



Ash Development Association of Australia

Department of Water and Environmental Regulation
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Friday, 15 December 2020

Discussion paper Proposed legislative framework for waste-derived materials

The Ash Development Association of Australia¹ ('the Association') welcomes the opportunity to provide our submission on the *Discussion paper Proposed legislative framework for waste-derived materials, September 2020* to the Department of Water and Environmental Regulation ('the Department').

This submission has been prepared for the Department with the objective to advise and inform the Department about the value-added benefits which are derived from coal combustion products generated by coal fired power stations within the proposed legislative framework.

The Association's CEO, Craig Heidrich² has over 26 years of experience within industry association management³, advocacy, R&D management, environmental policy development and has helped industry embrace the 'circular economy' revolution in Australia before the term was coined! Annually more than 8 million tonnes of industry by-products and recoverable mineral resources are effectively utilised through Associations managed by Mr Heidrich.

Framework elements	Commentary
- Framework review	We commend the Departments efforts in considering other jurisdictions policy framework and seeking to align where possible. NSW Resource Recovery

¹ <https://www.adaa.asn.au/membership/current-members>

² <https://www.hbmgroup.com.au/about-us/our-team>

³ <https://www.hbmgroup.com.au/our-partners/current-associations>

	<p>Orders/Exemptions⁴ and the QLD End of Waste⁵ frameworks use similar criteria, methodologies and assessment tools adopting a ‘-risk-based approach’. Well established and defined total metals and TCLP methods have been proven to be effective tools to evaluate end use risk of proposed utilisation. For example, bound applications such as concrete manufacture represent a low to no risk, when compared to unbound applications in say road construction where leaching potential risks need to be managed.</p> <p>We support the intent of framework to encourage reuse of WDM by providing certainty about when and how the landfill levy applies and government ‘certification’ (indemnity) for particular re-use pathways. The Department’s aim to address ‘legal certainty’ acknowledges corporate commercial decision-making processes where investments lead to secure associated ‘property rights’ arising from investment in the development of resources. It is these investments which lead to employment security and economic activity underpinning our industry development. Without ‘legal certainty’, investors, business operators and customers operating in highly competitive commercial markets will avoid the associated regulatory uncertainty risks - resulting in widespread loss of current and future beneficial utilisation opportunities.</p>
<p>- Amending the definition of ‘waste’</p>	<p>We agree that the current definition is problematic, i.e. the inclusion of ‘whether useful’ is inconsistent with principles of circularity. For example many rating schemes, e.g. GBCA, ISCA et al. seek to encourage resource conservation by giving credit to re-use. Some materials may potentially be caught by this proposed waste definition that are defined as co-products. i.e. <i>a product that is intentionally generated during the manufacturing process or chemical reaction(s) of the primary product or process. Co-product may also be characterised as essential to the primary product or process, having a critical influence on the properties of the primary product, e.g., the manufacture of crude steel. Iron and Steel Slags are essential co-products to</i></p>

⁴ <http://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption>

⁵ <https://environment.des.qld.gov.au/management/waste/business/end-of-waste-classification#toc-0>

	<p><i>the production of pig iron and steel. Common uses are slag cement, air-cooled iron blast furnace slag and steel slag aggregates.</i></p> <p>The framework proposes that material does not cease to be waste until used in accordance with all the conditions of the relevant WDM declaration. However, almost any raw [natural] material can be used in a way that constitutes disposal or can result in harm to human health or the environment. The definition is also potentially inconsistent with the application of a WDM given the producer/user interface (the producer could do everything right but still be liable if user does not).</p> <p>We recommend the material should cease to be a waste once producer has certified the conditions have been met and control of the material has been handed over with the reasonable expectation of safe re-use.</p>
<p>- Making a WDM determination</p>	<p>We recommend a risk-based approach should be adopted. Similar to other State exemptions/approvals, providing risks are addressed, the material “ceases” to be a waste.</p> <p>This is a significant threshold point in any supply chain model.</p> <p>In terms of matters to be considered when making a WDM determination, consider including developed national or regional industry standards and/or application specifications. The current list of matters⁶ in the discussion paper is narrowly limited to the Department’s CEO determinations.</p> <p>Time taken for WDM determinations required for every material and use combination could be lengthy and, under the framework, is at the discretion of regulator. This provides no certainty for producers/users as to if/when a determination will be made. Determinations could be critical to business cases/investment decisions for users and producers.</p> <p>Suggest that the Department provide clear advice about the risk assessment criteria, timeframes for review and approval so Industry can work towards meeting the requirements/expectations.</p>

⁶ Items 1-6

	<p>Recommend that the Department provides clear criteria for material to be considered low risk and ensures legislation changes allow for minimal regulation for low risk materials.</p> <p>Suggest that case studies for WDMs already being safely used (acknowledged by the Department) should be used as benchmarks for acceptable risk.</p>
<p>- Types of waste-derived materials determinations</p>	<p>Industry level or Association bodies should be able to initiate a WDM determination process based on collated data and facilitated consensus across stakeholders. This will lead to more Statewide coordination across classes of materials reduced time and inconsistencies.</p> <p>We support overall the current list in Table 1 as examples of materials that “could” be considered for general WDM determinations.</p> <p>Industry bodies such as Associations which have been instrumental in developing general determination(s), should be encouraged to engage to Department to trigger a review based on new scientific information.</p>
<p>- Prioritization of WDM determinations</p>	<p>The Department should consider including other measures for prioritization as the current scope is narrowly focused. Others to consider:</p> <ul style="list-style-type: none"> - economic contribution - invested capital - carbon reduction / energy conservation - natural resource conservation <p>Suggest low risk WDMs are prioritised by the Department for initial WDM determination(s)</p>
<p>- Potential liability of producer/user</p>	<p>Suggest that the Department provide more clarity on assessment criteria where use of the product has resulted in pollution/environmental harm although WDM determination was followed correctly by producer/user.</p>
<p>- Trials of waste-derived materials</p>	<p>The Department would need to provide clear guidelines on evidence required to demonstrate proposed use. QLD and NSW provide some guidance on these aspects.</p>
<p>- Content of WDM product specifications</p>	<p>Proposed elements for specifications are generally good, some aligned with normal business transactional records should be considered. For example, in NSW and QLD normal business records are used to track</p>

	<p>transactions; (1) invoices, (2) delivery docs, (3) PDS, (4) SDS and websites technical data sheets.</p> <p>Written statements of compliance again should be built into normal business documents and be linked electronically where possible, e.g. to website for testing data. These statements should be part of some annual reporting requirement, not every batch, lot or delivery.</p> <p>Suggest that the Department provides clear guidelines on sampling/testing/evidence to support determination assessment meets the Department's requirements/expectations.</p> <p>For example, NSW, QLD require statements 'characterising' with interim 'routine testing' to monitor quality characteristics every 12 to 24 months. This demonstrates normal processes are in control limits.</p>
<ul style="list-style-type: none"> - Content of WDM declarations 	<p>The proposed elements for declarations are generally good. Declarations can be aligned with normal business transactional records. For example, in NSW and QLD normal business records are used to track transactions; (1) invoices, (2) delivery docs, (3) PDS, (4) SDS and websites technical data sheets.</p> <p>Our major concern with declarations is the overly simplified supply chain (Chain of Custody) between the seller and buyer and lack of clarity of responsibilities between them.</p> <p>Supply chains can be more complex with multiple participants. For example, Producer1 to Value adder1, Value adder2, User1, User2. This complexity needs to be accounted for within the CoC requirements which are not onerous and lead to discouraging use.</p>
<ul style="list-style-type: none"> - Waste beneficiation/blending - site licensing 	<p>Blending of wastes and/or wastes with raw materials together can produce products with improved performance characteristics.</p> <p>Suggest that the Department clarify if a site accepting WDM (meeting product specification) for blending would need to be Category 62 licensed, as this presents a significant regulatory burden for what must already have been assessed as a low risk material.</p> <p>Suggest that WDM determinations allow for beneficiation/blending of wastes on unlicensed</p>

	<p>premises, providing WDM conditions are being met (which could include stockpile volumes, times etc.).</p> <p>To be practical WDM must cease to be waste when it is supplied to the site where the blending is to take place.</p>
- Cost of compliance	We emphasize importance of legislation changes allowing for minimal compliance costs/obligations for low risk waste products.
- Storage of waste-derived materials	<p>Some acknowledgment of the need for long-term vs. short-term stockpiling for project use including stockpiling for new materials during market and product development. Time limits on storage of WDM before use (otherwise a solid waste facility license (61A) or solid waste depot license (62) would be required) may hamper stockpiling of material on "user sites" prior to re-use.</p> <p>Suggest that the Department provide clarity on time limits for storage and how these will be practically implemented.</p>
- Disposal to landfill	Potentially unintended consequences.

End of submission

ABOUT THE ASH DEVELOPMENT ASSOCIATION OF AUSTRALIA

The Association was formed in 1991 by producers and marketers of power station ash, with the objectives to investigate and foster economic market opportunities for the **beneficial use of coal combustion products**⁷ (CCPs) commonly known as power station ash, fly ash or furnace bottom ash.

The combustion of pulverized coal in the furnace of a power station boiler results in the production of several solid by-products which were once regarded as waste but today are more accurately classified as coal combustion products (CCPs). This latter term, CCPs has been adopted globally and positively aligns with the concepts of a 'circular economy' – an approach which seeks to use one industry's by-products as another industry's raw material and ultimately conserving finite resources.

Putting our objectives for CCPs into some perspective, coal is likely to continue to be the largest energy source for electricity generation within Australia for the foreseeable future given; abundant low-cost coal reserves; coal fired plant life expectancy (age); coupled with reliable low-cost energy.

The Associations long-term forecasts predict annual production volumes of CCPs will continue to exceed 12 million tonnes beyond 2025⁸. The beneficial use of coal combustion products during 2018⁹ resulted in 5.936 million tonnes or 47% being beneficially used, resulting in the conservation of;

- energy;
- finite natural resources; and
- the reduction of carbon emissions through the recovery of CCPs being mineral by-product resources.

Surplus CCPs represent another 650 million tonnes of homogeneous secondary resources that are safely stored and managed in ash dams awaiting economic reuse opportunities to exploit this resource.

Putting Australia's annual production of 12 million tonnes of CCPs into context, globally more than 1.2 billion tonnes of CCPs were generated and 678 million tonnes or 63% was used beneficially in 2017¹⁰. China and India alone represent more than 62% of total global CCP production. Australia represents less than 1% of global production¹¹.

⁷ Coal combustion products include fly ash, bottom ash, boiler slag, fluidized-bed combustion (FBC) ash, or flue gas desulfurization (FGD) material produced primarily from the combustion of coal or the cleaning of the stack gases. The term 'coal ash' is interchangeable.

⁸ Submission to Senate Standing Committee on Environment and Communications – Inquiry into the rehabilitation of mining and resources projects and power station ash dams as it relates to Commonwealth responsibilities, April 2018.

⁹ <http://www.adaa.asn.au/resource-utilisation/ccp-utilisation>

¹⁰ Heidrich, C., et al. (2019). Global aspects on Coal Combustion Products. World of Coal Ash 2019. St Louis, USA, CAER & ACAA. Vol 1: pgs 21.

¹¹ *ibid*

The Association facilitates the responsible utilisation of CCPs as valuable materials; whilst endeavouring to engage and increase potential user/s awareness of the ecologically sustainable benefits arising through increased utilisation of these recoverable resources within a strong circular economy, to benefit industry members, the environment, and the community.

CIRCULAR ECONOMY

Why is a circular economy important? The circular economy is a modern term used to describe an alternative to a traditional linear economy (manufacture, use, dispose). In a circular economy we keep resources in use for as long as possible, thus extracting the maximum value from them whilst in use, then recover and regenerate products and materials until the end of each service life.

In simple terms the circular economy adds value to manufacturing by closing the loop on non-core resources and extracting maximum value by using them as input materials in other products or applications. In the case for mineral by-products using the term 'wastes' to describe them is inconsistent with 'resource conversation' and 'sustainability principles'.

Industrial 'waste' is generally referred to as the type of waste produced by industrial activity, such as that generated by factories, mills and mines. Waste can be more generally defined as any substance which is unwanted or unusable material. However, within some State legislative frameworks 'a' substance is NOT precluded from being waste for the purposes of [legislation] merely because it can be reprocessed, re-used or recycled. This is a relatively out of date concept and consistent with 'resource conversation' and 'sustainability principles' established back in the 1990's [Brundtland Commission] and needs to be addressed.

AN ABUNDANT PROVEN MINERAL RESOURCE

The beneficial use of CCPs during 2018 resulted in 5.936 million tonnes or 47% contributing to a significant economic value add of approximately \$200 million at the first tier, driven by market demand for the resource. Other positive contributions are from employment through the investment, resource management, processing, handling, transportation, and end-use applications of CCPs. Other less tangible aspects are the conservation of energy through reducing the mining of finite natural resources (displacement) and the reduction of carbon emissions through the use of CCPs to displace emission and energy-intensive manufactured materials including cement.

Snapshot of 2018 results:

- Approximately 12.6 Mt (million tonnes) of CCPs were produced within Australasia. On a per capita basis, this equates to approx. 502 kg/person. (12.6Mt/25.09M population)
- Some 5.936 Mt or 47% of CCPs produced have been effectively utilised in various value-added products or to some beneficial end over the period. On a per capita

basis, this equates to approx. 236 kg/person recycled or reused. (5.936Mt/25.09M population)

- Approximately 1.983 Mt or 33% of fine grade fly ash was used beneficially in high value-added applications such as cementitious binders, concrete manufacture or mineral fillers.
- About 0.42 Mt or 7% of CCPs were used in non-cementitious applications such as flowable fills, structural fills, road bases, coarse/fine aggregates.
- Some 3.56 Mt were used in projects offering some beneficial use (e.g. on-site remediation, local haul roads etc.). These uses typically generate no economic return, that is, cost avoidance or recovery only.
- Some 6.65 Mt were placed into onsite storage ponds awaiting future use opportunities where the material would be harvested for economic use.
- More than 52 Mt of CCPs (mainly fly ash) have been used in cementitious applications or concrete manufacture from 1975 to 2018 i.e 43 years.

An important role of the Association is to explore, research and publish information about beneficial opportunities for CCPs. The Association has directly or indirectly conducted research or published information on the use of CCPs in; Mine Backfill; Soil Amendment; Soil Stabilisation, Engineered Fills, and Pavements; Adsorbents, Barrier Materials, Stabilisers and Waste Encapsulation; Rare Earth Metal Recovery; Carbon Products; Composites; Manufactured Aggregates; Glasses; Geopolymers; and Zeolites.

The use of CCPs, in particular fly ash, has proven over the past 30 years to significantly reduce the carbon footprint of the cement and concrete sector as outlined above. However, additional processing capacity (investment) to produce more 'graded' fly ash is essential to meet growing demand and supply chain inventory capacity.

Some of the above larger scale applications, e.g. Pavements, can require large volumes over sort construction timeframes. Harvesting of the currently stored CCPs (> 650 million tonnes) of 'homogenous' materials within ash dams can supplement natural material supply chain demands. This 'harvesting' process is already occurring in countries such as the USA and the UK, but regulation to enable this process is essential. The use of CCPs, as valued resources in these large-scale applications is well established internationally.

Another large-scale construction material example where there are considerable opportunities for CCPs to be used relates to supplementing current demand for fine and coarse aggregate use in structural/civil applications. That is, current consumption and growth in the future development of infrastructure in both urban and regional Australia is estimated to be more than 160 million tonnes annually.

Extractive resources are generally widespread and remain in adequate supply nationally, however, shortages in important large-scale markets (Sydney, Melbourne and Brisbane) have emerged, requiring unprecedented additional logistics and associated handling costs. These are mainly attributed to unsuitable geology, conflicting or incompatible land uses, and environmental problems caused by high rates of urban expansion. Natural sand and gravel resources are also being depleted, leading to opportunities for substitution by

ungraded CCPs. Continued depletion of natural resources places further emphasis on the opportunity to reduce carbon emissions and reduced costs with the use of CCPs.

There has been a considerable increase in interest from extractive industries to supplement natural sand and gravel resources with recovered resources such as CCPs, which is an area of significant focus.

INTERNATIONAL PERSPECTIVES

Issues regarding CCPs and long-term storage are not unique to Australia, but lessons can be learned from other Countries in regard to pathways to be avoided and others to be encouraged.

In a white paper published in January 2020, A Comprehensive Survey of Coal Ash Law and Commercialization: Its Environmental Risks, Disposal Regulation, and Beneficial Use Markets commissioned by the National Association of Regulatory Utility Commissioners under a grant from the U.S. Department of Energy lessons learned and challenges ahead for public policy are offered.

The white paper found that regulation to comply with Federal and State EPA requirements by utilities [coal fired power stations] or CFPS will be costly. Recovery of compliance costs will usually fall within the purview of utility operators [CFPS] and ultimately be passed onto customers. Estimates for the cost of remediation of ash ponds range from the millions for individual coal ash ponds to billions for some utilities, and up to possibly hundreds of billions of dollars across the country, but true cost projections will be dependent on the closure and clean-up methods that are approved by state legislatures and/or environmental regulators.

NEED TO REDEFINE WASTES

As an industry association with an interest in resource conservation and recovery policy throughout Australian jurisdictions, we support and encourage pragmatic, scientifically-sound and consultative based action towards the development of legislation, regulations and other necessary measures designed to provide relevant industries with the level of 'legal certainty' required for capital investment to efficiently and effectively recover and use by-products for beneficial ends.

The need to create 'legal certainty' should not be underestimated as it underpins all corporate commercial decision-making processes where investments lead to secure associated 'property rights' arising from investment in the development of resources. Specifically, it's these investments which lead to employment security and economic activity which underpin our industry development. That is, without 'legal certainty', investors, business operators and customers operating in highly competitive commercial markets will avoid the associated regulatory uncertainty risks -- resulting in widespread loss of current and future beneficial utilisation opportunities.

Sustainable industry development, whilst protecting the environment and human health, is implicit in the community license to operate obligations for industry today. Accordingly, we encourage the Department to be mindful of these aspects when formulating any waste reform policy.

This submission has been approved by the Board of the Ash Development Association of Australia. Should you have any questions regarding our submission please do not hesitate to contact the undersigned.

Regards

A handwritten signature in black ink, appearing to read 'Craig Heidrich', written in a cursive style.

Craig Heidrich
CEO
Ash Development Association of Australia



15 December 2020

Department of Water and Environmental Regulation
8 Davidson Terrace
Joondalup WA 6027

Via online portal and email to wastereform@dwer.wa.gov.au

Dear Madam or Sir,

Thank you for the opportunity to provide feedback on the September 2020 discussion paper circulated by the Department of Water and Environmental Regulation (**DWER**), "Waste not, want not: Valuing waste as a resource; proposed legislative framework for waste-derived materials" (**Discussion Paper**). Alcoa has provided feedback on recent DWER discussion papers regarding waste, and given the interrelationship of issues, would encourage reading those submissions in conjunction with the feedback provided below.

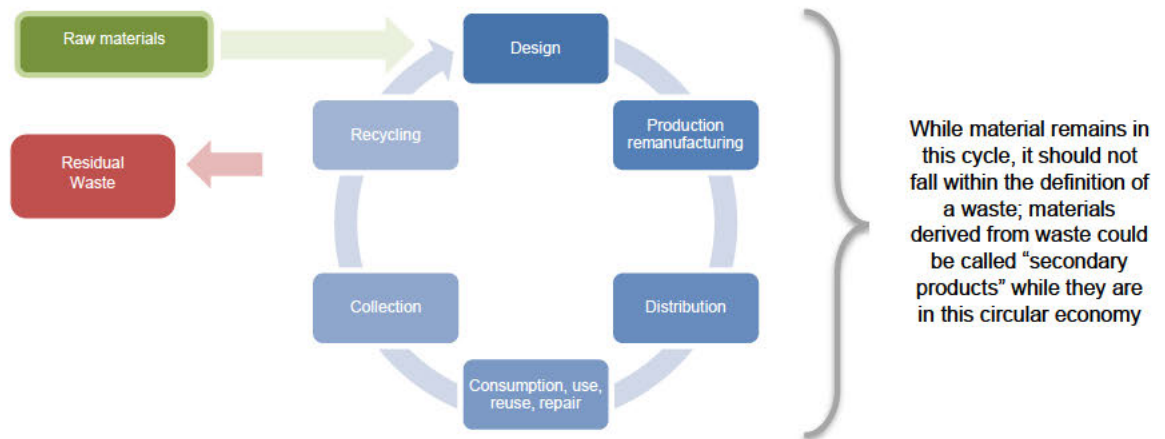
Overview

Alcoa continues to support the development of a waste-derived material (**WDM**) framework that underpins a product and waste economy within which materials and energy circulate for as long as possible. Within this framework materials are recovered as high up the waste hierarchy as possible and continue to circulate within the economy. It is Alcoa's view that whilst these materials are in circulation, they should not be treated as "waste", as a material is only truly a waste when it has no further utility and is disposed of (see Figure 1, below). Alcoa has provided comment on this issue previously through consultations run by DWER in recent years, and notes that legislative and policy impediments can only be resolved through a holistic review of all waste legislation, focusing particularly on the definition of "waste".

Alcoa notes that the proposed WDM framework is limited to material "applied to land" and will only resolve matters related to landfill licensing and levy application. Limiting the scope may resolve issues of clarity that arose from the decisions of Justice Beech and the Court of Appeal but does not resolve the broader strategic amendments required to support a circular economy. Alcoa supports the DWER factsheet "[Assessing whether material is waste](#)" (**Factsheet**) being used as a basis for legislative change. The factsheet reflects DWER's current position, better allows for streamlined management of secondary products and would be a robust basis for a framework that supports a circular economy. Under this approach, secondary and other materials that are used as products would not then need the additional burdensome, in parts duplicative, regulation proposed in the Discussion Paper.

Alcoa also reiterates its prior feedback regarding the nomenclature of waste-derived materials. Given that the objective of the circular economy is for the market of secondary (and tertiary) products to grow and mature, and that this involves building demand, the ongoing use of "waste" in references to these downstream products may hamper commercial and retail development.

Figure 1. Distinguishing between “waste” and “secondary products” (WDM)



* Graphic is adapted from the Government’s [Waste Avoidance and Resource Recovery Strategy 2030](#) (p.14)

Amending the definition of waste

Within the scope of the proposed changes it is noted that the definition of waste will only be amended in the *Environmental Protection Act 1986 (WA) (EP Act)* and *Waste Avoidance and Resource Recovery Act 2007 (WARR Act)*. This has a number of implications. For example, it is possible for waste-derived materials identified under the proposed framework to be defined as a “controlled waste”, creating confusion and impacting marketability. In addition, the legislative requirements of “controlled waste” require the material to be managed by licensed waste facilities, which conflicts with the removal of the licensing component in the proposed WDM framework. At a minimum, the definition of waste should be reviewed for consistency in all subordinate legislation under the EP Act and WARR Act.

The lack of clarity extends further. By changing the definition of waste in the EP Act and WARR Act but not clarifying the process for material that sits outside of the proposed scope of the WDM framework, the changes will, in effect, ensure that any material outside the scope, discharged into the environment, will now clearly be defined as a waste. Whilst an opt-in proposal for small quantity application is included in the proposal, the practicality of this approach is questionable given the significant resources needed to implement this framework. Alcoa recommends further review of the South Australian framework and the dual-path approach as an option to provide clarity for materials that are below the threshold.

Alcoa understands that the proposed definition in the consultation paper still requires final drafting and will incorporate ‘discharge into the environment’ within the scope of the definition for WDM as discussed in the DWER consultation workshop on the 16th of November.

Making a WDM Determination

Alcoa understands the concept of WDM determinations, which would provide business with certainty regarding the status of secondary products that are applied to land.

However, it is unclear how the WDM declaration is to operate in relation to bulk materials supplied to a distributor. The main source of the uncertainty is the requirement for the producer of a WDM to provide a written statement of compliance to the WDM user; there is no indication how this would work for WDM distributors (i.e. sand suppliers).

Types of WDM Determinations

The challenge of defining “waste” is clearly highlighted in Table 1 of the discussion paper. In a number of instances, the material listed as a “waste” is, in fact, a product. For example, Red Sand is the WDM or secondary product you create by further processing bauxite residue (the “waste”) is useful for road construction as either a sub-grade or sub-base product.

Prioritisation of WDM Determinations

Alcoa notes that the consultation paper indicates “high-priority” general WDM determinations will be in place soon after the framework is enacted but that during the consultation workshop it was advised that determinations would be in place for priority WDM’s prior to the promulgation of the legislative changes. Alcoa supports this updated approach which will reduce the impact on market stability and economic viability for facilities.

Alcoa is currently reviewing the commercial application of Red Sand and would seek to have this material approved under the WDM framework prior to promulgation of the legislative changes.

Storage of WDM

Some secondary materials are sold in bulk quantities that require stockpiling in order to be economically viable. It is noted that storage requirements and time limits on both the producer and user are proposed to be contained within the WDM framework. Alcoa seek flexibility in stockpile management and would like to highlight that a time limit on stockpiling is not a suitable approach for bulk materials where stockpiles are in continuous use. In these circumstances a maximum quantity approach may be more appropriate. In all cases it is critical that these determinations are based on risk management and allow flexibility for the market given the benefits of using these materials in place of virgin raw material.

Next steps

Alcoa is grateful for the opportunity to provide feedback and looks forward to advice from DWER on the next phase of consideration of this, and related, waste legislation and policy issues. If you have any questions or wish to discuss any aspect of this submission further, please contact Nicole King, Senior Environmental Consultant, on [REDACTED] or at [REDACTED].

Yours sincerely,



Soo Carney
Regional Environment Manager, Australia

To: Department of Water and Environmental Regulation

Re: Waste not, want not: Valuing waste as a resource

17 December 2020

Introduction

AMEC appreciates the opportunity to provide a submission to the Department's Discussion paper 'Waste not, want not: Valuing waste as a resource', and the proposed legislative framework for waste-derived materials.

About AMEC

The Association of Mining and Exploration Companies (AMEC) is a leading national industry association representing over 350 members from all around Australia. Our members are explorers, emerging miners, producers, and a wide range of business working in and for the industry. Collectively, these companies account for over \$100 billion of the mineral exploration and mining sector's capital value.

The mining and exploration industry make a critical contribution to the Australian economy, employing over 255,000 people. In 2018/19, these companies collectively paid over \$39 billion in royalties and taxation, invested \$36.1 billion in new capital and generated more than \$283 billion in mineral exports. In 2019/20, \$2.8 billion was spent on minerals exploration, representing an 18% increase from the previous year.

Discussion Paper

General Feedback

AMEC welcomes opportunities to engage with the Department on the important issue of waste as demand for circular economies increases. This year we have also made submissions to the Department's Closing the loop consultation process, and the review of the Waste and Resource Recovery Act 2007. The ideas provided in both submissions remain relevant and consistent with our submission to this discussion paper.

The discussion paper proposes significant legislative amendments and reforms to achieve long-term objectives. We note there is no mention of proposed timeframes for conducting further consultation or development of the waste-derived materials Regulations and associated guidelines. AMEC would appreciate the opportunity to be involved in the development and implementation of these documents, which will underpin the regulatory framework industry will be regulated in accordance with, once assented.

Definitions

The proposed amendment to the definition of waste to clarify that waste-derived materials (WDM) are waste, unless used in accordance with a relevant WDM declaration made by the CEO, is welcomed.

It is a necessary amendment to explicitly reference waste-derived materials in the two pieces of legislation which regulate waste.

The proposed expanded definition of waste, however, raises concern about the potential impact and unintended consequences that will arise for activities under the *Mining Act 1978*, and the coexistence of various definitions across other relevant pieces of legislation. These changes will have a conventional flow on effect to the levy. Has a cost-benefit analysis been undertaken to quantify this flow on effect?

As we have previously highlighted to the Department, clarification of the treatment of co-mingled waste is required, as this distinction will also have an impact on the administration of levies.

Additionally, the note on Page 5 of the Paper that “the wording for the new clause (c) is provided to describe the policy intent behind the amendment and may be subject to refinement and/or amendment in the drafting of legislative amendments” is conditionally supported by AMEC.

Should the wording be refined or amended, we request appropriate consultation be undertaken to ensure a holistic view of the changes and the ramifications of their implementation have been given due consideration by those likely to be impacted.

Resourcing

AMEC continues to raise concerns with the Department about the capacity to resource current business operations. The overstretched resources within the Department creates significant delays, regulatory uncertainty and increased costs for industry across the State. We do not believe it is within the Department’s existing resourcing capacity to deliver the amount of proposed changes in this discussion paper, without impacting the Department’s day to day operations.

As the guidelines and Regulations are developed, it is recommended the Department increases its resources to meet expected increased demand. This resourcing should be maintained post-introduction, to enable the Department to meet approval and compliance timeframes.

Timeframes

There is a notable absence of timeframes in the Discussion Paper. When creating Regulations and guidelines, industry requests the publication and consultation of proposed timeframes. The lack of timeframes or rationale behind timeframes is concerning for industry. For example, what will the time limits under which the storage of a WDM that would not trigger the requirement to hold a category 61A or 62 license be based on? To provide clarity, it is requested timeframes are discussed early in the consultation process.

Further, as addressed in the resourcing paragraphs, as the Department will be held accountable by all relevant stakeholders to the published timeframes, implementing reasonable, measurable and achievable timeframes that do not disadvantage any party is recommended.

Penalties

The proposed penalties for breaches of conditions of a WDM are severe, at a \$50,000 fine and/or a daily penalty of \$10,000 for a breach for individuals, and a \$100,000 fine or a daily penalty of \$20,000 for a body corporate.

The monitoring and enforcement of environmental issues relating to waste in Western Australia are considered quite relaxed compared with other jurisdictions. From 2020-21, the maximum penalty

applied in Western Australia for illegal dumping was \$5,000. Most fines ranged from \$1,000 to \$5,000¹. To increase that amount tenfold for an individual seems disproportionate. Industry questions the intent behind this increase, and is concerned that the substantial increase will not serve its intended purpose of disincentivising non-compliance, but will instead result in overzealous compliance requirements that add significant administrative burden.

AMEC recommends a more balanced approach to fines and penalties is adopted, with penalties commensurate to the level of noncompliance, and the impact of the noncompliance in question.

Cost recovery

AMEC continues to oppose cost recovery to fund core Government activities. If cost recovery is used to fund the costs of assessing an application of a WDM determination as proposed, there is an expectation that applications will be assessed in a tight timeframe.

Geological repositories

As recommended in our submission to the WARR review, geological repositories should be acknowledged in Australia's waste legislation. There are currently two operational facilities already within Western Australia, and this recognition will be prudent given the increasing demand for circular economies.

These facilities, such as Tellus Holdings' Sandy Ridge Facility, which has recently been cleared for 100,000 tonnes per annum of Class IV and V waste, serve the public interest and should be exempt from levies such as the waste levy. The work undertaken at this site to minimise Australia's hazardous waste, should be incentivised instead of subject to levies. We consider there is scope within the remit of this discussion paper and the subsequent review process to undertake these important reforms as new technologies and processing mechanisms emerge.

Final comments

AMEC continues to engage with the Department on important regulatory reforms which will impact the framework which industry is regulated in accordance with. When undertaking reforms, it is important that stakeholders are actively engaged in consultation, so changes can be given due consideration and the practicality of their implementation can be robustly assessed. AMEC appreciates the opportunity to consult on this review, and requests ongoing involvement as the Regulations and Guidelines are developed.

For further information contact:

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Manager, WA, SA, NT & Industry Policy
AMEC

or

██████████
Policy & Research Officer
AMEC

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¹ [Summary of Prosecutions - Department of Water and Environmental Regulation \(der.wa.gov.au\)](https://www.der.wa.gov.au/summary-of-prosecutions)

**Australian Organics Recycling Association
Western Australia**

Submission to the:

Department of Water and Environmental Regulation (DWER)
Discussion Paper

'Waste not, want not: Valuing waste as a resource'

Australian Organics Recycling Association (AORA)

AORA works to address the product and market challenges and opportunities faced by legitimate compost industry processors, and to advocate for the wider organics recycling industry in representing their view to policy makers.

AORA has worked strongly on behalf of its members in the evolution of the processing industry being viewed as "simply" processing waste materials to recovering resources, mitigating environmental pollution and returning much needed carbon back to soils. In doing so, AORA has forged good relationships with state government environmental authorities, local councils, raw material suppliers and end market users across Australia. The Western Australian branch (AORA WA) was formed in October 2016, and welcomes the contribution and involvement of the majority of organics recyclers.

AORA WA members acknowledge that ingredients can be sourced from what is deemed as "waste" under organic recycling facility DWER licences and may be considered "waste derived materials" under the current DWER 'Discussion Paper: Waste Not, want not: Valuing waste as a resource'. However, AORA WA processes are manufacturing based and produce quality recycled organic products (RO products) that meet process standards and end user i.e. market stipulations.

AORA WA members have worked hard to develop and grow markets for RO products and consider that the WDM legislation will have a huge negative impact on the marketability of RO products.

In addition, the WDM proposed legislation will place a layer of administration and costs on the sector not placed on competing products.



Western Australia

Contribution of AORA WA

In 2018-19 over 7,500 kilotons of organic materials were recovered and manufactured into quality recycled organic products. Western Australia accounted for almost 35%

AORA WA members provide over 300 jobs to West Australians

Members have invested \$11 million in land and capital infrastructure to recycle the State's organic wastes

Supports (and secures) the supply chain to the extent of \$121 million through contracting, transport, marketing services

The sector contributes \$46 million to the W economy

The Organics Recycling Industry comprises commercial operators, local governments and joint ventures between these parties

A range of technology, innovations and processes are used to recover and recycled organic wastes including composting windrows, forced aeration, anaerobic digestion, mechanical biological treatment

Industry works to continually grow markets for quality recycled organic products not limited to urban amenity, agriculture, horticulture and rehabilitation

1. Overview

AORA WA members represent an industry that recycles over 2,500 kiloton of organic material into products that meet market requirements ranging from broad acre agriculture to rehabilitation to landscaping to home gardening users. Quality products are manufactured from a range of organic materials that meet market specifications for, among other reasons, improving soil quality, increasing yield, growing vegetables, renovating and maintaining gardens, retaining moisture in landscapes.

AORA WA members acknowledge that ingredients can be sourced from what is deemed as “waste” under organic recycling facility DWER licences and may be considered “waste derived materials” under the current DWER ‘Discussion Paper: Waste Not, want not: Valuing waste as a resource’.

AORA WA members would argue that the industry sector is regulated under DWER in terms of managing and mitigating environmental (and human health) emissions. Members already meet robust licensing conditions with management, engineering and reporting controls in place. From a producer perspective, markets do not purchase products that could impact negatively on their farm, livelihood, and environment. AORA WA members have worked hard to develop and grow markets for RO products and consider that the WDM legislation will have a huge negative impact on the marketability of RO products, as:

- Market perception of what constitutes a “waste derived material”
- Additional administrative, auditing and reporting and the ability to cost-effectively produce RO products
- Timescales on ‘granting’ of WDM
- Flexibility of the use of inputs and the WDM criteria
- Impact on the historic, current and potential future markets and perceived impact on the environment with respect to the application of quality RO products

Query:

We query as to why composting is captured under this legislation, what scientific evidence its inclusion has been based upon in terms of environmental or human health, and what considerations DWER has reviewed in terms of input / feedback from the users and markets for quality RO products?

2. Circular Economy

Being “producers” of RO products, our members have invested significantly in processing operations, quality procedures and management protocols, operations to meet quality and product production standards, accreditations and market stipulations. We understand the perspective of the proposed legislation to safeguard environmental and human health, and consider that our members facilitate meeting this objective, by recycling and manufacturing quality RO products.

In a circular economy system, nutrients and carbon would be returned to the biosphere through capture from the organic fraction of MSW, C&I, for example, food processing, commercial outlets, restaurants, wastewater treatment, and C&D predominantly through landscaping and compostable materials such as plasterboard. These organics are currently processed by AORA WA members, and returned to the soil in forms such as composts, soil conditioners, mulches, organic fertilisers. Ideally, the recovery of these organic resources coupled with regenerative agricultural, horticultural and landscaping practices would reduce the need to bring in nutrients and carbon from non-renewable sources.

The WDM proposed legislation will place a layer of administration and costs on the sector that are not placed on competing products. It increases the level of the unfair “playing field” that other products applied to land do not have to meet e.g. fertilisers. This additional layer of administration, auditing and reporting may impede the ability of the organics recycling sector to compete and effectively recycle nutrients, reduce organics recycling rates and impede the vision of the WA Waste Strategy to implement a circular economy.

Intent of the legislation:

There is a danger that instead of moving toward a circular economy, the intent of the legislation moves organics towards waste to energy.

3. Survey Responses

AORA WA has framed our response around some of the questions posed by DWER as follows.

Survey question 5: Purpose

The ‘Waste not, want not: Valuing waste as a resource’ discussion paper seeks to provide clarity around waste derived materials and when “producers” and then “users” depositing them to land, in quantities above licensing thresholds, would not be considered to be disposing of “waste” and not (1) subject to landfill levy (as a producer) and (2) licensing requirements under the EPAct (as a user).

As is outlined in the DWER Factsheet: Assessing whether material is waste, currently a user must determine that the recycled materials they are using is not deemed “waste”.

Whilst we support the purpose of the proposed legislation to allow the Department to approve the use of WDM, as there is currently no capacity for DWER to achieve this under legislation, we consider that the impact on the organics recycling sector as producers will be onerous due to:

- Potential impact on markets
- Administration
- Meeting and reporting on legislation requirements

Response:

We do not consider that recycled organic products that undergo a quality composting process are captured under the WDM proposed legislation.

Survey question 7: WDM and transitional arrangements

Recycled organic products may fall under those products that are now assessed to be classified as WDMs under this proposed legislation. RO products are not currently classified as “waste” and may now be subject to being classified under a ‘General’ or ‘Case-by-case’ WDM.

AORA WA acknowledge that the WDM legislation is proposing to implement a framework that clarifies when a WDM applied to land will not attract the levy for the “user”. However, from a “producer perspective, classifying RO products under either ‘General’ or ‘Case-by-case’ basis will add significant administration and time and impact on resourcing and timeframes to effectively recycle organics.

AORA WA queries why composting will fall under the WDM proposed legislation and on what basis i.e. what evidence with respect to the application of RO products and environmental / human health impacts this has been made.

Response:

AORA WA would like to be consulted and presented with the scientific and land investigative analysis with respect to inclusion of composting and RO products being applied to land under the proposed legislation.

Survey question 8: CEO determination

AORA WA members have experienced licence applications and amendment that, in some cases, have taken more than 18 months to amend organic recycling facility licenses; impeding innovation and response time for the industry to process increasing volumes of organics. With this in mind and given another layer of resourcing and administration required to be implemented by DWER, we raise concerns about the timeframes on assessments of WDM classifications. We acknowledge that DWER may priorities certain WDMs, however, concern remains over how long assessments might take.

Response:

How do DWER propose to resource and implement the WDM framework for flexible, responsive timeframes that meet industry needs and the marketplace in terms of recycling of organics?

Survey question 10: Types of WDM determinations

The types of WDM i.e. ‘General’ and ‘Case-by-case’ are in line with the NSW Resource Recovery Orders and Exemptions (RROE) framework. The ‘mulch’ RROEs specifies the input materials that comprises the classification for application to land.

Response:

What happens if a minor change to a product inputs i.e. feedstock organic material occurs? How will the WDM classification be implemented in these circumstances or does a new WDM need to be assessed?

Survey question 20: Storage of WDM

As “producers” who meet market projects and timeframes, seasonality, cropping regimes, unforeseen events e.g. increased impact of landscaping / home garden during the pandemic, we need to be responsive and forecast products to meet demand. This may mean producing and storing RO products, in line with our DWER licensing requirements, to be able to meet market requirements. However, on review of the WDM proposed legislations for storage, it many mean not being able to meet the storage requirements. AORA WA considers that the proposed storage requirements do not take into account market realities.

Response:

Reviews storage requirements with consideration to market uptake / demand and review in light of adequate storage facilities to manage and mitigate environmental and human health impacts

For an on behalf of AORA WA

AORA WA President: Dave Cullen, C-Wise.

Email: [REDACTED]

Response ID ANON-NHP8-6B5H-K

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on 2020-12-18 07:27:14

Introduction

1 What is your name?

Name:

Peter Brisbane, on behalf of the Australian Packaging Covenant Organisation (APCO).

2 What is your email address?

Email:

[REDACTED]

3 Which of the following best describes the group or person you represent? (optional)

Other

If other, please specify.:

Product stewardship organisation

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

APCO supports the proposed amendments to the legislative definition of waste. Clarifying that waste-derived materials (WDM) are waste unless used in accordance with a relevant WDM determination will ensure appropriate oversight of risks associated with inappropriate use of WDM, while enabling appropriate use of WDM.

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

APCO anticipates that relevant materials will include waste glass and plastics in road and other infrastructure, and compost.

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

It is likely that some of this packaging could be recovered at a net economic benefit at a moderate rate of levy, although there may be other barriers to realising these opportunities. Increased recovery could potentially be achieved through:

- More direct pass-through or transparency of the cost of the levy for householders and businesses
- Further investment of the waste levy to support:
 - o A greater level of recycling education and promotion to households and businesses

o Strategic intervention to encourage greater recycling, e.g. to improve cost effective access of small businesses to recycling services, provide infrastructure (including regional infrastructure at appropriate scale and locations), and develop end markets for waste-derived materials, including through R&D and direct project investment

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

The levy can act as a barrier to investment for recyclers. All recycling processes have some residual waste and this results in a direct correlation with material volumes and profitability. Increased levies need to be introduced in alignment with tailored consumer education programs to reduce contamination in waste stream and/or consideration for waste levy exemptions that form part of the residual waste stream from reprocessing activities.

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

APCO supports the use of both general and case-by-case WDM determinations.

General WDM determinations would be appropriate where it has been demonstrated that the use of the WDM is low-risk, the WDM consistent meets clear physical and performance specifications and clear standards are in place for use of the materials.

The work currently being undertaken by the Australian Roads Research Board on the use of recycled plastics and recycled crushed glass in road construction is an example of the type of work that APCO would expect to underpin the development of general WDM determinations.

Where use of a WDM carries greater potential risks, has not yet been demonstrated to deliver consistent physical and performance characteristics and is not subject to established standards, APCO supports the use of case-by-case WDM determinations.

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

Consideration could be given to the development of general WDM determinations for the use of both recycled plastics and recycled crushed glass in road construction. The outcomes of research currently underway by the Australian Roads Research Board, including in informing the development of standards for the use of these materials, will be an important factor in the development of these determinations.

General WDM determinations could also be considered for the use of recycled plastics in non-road infrastructure where such uses may be considered to involve deposition of WDM to land and where these uses meet the requirements for general WDM determinations. Infrastructure and items containing recycled plastics may include board walks, fencing, sound barriers, retaining walls, geogrid, cable cover, pipes, culverts, bollards, reflector posts, guttering and railway sleepers. With regard to compost, APCO encourages the department to consider the inclusion of certified compostable food packaging and food service items in a general WDM exemption. Certified compostable packaging and food service items can, if used in appropriate situations, support the recovery of food organics for composting.

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

Case-by-case determinations should be used where there is a significant degree of variability in the physical and performance characteristics of recycled materials, where there are not clear standards in place to govern use of the materials, or where there are environmental risks associated with the use, such as the potential release of hazardous chemicals or microplastics.

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

The department could usefully consider the potential positive impact of a general WDM determination on the development of a general WDM exemption on the development of a market for a specific WDM. The positive impact of a general WDM may be relatively high for materials such as flexible plastics for use in road construction where industry is already working to overcome significant economic barriers to their use, compared to materials where the reuse market may already be well established.

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

APCO supports the prioritisation of materials that are subject to the waste export ban.

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

APCO supports the use of WDM determinations for trials of waste-derived materials where appropriate risk management and other controls are in place.

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

APCO supports the proposed content.

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

APCO supports the proposed content.

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

APCO recognises the need to have in place a mechanism for reviewing and amending WDM determinations, particularly to enable the department to act on new information about potential environmental hazard. We further support the position that amendments would not be retrospective and that transitional arrangements may be needed in some circumstances.

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

APCO supports the publication of WDM determinations, in the interests of transparency.

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

APCO supports the creation of the new offence provision. A robust compliance and enforcement process to be essential to underpin confidence in the legislative framework and use of recycled materials in WA.

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

APCO supports the creation of the new offence provision. A robust compliance and enforcement process to be essential to underpin confidence in the legislative framework and use of recycled materials in WA.

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

APCO supports the application of compliance provisions to non-compliant users of a product subject to a WDM determination. A robust compliance and enforcement process to be essential to underpin confidence in the legislative framework and use of recycled materials in WA.

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

The legislative framework, particularly the making and publication of general WDM determinations, will help to increase awareness and confidence in the use of recycled materials and streamline the approvals processes for doing so.

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

Information sessions



5/41-47 Five Islands Rd, Port Kembla NSW 2505
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JOONDALUP WA 6027
wastereform@dwer.wa.gov.au

Friday, 15 December 2020

Discussion paper Proposed legislative framework for waste-derived materials

The Australasian Pozzolan Association¹ ('the Association') welcomes the opportunity to provide our submission on the *Discussion paper Proposed legislative framework for waste-derived materials, September 2020* to the Department of Water and Environmental Regulation ('the Department'). This submission compliments our CEO, Mr Craig Heidrich's presentation during a recent workshop facilitated by the Future Batteries Industry CRC.

This submission has been prepared for the Department with the objective to advise and inform the Department about the value-added benefits which can be derived from emerging manufactured by-product pozzolan sources within the proposed legislative framework.

The Association's CEO, Craig Heidrich² has over 26 years of experience within industry association management³, advocacy, R&D management, environmental policy development and has helped industry embrace the 'circular economy' revolution in Australia before the term was coined! Annually more than 8 million tonnes of industry by-products and recoverable mineral resources are effectively utilised through Associations managed by Mr Heidrich.

Framework elements	Commentary
- Framework review	We commend the Departments efforts in considering other jurisdictions policy framework and seeking to align where possible. NSW Resource Recovery

¹ <https://apoza.asn.au/membership/current-members>

² <https://www.hbmgroup.com.au/about-us/our-team>

³ <https://www.hbmgroup.com.au/our-partners/current-associations>

Framework elements	Commentary
	<p>Orders/Exemptions and the QLD End of Waste frameworks use similar criteria, methodologies and assessment tools adopting a ‘-risk-based approach’. Well established and defined total metals and TCLP methods have been proven to be effective tools to evaluate end use risk of proposed utilisation. For example, bound applications such as concrete manufacture represent a low to no risk, when compared to unbound applications in say road construction where leaching potential risks need to be managed.</p> <p>We support the intent of framework to encourage reuse of WDM by providing certainty about when and how the landfill levy applies and government ‘certification’ (indemnity) for particular re-use pathways. The Department’s aim to address ‘legal certainty’ acknowledges corporate commercial decision-making processes where investments lead to secure associated ‘property rights’ arising from investment in the development of resources. It is these investments which lead to employment security and economic activity underpinning our industry development. Without ‘legal certainty’, investors, business operators and customers operating in highly competitive commercial markets will avoid the associated regulatory uncertainty risks - resulting in widespread loss of current and future beneficial utilisation opportunities.</p>
<ul style="list-style-type: none"> - Amending the definition of ‘waste’ 	<p>We agree that the current definition is problematic, i.e. the inclusion of ‘whether useful’ is inconsistent with principles of circularity. For example many rating schemes, e.g. GBCA, ISCA et al. seek to encourage resource conservation by giving credit to re-use. Some materials may potentially be caught by this proposed waste definition that are defined as co-products. i.e. <i>a product that is intentionally generated during the manufacturing process or chemical reaction(s) of the primary product or process. Co-product may also be characterised as essential to the primary product or process, having a critical influence on the properties of the primary product, e.g., the manufacture of crude steel. Iron and Steel Slags are essential co-products to</i></p>

Framework elements	Commentary
	<p><i>the production of pig iron and steel. Common uses are slag cement, air-cooled iron blast furnace slag and steel slag aggregates.</i></p> <p>The framework proposes that material does not cease to be waste until used in accordance with all the conditions of the relevant WDM declaration. However, almost any raw [natural] material can be used in a way that constitutes disposal or can result in harm to human health or the environment. The definition is also potentially inconsistent with the application of a WDM given the producer/user interface (the producer could do everything right but still be liable if user does not).</p> <p>We recommend the material should cease to be a waste once producer has certified the conditions have been met and control of the material has been handed over with the reasonable expectation of safe re-use.</p>
<p>- Making a WDM determination</p>	<p>We recommend a risk-based approach should be adopted. Similar to other State exemptions/approvals, providing risks are addressed, the material “ceases” to be a waste.</p> <p>This is a significant threshold point in any supply chain model.</p> <p>In terms of matters to be considered when making a WDM determination, consider including developed national or regional industry standards and/or application specifications. The current list of matters⁴ in the discussion paper is narrowly limited to the Department’s CEO determinations.</p> <p>Time taken for WDM determinations required for every material and use combination could be lengthy and, under the framework, is at the discretion of regulator. This provides no certainty for producers/users as to if/when a determination will be made. Determinations could be critical to business cases/investment decisions for users and producers.</p>

⁴ Items 1-6

Framework elements	Commentary									
	<p>Suggest that the Department provide clear advice about the risk assessment criteria, timeframes for review and approval so Industry can work towards meeting the requirements/expectations.</p> <p>Recommend that the Department provides clear criteria for material to be considered low risk and ensures legislation changes allow for minimal regulation for low risk materials.</p> <p>Suggest that case studies for WDMs already being safely used (acknowledged by the Department) should be used as benchmarks for acceptable risk.</p>									
<p>- Types of waste-derived materials determinations</p>	<p>Industry level or Association bodies should be able to initiate a WDM determination process based on collated data and facilitated consensus across stakeholders. This will lead to more Statewide coordination across classes of materials reduced time and inconsistencies.</p> <p>We support overall the current list in Table 1 as examples of materials that “could” be considered for general WDM determinations but recommend the following amendment:</p> <table border="1" data-bbox="646 1350 1369 1585"> <thead> <tr> <th>Version</th> <th>Waste</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>Original</td> <td>Aluminosilicate from lithium production</td> <td>Concrete and cement products</td> </tr> <tr> <td>Amended</td> <td>Delithiated Beta Spodumene (DBS)</td> <td>Concrete, cement and construction products</td> </tr> </tbody> </table> <p>Industry bodies such as Associations which have been instrumental in developing general determination(s), should be encouraged to engage to Department to trigger a review based on new scientific information.</p>	Version	Waste	Use	Original	Aluminosilicate from lithium production	Concrete and cement products	Amended	Delithiated Beta Spodumene (DBS)	Concrete, cement and construction products
Version	Waste	Use								
Original	Aluminosilicate from lithium production	Concrete and cement products								
Amended	Delithiated Beta Spodumene (DBS)	Concrete, cement and construction products								
<p>- Prioritization of WDM determinations</p>	<p>The Department should consider including other measures for prioritization as the current scope is narrowly focused. Others to consider:</p> <ul style="list-style-type: none"> - economic contribution - invested capital 									

Framework elements	Commentary
	<ul style="list-style-type: none"> - carbon reduction / energy conservation - natural resource conservation <p>Suggest low risk WDMs are prioritised by the Department for initial WDM determination(s)</p>
<ul style="list-style-type: none"> - Potential liability of producer/user 	<p>Suggest that the Department provide more clarity on assessment criteria where use of the product has resulted in pollution/environmental harm although WDM determination was followed correctly by producer/user.</p>
<ul style="list-style-type: none"> - Trials of waste-derived materials 	<p>The Department would need to provide clear guidelines on evidence required to demonstrate proposed use. QLD and NSW provide some guidance on these aspects.</p>
<ul style="list-style-type: none"> - Content of WDM product specifications 	<p>Proposed elements for specifications are generally good, some aligned with normal business transactional records should be considered. For example, in NSW and QLD normal business records are used to track transactions; (1) invoices, (2) delivery docs, (3) PDS, (4) SDS and websites technical data sheets.</p> <p>Written statements of compliance again should be built into normal business documents and be linked electronically where possible, e.g. to website for testing data. These statements should be part of some annual reporting requirement, not every batch, lot or delivery.</p> <p>Suggest that the Department provides clear guidelines on sampling/testing/evidence to support determination assessment meets the Department's requirements/expectations.</p> <p>For example, NSW, QLD require statements 'characterising' with interim 'routine testing' to monitor quality characteristics every 12 to 24 months. This demonstrates normal processes are in control limits.</p>
<ul style="list-style-type: none"> - Content of WDM declarations 	<p>The proposed elements for declarations are generally good. Declarations can be aligned with normal business transactional records. For example, in NSW</p>

Framework elements	Commentary
	<p>and QLD normal business records are used to track transactions; (1) invoices, (2) delivery docs, (3) PDS, (4) SDS and websites technical data sheets.</p> <p>Our major concern with declarations is the overly simplified supply chain (Chain of Custody) between the seller and buyer and lack of clarity of responsibilities between them.</p> <p>Supply chains can be more complex with multiple participants. For example, Producer1 to Value adder1, Value adder2, User1, User2. This complexity needs to be accounted for within the CoC requirements which are not onerous and lead to discouraging use.</p>
<ul style="list-style-type: none"> - Waste beneficiation/blending - site licensing 	<p>Blending of wastes and/or wastes with raw materials together can produce products with improved performance characteristics.</p> <p>Suggest that the Department clarify if a site accepting WDM (meeting product specification) for blending would need to be Category 62 licensed, as this presents a significant regulatory burden for what must already have been assessed as a low risk material.</p> <p>Suggest that WDM determinations allow for beneficiation/blending of wastes on unlicensed premises, providing WDM conditions are being met (which could include stockpile volumes, times etc.).</p> <p>To be practical WDM must cease to be waste when it is supplied to the site where the blending is to take place.</p>
<ul style="list-style-type: none"> - Cost of compliance 	<p>We emphasize importance of legislation changes allowing for minimal compliance costs/obligations for low risk waste products.</p>
<ul style="list-style-type: none"> - Storage of waste-derived materials 	<p>Some acknowledgment of the need for long-term vs. short-term stockpiling for project use including stockpiling for new materials during market and product development. Time limits on storage of WDM before use (otherwise a solid waste facility license (61A) or solid waste depot license (62) would be required) may hamper stockpiling of material on "user sites" prior to re-use.</p>

Framework elements	Commentary
	Suggest that the Department speak with industry participants to understand time limits for storage and how these will be practically implemented – particularly during market and product development phases for products that are new to the market.
- Disposal to landfill	Potentially unintended consequences.

End of submission

POZZOLANS

The term 'Pozzolan' used in the name of the Association more accurately reflects the material characteristics of interest to members, which don't fit within the charters of any existing Associations interests or material defined as; cement, lime, amorphous silica, slag or coal ash.

Pozzolans can include a broad category of materials, both naturally occurring and by-products of various manufacturing processes, but can be generally defined as being mainly siliceous or silico-aluminous material that will, in finely divided form and in the presence of moisture, chemically react with calcium hydroxide at ordinary temperatures to form compounds having cementitious properties. Typical pozzolans found across Australia fall into either 'manufactured' or 'natural' sources.

Interestingly, manufactured sources have typically attracted a 'waste' label.

Manufactured Pozzolans	Natural Pozzolans
<ul style="list-style-type: none">• Lithium mining by-products• Ferro-nickel slag• Metals extraction by-products• Waste to Energy (WtE) by-products• Red mud• Glass waste• Calcined clay• Rice husk ash	<ul style="list-style-type: none">• Volcanic rock/ash• Geo-silica• Kaolin• Metakaolin• Chert• Shales• Tuffs• Diatomaceous earths• Pumice

Table 1 - Typical pozzolans found across Australia

During a Forum on October twenty two (22) stakeholders participated in completing a heat mapping exercise. Based on feedback from participants there was a clear and common interest in addressing identified challenges to increase user, business and government awareness of the construction properties and value-added benefits derived from natural and emerging manufactured pozzolan sources.

In the case for manufactured pozzolans, being by-products of various mining, metal extraction, resource and energy recovery processes, an important role of APoZA will be;

- (1) to advocate for the beneficial utilisation of these by-products, in particular the;
- (2) resource recovery benefits to the environment and economic sustainable development for all stakeholders, and
- (3) contributing to a sustainable circular economy.

CIRCULAR ECONOMY

Why is a circular economy important? The circular economy is a modern term used to describe an alternative to a traditional linear economy (manufacture, use, dispose). In a

circular economy we keep resources in use for as long as possible, thus extracting the maximum value from them whilst in use, then recover and regenerate products and materials until the end of each service life.

In simple terms the circular economy adds value to manufacturing by closing the loop on non-core resources and extracting maximum value by using them as input materials in other products or applications. In the case for mineral by-products such as pozzolans using the term 'wastes' to describe them is inconsistent with 'resource conversation' and 'sustainability principles'.

In the processing of minerals from mining operations, e.g. for lithium extraction, various mineral by-products are produced. Historically these by-products have been referred to as either; wastes or residuals. We hold these labels are inconsistent with modern industrial ecology, moreover labelling by-products as 'wastes' only stigmatise opportunities for mineral resource recovery.

An example comes from the iron and steel slags (ISS) which are considered by-products of iron and steel manufacture and not wastes. ISS are broadly described as amorphous inorganic oxides, having similar chemistry to naturally occurring materials, such as quarried stone. Globally, iron and steel manufacture gives rise to millions of tonnes of metallurgical slag. Over the past 40 years important 'hard won' end use markets for ISS have been developed within what has become termed the circular economy.

Industrial 'waste' is generally referred to as the type of waste produced by industrial activity, such as that generated by factories, mills and mines. Waste can be more generally defined as any substance which is unwanted or unusable material. However, within some State legislative frameworks 'a' substance is NOT precluded from being waste for the purposes of [legislation] merely because it can be reprocessed, re-used or recycled. This is a relatively out of date concept and consistent with 'resource conversation' and 'sustainability principles' established back in the 1990's [Brundtland Commission] and needs to be addressed.

PATHWAYS

One primary objective for creating the APozA has been to provide formal representation and a voice for members on par with that available to other industry segments within the construction industry. That is giving us a collective, coordinated voice.

Arising from the heat mapping exercise the APozA committed to investigating and developing a new Australian Standard to facilitate market understanding and develop the use of pozzolans into value added applications. The collection and publication of production and utilisation of natural and manufactured pozzolans data will be an important objective for the Association, in particular applications and end uses by regions.

AUSTRALIAN STANDARDS

Pozzolans can include a broad category of materials, both naturally occurring, processed materials, and by-products of various manufacturing processes but can be generally defined as being mainly siliceous or silico-aluminous or dicalcium silicates material that will, in finely divided form and in the presence of moisture, chemically react with calcium hydroxide at ordinary temperatures to form compounds having cementitious properties.

Whilst natural pozzolans sources are well understood, there is an emerging class of manufactured pozzolans arising from various non-metallurgical and mineral processing industries which warrants greater focus given 'circular economy' drivers to minimise wastes generated.

One example is the manufacture of aluminosilicate by-products from Lithium production. To put in context, Australia is fast becoming a major stakeholder in the global supply of lithium products given its large resources of spodumene. This lithium bearing mineral occurs in hard rock pegmatites and can be processed to extract lithium compounds used to make valuable products such as lithium-ion batteries, ceramics and lubricants. What remains is a lithium aluminosilicate by-product.

Whilst by-product volumes are difficult to estimate, industry predictions based on forecast demand for lithium for use in lithium-ion batteries, ceramics and lubricants will result in significant quantities of lithium aluminosilicate by-product over the next 5 years.

Other non-metallurgical pozzolans can include by-products such as; ferronickel slags, nickel slags, copper slags, beneficiated coal combustion products, incinerator ashes (WtE) and natural sources which can be beneficially used.

These material(s) characteristics don't fit within existing standards for mineral binders such as; cement, lime, amorphous silica, slag or coal ash. Accordingly, the Association is committed to developing a new Standard to facilitate resource beneficial use through well-defined standards ensuring these resources can be incorporated into value added applications.

There are six main stages in the development of an Australian Standard®:



The above figure provides an example of the typical stages and timeline to develop new Standards. This development timeline can vary considerably.

Australian Standards are published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform the way they are intended to. They establish a minimum set of requirements which

define quality and safety criteria. Australian Standards are voluntary documents that are developed by consensus.

Many Australian Standards, because of their rigour, are adopted into legislation to become mandatory or referenced in contracts. Australian Standards development process is based on the key principles of transparency, consensus and balanced expert committee representation. This process is regarded as one of the most rigorous in the world.

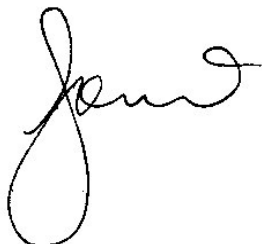
NEED TO REDEFINE WASTES

As an industry association with an interest in resource conservation and recovery policy throughout Australian jurisdictions, we support and encourage pragmatic, scientifically-sound and consultative based action towards the development of legislation, regulations and other necessary measures designed to provide relevant industries with the level of 'legal certainty' required for capital investment to efficiently and effectively recover and use by-products for beneficial ends.

The need to create 'legal certainty' should not be underestimated as it underpins all corporate commercial decision-making processes where investments lead to secure associated 'property rights' arising from investment in the development of resources. Specifically, it's these investments which lead to employment security and economic activity which underpin our industry development. That is, without 'legal certainty', investors, business operators and customers operating in highly competitive commercial markets will avoid the associated regulatory uncertainty risks -- resulting in widespread loss of current and future beneficial utilisation opportunities.

Sustainable industry development, whilst protecting the environment and human health, is implicit in the community license to operate obligations for industry today. Accordingly, we encourage the Department to be mindful of these aspects when formulating any waste reform policy.

Regards

A handwritten signature in black ink, appearing to read 'Craig Heidrich', with a large loop at the end.

Craig Heidrich
CEO
Australasian Pozzolan Association

18 December 2020

Waste Reform
Department of Water and Environmental Regulation
Locked Bag 10,
JOONDALUP DC WA 6919

Via: wastereform@dwer.wa.gov.au

SUBJECT: WASTE NOT, WANT NOT: VALUING WASTE AS A RESOURCE DISCUSSION PAPER

Cement Concrete & Aggregates Australia (CCA) welcomes the opportunity to provide a submission to the Department of Water and Environmental Regulation on the *Waste not, Want not: Valuing Waste as a Resource* Discussion Paper.

CCA is the peak industry body for the heavy construction materials industry in Australia including the cement, pre-mixed concrete and extractive industries. Our members operate cement distribution facilities, concrete batching plants, hard rock quarries and sand and gravel extraction operations throughout Western Australia. For your information, a list of CCA Western Australia's members is provided in Appendix 1.

CCA supports the establishment of a commercially viable circular economy where the regulatory barriers to reuse/recycle material are removed, and the system incentivizes innovation and the commercial application of previously classified waste streams. Overall, the proposed framework is positive and will provide greater certainty around the use of waste derived materials, but additional refinements will increase the likelihood that the promised environmental and commercial benefits will be delivered.

CCA makes the following recommendations:

1. A similar approach is required to determine whether material is waste as is proposed for waste-derived-materials.
2. WDM Determinations must cover producer to consumer material flow.
3. The definition of waste needs to also include the concept that useful material can be transferred within a company and used to produce a commercial product.
4. General WDM Determinations must be finalised for priority materials prior to the enactment of the legislative framework.
5. Government should continue to actively engage with industry to develop the detail on the priority WDM Determinations, Regulations and other guidelines.
6. Given the significant changes proposed, a transition period of 5 years is necessary.
7. Results of interstate and overseas research can be used to support an application for a WDM Determination.
8. Government grants should be available to offset the initial cost and investment hurdle of conducting R&D and establishing demonstration plants for WDM.

9. Government defines specifications or codes for use of recycled/waste derived materials in the construction sector prior to the enactment of the legislation.
10. The NSW Resource Recovery Exemptions and Queensland End of Waste Codes should be used as the basis for developing Western Australia's WDM Determinations.
11. Market fluctuations should be considered in allowing stockpiles of material.
12. An open and transparent appeals process through the State Administrative Tribunal is available.
13. The grounds for appeal are constrained and the time when an appeal can be made is limited.
14. An appropriate compliance and enforcement regime are required that enables a consistent commercial environment.
15. Costs associated with Determination applications and licencing are equivalent to similar charges in other jurisdictions.

CCAA makes the following more detailed comments on the Discussion Paper:

Section 2.2 Amending the definition of 'waste'

The definition of 'waste' is a key concept that will enable the success or otherwise of this legislation. The proposed amendment to the definition of "waste" seeks to expand the definition of waste to include waste derived materials however does not address the more fundamental issue and current uncertainty around what is waste? Given the proposed changes and broadened scope of the definition, it is critical that any uncertainty around whether material is waste or not is first resolved.

The heavy construction materials industry in particular has been significantly affected by uncertainty around whether material is waste or not. As the Discussion Paper identifies, the proposed definition to include waste-derived-materials would exacerbate this issue by broadening its scope and potentially capture many more products and materials which are not currently considered to be waste.

The regulatory regime for waste and waste-derived-materials is both onerous and costly. As such it should be limited as far as practicable to material which is genuinely "waste" and not unreasonably burden other materials and products.

To address this, CCAA **recommends** a similar approach is required to determine whether material is waste as is proposed for waste-derived-materials (WDM), i.e., a mechanism to provide for a general or case-by-case rulings on whether material is waste or not, and by consequence whether the waste regulatory framework should apply to that material or not.

WDM Determination must cover producer to consumer material flow

The Discussion Paper could be interpreted as proposing that WDM is no longer considered "waste" only once it has been **used**. This is highly problematic and is not supported by CCAA.

This concept would mean that consumers of WDM would be purchasing the material as "waste" and it only ceases to be considered waste if the end-consumer uses it in the prescribed manner outlined in the Determination.

Not only would this be an unreasonable regulatory burden and significant disincentive to producers and consumers of recycled materials, but it also classifies wholesalers and retailers of products containing waste-derived-materials as "waste depots" and require them to obtain prescribed premises licences. Given the number of everyday products which contain waste-derived-materials (e.g., recycled paper, plastic, glass, aggregates, etc.), this would be a regulatory nightmare.

CCAA further notes that the proposed treatment of WDM is disproportionate and unreasonably more onerous than compared to the controls and restrictions in place for the use of comparable materials which do not contain waste. The additional risk to consumers by using WDM compared to natural materials is currently one of the principal market barriers to recycled materials acceptance and use.

The Discussion Paper appear to perpetuate the perverse and unsustainable notion that materials derived from waste are somehow inherently more harmful than materials that do not contain waste, regardless of the actual source or composition of the material and/or processing of the material undertaken. In order for WDM to have any hope of meaningful market penetration and acceptance by consumers it must be treated by regulators in the same way as comparable non-waste derived materials.

To resolve these issues and improve market acceptance, CCAA **recommends** that WDM must cease to be classified as waste at the point when the WDM has been **produced** in accordance with a WDM Determination (i.e., the material has been transformed into a product). This would additionally resolve the potential unintended consequences to wholesalers and retailers as the storage of compliant WDM would not be considered a prescribed activity.

Internal company transfers

CCAA **recommends** that the definition of waste needs to also include the concept that useful material can be transferred within a company and used to produce a commercial product without requiring unnecessary, additional red tape to authorise the process. An example of this type of material flow is the reuse and recycling of Concrete Wash Water & Liquid Wash Out into the concrete batching process. Whilst a general Determination could be made to cover this process, the material producer and material customer are the same legal entity, even if the material must be transferred to another site, and a Determination does not add value or provide additional safeguards to the environment in this example.

Section 2.4 Types of waste-derived materials (WDM) Determinations

CCAA **supports** developing general WDM Determinations for priority material as outlined in Table 1 **prior** to the enactment of the legislative framework.

CCAA **recommends** that Government continue to actively engage with industry to develop the detail on the priority WDM Determinations as well as Regulations and guidance materials to avoid unintended consequences and deliver a process that delivers the promised benefits for the environment and industry.

Table 1 – Preliminary Assessment of Priority Materials

Material	Estimated Tonnage Produced per Year	Potential for Diversion from Landfill	Potential Use	Estimated Tonnage Currently Being Used	Target in Waste Strategy
Returned Hardened Concrete	Commercial in confidence	High	Road base /sub base	85%	Yes
Solid Wash Out			Drainage aggregate		
Recycled crushed concrete			Concrete Engineered fill/fill that uses a portion of crushed concrete for backfilling/ rehabilitation		
Bottom ash from waste to energy plants	120,000 when 2 Kwinana sites operational	High	Road base /sub base Engineered fill Concrete		
Fly ash from electricity generation		Medium, research ongoing	Supplementary cementitious material		
Alumino silicate from lithium production	380,000 when Covalent Lithium plant operational	Medium, research ongoing	Supplementary cementitious material Road sub base		
Bricks		High	Road base /sub base Drainage aggregate		Yes
Limestone and limestone waste from scrubber		High	Treatment of acid sulphate soils/acidic dam waters Soil blending		

Section 2.5 Prioritisation of WDM Determinations

CCAA **recommends** the materials listed in Table 1 are priority waste derived materials that must have general WDM Determinations developed **prior** to the legislation coming into force. This will help to resolve concerns regarding timing for industry on WDM Determination and any subsequent appeals.

The Discussion Paper indicates that DWER would be unable to issue WDM Determinations until after the commencement of the legislative changes, with the significant risk of further delays given the proposed rights of appeal against all WDM Determinations.

This scenario has the potential to effectively shut down the industry for an extended period whilst WDM Determinations are resolved, with catastrophic impacts to producers and consumers of WDM. As well as prioritising applications, a transition period for the introduction of the legislation is required to allow producers and consumers to continue to operate under the existing system and provide sufficient time to undertake the requisite assessments and obtain WDM determinations. Given the likely initial high number of WDM determination applications, the level of assessment which will be required, and allowances for appeals, CCAA **recommends** a transition period of 5 years is necessary.

Section 2.6 Trials of waste-derived materials

CCAA **recommends** that results of interstate and overseas research and actual practice should be considered appropriate evidence to support an application for a WDM Determination. There is no need for Western Australia's researchers to reinvent the wheel if the WA material is comparable to that investigated previously.

CCAA **recommends** that Government grants are available to offset the initial cost and investment hurdle of conducting R&D and establishing demonstration plants for waste derived materials. This is an extension of the various Government grants already available to encourage the implementation of a circular economy.

CCAA **recommends** that Government defines specifications or codes for the use of recycled/waste derived materials in the construction sector prior to the start of the legislation that will help commercialise new materials and stimulate market demand. Without these market drivers, the framework will not deliver the expected environmental and commercial benefits.

Some waste derived products cannot be sold in Perth due to poor market demand as natural materials are more cost effective. A potential example of this situation is the bottom ash from the proposed Waste to Energy plants at Kwinana. It can be an expensive and lengthy process to screen, filter and decontaminate the bottom ash from these plants and the quality of the resulting product may not be as good as some of the virgin products available in WA.

Bottom ash material may be viable in markets such as in Europe where it can be expensive to source good quality construction materials to market from distant quarry locations. In WA virgin materials maybe more accessible and cost effective. Commercial drivers will dictate the end use of bottom ash and Government has a role in incentivizing the establishment of new markets for what may otherwise be deemed waste product that is diverted to landfill.

Section 2.7 Content of WDM product specifications

CCAA **recommends** using the NSW Resource Recovery Exemptions and Queensland End of Waste Codes as the basis for developing Western Australia's WDM Determinations. These NSW and Queensland models have been developed in consultation with industry, are understood by industry, are effective in diverting material away from landfill, encourage material reuse and recycling and provide a guidance for implementation.

Note that in New South Wales there has been some confusion in the past with the definitions of naturally occurring materials. In Western Australia, the general definitions are well established, and it is important that natural materials such as soil, sand topsoil and basic raw materials remain outside the waste definitions. In the same way it is important that "waste" continues to only apply to processed materials such as brick and concrete that are disposed of but does not apply to materials that are reused.

Section 2.10 Storage of waste-derived materials

CCAA **recommends** that any limits on approvals for the timing for stock piling material takes into consideration the commercial realities of market fluctuations so that material is not needlessly diverted to landfill or sites required to apply for additional licences during times of low market demand. Variable market demand due to a number of factors in Perth/WA for these products places the ability to sell these products outside of the producer's control, therefore setting time limits is not realistic.

CCAA **does not** support the proposal that the storage of WDM be classified as a prescribed activity and require a Category 61A or 62 Licence.

Section 2.13 Rights of Appeal

CCAA has concerns regarding the appeal process. Industry requires security and certainty around the use of WDM Determinations where a Determination may be challenged, especially if the Determination has been operating for some time. CCAA **recommends** that in effort to limit vexatious appeals, the grounds for appeal are constrained and the time when an appeal to a Determination can be made is limited.

CCAA **recommends** an open and transparent appeals process through the State Administrative Tribunal. There is a risk to both Government and industry if priority Determinations are not in place by the time legislation is in place due to a long, slow, and costly appeals process through the Appeals Convenor.

Section 2.14 Compliance and enforcement

CCAA supports an appropriate compliance and enforcement regime that enables a consistent commercial environment. The Regulator should be well resourced, technically competent and risk based that has the trust of industry and government. Skilled and resourced staff are the key to

realising the full benefit from a modern regulatory framework. The initial focus should be on compliance through education and providing support to operators, so they comply rather than through heavy handed enforcement. Compliance audits should focus initially on high-risk sites.

The regulator should have a range of compliance tools, ranging from infringement notices for relatively minor offences up to significant fines for repeated, serious offences. The regulators decision should also be subject to an external review process.

Section 4 - Implementation of the framework - Cost Recovery

CCAA **recommends** that any costs associated with Determination applications and licencing are equivalent to similar charges in other jurisdictions. The primary aim of Government and real benefit for the community is in avoiding material disposed to landfill and encouraging recycling and reuse.

Government should focus on lowering any barriers to entry, not on cost recovery and unnecessary red tape. Similarly, The Government's priority should be on developing and assisting markets for recycled materials and addressing the current substantial barriers restricting the acceptance of recycled materials before contemplating any changes to the Landfill Levy and/or increasing the costs and regulatory burden on industry.

Western Australia's regulatory environment needs to be internationally competitive to continue to attract capital to invest into the state to ensure a sustainable and competitive heavy construction materials industry. This in turn facilitates Western Australia's productivity, housing affordability and lower infrastructure costs.

The provision of affordable heavy construction materials, including recycled waste derived materials helps to facilitate the delivery of affordable infrastructure, contributing to the completion of Western Australia's infrastructure projects within budget.

There is no more important time than now for the construction sector, supported by an efficient heavy construction materials supply chain, to provide the engine to build Western Australia's post COVID economy and create jobs.

Please do not hesitate to contact me to discuss any of these issues in more detail.

Yours sincerely



ROGER BUCKLEY

State Director Western Australia

APPENDIX 1

CEMENT CONCRETE & AGGREGATES AUSTRALIA

MEMBERSHIP

FOUNDATION MEMBERS

 <p>ADBRI Adbri Limited</p>	 <p>Boral Australia</p>	 <p>Cement Australia Pty Ltd</p>
 <p>Hanson HEIDELBERGCEMENTGroup Hanson Australia Pty Ltd</p>		 <p>Holcim (Australia) Pty Ltd</p>

WESTERN AUSTRALIA

ORDINARY MEMBERS

<p>Flyash Australia Pty Ltd Fulton Hogan Industries Lime Industries Pty Ltd</p>	<p>Pilatti Bros Transport Ransberg Pty Ltd T/a WA Premix and WA Bluemetal Urban Resources Pty Ltd</p>	
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ASSOCIATE MEMBERS

<p>Concrete Colour Systems Concrete Waterproofing Manufacturing Pty Ltd T/a Xypex Australia</p>	<p>GCP Applied Technologies Sika Australia Pty Ltd Westrac</p>	
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Waste not, want not: Valuing waste as a resource: Discussion paper

CCF WA supports the principle of a legislative framework for waste-derived materials, which would allow case-by-case determinations.

DWER's proposed framework has great merit and we welcome your proactive approach to this issue, and in general your recent strong engagement with industry. There are however some concerns which we outline below.

Definition of waste

The first issue with the proposed legislative framework is that it would amend the definition of waste to clarify that waste-derived materials are waste for the purposes of the legislation, thereby broadening the definition of waste.

In previous submissions we have called for legislative changes to ensure valuable recycled construction and demolition materials cannot be regarded as waste. Materials recycled for use in construction must be explicitly excluded from any definition of waste. This includes clean fill for land development and recycled materials used for drainage, road base and other purposes. Where a proponent can demonstrate that a recycled material has value, i.e. is a saleable commodity, then that material should be excluded from the definition of waste.

Timing for classification of waste-derived materials

DWER's proposal (section 2.10) that "waste-derived materials would only cease to be waste when **used** in accordance with a WDM declaration" (our bold) has the potential to cause major issues around the storage of materials and regulatory risk to consumers of the material. CCF WA strongly endorses the view expressed in our Member WA Limestone's submission that waste-derived materials should cease to be classed as waste as soon as the material is transformed into a saleable product, not when it is sold or ultimately used.

Implementation

We also support WA Limestone's recommendation for a transition period for producers to operate under the existing system whilst they go through the process of obtaining a waste-derived materials determination for their products. WA Limestone's proposal for a five-year transition period is

reasonable, given the potential for significant damage to the WA C&D recycling industry while the new legislation is bedded in and approval processes get up to speed.

It is worth noting here that WA already lags well behind most of the world on C&D recycling. There are currently huge stockpiles of recycled C&D material (estimated at 500,000 tonnes -plus) looking for suitable markets. Regulators, Government infrastructure agencies and industry must work together to fast-track the acceptance and application of these materials. We cannot risk these worthy reforms proposed by DWER placing any short to medium-term impediment to the urgent need to improve our performance in this area.

CCF WA has previously highlighted an upcoming issue with the waste-to-energy (W2E) plants currently under construction. Both W2E plant proponents state that the bottom ash will be recycled for use as a construction aggregate, yet to date there has been no approval or endorsement by the State for the recycling of bottom ash for road base and construction materials, and no indication from Main Roads that it will change its specifications and/or accept this material.

With projects such as the W2E plants and lithium refineries being commissioned within the next 12-18 months there will be a significant increase in the volume of waste material with the potential to be recycled. However, under the current system it is likely this material will have to be sent to landfill.

CCF WA thanks DWER for the opportunity to comment.

Yours sincerely



Andy Graham
CEO (WA)

Response ID ANON-NHP8-6BZZ-A

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on 2020-12-18 15:45:39

Introduction

1 What is your name?

Name:

ChemCentre

2 What is your email address?

Email:

[REDACTED]

3 Which of the following best describes the group or person you represent? (optional)

Other

If other, please specify.:

Government scientific organisation

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

ChemCentre feels the direction of the legislation is useful as it will bring more certainty to industry and help in the goal of a circular economy for Western Australia.

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

The use of the word "waste" is counter to the value the products will bring. The use of the word "by-product" may better convey the value of these materials.

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

N/A

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

The CEO will be able to call on existing regulations according to the specifics of the material and intended usage (such as environment and public health). Landfill Waste Classification could apply to clean fill, the Ecological Investigation Levels and/or Health Investigation Levels as appropriate.

The end use of WDM should determine which criteria should apply. One size should not fit all since WDM can cover a diverse range of materials. DWER will have to formulate their own decision tree(s) as to usage of WDM incorporating existing

An important aspect of the proposed legislative framework for WDMs is the ability for the DWER CEO to be able to review and amend WDM determinations as

more and/or new information/scientific data becomes available.

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

Waste by-products that currently sit outside of the legislative umbrella would now be included. There may be benefit in maintaining exemptions for well-established practices (eg WWTP treated wastewater) to reduce pressure on the number of WDM determinations required.

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

The consequences of not developing a WDM, such as economic effect or environmental risk of extended storage.

Consideration should include WDMs for soil amendment where a market does not exist and yet it can resolve currently serious environmental problems in WA, such as; (i) high soil salinity and (ii) acid sulfate soils in non-urban locations.

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

ChemCentre has been working with various industries (including LiOH producers) and WA Government agencies on the environmental risk assessment of using certain WDMs and better informing safe uses. Hence, there is already data that would inform and expediate the development of some general WDM determinations and these could be considered in DWER's priority list.

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

There are suites of chemical analysis that can support decision making and development of WDMs, such as chemical composition, kinetic testing, leachate composition (ASLP, LEAF tests), acid base accounting. Some guidelines exist on applying the results of these protocols, but other decision support tools will need to be identified and/or developed.

The LEAF tool kit comprises a set of leaching test methods, data management and predictive modelling tools that can predict and inform the potential environmental risk of specific uses/applications of a WDM, e.g. use for fill, road base or soil amendment. The LEAF tool kit can also be applied to more efficiently optimise the development of safe uses of WDMs rather than having to perform field trials, large column studies and pot trials, which can be too costly and take a long time (years) before results are obtained.

Through a MRIWA and industry (Alcoa, Iluka and Aroona of the Water Corporation), ChemCentre has establishment of an initial LeachXS database of Western Australian local soils and by-products suitable for the development of chemical speciation fingerprints to allow robust predictions of the potential environmental impact of proposed or potential WDM uses. ChemCentre capability will readily allow database expansion as other soil types and materials are tested in the future.

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

It should be case-by-case as different operators may result in different compositions in what would nominally be the same WDM. If the WDM is similar, confirmatory tests would be acceptable instead of a in depth analysis.

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

Existing data and processes will be applicable, and these precedents can help inform decisions going forward.

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

For guidance, the acceptable chemical compositions should be stated, be it contaminated sites legislation or landfill classification. This should be an early step in the decision tree. Being above the guideline levels will trigger another branch in the decision tree and not necessarily prohibit the use of WDM as other factors will come into play such as the receiving environment and the intended use.

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

Storage of WDM should be decided based on site-specific conditions and criteria

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

We must be mindful of risks that will appear as new data is obtained.

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

Time will be of the essence and timely WDM determinations will be crucial. To this end we believe protocols needed to be established earlier rather than later and that stakeholders such as laboratories needed to be kept in the loop.

Final comments**29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?**

general comments:

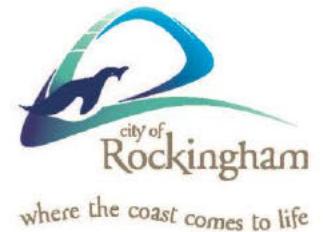
30 Do you have any final comments? Please provide your final comments in the text box below.**any final comments:**

Economically, DWER will struggle to find resources for studies into WDM where in the absence of published material. However, producers of WDM will have the financial incentive to undertake these studies. Having clear guidelines available as soon as possible on what is required to make an WDM determination will allow time for industry and providers of studies (eg Scientific organisations, consultants and laboratories) to undertake the relevant investigations to ensure DWER have access to the relevant science and data.

ChemCentre has expertise in chemical and other aspects and we are willing to contribute to the technical aspects of the process as it develops.

Information sessions

Our Ref: EVM/94 – D20/237266
Your Ref:
Enquiries to: Miss C Raphael (Environmental Planning Officer)



18th December 2020

Waste Reform
Department of Water
and Environmental Regulation
Locked Bag 10
JOONDALUP WA 6919

Email: wastereform@dwer.wa.gov.au

Dear Sir/Madam

Re: Waste Not, Want Not: Valuing Waste as a Resource, Discussion Paper, Proposed Legislative Framework for Waste-Derived Materials

Thank you for providing the City of Rockingham ('the City') the opportunity to comment on the Discussion Paper "Waste Not, Want Not: Valuing Waste as a Resource" and the proposed changes to the legislative framework for waste-derived materials.

The City is pleased to see the revisions and improvement of the current legislative framework governing waste-derived materials (WDM). The City supports the shift towards a circular economy in Western Australia and endorse efforts to improve the demand and confidence in recycled materials.

The City is supportive of the revised legislative changes. The following comments are provided for your consideration:

- The City supports the inclusion of other WDM in the proposed legislative framework for waste-derived values that are not destined for land (e.g. recycled plastic products).
- The City strongly supports the use of general WDM determinations to streamline the process and incentivise the use of waste-derived materials for users. The City recommends the list of general WDM determinations is created in collaboration with local governments (as well as industry) and reviewed regularly and expanded as necessary to accommodate emerging technologies and trends.

The City wishes to remain up to date and have the opportunity to comment throughout the implementation process, and is particularly interested in how the monitoring and compliance program will be implemented and operated. Considering the misuse of WDM materials may have significant impacts on human health and the environment, a robust and effective monitoring and compliance program will be necessary.

Should you wish to discuss the City's comments further please feel free to contact Claire Raphael on [REDACTED] or [REDACTED].

Yours faithfully

BRETT ASHBY
MANAGER STRATEGIC
PLANNING AND ENVIRONMENT





Waste not, want not: Valuing waste as a resource

Proposed legislative framework for waste-derived materials

Discussion Paper – September 2020

Submission to Department of Water and Environmental Regulation

Contact
Kira Sorensen
Senior Policy Adviser
Environment

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About CME

The Chamber of Minerals and Energy of Western Australia (CME) is the peak resources sector representative body in Western Australia (WA). CME is funded by member companies responsible for more than 86 per cent of the State's mineral and energy workforce employment.¹

In 2019-20, the WA's mineral and petroleum industry reported a record value of \$172 billion.² Iron ore is currently the State's most valuable commodity at \$103 billion. Petroleum products (including crude oil, condensate, liquefied natural gas, liquefied petroleum gas and natural gas) followed at \$37 billion, with gold third at \$16 billion.

The value of royalties received from the sector totalled \$9.3 billion in 2019-20,³ accounting for 28.8 per cent of general government revenue.⁴ In addition to contributing 40 per cent of the State's total industry Gross Value Added,⁵ the sector is a significant contributor to growth of the local, State and Australian economies.

Summary of Recommendations

The following recommendations address specific key concerns and priorities for recovered resources (i.e. waste-derived materials) in WA.

- Consistent with a circular economy and end-of-waste approach, any term using “waste” must not be used for materials that are approved for use (and hence no longer “waste”). Multiple different alternative terms could be used such as ‘secondary material’, ‘derived material’, ‘derived resource’, or ‘recovered resource’. The term ‘recovered resource’ is recommended by CME and has been used throughout this submission to more clearly distinguish products from being a waste, assist marketing, and crucially, to align with the terminology used in Queensland, New South Wales and South Australia.
- Agglomerated products which are comprised of or derived from a recovered resource should not be subject to a recovered resource framework.
- The recovered resources framework should not apply to distributors of recovered resources beyond standard requirements for the safe storage, handling and transport of the material.
- The Department of Water and Environmental Regulation ‘Factsheet – Assessing whether material is waste’ be incorporated into an amended definition of ‘waste’.
- Materials produced and managed under the *Mining Act 1978*, *Petroleum and Geothermal Energy Resources Act 1967*, and State Agreement Acts be excluded from the definition of waste or exempt from waste licensing and levy obligations, under the new recovered resource legislation.
- Industry-to-industry transfer of materials to be considered in the development of the recovered resource legislation to prevent unnecessary regulation and mechanisms adopted to incentivise industrial symbiosis in WA.
- Develop a single approval document which sets out both the requirements for producers and users of a recovered resource, similar to the Queensland end-of-waste framework.
- Develop and publish the list of proposed matters to which the CEO must have regard when making a WDM determination.
- Apply robust and consistent risk assessment framework to ensure effective and appropriate regulation of recovered resources.

¹ Full-time employees and contractors onsite in 2019-20, excludes non-operating sites. Government of Western Australia, *2019-20 Economic indicators resources data*, Safety Regulation System, Department of Mines, Industry Regulation and Safety, September 2020.

² Government of Western Australia, *Latest statistics release Mineral and petroleum review 2019-20*, Department of Mines, Industry Regulation and Safety, September 2020.

³ Government of Western Australia, *2019-20 Economic indicators resources data*, Safety Regulation System, Department of Mines, Industry Regulation and Safety, September 2020.

⁴ Government of Western Australia, *2019-20 Annual report on State finances*, Department of Treasury, 25 September 2020.

⁵ Duncan, A. and Kiely, D., *BCEC Briefing note WA Economic update*, Bankwest Curtin Economics Centre, November 2019, p. 4.

- Both general and case-by-case approvals for recovered resources should be developed to distinguish between common and bespoke uses.
- A circular economy approach should prioritise recovered resources capable of displacing virgin materials.
- The framework should specifically enable and incentivise investment in, and the trialling of, materials for their suitability to become recovered resources.
- Clear accountabilities of producers and users, and distinct transfer of liability at point of sale must be developed.
- DWER should acquire additional resources to establish a dedicated team responsible for managing the implementation of the Framework.

CME does not support the following two proposals canvassed in the Discussion Paper:

- The requirement for producers to provide a statement of compliance to users is not supported.
- The requirement for time-limited storage of recovered resources is not supported.
- The requirement for recovered resources to be subject to additional regulation under the *Environmental Protection (Controlled Waste) Regulations 2004*.

Context

CME welcomes the opportunity to provide a submission to the Department of Water and Environmental Regulation (DWER) on the 'Waste not, want not: Valuing waste as a resource – Proposed legislative framework for waste-derived materials' Discussion Paper (the Discussion Paper) released 25 September 2020.

The Discussion Paper proposes a legislative framework for waste-derived materials (WDM) including various legislative amendments to the *Environmental Protection Act 1986* (EP Act), *Waste Avoidance and Resource Recovery Act 2007* (WARR Act) and *Waste Avoidance and Resource Recovery Levy Act 2007* (WARR Levy Act). The proposed framework is intended to support and promote use of WDM by improving confidence in and demand for recycled products to stimulate market development in WA.

New South Wales, South Australia and Queensland have adopted the term “recovered resource” as opposed to “waste-derived material”. **CME recommends using the term “recovered resource” to more clearly distinguish products from being a waste, assist marketing, and better align with the approach of other jurisdictions.** The term “recovered resource” will be used throughout this submission.

Proposed legislative framework

The development of an effective legislative framework for recovered resources is critical to supporting a circular economy and the achievement of the Waste Strategy 2030 targets.

Supply chains of relevance to the resources sector are highly complex and relationships between products and waste are often non-linear or binary. The proposed framework must be capable of clearly differentiating various process materials as outlined in **Table 1. Appendix I: Proposed application of a recovered resources framework.** details the proposed application of the framework consistent with the below differentiations.

Table 1: Differentiating process materials and their consideration under a recovered resource framework.

Material	Is it waste?	Does it have value?	Sold, traded, given away?	Under framework?
By-product & co-product Secondary material produced from the manufacturing / processing of another primary product.	No	Yes	Yes	No
Intermediate product Material, which is not a final product, produced from one process and used in other. Includes materials involved in inter-industry and intra-industry transfers.	No	Yes	Yes	No
Recovered resource Material recovered or derived from waste, has a beneficial use, and is produced and used as per relevant product specifications.	No	Yes	Yes	Yes
Agglomerated product Material which is comprised of or derived from a recovered resource.	No	Yes	Yes	No
Waste Material which discarded as no longer useful or required after the completion of a process.	Yes	Sometimes	No	Yes

Agglomerated products

A clear distinction is needed to determine when a recovered resource becomes a product and is no longer subject to the recovered resource framework.

Where a recovered resource is used to produce an agglomerated product, and where this use is consistent with the requirements of the recovered resource product specification, the agglomerated product should not be captured under the framework.

The framework must have distinct boundaries defining the scope of its application in a circular economy. These boundaries must not allow the framework to indefinitely apply to a material supply chain and should be restricted to the production of and use of a recovered resource, not subsequent products.

CME recommends agglomerated products which are comprised of or derived from a recovered resource should not be subject to a recovered resource framework.

Distributors

The application of the framework regarding distributors of recovered resources requires clarification.

As agents who supply goods to users, distributors should not be themselves considered 'users' under a recovered resource framework and as such should not be subject to regulation under the framework. As with any standard product specification, requirements for the safe storage, handling and transport of the material should be complied with. However, requirements for registration, record keeping and monitoring of use of the recovered resource should not apply.

CME recommends the framework should not apply to distributors of recovered resources beyond standard requirements for the safe storage, handling and transport of the material.

Definition of 'waste'

Correcting the definition of waste is fundamental to the waste reform agenda, providing certainty around when recovered resources are no longer waste and negating the need for an additional legislative framework.

The definition of waste needs to be amended to:

- Stop capturing (or potentially capturing due to ambiguities) by-products, co-products, intermediate products, recovered resources, uncontaminated fill, clean fill, and waste already regulated under other legislation; and
- Be flexible enough to allow for material to cease to be waste.

Under DWER's 'Factsheet – Assessing whether material is waste', saleable material and waste which has been substantially transformed or converted into a product or good are not waste.⁶ This definition reflects DWER's current position and promotes streamlined management of recovered resources.

CME recommends incorporating the DWER 'Factsheet – Assessing whether material is waste' into an amended definition of 'waste'.

Materials excluded from the waste definition or exempt from licensing and levy obligations

It is essential a number of mineral and processing materials in the resources sector are excluded from the definition of waste or exempt from waste licensing and levy obligations under the new legislation.

CME recommends materials produced and managed under the following legislation be excluded from the definition of waste or exempt from waste licensing and levy obligations, under the new recovered resource legislation:

- *Mining Act 1978;*⁷

⁶ Available at <https://www.der.wa.gov.au/images/documents/your-environment/waste/Factsheet-Assessing-waste.pdf>.

⁷ Government of Western Australia, Department of Justice, Parliamentary Council's Office - Mining Act 1978, https://www.legislation.wa.gov.au/legislation/statutes.nsf/main_mrtitle_604_homepage.html

- *Petroleum and Geothermal Energy Resources Act 1967*,⁸ and
- State Agreement Acts.

By adopting this approach, the following materials, specific to the resources sector, will appropriately be excluded from the definition of waste, or exempt from licensing and levy obligations:

- Any material which is subject to a royalty payment and therefore is a natural resource which inherently still has a value / use to society;
- “Waste rock” – rock which is mined and does not have current metal concentrations of economic value to the miner; and
- “Tailings” – ground rock and process effluents that are generated in a mine processing plant and disposed of within tailings storage facilities as approved on Mining Act or State Agreement Act tenure.

By way of example, the following would be appropriately excluded from the definition of waste: waste rock crushed for road base and concrete aggregate; and tailings used for paste fill in underground mining situations.

It should be noted that none of the above Acts exempt activities from being regulated under the provisions of the EP Act and other legislation already in place to protect the environment and human health (such as the *Contaminated Sites Act 2003*). Further, CME does not consider it necessary, nor appropriate, for waste materials in the resources sector to be further regulated by the new proposed legislative framework.

By-products

CME considers the current definition of waste is too broad and could be unnecessarily obstructive to the beneficial use of by-products and the objectives of a circular economy.

A State framework for managing waste, where by-products produced by industry are defined as waste (as determined from the perspective of the person who is the source of material) and are subject to a levy, will undermine the adoption of industrial symbiosis (industrial ecology) and the development of a circular economy in WA.

The paper “Industrial Symbiosis in the Kwinana Industrial Area (Western Australia)”⁹ discusses the benefits which can be derived from industry-to-industry transfer of by-product materials. This can only occur if such transfers are not over regulated and / or financially dis-incentivised.

The below figure, sourced from this paper, shows historical by-product industrial symbiosis in the Kwinana Industrial Area.

CME recommends implications of the framework on industry-to-industry transfer of materials be more clearly considered in the development of the recovered resource legislation to prevent unnecessary regulation and mechanisms adopted to incentivise industrial symbiosis in WA. CME is strongly of the view that industry-to-industry transfers are not captured by the framework as this would unnecessarily burden industry creating a disincentive.

⁸ Government of Western Australia, Department of Justice, Parliamentary Council's Office - Petroleum and Geothermal Energy Resources Act 1967, https://www.legislation.wa.gov.au/legislation/statutes.nsf/main_mrtitle_704_homepage.html

⁹ Harris, S. Dr, Industrial Symbiosis in the Kwinana Industrial Area (Western Australia), Centre of Excellence in Cleaner Production, Curtin University of Technology, Measurement + Control Vol 40/8 October 2007, <https://journals.sagepub.com/doi/pdf/10.1177/002029400704000802>

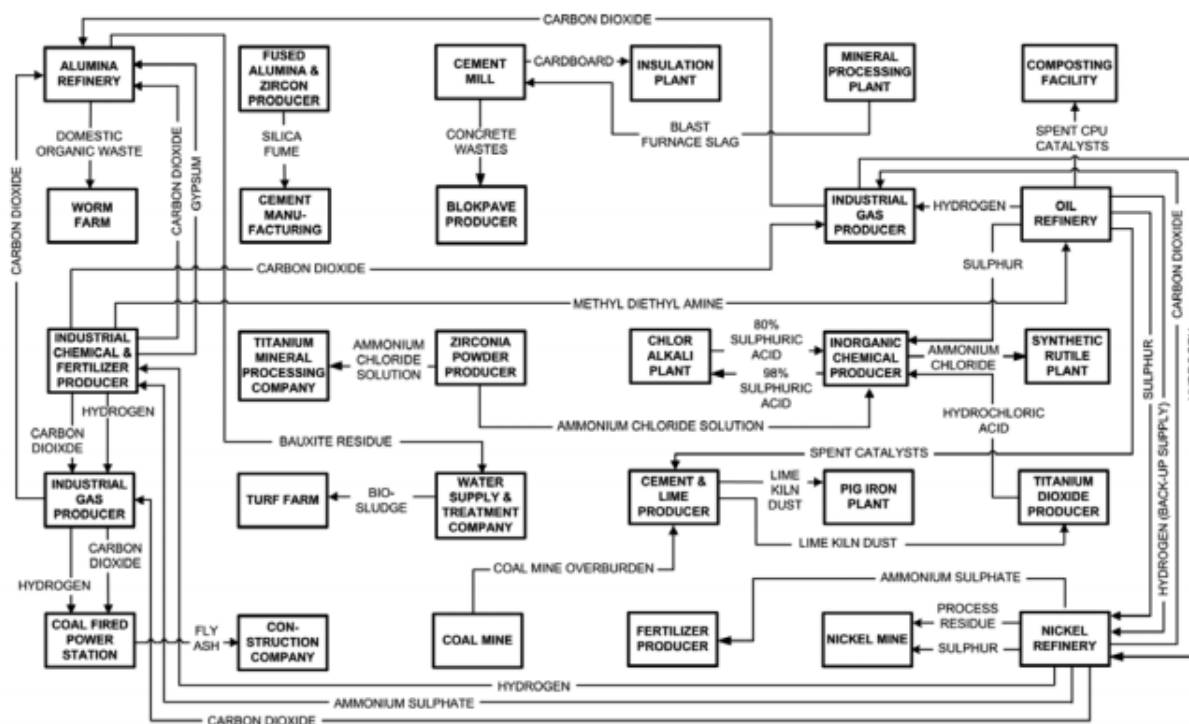


Figure 3: Existing by-product IS in the Kwinana Industrial Area. (van Beers, Corder et al. 2007)

WDM determinations

Making a WDM determination

Under the proposed framework, general and case-by-case ‘WDM determinations’ will be developed which each comprise of a ‘WDM product specification’ for producers and ‘WDM declaration’ for users. The use of three different terms for a single recovered resource approval appears unnecessarily complex.

Under the Queensland end-of-waste framework, a single document (a ‘code’ for general use, or ‘approval’ for specific trial use) is developed which separately sets out requirements for producers and users. From a transparency perspective, it would also appear beneficial for both users and producers to be aware of the requirements placed on the other party as part of the Framework.

CME recommends development of a single approval document which sets out both the requirements for producers and users of a recovered resource, similar to the Queensland end-of-waste framework.

Matters the CEO would have regard to in assessing and making a WDM determination

In principle, CME supports the list of proposed matters to which the CEO must have regard when making a WDM determination. However, greater clarity is needed regarding the evidence required by industry to demonstrate alignment with the proposed principles in order to obtain CEO approval.

Acknowledging DWER’s commitment to ensuring this detail is captured in further guidance material, CME looks forward to contributing to future consultation on these guidance documents.

Setting conditions in WDM determinations

CME support risk-based regulation and conditions proportionate to the risk. However, under the proposed framework there exists no clear pathway for how a recovered resource is to be considered low or high risk. Perception of risk can differ across stakeholder groups and its method of assessment must be clearly defined and consistently applied.

CME recommends a robust and consistent risk assessment framework be applied to ensure effective and appropriate regulation of recovered resources.

Types of WDM determinations

CME supports the development of general and case-by-case approvals for recovered resources to distinguish common and bespoke uses.

Regarding Table 1 on page 9 of the Discussion Paper, CME notes the following:

- The 'Use' column incorrectly captures both recovered resources and their potential uses. For example, crumbed rubber modified bitumen is a recovered resource made from used tyres and conveyor belts which can be used for road sealant spray applications. A third column should be added to distinguish waste, recovered resource and potential use.
- Red Sand is not used as a soil ameliorant.
- Acid sulfate soils are naturally occurring. It is not correct to consider treated acid sulfate soils a recovered resource and therefore should not be captured under a recovered resource framework. Acid sulfate soils may also be treated in-situ further compounding potential confusion about capture of this material as waste.
- Treated wastewater used for irrigation is already subject to Department of Health regulations and guidelines, and other parts of the EP Act and should not be subject to additional regulation under a recovered resource framework.

Prioritisation of WDM determinations

In determining the priority of materials for developing general determinations, **CME recommends a circular economy approach is considered with prioritisation of recovered resources capable of the displacing virgin materials in bulk. Materials for use by Main Roads and other large-scale construction projects should also be prioritised.**

Trials of recovered resources

Any legislation should allow for testing and trialling of recovered resources in different capacities to explore reuse options. Barriers to trials must be sufficiently low to encourage innovation and novel use. Allowing trial permits or periods could revolutionise how companies handle large volume mineral wastes. Minimising such wastes through reuse / repurposing has multiple benefits including reducing footprints, reducing liability, reducing demand for virgin materials and reducing potential environmental impacts.

CME recommends the framework specifically enables and incentivises investment in, and the trialling of, materials for their suitability to become recovered resources.

WDM production specifications

CME support clear accountabilities of producers and users, and distinct transfer of liability at point of sale.

Producers should not be held accountable for the action (or inaction) of users. This was a clear lesson learnt from implementation Queensland's end-of-waste framework.

The need for a written statement of compliance to be provided by the producer to the user is questionable. Under the proposed framework, the producer is required to comply with the product specification stipulated in the relevant general or case-by-case determination. Failure to comply constitutes a non-compliance. The statement of compliance provides no additional legal certainty for the user regarding product quality, and only adds an unnecessary administrative layer and compliance requirement for the producer.

Furthermore, broader consumer protection laws apply, requiring the producer to ensure the product provided to the user is as per the required specifications.

CME do not support the requirement for producers to provide a statement of compliance to users.

Transitional provisions

The implementation plan provides 'transitional provisions' for recovered resources currently produced and / or in use so far as that determinations will be developed for 'prioritised' materials. The process for developing determinations is untested and the timeline unknown and unbound by statutory timeframes. While the intent is to mitigate impact on industry, this may not be entirely possible.

CME notes the proposed framework is highly resource intensive with regards to approvals and compliance, and long lead times are expected for the development of determinations. **CME recommends DWER acquire additional resources to establish a dedicated team responsible for managing the implementation of the Framework.**

WDM declarations

Product storage and stockpiling is a necessary part of inventory management and should not be subject to time limitations. The imposition of stockpiling restrictions on users is not consistent with a risk-based approach to regulation.

Recovered resources would be required to not pose an unacceptable risk to human health or the environment, as proposed under the 'principles for use'. Consequently, the storage and stockpiling of such material should not consist of an unacceptable risk to health or the environment. Restricting the storage of the resource would not provide for better environmental protection.

CME do not support the requirement for time-limited storage of recovered resources.

Controlled waste

Under the proposed framework, a recovered resource comprised of or derived from controlled waste would by default continue to be considered controlled waste and subject to the *Environmental Protection (Controlled Waste) Regulations 2004* (CW Regs). This presents a significant barrier to market development and resource uptake as the transport, storage and handling of the material would be subject to extensive regulation, including additional reporting and licensing.


Classification of recovered resources as controlled waste is inconsistent with intent of the framework for recovered resources. Controlled wastes are inherently hazardous wastes, unlike recovered resources which are required to not pose an unacceptable risk to human health or the environment.

CME recommends recovered resources are not subject to additional regulation under the CW Regs.

Conclusion

CME thanks DWER for the opportunity to comment on the Discussion Paper and looks forward to continuing to work with DWER through this reform process and the wider waste reform agenda.

If you have any further queries regarding the above matters, please contact Kira Sorensen, Senior Policy Adviser – Environment, on [REDACTED] or [REDACTED]

Authorised by	Position	Date	Signed
Robert Carruthers	Director – Policy & Advocacy	18/12/2020	
Document reference	201218-WDM Framework_Submission-Final.docx		

Appendices

Appendix I: Proposed application of a recovered resources framework.

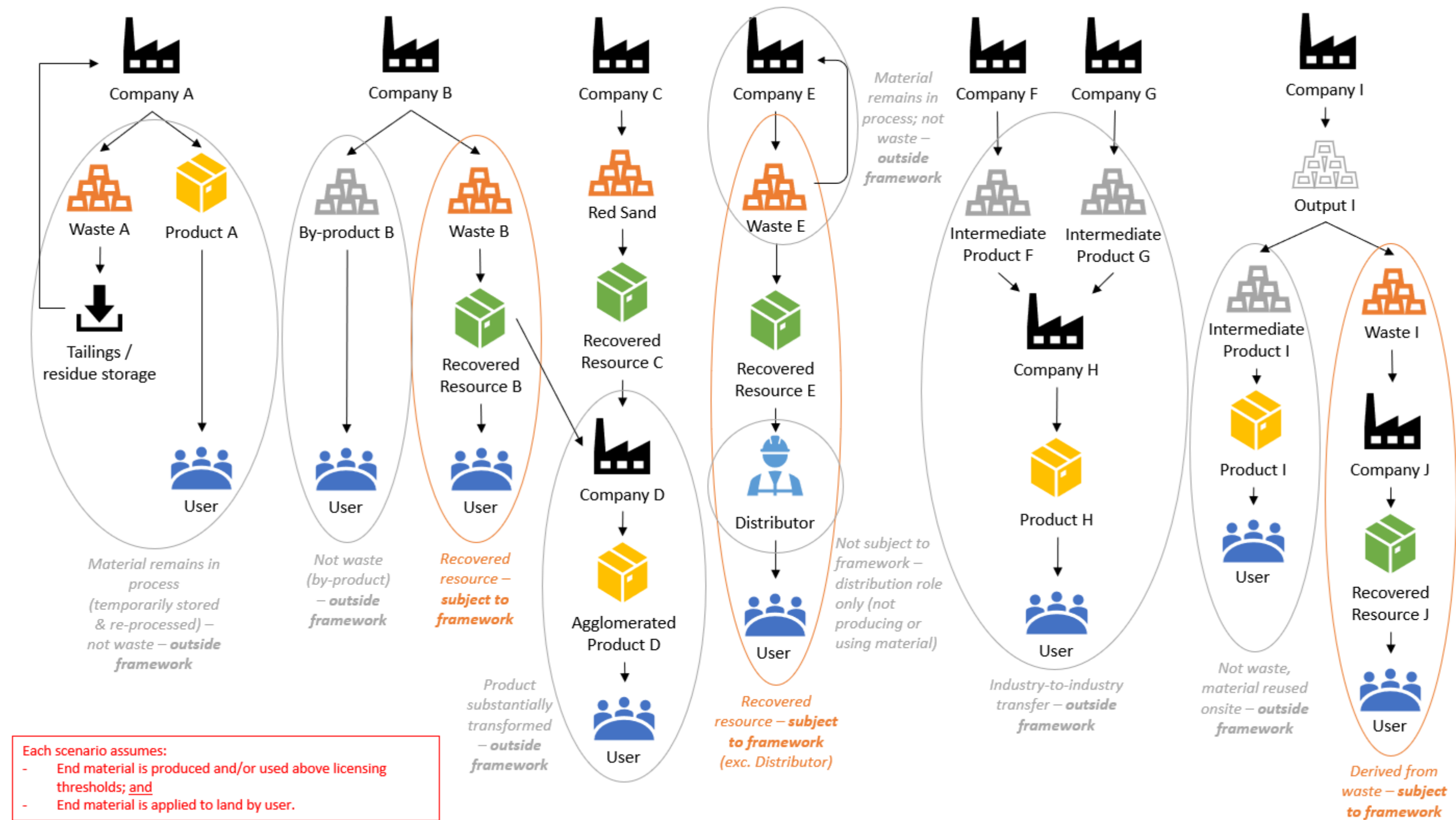


Figure 1: Application of a recovered resources framework illustrated under multiple scenarios.

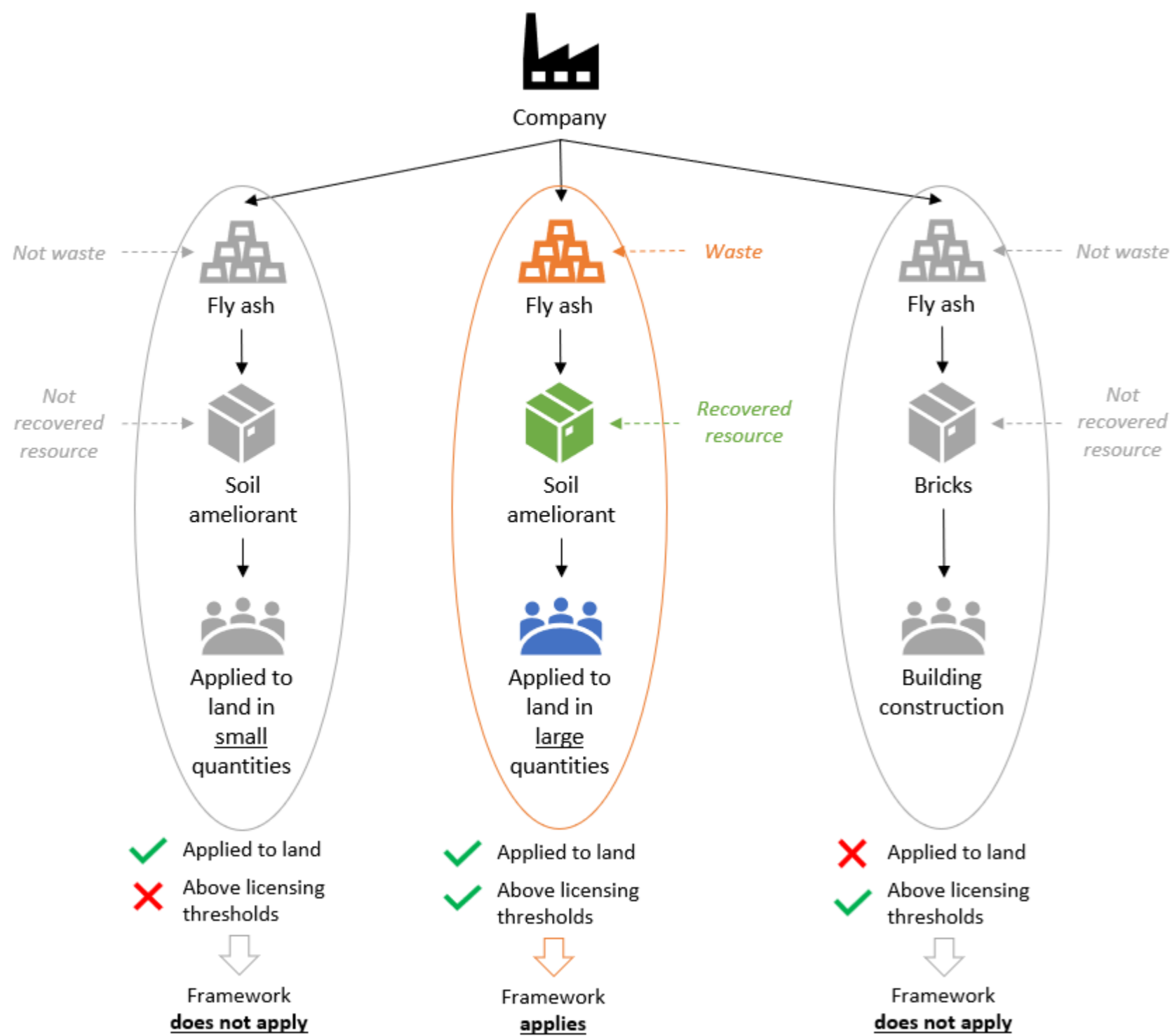


Figure 2: Example illustration of the application of a recovered resources framework.

Response ID ANON-NHP8-6B59-4

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on 2020-12-18 12:44:26

Introduction

1 What is your name?

Name:

Kate Bushby

2 What is your email address?

Email:

[REDACTED]

3 Which of the following best describes the group or person you represent? (optional)

Government body

If other, please specify.:

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

Department of Biodiversity, Conservation and Attractions (DBCA) supports the development of a framework that provides certainty for producers and users of WDM while ensuring human health and the environment are not placed at risk. There are significant benefits to be gained from appropriate application of WDM including improved soil nutrient and moisture retention and agronomic outputs. Use of WDM can also assist with protection of native vegetation from clearing by reducing the need for extraction of basic raw materials.

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

No

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

The environment and human health must be key considerations including biological risk (eg phytophthora risk) and risk of environmental harm through interaction of the WDM with water, soil, wind and vegetation. An adequate quality assurance program must be implemented for WDM to ensure consistent material quality.

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

No

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

Additional to laboratory validation, field validation of WDM's should be required to ensure application of materials does not result in environmental harm under likely conditions of application.

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

WDM production specifications should include allowable application conditions (ie where to and where not to apply), rates and potential environmental and human health risks.

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

No

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

WDM declarations should include contingencies in the event of environmental harm e.g. a condition such as development of an environmental management plan may be appropriate.

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

As with all stockpiles they must be appropriately managed to ensure the local environments are protected.

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

No

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

Regular review is required, including random audits of WDM quality.

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

A period of public comment should be required prior to their publication and a period of review must be set e.g. every two years.

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

DWER should be adequately resourced to provide compliance.

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

DBCA commends DWER in their efforts to reduce Western Australia's waste production and the associated environmental degradation caused by these activities and see the opportunity of utilising adequately characterised materials with favourable characteristics to address environmental issues, such as nutrient loss or reducing acidity in soils.

Information sessions

Waste not, want not: Valuing waste as a resource: Discussion Paper: Department of Finance (Finance) response, December 2020

Online Survey Questions

Questions 1 -3 are identification questions.

Confidentiality

4. Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

Finance response

- No aspect of this submission is confidential.

Proposed Legislative Framework

5. Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Finance response

- The legislation and scope are clear and address legislative issues that would impact on Finance with regard to using Waste-Derived Materials (WDM) for land development, infrastructure and construction processes.
- Finance notes that there does appear to be a significant reliance on a Departmental CEO to make a determination regarding WDM. However, Finance assumes there will be a transparent process including the input of independent specialist advice. We further assume that the CEO referenced is the Director General of DWER. Finance is not in a position to assume this role.
- Finance supports the WDM product specification and declaration approach for producers and users, and the use of risk and fitness assessments to support approval. However more information is required regarding the responsibilities and obligations to be placed on end users of waste derived materials/products, including clear

communication and advisory resources for producers/users to educate and ensure compliance. Again, our view is that any such advisory, education and compliance role would sit with DWER as Finance does not consider itself resourced to fulfil such a role.

- Finance supports the approach to provide for general WDM specifications to approvals for materials that require assessment on the basis of site-specific conditions and risks. Finance assumes DWER will develop any such specifications and implement a system of monitoring/auditing for compliance with specification and declarations. In addition, we consider that any such system should be designed to require the minimal reasonable effort from government suppliers, including with regard to reporting or compliance.

Definition of Waste

6. Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Finance response

- Sub-clause (c) of the definition refers to either a relevant general or case-by-case Waste Derived Material (WDM) declaration – Finance suggests this be amended to a relevant current WDM declaration. This amendment would avoid instances where WDM is claimed to not be waste because its use complies with a previous declaration, which may no longer reflect contemporary requirements.
- Finance suggests that the definition be further amended at sub-clause (c) to specifically exclude WDM that complies with the WDM specification from being defined as waste.

7. To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements: (1) They are currently considered to be products (not waste), and (2) They are

deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste. This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Finance response

- Finance notes the reference to wastewater and that this would impact on individual projects where wastewater is used on the site for landscaping or other purposes. We suggest that waste water be subject a general specification, to allow appropriate reuse while continuing to maintain appropriate exclusions, such as for trade waste.

Making a waste-derived materials (WDM) determination

8. Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Finance response

- Finance assumes the CEO would be the DG of the Department of Water and Environmental Regulation. Finance supports this position as the most appropriate to approve WDM determinations.

9. Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

Finance response

- Finance suggests DWER considers a process for appeals to WDM determinations be considered. This would provide due process for WDM producers.

Types of WDM determinations

10. Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Finance response

- The types of WDM determinations proposed would appear to be appropriate to address the variety of waste derived materials likely to require determinations and the impact of site-specific conditions/requirements.

11. Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations?

Please provide your comments in the text box below.

Finance response

- Glass – as glass powder for use as replacement for cement
- Glass - aggregate for use in concrete for infrastructure including road/ pedestrian pavements/ kerbing /buildings? Need to consider reduced concrete strength where using glass aggregate
- Glass – aggregate for use in asphalt – roads etc.
- Tyres – crumbed rubber for use in asphalt – roads/carparks etc.
- Concrete – in consideration of previous use and contaminants
- It is noted that Table 1 refers to construction and demolition waste – this should be considered in different categories – masonry, concrete, steel, timber, glass etc.
- Compost – as has already been identified in the discussion paper.
- Plastics, including operating plastics, High-Density Polyethylene (HDPE) and Polyethylene Terephthalate (PET)
- Scrap metals - bulk steel and copper.
- Old corrugated cardboard or containers.
- Mixed paper and old newspaper.

12. Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Finance response

No comment.

Prioritisation of WDM determinations

13. Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Finance response

- Finance proposes DWER considers:
 - potential/opportunity to develop a local 'manufacturing'/ supply capacity;
 - the ability for the current capacity to be grown to meet increased market demand for waste derived materials;
 - the cost to industry of compliance with this regime; and
 - DWER's capacity to monitor/audit the compliance of industry to meet requirements of WDM Specification and Declarations.

14. Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Finance response

- Finance recommends prioritising development of general WDM determinations for
 - concrete, masonry, tyres and glass for use in infrastructure/building construction projects.
 - compost for use in landscaping projects.
 - plastics in various gradations for the purpose of re-creating plastic products.

15. Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Finance response

- Finance supports the development of clear guidelines on the evidence required for trials of specific material(s).

WDM product specifications - producers

16. Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

Finance response

- Generally, Finance supports the described WDM specification requirements, on the assumption that there would be a mechanism to ensure these specifications do not exclude producers without adequate evidence that the specification should not be applied.
- Finance also notes that the producer must demonstrate capability and processes to ensure that the WDM is ready for use as a WDM. How will reliable accountability be introduced for ensuring producers are complying with the WDM specification from time-to-time? It appears that users are left with the onus to investigate and report non-compliance with the WDM specification - this may be neither reasonable nor practicable.

17. Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Finance response

- No comment

WDM declarations - users

18. Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

Finance response

- Finance supports the described WDM declaration requirements.

Contaminated sites, storage and disposal to landfill

19. Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

Finance response

- Finance assumes that the legislative framework would be aligned with any current relevant acts or that these acts would be amended as necessary to meet the requirements of this framework.

20. Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

Finance response

- Finance understands storage time-limits are intended to encourage timely use. Finance assumes the time limits would be identified for individual materials in consideration of risks specific to those product(s).
- Once the general WDM determinations have been considered, it would be appropriate to seek input from end users and industry on proposed timelines. Feedback will assist in ensuring time limits are reasonable, pragmatic, and consider identified risks, particularly in WDMs where stockpiling is observed.

21. Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

Finance response

- No comment

Review of WDM determinations, publication and rights of appeal

22. Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

Finance response

- Finance supports provision to review specifications/determinations and agrees that determinations should be considered a 'live' process that accommodate changes in technology, circumstance etc.
- Where case by case WDM determination, Finance queries whether there would there still be a requirement to undergo public comment process? Finance's position is that the two processes should be aligned.
- The legislative framework should allow efficient minor adjustments to operational effect of both general and case-by-case WDM determinations.

23. Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

Finance response

- Finance generally supports the approach to publication noting that the process for determining the commercial-in-confidence status of certain information and industry satisfaction with this process is unknown at this point.

24. Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

Finance response

- No comment

Compliance and enforcement

25. Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

Finance response

- Finance notes the difference in penalty between non-compliance with the WDM specification by the producer and non-compliance with the WDM declaration by the user. Finance considers non-compliance with specification as serious as non-compliance with declaration.

26. Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

Finance response

- No comment

27. Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

Finance response

- No comment.

Implementation of the framework

28. Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

Finance response

- In relation to the reference to cost recovery for determinations, Finance suggests consideration be given to the following:
 - application to general WDM determinations
 - whether it should be applied to development and/or approval of WDM specifications
- The efficiency and benefits of the new legislative framework should incentivise current and potential market participants to seek productive uses for WDMs. Consideration should be given to the cost and effort required in complying with the legislative framework

compared with the cost of landfill. Ease of complying with the framework and clear understanding of requirements will likely have a substantial impact on implementation and success.

Final Comments

29. Do you have any general comments on the implications of the proposed legislative framework on producers and users?

Finance response

- The proposed legislative framework will provide clarity for the use of waste derived materials for building and infrastructure construction. Greater detail regarding issues of compliance monitoring and auditing, relevant appeals processes, and the intended cost recovery approach would be of benefit.
- Finance reinforces the need for producers and end users to be fully aware of their obligations, and the potential penalties for non-compliance, and to have access to adequate guidance.

30. Do you have any final comments? Please provide your final comments in the text box below.

Finance response

- No further comment



Government of **Western Australia**
Department of **Health**

Your Ref: Waste Not, Want Not
Our Ref: F-AA-11918/4 D-AA-20/148892
Contact: Vic Andrich 9222 2000

Waste Reform
Department of Water and Environmental Regulation
Locked Bag 10
JOONDALUP DC WA 6919

Via email: wastereform@dwer.wa.gov.au

Dear Sir/Madam

DISCUSSION PAPER - WASTE NOT, WANT NOT: VALUING WASTE AS A RESOURCE – PROPOSED LEGISLATIVE FRAMEWORK FOR WASTE-DERIVED MATERIALS

Thank you for your letter of 25 September 2020 requesting comments from the Department of Health (DOH) on the above proposal. The DOH provides the following comment:

The DOH is very supportive of such an initiative and sees that this will improve public and environmental health outcomes both directly or indirectly. To achieve those outcomes, a sustainable, economically viable industry is essential. Getting the economics sorted will lead to a way to divert wastes from the environment which will in-turn improve environmental health and assist with meeting outcomes recommended in the Sustainable Health Review.

The DOH considers the following to be critical issues for establishing and sustaining any waste-derived material industry:

- Secure the resource supply – in a form and at a quality that best suits the end market. This may mean setting up collecting, handling, storage and preliminary washing/separating infrastructure to facilitate efficient on-processing to end products. For example, waste tyres are disposed in various ways resulting in them being uneconomical to recover. The recovery and handling of waste tyres should be coordinated that facilitates efficient recovery for processing.
- Identify potential markets for each waste-derived material. Within the report, identify markets within Western Australia as the highest priority, followed by nationwide and then international. Publish the reports of potential markets along with expected quantities of waste-derived materials that would meet the demand.

- Regional coordination of waste derived product to markets. To support open markets, the supply of waste derived material should be stockpiled until it reaches a critical mass that can dictate its own price on open markets. This would entail suitable storage facilities until that critical mass is achieved (which may take considerable time). Local government household recycling would be the greatest beneficiaries of such a scheme. Funding of storage facilities and appropriate equipment for washing, separating and baling waste materials should be from the Waste Levy.
- Develop and ensure that at every stage, no one business has a monopoly on either the resource supply or the market of the product. This principle applies to both the producer of the product and the end user. This is critical if the system is to be sustainable. If any business or end user has a monopoly, then that will distort the economics and the industry will fail or become too expensive for participants.
- Consideration also needs to be given to how to prevent the undercutting of the price of the waste-derived material (end product) from traditional suppliers of competing materials. For example, crumb rubber for roads competes with gravel. When a crumb rubber comes on the market, the gravel suppliers drop their price to undercut the crumb rubber for a period of time which closes the crumb rubber business.
- Long-term facility infrastructure stability. As Western Australia is a relatively small market it is critical that infrastructure remains for extended periods as these provide the stable base upon which a waste-derived product industry is based. Consideration should be given to government owned facilities which are leased to private operators. This will ensure that the facility remains even if the operator decides to close the facility or relocate to another jurisdiction. It is imperative that the facility continue to be available to underpin the industry in Western Australia.
- Mapping of resource supply throughout the state. When determining the resource supply, it is important to understand where the product is located throughout the state and the condition that it is in. Strategies can then be designed to recover that resource in the most efficient process. This could entail mobile washing and baling plants travelling to regional areas to improve the resource to a standard that can be processed.
- Environmental Regulatory Reform – current environmental regulations inhibit the opportunity for waste-derived products industry to be fully developed. Consideration of the needs for a sustainable industry will require flexibility in the collection, handling, storage and disposal regulatory requirements. The banning or restriction of waste products to various disposal sites should be undertaken only when there is a viable alternative otherwise indiscriminate dumping will occur.

Should you have any queries or require further information please contact Vic Andrich on [REDACTED] or [REDACTED]

Yours sincerely



Dr Michael Lindsay
EXECUTIVE DIRECTOR
ENVIRONMENTAL HEALTH DIRECTORATE

13 November 2020

Response ID ANON-NHP8-6B5U-Z

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on 2020-12-17 12:38:18

Introduction

1 What is your name?

Name:

Transport Portfolio

2 What is your email address?

Email:

3 Which of the following best describes the group or person you represent? (optional)

Other

If other, please specify.:

Stage Government Agency

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

The Public Transport Authority (PTA) supports the intent of the proposed legislative framework to allow for the use of excavated material which is fit for purpose and suitable for use, without the requirement for a licence or payment of the waste levy.

Section 2.0

To demonstrate the primary purpose of framework, it is suggested that an additional statement should be included to the dot points beneath "The proposed legislative framework is designed to:". Proposed statement below:

- Increase the use of waste-derived materials across industry to reduce landfill burden caused by the unnecessary disposal of fit-for- purpose waste-derived material.

Section 2.1

In relation to WDM determinations, it would reduce complexity and administration burden if the "WDM product specification" identified approved use scenario. This would negate a user having to link a WDM Product Specification with a WDM declaration reducing the potential for incorrect linkage and unacceptable use. The producer that is processing the material from a waste to a WDM should be doing so with the end user in mind. Thus producing a product to a singular approved specification that identifies the materials:

- Engineering properties.
- Environmental properties.
- Occupational exposure properties.
- Approved use scenarios.

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

In relation to the proposed waste definition, the department should consider taking a resource approach to WDM, meaning that there should be a singular specification per WDM product. This would in essence demonstrate a pathway from where a material changes from a waste to a resource (product). This could be achieved through the adjustment of the waste definition, as detailed below:

waste includes matter:

c) wholly or partly comprised of waste, or wholly or partly derived, recovered or produced from waste, unless (insert 'produced and') used in accordance with all of the conditions of either a relevant:

- (i) general WDM (replace 'declaration made' with 'specification endorsed') by the CEO; or
(ii) case-by-case WDM (replace 'declaration' with 'determination') made by the CEO.

In relation to the following sentence:

"To address this, the department would ensure high-priority general WDM determinations are in place soon after the framework is enacted."
It is suggested a cooling off period is stated to provide industry confidence that they have time to meet new framework requirements

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

Dependent on project size, the following materials could meet all of the listed requirements:

- General fill.
- Recycled asphalt pavement.
- Recycled ballast.
- Dewatering effluent
- Recycled reconstituted retaining wall blocks.
- Crushed recycled concrete.
- Recycled C&D aggregates.
- Mulch (chipped vegetation).
- Topsoil.
- Treated acid sulfate soils
- Glass cullet (crushed recycled glass).
- Excess soil from construction earthworks.

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

Dependent on project size, the following materials could meet all of the listed requirements:

- General fill.
- Recycled asphalt pavement.
- Recycled ballast.
- Dewatering effluent
- Recycled reconstituted retaining wall blocks.
- Crushed recycled concrete.
- Recycled C&D aggregates.
- Mulch (chipped vegetation).
- Topsoil.
- Treated acid sulfate soils
- Glass cullet (crushed recycled glass).
- Excess soil from construction earthworks.

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

Dependent on project size, the following materials could meet all of the listed requirements:

- General fill.
- Recycled asphalt pavement.
- Recycled ballast.
- Dewatering effluent
- Recycled reconstituted retaining wall blocks.
- Crushed recycled concrete.
- Recycled C&D aggregates.
- Mulch (chipped vegetation).
- Topsoil.
- Treated acid sulfate soils
- Glass cullet (crushed recycled glass).
- Excess soil from construction earthworks.

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

There may be instances where there is doubt whether a general determination is valid for a particular scenario. It is suggested the process include a mechanism whereby industry can seek confirmation from DWER that the general determination applies to their circumstances.

Conditions attached to general determinations may not suit all applicable scenarios. Will a process to vary conditions be considered?

It is suggested that the terminology is adjusted to remove negative connotation of WDM, in the following sentence:

1. general WDM determination for commonly used materials with known (replace 'contaminant' with 'analyte') thresholds,

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

- Offsite re-use of excavated material (spoil resulting from infrastructure projects surplus to project requirements) for fill material.
- General fill.
- Recycled asphalt pavement.
- Recycled ballast.
- Dewatering effluent
- Recycled reconstituted retaining wall blocks.
- Crushed recycled concrete.
- Recycled C&D aggregates.
- Mulch (chipped vegetation).
- Topsoil.
- Treated acid sulfate soils
- Glass cullet (crushed recycled glass).

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

- Excavated material that may not meet the requirements of a general WDM termination.

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

The prioritisation of WDM determination should include:

- The whole of life sustainability (social, environmental and economic) benefits or cost of material re-use.

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

Reuse of spoil that meets human health and ecological criteria as general fill material is a key issue for infrastructure projects.

Request this is considered as a priority.

- General fill.
- Recycled asphalt pavement.
- Recycled ballast.
- Dewatering effluent
- Recycled reconstituted retaining wall blocks.
- Crushed recycled concrete.
- Recycled C&D aggregates.
- Mulch (chipped vegetation).
- Topsoil.
- Treated acid sulfate soils
- Glass cullet (crushed recycled glass).

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

No

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

The WDM product specification should clearly articulate the proposed use scenario. The proposed text should be added to:

4. conditions to be met in order for the WDM product specification to apply. These might include:

- the source(s) of the waste input
- time limit for storage of the waste-derived material
- sampling and testing requirements commensurate with the risks and uses and taking into account the sources of the waste input
- chemical and contaminant thresholds
- record-keeping and reporting requirements

Proposed two points to be added:

- the waste-derived material(s) and uses to which the specification applies
- acceptable or unacceptable use(s), such as receiving environment and application rates

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

It is suggested a cooling off period is stated to provide industry confidence that they have time to meet new framework requirements.

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

It is suggested that the WDM declaration should be considerably simplified, with the text in {brackets} to be added to the WDM specification:

{1. the waste-derived material(s) and uses to which the declaration applies

2. the user(s) of the waste-derived material(s) to whom the declaration applies (if not for general application)}

3. the duration of the declaration (generally valid until revoked)

4. conditions, all of which the user(s) of the waste-derived material(s) must meet for the material to not be 'waste', such as:

- holding a statement of compliance from the producer that all the conditions of the WDM product specification have been met at the time of receipt of the waste-derived material on site

{• acceptable or unacceptable use(s), such as receiving environment and application rates

- information that must be provided by the supplier and stored by the user(s) (such as a statement of compliance from the producer and any other evidence of compliance)}

- record-keeping and reporting requirements, including registration with the department, depending on the level of risk.

{5. time limits on stockpiles (i.e. in instances where the waste-derived material is to be stored on site)}

6. definitions of relevant terms.

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

In relation to Section 2.9, it would be beneficial to identify that if a WDM is used in accordance with the approved WDM determination it would not be considered a potentially contaminating activity.

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

Noting that infrastructure projects occur over a number of years –provision should be made to allow storage of waste-derived materials on a site throughout a construction phase.

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

No

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

The periodic review should be defined.

The public review period should be defined.

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

No

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

No

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

Generally they seem quite low, when in comparison to the potential cost of disposal.

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

Generally they seem quite low, when in comparison to the potential cost of disposal.

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

No

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

No

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

No

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

No

Information sessions

Response ID ANON-NHP8-6B5G-J

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on 2020-12-14 09:45:52

Introduction

1 What is your name?

Name:

Stuart Murphy

2 What is your email address?

Email|

3 Which of the following best describes the group or person you represent? (optional)

Government body

If other, please specify.:

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

I work for DevelopmentWA as a Senior Project Manager. I'm not a lawyer so will not try to amend or propose anything. However, I would like to bring to your attention the success we have had at Midland. DevelopmentWA currently have 180,000m3 of lightly contaminated material. This material is currently stockpiled in Midland. Maintaining this stockpile is costly and wastes a huge area of land that could otherwise be very activating.

We have just managed to engineer the material and create a design to use the material as Engineered Road Sub-grade. This project is very successful and has had the following benefits:

- Future activation of the vacant land;
- reduced exposure to the community to the environmental impacts of the contamination by placing the material under a road which protects the community;
- Used the material as a product which has saved the State payment of the Waste Levy of \$22,000,000. This shows the industry what can be done if given the correct incentive to do so (waste Levy is the incentive to reuse the material).
- Saved and estimated \$30,000,000 in wasteful tipping.

This is all possible based on the Definition of waste. If you can prove that a material has to be Engineered then how can it be a waste; it must be a product.

I'm happy to discuss further if you would like to contact me.

Regards

Stuart Murphy

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

Midland "Western Paddock". I'm not sure if under the current amendments this material would be considered waste but I'm highlighting this material so you could consider the material in your review.

I confirm that the material is currently considered to be a product.

I confirm that the material is currently deposited to land in a very large quantity.

Please refer to my response to question 6 for further detail.

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

Information sessions

Response ID ANON-NHP8-6B57-2

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**
Submitted on 2020-12-17 15:52:11

Introduction

1 What is your name?

Name:

Department of Planning, Lands and Heritage

2 What is your email address?

Email:

[REDACTED]

3 Which of the following best describes the group or person you represent? (optional)

Government body

If other, please specify.:

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

N/A - general comments provided in last response

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

N/A - general comments provided in last response

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

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Making a waste-derived materials (WDM) determination

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N/A - general comments provided in last response

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WDM determinations:

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Case-by-case WDM determination:

N/A - general comments provided in last response

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

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14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

N/A - general comments provided in last response

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Trials:

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WDM production specifications:

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Transitional arrangements:

N/A - general comments provided in last response

WDM declarations –users

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N/A - general comments provided in last response

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N/A - general comments provided in last response

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new offence for producers for provision of a false statement :

N/A - general comments provided in last response

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Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

N/A - general comments provided in last response

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

N/A - general comments provided in last response

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

Generally Supportive

The Department of Planning, Lands and Heritage (DPLH) recognises the limits to natural resources and that waste can be used to as a resource to supplement

traditional sources, particularly for Basic Raw Materials in both building, road and subdivision construction.

DPLH supports the Waste Strategy 2030 vision that the State becomes a sustainable, low-waste, circular economy in which human health and the environment are protected from the impacts of waste. The Issues Paper outlined that the current legislation does not include a framework for waste-derived materials and does not prescribe when waste-derived materials will cease to trigger licensing and waste levy regimes under relevant acts and the regulations made under these acts. Given the vision and current legislative gap, DPLH is supportive of the development of a legislative framework that provides for a risk-based assessment and approval process for bespoke use of waste-derived materials.

DPLH raises the following to DWER's attention:

- The discussion paper did not specifically address land use changes over time whereby a waste-derived material may be disposed in accordance with the WDM declaration, however, not suitable for a future change of land use:
 - o A situation whereby a WDM declaration identifies a waste-derived material is suitable for use on industrial land (receiving environment), but over time the receiving environment changes from a industrial use to a more sensitive use (for example residential or school). Depending on the waste-derived material disposed over the land, the land would require remediation and/or removal of the waste-derived material to ensure the land is suitable for the intended use/development.

DPLH supports the following as a result of the proposed legislative frameworks:

- WA's shift towards a circular economy and the reuse and recycling of materials generated through construction and other processes
- Consistent with the State Government's Our Priorities – Sharing Prosperity document which promotes 'A liveable environment' in order to make a cleaner and more sustainable environment. Setting a target by 2030 to have at least 75% of waste generated in WA reused or recycled.
- Reducing the amount of tonnage to landfill
- Minimising stockpiling by encouraging the use of fit-for-purpose waste-derived materials which may otherwise have adverse impacts on nearby sensitive land uses
- A flexible approach towards waste-derived material determinations and the ability to place conditions on waste-derived materials to ensure the materials use is suitable in specific applications and receiving environments
 - o General (commonly-used waste-derived materials); and
 - o Case by case (bespoke)
- Stringent protocol through the legislation (WDM determination) to ensure waste-derived material is produced and used appropriately (for instance WDM product specification and WDM declaration) to ensure there is minimal risk to the environment and human health

Information sessions



To:	Department of Water & Environmental Regulation (wastereform@dwer.wa.gov.au)
From:	Jason Pugh – General Manager Commercial
CC:	
Date:	17/12/2020
Re:	<i>Submission: Waste not Want Not: Valuing Waste as a Resource</i>

Question	Section	Feedback
Do you have any comments on the purpose, scope and overview?	2. Proposed legislative framework	<ul style="list-style-type: none">We are supportive of the scope of this proposed legislative framework. <p>In terms of scope we would request that “licensing of production premises” be considered as part of the framework. Whilst we understand the approach to make WDM “waste” under the definition of waste we are concerned how this applies to the supply chain. For example, we are working with a concrete manufacturing company to use IBAA as a substitute for Portland cement in the concrete manufacturing process. The IBAA will be supplied to the manufacturer after first undergoing thermal degradation in the incinerator, then metals recovery, screening and sizing through our onsite IBA treatment plant. We should be able to supply this material to the concrete manufacturer without them having to license their facility as a prescribed premises for waste processing. We have already been told that this requirement will eliminate the opportunity to work with this major</p>

		<p>concrete manufacturer. We request that the “concrete manufacturer” be treated as a user of WDM’s and not be required to have a prescribed premises license for the processing of waste. They should be treated like any “user” of the waste-derived material with conditions they must meet in order for the material to cease to be waste and therefore not have to licence the land on which they use the materials nor pay the waste levy.</p> <p>This is incredibly important because the use of IBAA as a substitute for Portland cement is a safe and elegant way to support the circular economy on a long-term basis for the industry. This opportunity will be lost if they need to obtain waste processing licences.</p>
Do you have any comments on the proposed amendment to the definition of waste?	2.2 Definition of waste	No comment
To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify any materials which meet all of the following requirements: (1) They are currently considered to be products (not waste); (2) They are deposited to land in quantities above the licensing thresholds; and (3) Under the proposed amended definition of waste, they would be considered waste. This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).	2.2 Definition of waste	No comment
Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination?	2.3 Making a waste-derived materials (WDM) determination	<p>Comments on CEO considerations:</p> <ul style="list-style-type: none"> • <u>Point 4</u>: We have seen poor uptake of WDM’s in support of the circular economy in WA. There is a concern that the CEO must consider an established or emerging market for the WDM to make

		<p>a WDM determination. For Incinerator Bottom Ash Aggregates (IBAA), which is a new product to the market, the WDM could fall short of this requirement. Creating markets for new WDM's requires the producers to create confidence with end users as an initial step. It is unlikely potential users will drive this process making it difficult for the CEO to make a determination. Please note further comments that follow and are relevant to this issue. We have entered into a R&D Agreement with Curtin University to trial IBAA imported from the UK in bound and unbound civil engineering applications. We would like to work with DWER to ensure the work fulfills some trial requirements on the pathway to creating an established market.</p> <ul style="list-style-type: none"> • We support the concept of site-specific matters in determining the risks associated with the materials use. This needs to be considered on a large-scale basis to define the appropriate hydrogeological types / areas that are compatible to the IBAA specification.
<p>Do you have any other comments on the making of WDM determinations?</p>	<p>2.3 Making a waste-derived materials (WDM) determination</p>	<ul style="list-style-type: none"> • For IBAA reuse it is important and reasonable to use leaching data analysis when assessing the suitability of the WDM reuse in addition to the general hydrogeological risk factors. The IBAA treatment process is effective at stabilizing heavy metals. A specification using appropriately banded criteria to allow for the variability in the material is necessary. This specification when assessed against the general hydrogeology should provide confidence that the risk of re-use of the product does not pose risk to the environment or human health • Leach testing methodology should use water as the solvent not acid. This is to reflect the environment the WDM will be used in, that is, as a sub-base for road construction or in a bound application. It would be inappropriate to use acid as the solvent as this is specifically designed to simulate conditions in a Class III landfill environment, which does not reflect the end uses of IBAA. • International benchmarking: the WA EPA created a regulatory framework for waste to energy by first looking at international best practice through Section 16 (e) advice to the Minister. This

		<p>sensible approach has resulted in WA achieving the first two projects in Australia. A similar approach should be taken to the reuse of IBAA. The UK has a well-established framework for the beneficial reuse of IBA and this best practice solution should be considered as part of a General WDM determination by the CEO. We acknowledge that WA specific risk factors also need to be considered.</p> <ul style="list-style-type: none"> • It is difficult for WDM's to compete against the use of virgin materials for a number of reasons. The Department needs to ensure the framework to make a WDM determination is as expedient as possible. Any framework that makes it easier for the market to keep using virgin materials (by making WDM more complex and cumbersome) does not support the WARR Act or the State Waste Strategy 2030. Thus, the WDM Determination needs to be General (not case by case) and have sufficient factor of safety to cope with the variability of the product and the localized hydrogeology.
<p>Do you have any comments on the types of WDM determinations (general and case-by-case)?</p>	<p>2.4 Types of WDM determinations</p>	<ul style="list-style-type: none"> • The DWER should work towards making General Determinations for IBAA, one for bound use and one for unbound use. A case by case determination provides an additional market risk to WDM's that would greatly affect their uptake. • The Consultation Paper has included Fly Ash and Bottom Ash from Waste to Energy Plants in Table 1 – Examples of materials considered for General WDM determinations we support this approach in aiding to find an expedient path to market for this material and supporting the Waste Strategy 2030.
<p>Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations?</p>	<p>2.4 Types of WDM determinations</p>	<ul style="list-style-type: none"> • We strongly advocate the inclusion of IBAA as a WDM that receives a General Determination. Once operational the two waste to energy projects will be treating almost all of Perth's residual MSW on long term contracts. This means IBAA will be generated in reasonably large volumes on a consistent basis for the next 30 years. • IBAA has various applications/uses as a WDM, including bound (concrete) and unbound (sub-base for road construction). The industry would be seeking application based WDM determinations

		that would have differing risk analysis based on the leaching profile of the application (for example bound applications have little metals leaching risk).
Which material(s) would you wish to seek a case-by-case WDM determination?	2.4 Types of WDM determinations	<ul style="list-style-type: none"> No comment
Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations?	2.5 Prioritisation of WDM determinations	<ul style="list-style-type: none"> No, we believe section 2.5 covers the main considerations for determining priority.
Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials?	2.5 Prioritisation of WDM determinations	<ul style="list-style-type: none"> Incinerator Bottom Ash Aggregates (IBAA): as stated above, almost all Perth councils will be utilizing the services of the two waste to energy projects by 2022. This will see the generation of IBAA per annum to rise to approximately 140,000 tonnes per annum. The prioritization of this WDM would support the State Governments resource recovery and landfill diversion targets in the State's Waste Strategy 2030.
Do you have any comments about WDM determinations for trials of waste-derived materials?	2.5 Prioritisation of WDM determinations	<ul style="list-style-type: none"> We support the department publishing guidelines on the implementation of IBAA as a WDM. <ul style="list-style-type: none"> Trials should not prolong the timeframe for the IBAA to be determined as an approved WDM Evidence from international markets should be considered in assessing evidence of WDM usage. As stated above, East Rockingham Waste to Energy has entered into an R&D Agreement with Curtin University to evaluate IBAA in bound and unbound civil engineering applications. It would be very helpful to have DWER involved so any WDM Trials Objectives could be captured in the methodology.
Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions?	2.7 Content of WDM product specifications (general or case-by-case)	<ul style="list-style-type: none"> We support the WDM product specifications as outlined in the consultation paper. <ul style="list-style-type: none"> Identifying the source of the waste requirements should mirror or consider the reporting requirements of the facility (stipulated in the Part IV Ministerial Approvals) and not impose new conditions. Both waste to energy projects have significant reporting requirements that should satisfy this requirement.

		<ul style="list-style-type: none"> ○ Sampling and testing requirements should focus on leach tests of IBAA not a set ultimate analysis. This risk-based approach is a better fit for beneficial and safe reuse of IBAA. • As commented above: A set of Generic Risk assessments for “Standard Applications” could be developed for say bound and unbound uses as mentioned below.
Do you have any comments about transitional arrangements for producers?	2.7 Content of WDM product specifications (general or case-by-case)	<ul style="list-style-type: none"> • We believe the factsheet “Assessing whether material is a waste” should remain in place until a determination of a WMD is in place. Recycling markets utilizing WDM are very difficult to establish and that should not be disturbed whilst new legislation is being developed, particularly when there are no statutory timeframes to introduce the new legislation.
Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions?	2.8 Content of WDM declarations (general or case-by-case)	<ul style="list-style-type: none"> • We support the concept of a WDM declaration to build confidence in the market for WDM. • We would request consideration be given to simplification of WDM Declarations. Whilst we support the concept of ensuring WDM are used appropriately, if users perceive using WDM as risky and more complex and expensive than just using virgin materials then the market for WDM will be limited. • The balanced approach is to have the producer be involved in the determination with the User of the appropriate use and then a simple verification that the IBAA was re-used in the location as planned. Record keeping by the Producer.
Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation?	2.9 – 2.11 Contaminated sites, storage and disposal to landfill	<ul style="list-style-type: none"> • No comment
Do you have any comments on the storage of waste-derived materials before use?	2.9 - 2.11 Contaminated sites, storage and disposal to landfill	<ul style="list-style-type: none"> • Consideration of stockpiling WDM should be given to products like IBAA where: <ul style="list-style-type: none"> ○ A general/case by case determination for this new WDM may take considerable time. Once the market is established then timelines for stockpiling could be reduced. ○ Equally if a trial is required to be undertaken then consideration should be given to stockpiling IBAA until the path to market is clearly established. • IBAA like recycled C&D waste will be used sporadically (or in campaigns) by end users such as Main Roads and Local

		Government. Consideration needs to be given for this fact and stockpile sizes will vary greatly from time to time.
Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework?	2.9 - 2.11 Contaminated sites, storage and disposal to landfill	<ul style="list-style-type: none"> • We support this concept of diverting WDM from landfill in support of the circular economy. We ask consideration be given to emerging markets and products and sufficient time to potentially stockpile IBAA whilst the market is established.
Do you have comments on the review of WDM determinations?	2.12 – 2.13 Review of WDM determinations, publication and rights of appeal	<ul style="list-style-type: none"> • Supportive of this approach.
Do you have any comments on the publication of WDM determinations?	2.12 – 2.13 Review of WDM determinations, publication and rights of appeal	<ul style="list-style-type: none"> • No comment
Do you have any comments on the appeal of decisions regarding WDM determinations?	2.12 – 2.13 Review of WDM determinations, publication and rights of appeal	<ul style="list-style-type: none"> • Disagree that a 28-day appeals process should be open for all general and case by case determinations. <ul style="list-style-type: none"> ○ We have seen many frivolous appeals to the waste to energy projects that had no scientific basis and were only lodged to frustrate the proponents. This would continue with WDM determinations. ○ These appeals crate a negative perception of WDM’s that will restrict their reuse. DWER has the skills required to make WDM determinations and the question is, who hears the appeals? The Office of the Appeals Convener is a bad model to manage appeals. The Office does not have the requisite skills of the DWER and the process is open ended. This results in long delays as the assessment process is repeated by a Government Department without the resources to get quality outcomes. • Any market for recycled products needs certainty. Users will balk at committing to a WDM that could be overturned on appeal and is constantly delayed by an open-ended appeals process.
Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification?	2.14 Compliance and enforcement	<ul style="list-style-type: none"> • No comment

Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials?	2.14 Compliance and enforcement	<ul style="list-style-type: none"> No comment
Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials?	2.14 Compliance and enforcement	<ul style="list-style-type: none"> It is important to reinforce in the proposed legislation that when WDM's are used in accordance with the Declaration, there is no long-term liability hanging over the head of the user. The documentation of the test results verifying the product quality (leachate test result) and the verification of use in the prescribed location. It is so difficult to get WDM reused in a highly prescriptive environment where users feel extra liabilities by "doing the right thing" and using WDM's. Whilst we acknowledge the intent to the statements, please don't kill a market before its established.
Do you have any comments on the implementation of the framework?	4 Implementation of the framework	<ul style="list-style-type: none"> Whilst we acknowledge the process has been running since 2014 and much of the legislative timelines are out of the control of DWER, it is important to maintain a focus and get this work complete as soon as possible.
Do you have any general comments on the implications of the proposed legislative framework on producers and users?	General, throughout	<ul style="list-style-type: none"> East Rockingham Waste to Energy would like to endorse the process undertaken by DWER. The establishment of the WDM determinations and changes to legislation are critical to transitioning from a linear to a circular economy.
Do you have any final comments?	General, throughout	<ul style="list-style-type: none"> No Comment

18 December 2020



Environment Institute
of Australia and
New Zealand Inc.

Waste not, want not: Valuing waste as a resource
Proposed legislative framework for waste-derived materials

Department of Water and Environmental Regulation
Locked Bag 10,
Joondalup DC, WA, 6919

Online Submission Via: wastereform@dwer.wa.gov.au

Dear Sir / Madam

RE: Submission on the proposed legislative framework for waste-derived materials

The Environment Institute of Australia and New Zealand (EIANZ) (the Institute) Western Australia (WA) Division (the Division) is pleased to provide feedback on the discussion paper on the proposed legislative framework for waste-derived materials, released by the Department of Water and Environmental Regulation (DWER) in September 2020 for public consultation.

The Institute is the leading professional body in Australia and New Zealand for environmental practitioners and promotes independent and interdisciplinary discourse on environmental issues. On all issues and all projects, the Institute advocates good practice environmental management delivered by competent and ethical environmental practitioners.

We forward this submission on behalf of the WA EIANZ members. The WA Division currently has approximately 175 members with over 2,135 members across Australia and New Zealand. Our members come from a range of technical disciplines including certified environmental practitioners (CEnVP), ecological consultants, environmental advocates and environmental impact specialists working in government, industry and the community.

We thank DWER for engaging in discussions on improving waste management in Western Australia.

Yours sincerely

A handwritten signature in black ink that reads "Belinda Bastow". The signature is written in a cursive style with a large initial "B".

Belinda Bastow
President
EIANZ – WA Division

1 Introduction

1.1 Summary

The EIANZ WA Division (EIANZ-WA) is pleased to make comments on the *Waste not, want not: valuing waste as a resource - Discussion Paper: Proposed legislative framework for waste-derived materials* (the **Discussion Paper**). EIANZ-WA commends the Government on its activities to develop a comprehensive and integrated policy and regulatory framework to improve waste management in Western Australia (WA).

EIANZ-WA has provided feedback on many of the discussion papers that have been released regarding waste and given the inter-relationship of the issues, would encourage reading those submissions in conjunction with the feedback provided below. The following points summarise EIANZ-WA's feedback on the Discussion Paper:

- The proposed amendment to the definition of waste described within the Discussion Paper is not supported by EIANZ-WA.
- A waste derived material (WDM) framework should be focused on enabling materials (wastes and emissions) to stay within the circular economy, rather than addressing levy concerns.
- Formalise the Factsheet – Assessing whether material is waste to address the ongoing concern regarding the definition of waste and application of the landfill levy.
- Utilise existing categories, such as Category 61 and 61A of Schedule 1 of the Environmental Protection Regulations 1987 for licensing WDM processing facilities.
- Develop and consult on a regulatory impact statement outlining the proposed costs associated with the introduction of this framework.

1.2 Role of the EIANZ

The EIANZ, as the leading membership based professional organisation for environmental practitioners in Australia and New Zealand and is an advocate for good practice environmental management. The Institute supports environmental practitioners and promotes independent and interdisciplinary discussion on environmental issues. The Institute also advocates environmental knowledge and awareness, advancing ethical and competent good practice environmental management.

A Certified Environmental Practitioner Scheme (www.cenvp.org) is also in place to assess and certify competent experienced environmental practitioners working in government, industry and the community. This includes specialist competencies such as Impact Assessment, Ecology, Land Rehabilitation and Contaminated Lands.

The EIANZ is an advocate for environmental assessment, management and monitoring investigations and reports being certified by suitably qualified and experienced persons for the completeness and scientific rigor of the documents. One of the ways of recognising a suitably qualified practitioner is through their membership of, and certification by, an organisation that holds practitioners accountable to a code of ethics and professional conduct, such as the EIANZ.

The EIANZ is a not-for-profit, charitable organisation incorporated in Victoria, and a registerable Australian body under the *Corporation Act 2001* (Cwth), allowing it to operate in all Australian jurisdictions.

2 General Observations

EIANZ-WA is supportive of the Government's commitment to waste avoidance, recovering more value and resources from waste and protecting the environment by managing waste

responsibly and consistent with the objectives of the Waste Avoidance and Resource Recovery Strategy 2030.

In our previous submission on the Closing the Loop Consultation Paper we highlighted our support of the principle of a circular economy and its importance in minimising the generation of waste. The circular economy is a framework concept that supports sustainable economic development through the 'closed flow of materials and the use of raw materials and energy through multiple phases' (Sanguino et al, 2020 p1). The development of a robust waste derived material (WDM) framework is integral to support a strong circular economy.

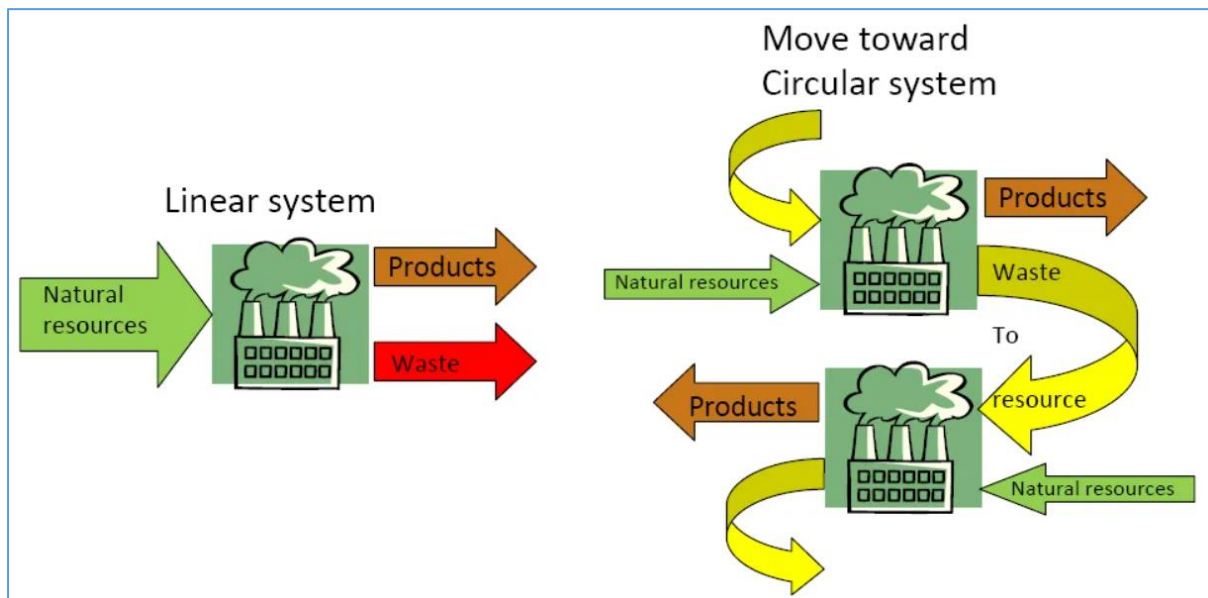


Figure 1: Conceptual Circular System

As illustrated in Figure 1, while a material is still in circulation within the system it is a 'resource' and should be treated as such. The definition of waste within the WA environmental and waste legislation is the source of many of the issues that the Government is attempting to resolve. The preference would be to address the root cause of the problem rather than continuing to address the symptoms through additional regulatory frameworks and duplicating or further complicated licensing activities.

Similar to our previous concerns, we note in this discussion paper that the scope of the WDM framework focuses on material applied to land and as such narrows its focus on issues associated with landfill licensing and levy application. We encourage the Government to approach its policy design around 'first principles' rather than the narrow-focused approach to levy implementation facilitation that appears to pervade much of the policy activities to date. As such, we recommend that a WDM framework should look at ways of keeping all waste streams within the economy for as long as possible.

3 Observations on the proposed legislative framework

Amending the definition of waste

The Discussion Paper proposes to amend the definition of waste to "clarify that waste-derived materials are waste for the purposes of the legislation". EIANZ-WA is not supportive of this definition and approach and sees 'waste-derived material' as a resource with an ongoing usefulness to society. In addition, this approach would appear to be in direct contradiction with the DWER factsheet regarding assessing whether a material is a waste and thereby contributing to further confusion. Under the existing factsheet, saleable material and waste that has been transformed or converted into a product or goods are not classified as waste.

EIANZ-WA is aware that the DWER is proposing to remove the factsheet; EIANZ is not supportive of this approach.

Rather, EIANZ-WA recommends that the approach outlined in the DWER *Factsheet – Assessing whether material is waste*, be formalised to provide certainty to industries and individuals working to develop a circular economy through the utilisation of 'wastes' from other parties or industries. This would be conducive to encouraging approaches to secondary resource markets and products and not provide the overlap in the regulatory framework promoted by the discussion paper.

Making a WDM determination

EIANZ-WA sees some merit in providing powers under the *Environmental Protection Act 1986* to exempt some activities, on an individual basis, from the requirements of licensing or other regulatory requirements where they have an environmental and community benefit. This would provide for a level of flexibility for new or trial activities that may in some circumstances become bogged down in licensing requirements or that may prevent new environmental beneficial activities from occurring. Protection of the environment would still be managed through sections 49, 49A, 50, 50A and 50B. This could be undertaken in a similar manner to impact assessment processes under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and Part IV of the EP Act where a referral is made and a decision to assess is made dependent upon significance of impact to the environmental or community health. Adopting an exemption approach may negate the need for the complicated and duplicative WDM proposal that has been presented within the Discussion Paper.

As stated above, Sections 49 to 50B make it an offence to pollute the environment. EIANZ-WA would prefer to see further DWER effort in compliance and monitoring activities rather than controls on use of WDM in individual situations. In addition, without a robust auditing and enforcement program, the introduction of conditions to licences and other instruments has little value.

In the Discussion Paper, it states that WDM determinations would require significant resourcing. Given this acknowledgement, a detailed regulatory impact statement that outlines how the Government proposes to fund the program should be developed and consulted on, prior to implementation. While EIANZ-WA supports a user pays system, it is unclear what costs the Government's detailed and duplicative system will present to industry and may ultimately act as a deterrent to the adoption of a circular economy. Ultimately, if the proposed framework is unworkable, duplicative, expensive and generally not supported, its costs should not be expected to be borne by participants.

Implementation of the framework

Given the limited level of support that EIANZ-WA has for the proposed WMD legislative framework, any discussion of a proposal for its implementation appears premature. The EIANZ-WA is supportive of waste reform activities and would encourage the Government to look at opportunities to facilitate the circular economy through collaborative and forward-thinking policies.

Similarly, the framework proposed by the Government outlines a number of supporting regulations, policies, guidelines and other documents that still need to be developed to support the program. The EIANZ-WA would rather see the Government focus on formalising the Factsheet as a simple approach to WDM and licence WDM facilities through Category 61 and 61A. Over regulation does not assist in meeting environmental outcomes or objectives.



ENVIRONMENTAL
HEALTH AUSTRALIA
(WESTERN AUSTRALIA)
INCORPORATED

ABN 24683873370

1 December 2020

Enquires: Vic Andrich – [REDACTED]

Waste Reform
Department of Water and Environmental Regulation
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Dear Sir/Madam

DISCUSSION PAPER - WASTE NOT, WANT NOT: VALUING WASTE AS A RESOURCE – PROPOSED LEGISLATIVE FRAMEWORK FOR WASTE-DERIVED MATERIALS

Thank you for the opportunity for EHA (WA) to provide a submission on this proposal.

Environmental Health Australia (EHA) is the peak organisation in Australia which advocates for public and environmental health standards and represents the professional interests of Environmental Health Practitioners.

EHA (WA) represents Environmental Health Officers (EHOs) in Western Australia who have a crucial role as regulators of public and environmental health on behalf of local government and other agencies.

For any such legislative framework to be effective and sustainable, the participant businesses/industry must be economically viable. Failure to understand the 'economics' and structure the framework correctly will undermine the entire industry and Western Australia will have wasted a lot of time and effort.

This has been demonstrated on numerous occasions since the inception of the Waste Avoidance and Resource Recovery Act in that we have come this far and still do not have a viable and sustainable waste-derived products industry established in Western Australia.

The following paragraphs outline critical issues and principles for establishing and sustaining any waste-derived material industry which the framework needs to address and/or facilitate:

- Secure the resource (waste-derived material) supply – in a form and at a quality that best suits the end market. This may mean setting up collecting, handling, storage and preliminary washing/separating infrastructure to facilitate efficient on-processing to end products.

Our Environment, Our Health, Our Future www.eh.org.au

For example, waste tyres are disposed in various ways resulting in them being uneconomical to recover. The recovery and handling of waste tyres should be coordinated that facilitates efficient recovery for processing. This means that waste tyres should not be shredded and disposed at landfills. The quality of end product use is intrinsically linked to the feedstock. If the feedstock is shredded prior to processing, the quality of the end-product is unknown.

- Identify potential markets for each waste-derived material. Within the report, identify markets within Western Australia as the highest priority, followed by nationwide and then international. Publish the reports of potential markets along with expected quantities of waste-derived materials that would meet the demand.

It is critical that markets are identified and developed within Western Australia in the first instance. Any market outside of Western Australia means that the sustainability may come under threat as demonstrated by the collapse of the Asian market for recycled materials.

- Regional coordination of waste derived product to markets. To support markets, the supply of waste derived material should be stockpiled until it reaches a critical mass that can dictate its own price on open (spot) markets.

This would entail suitable storage facilities until that critical mass is achieved (which may take considerable time). Local government household recycling would be the greatest beneficiaries of such a scheme. Funding of facilities and appropriate plant/equipment for washing, separating, baling and storage waste-derived materials should be from the Waste Levy. The added benefit is that the product becomes more valued as it is purified to a standard that make further processing more economical.

- Develop and ensure that at every stage, no one business has a monopoly on either the resource supply or the market of the product. This principle applies to both the producer of the product and the end user. This is critical if the system is to be sustainable. If any business or end user has a monopoly, then that will distort the economics and the industry will fail or become too expensive for participants.

There must be alternatives for the waste-derived material to find end uses or more than two processors for the same end use. In regard to end-users, they should only be required to utilise no greater than a percentage of the producers' capacity (eg 30%). This would force the producer to find a market for 70% of their product and for that, they would need to be competitive in the market.

- Consideration also needs to be given to how to prevent the undercutting of the price of the waste-derived material (end product) from traditional suppliers of competing materials. For example, crumb rubber for roads competes with gravel. When a crumb rubber comes on the market, the gravel suppliers drop their price to undercut the crumb rubber for a period of time which closes the crumb rubber business.

The above example (of 30% guaranteed) may be a way of preventing the waste-derived business going under as a result of unfair pricing by traditional suppliers and prevent the need for a government bail-out if they were to close.

- Long-term facility infrastructure stability. As Western Australia is a relatively small market it is critical that infrastructure remains for extended periods as these provide the stable base upon which a waste-derived product industry is based. Consideration should be given to government owned facilities which are leased to private operators. This will ensure that the facility remains even if the operator decides to close the facility or relocate to another jurisdiction. It is imperative that the facility continue to be available to underpin the industry in Western Australia.
- Mapping of resource supply throughout the state. When determining the resource supply, it is important to understand where the product is located throughout the state and the condition that it is in. In collecting data, it is imperative that the suppliers of the data will not be penalised should they admit that they have wastes stored in their area that is not in conformity with current legislation.

Strategies can then be designed to recover that resource in the most efficient process. This could entail mobile washing and bailing plants travelling to regional areas to improve the resource to a standard that can be processed.

- Environmental Regulatory Reform – current environmental regulations inhibit the opportunity for waste-derived products industry to be fully developed. Consideration of the needs for a sustainable industry will require flexibility in the collection, handling, storage and disposal regulatory requirements. The banning or restriction of waste products to various disposal sites should be undertaken only when there is a viable alternative available otherwise indiscriminate dumping will occur.

The purpose of regulations should be to recover waste-derived material for the purposes of establishing and supporting an economically viable industry not be used to penalise unless it is the result of deliberate illegal actions.

Should you have any queries or require further information please contact the undersigned

Yours sincerely



Vic Andrich
President
EHA (WA)

Response ID ANON-NHP8-6BHU-K

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on 2020-11-04 08:21:31

Introduction

1 What is your name?

Name:

Mike Marshall

2 What is your email address?

Email:

3 Which of the following best describes the group or person you represent? (optional)

Producer of waste-derived materials

If other, please specify.:

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

On page 3, the framework diagram says "Are you proposing to apply a waste-derived material to land in quantities that would trigger licensing requirements under the EPA act?"

I couldn't find the figures that determine when a license is required, so I'm not sure how much material is relevant in this scenario. But if I assume that 1000 tonnes or less does not require a license, am I correct in assuming that an earthworker can drop 20m³ of clean fill (excavated from another job) into someone's paddock and neither party will require a license, or be subject to the waste levy, as the diagram appears to convey? I'm aware that the current 'factsheet - assessing whether material is waste' would probably class this activity as waste disposal, triggering the levy etc - but as this sheet will be made redundant relatively soon, and I didn't find a proposed updated fact sheet in the discussion paper, this was the conclusion I came to. Please provide feedback, detailing whether any difference will apply should the material be delivered for free to the customer, or if the customer pays any amount for it.

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

In section 2.2, I refer to the questions seeking feedback on materials that are considered 'products' and note 'waste'.

I would submit that clean, virgin fill excavated from things like road projects, pool installations and soakwell installations on new builds is a valuable product, and not a waste. These are often deposited to land in large amounts, and may be considered waste under the amended definitions.

I tentatively share an example of some work we performed earlier this year. BMD Construction were nearing the closing stages of the freeway upgrade between Russell Rd and Roe Hwy, and needed a large amount of fill excavated from the existing batter and removed from site to make room for the new road to be asphalted. We removed the fill for them, and delivered it to a developer performing a large subdivision, who needed substantial amounts of fill (much more than

we were able to provide, in fact). The developer paid for the material, and had a development approval for the works he was doing.

I query whether this would also be considered 'levy applicable' in the amended definitions. If so, I ask the following questions:

- 1) If the developer can use (potentially low quality) fill for their project, and would have to obtain it one way or another if they weren't to use the excavated fill, does this not constitute quite an effective recycling/reuse procedure?
- 2) If the material was not paid for by the developer, but instead (or perhaps additionally) the cost of removal was charged to the producer, would reuse of the product attract the landfill levy?

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

In section 2.4, there is a table providing suggested reuse avenues for certain wastes.

I would suggest that the following products are also achievable from the 'construction and demolition waste' category - although this category is very broad, and my feedback is not encompassing.

- 1) Clean fill (development purposes)
- 2) Topsoil (soil amendments)
- 3) Clay (Motorcross track builds, deep fill utilisation, dam construction)

Thank you for the opportunity to provide feedback. I apologise if any of my questions come from a misunderstanding of the discussion paper, and hope not to waste the department's time.

Kind regards
Mike Marshall

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

Thank you for the opportunity to provide feedback. I apologise if any of my questions come from a misunderstanding of the discussion paper, and hope not to waste the department's time.

Kind regards

Mike Marshall

Information sessions

Response ID ANON-NHP8-6BHY-Q

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**
Submitted on 2020-09-30 23:15:29

Introduction

1 What is your name?

Name:

Gary McNeish

2 What is your email address?

Email:

[REDACTED]

3 Which of the following best describes the group or person you represent? (optional)

User of waste-derived materials

If other, please specify.:

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

Red mud (Bauxite residue)

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

Red mud is 100% recyclable contains metals and REE (Rare Earth Elements)

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

This is a waste the companies that generate it would rather leave in stockpiles. Some 4 billion tonnes stockpiled globally.

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

I have a patent pending for the process of extracting metals from red mud and working on a patent application for the extraction of REE from red mud.

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

The Fe alone will boost any countries steel industry.

The stockpile in India has enough Fe₂O₃ to make the annual output of Indian pig iron.

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

Red mud (Bauxite residue)

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

Fe₂O₃, TiO₂, Al₂O₃. REE, (Rare Earth Elements)

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

Every red mud site is classified as toxic and covers many acres these dams fail and lives have been lost.

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

This waste can be stored safely before use.

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

100% is recyclable.

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

Jail.

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

Jail.

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

It's a win win situation.

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

Information sessions

Response ID ANON-NHP8-6BHR-G

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on 2020-09-29 13:54:23

Introduction

1 What is your name?

Name:

Richard Baldwin

2 What is your email address?

Email:

[REDACTED]

3 Which of the following best describes the group or person you represent? (optional)

Environmental consultant

If other, please specify.:

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

s.2.4: Add "bioremediated hydrocarbon impacted" soils = fill to Table 1

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

no comment

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

no comment

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

Difficult to assess until I see an example.

Was there a time limit for the CEO to make a determinations?

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

no comment

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

on a case by case basis: ability to extend stockpile times beyond 12 months if and as required if it can be shown that doing so would not cause any environmental harm.

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

no comment

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

Remediated hydrocarbon impacted soils.

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

no comment

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

Those that have the biggest volume impact on landfills

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

no comment

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

no comment

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

There should be some way of getting an 'in principle' WDM determination (case-by-case) in the early stages of implementation when the CEO / DWER are going to be inundated.

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

no comment

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

The TPH hydrocarbon ranges in the "Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)" need to be aligned to the NEPM TRH range

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

Comments about length of time for stockpiles noted previously - my comments are specifically addressed to hydrocarbon contaminated soil

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

no comment

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

how often is a 'periodic review' undertaken - every five years? Will it be of all WDM's? I think that a timeframe for the 'periodic review' needs to be stipulated

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

no comment

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

no comment

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

It is not stated how compliance will be monitored.

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

As above, how is the department going to know if a producer's statement is false. If found to be false does the material have to be 'reclaimed' and disposed to landfill? Who pays that cost? Responsibility should be along the lines of the CS Act?

Or can it be 'reworked' to bring the material back into compliance?

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

As above who is going to 'police' it?

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

no comment

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

no comment

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

None

Information sessions



Department of Water and Environmental Regulation

Prime House
8 Davidson Terrace, Joondalup
Western Australia 6027

Submission by email: wastereform@dwer.wa.gov.au

18 December 2020

RE: Waste Not, Want Not: Valuing Waste as a Resource: Discussion Paper - Proposed Legislative Framework for Waste-Derived Materials

Thank you for the opportunity to comment on the Waste Not, Want Not: Valuing Waste as a Resource: Discussion Paper - Proposed Legislative Framework for Waste-Derived Materials. Holcim (Australia) Pty Ltd (Holcim) has reviewed the discussion paper and offer the following comments for consideration by the Department of Water and Environmental Regulation.

About Holcim

Holcim has been delivering construction materials since 1901, originally serving the industry under the well-known Readymix and Humes brands. Today, Holcim continues to supply essential construction products such as aggregates, sand, premixed concrete, concrete pipe and precast concrete products, to help Australia build roads, bridges, rail, homes, schools, hospitals and much more.

Holcim operates across the Australian continent supplying construction materials from a network of more than 150 concrete plants, 900 mixer trucks, 60 operating quarries (an additional 25 non-operating quarries), 12 manufacturing plants and mobile and on site project facilities. Holcim directly employs almost 3,000 people in Australia along with many more contractors and local service businesses where we operate.

Holcim is a key player within the construction materials market within Western Australia and operates 15 operating quarries and 36 premixed concrete plants. Our mobile and on-site batching operations service major mining and infrastructure projects as well as provide much needed access to construction materials in remote rural communities – giving us the ability to go anywhere construction materials are needed.

Holcim is part of LafargeHolcim, a global leader in construction materials created by the 2015 merger of Lafarge and Holcim. LafargeHolcim has operations in over 80 countries and employs over 90,000 people worldwide. This global network and support provides Holcim in Australia with access to world class best practices in operations, innovation, technical expertise and sustainability.

Considerations

Holcim makes the following comments on Waste Not, Want Not: Valuing Waste as a Resource: Discussion Paper - Proposed Legislative Framework for Waste-Derived Materials for consideration by the Department of Water and Environmental Regulation:

- Overall, believes the framework is positive and will provide greater certainty around the use of waste derived materials.
- Request that further work around the definition of waste is required. Much of the uncertainty around the reuse of waste materials is because of clarity around the definition of waste. This will be an ongoing issue even with the introduction of the legislative framework for waste-derived materials as it relies on the definition of what is a waste.
- Understands that the State Government is trying to encourage and support the use of waste-derived materials, however Holcim believes that more work is needed to encourage their use and stimulate market demand. Holcim notes that some waste-derived products cannot be sold in Perth due to poor market demand (ie. recycled road base) as natural materials are more cost effective. Specifications or codes for use of recycled/waste derived materials in construction of housing/infrastructure are required to stimulate market demand.
- For the waste derived materials framework to be effective, as many general declarations should be made/determined by DWER. This will resolve concerns regarding timing for industry for determination of case by case waste derived materials and appeals. Holcim requests that general declarations are included for the following products:
 - Fill sand – Fill for rehabilitation, residential/commercial/industrial subdivisions.
 - Concrete waste – Road base, sub base, drainage aggregates.
 - Concrete waste - Green/eco concrete where concrete waste or other recycled materials are used as an aggregate substitute.
 - Concrete waste – Aggregate substitute.
 - Concrete waste - Engineered fill/fill material containing concrete waste.
 - Concrete waste – Concrete blocks.
- Concerns regarding timing of determination of waste derived materials (as above)
- Concerns regarding appeals as this does not provide security and certainty around the use of waste derived materials where a decision may be challenged (as above).
- Requests that the storage of waste derived materials should not require to be licenced. Poor market demand due to a number of factors in Perth/WA for these products places the ability to sell these products outside of the producers control, therefore setting time limits is not realistic.

Thank you for the opportunity to comment on the Department of Water and Environmental Regulation's Waste Not, Want Not: Valuing Waste as a Resource: Discussion Paper - Proposed Legislative Framework for Waste-Derived Materials. Please contact the undersigned on [REDACTED] or [REDACTED] should you have any queries or require further information.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Jenny Moro', written in a cursive style.

Jenny Moro
Planning & Environment Manager WA

Response ID ANON-NHP8-6B5A-C

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on **2020-12-15 09:17:43**

Introduction

1 What is your name?

Name:

Andrew Thomson

2 What is your email address?

Email:

3 Which of the following best describes the group or person you represent? (optional)

Other

If other, please specify.:

Circular economy consultant - Business, environment, social

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

Our answer to question 6 asks questions of these. However, under your current focus, they seem fine. But we think a shift in focus is worth exploring if possible.

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

If we really want to move towards a circular economy and the Waste Authority's 2030 strategy, should we not be focusing on the word USELESS and building policy around this to stop the USEFUL matter from being classed as waste at all. Waste not want not- most waste=food or a resource.

Therefore,

Waste includes matter:

- a) whether liquid, solid, gaseous or radioactive that is deemed useless, which is discharged into the environment; or
- b) prescribed by regulations to be waste.
- C) Any matter, or components of it that are deemed by regulations to be useful will see:
 - 1) Increased levies apply in the short-term if discharged into the environment,
 - 2) In parallel a rollout of ban's will commence once infrastructure/solutions have been put in place to capture the embodied "usefulness" of those material flows.

(To support point C, a circular economy program could be put into place, which enables and incentivises the transition, whereby levies from C1 are redirected to C2 initiatives. More importantly, a clear message is sent up the innovation chain to design waste out in the first place, truly circular design. Funds from C1 could also be used to assist producers at the design phase).

This is not easy and going to cause issues, but we need to shift from dealing with waste to avoidance and have policy that drives it.

The original point C then becomes somewhat redundant in this context, less about policing from the waste perspective, and more about is it safe to apply to the land as if it was a brand new material.

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

You have covered many of the obvious ones on page 9 for general WDM.

There are businesses in the chemical space such as Epichem that are doing work to process "waste" streams into other uses that would be impacted by this policy. We have forwarded this consultation paper to them as they were unaware.

Lots of the examples given are for products that would be applied directly to land in the short-term following processing. Just thinking "out loud" What about products that might take some time to find themselves into the environment or be hard to measure volumes over time, how would this work?

One hypothetical example might be a consumer cleaning product derived from say food waste streams (say citrus fruit skins).

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

Are the CEO and advisors conversant with ideas behind the circular economy and alike (systems thinking)? To do it properly means going beyond waste and waste management and requires new ways of thinking and working.

Are you and will you be collaborating with other relevant state departments, bodies, and industries?

We need better policy, not necessarily more policy.

What about including "Biological" nutrient streams and "Technical" nutrient streams as a first high-level filter. Biological can be returned safely to nature, technical require more stringent controls and approvals. Start applying circular economy concepts to your policy. Each nutrient cycle works differently and has different considerations.

Remember waste is a consequence of a wasteful economic mentality that drives wasteful mentalities, until we change this we are simply doing less bad. Let's not waste more of our time on this. The main misconception associated with the circular economy is that its just about better recycling and waste management, this does it a complete disservice. The inspirational narratives of "do more good"(circular economy and alike) "design waste out" need to replace the compliance "do less bad" narrative (sustainability) across all areas of government.

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

We are fearful through DWER's desire to control and do the right thing they will inflict a bottleneck WDM approval system (especially under-resourced) that will stifle innovation in this space and cause lots of frustration. How do you overcome this?

We are also fearful that government, through this and other policies and objectives mentioned (i.e. COVID recovery) might direct actions in the wrong direction. All the power and decision making seems to rest with you especially with priorities.

We believe with our other responses that a cross-sector and cross-disciplinary approach is required. We are not talking about more community consultation but dedicated "Circular" or "New" Economy working groups comprised of key stakeholders across the relevant domains. The fact that businesses working in this space, such as Epichem, didn't know about this consultation paper and process is concerning.

Is there scope to bring current waste flows to innovators' attention based on volume, negative externalities, and so forth, as well as the right people to look at potential WDM or circular uses and markets. A royalty from any new developments could feedback into the scheme to fund not just an approval process but a progressive innovation and approval scheme as outlined earlier.

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

Please see my comments from previous answers

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

Biological nutrients that can be returned safely to the environment with triple bottom line benefits should be the starting point.

Your list is good though, any unproven high potential cases need to be done first.

Has high-level material flow analysis and mapping been done?

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

See previous comments.

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

Are you alone best placed to determine as per previous answers.

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

Covered in previous answers

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

Covered in previous answers

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

Covered in previous answers

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

N/A

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

No

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

No

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

What if some are not in centralized but decentralized storage? is it always possible to classify storage vs process? Are there loop-holes there?

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

No

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

Covered previously. One last point is that unintended consequences of approved WDM may manifest later, sometimes requiring quick action. Have these been considered?

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

No.

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

Covered in previous questions.

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

As a piece of policy, it seems good. But does it really go far enough? From our perspective, it does not imbue enough circular thinking. It feels like another piecemeal approach when we need to take a more systems led approach.



Ref: 082 201218
18 December 2020

Waste Reform
Department of Water and Environmental Regulation
Locked Bag 10
JOONDALUP DC, WA 6919
Email: wastereform@dwer.wa.gov.au

To Whom It May Concern,

KIC SUBMISSION: WASTE NOT, WANT NOT: VALUING WASTE AS A RESOURCE

Kwinana Industries Council (KIC) welcomes the opportunity to make comment on the above guideline.

By way of background the KIC is an incorporated business association with membership drawn from the Kwinana Industrial Area (KIA). The current KIC membership comprises major industries found within the KIA and more broadly the Western Trade Coast (WTC), plus support and service sectors.

The WTC is the premier industrial estate in Western Australia, covering an area approximately 14km north-south and an average of 4km east-west, on the eastern side of Cockburn Sound some 30km south of the Perth CBD. The KIA forms the heavy industrial core of the WTC.

KIC members employ approximately 5,000 workers directly and another 26,000 indirectly, and its economic activity contributes \$1.6bn annually to the State economy.

The KIC was established in 1991 with its primary goals being to:

- promote a positive image of Kwinana industries;
- work towards the long-term viability of Kwinana industry;
- coordinate a range of intra-industry activities including water quality, air quality, monitoring and emergency management;
- highlight the contribution Kwinana industry makes to community; and
- liaise effectively with local communities, Government and Government agencies.

The KIC, as an industry association, is well respected for what it represents, how it operates and for what it has achieved. It pursues its goals through a range of formal committees set up to provide input on issues of common interest to the KIC member companies.

Committee members are delegates with appropriate experience, technical expertise and authority drawn from the member companies. The output from the various committee activities is then used as the basis for communication to KIC's stakeholders such that Kwinana industry is seen as speaking with one voice.

KIC members are generally in support of the proposed changes and are pleased many of our previous comments have been incorporated. There are a few remaining aspects that we would like to highlight for your attention, and principally these relate to;

- The circular economy.
- Working in partnership.
- Application of international best practice.
- Unintended consequences.
- Reducing waste derived materials (WDM) participant risk so that re-use is encouraged.
- Timely decision making.
- Encouraging the re-use of materials over virgin materials.

The circular economy

This emerging phenomenon has been around for a long time, however in recent years the act of reclassifying 'waste' materials as by-products for re-use has been actively pursued by industry. The case in point cannot be more robustly portrayed in the attached Industrial Symbiosis (IS) schematic (SKM, 2014 - WTC Integrated Assessment). The product and by-product exchanges in Kwinana are referred to in academia as one of the best examples of IS in the world.

In essence, industry's view on the exchange of by-products is that they are not waste materials, they represent commercially-valued process inputs and outputs. For exchanges of by-products to occur, the commercial viability of transaction is a factor for both parties (and sometimes there are more than one party benefitting).

Few, if indeed any, of the by-product exchanges in the schematic have their genesis in waste policy, they were created through industry-to-industry discussions, within a market environment, and with the goal of improving the international competitiveness of the participants in the exchange. We can only imagine what the schematic would look like today had there been a waste policy environment that was encouraging of these industry interactions. In other industrial clusters, Kalundborg in Denmark for example, (www.symbiosis.dk/en/) a small government unit was set up to actively attract suitable waste-exchanging industries to the cluster. The unit exists to this day and is the envy of many industrial estates.

The Circular Economy movement has gathered its momentum now. Numerous conference presentations and academic journal articles attest to this. Fundamental to its success, and its success is clearly aligned with government policy and most would agree this is necessary, regulators could assist the process by adjusting away from the way industry regulation has been historically done toward a new paradigm for dealing with materials that have potential for re-use. We need to see a move from a mind-set of slow and subjective processes, overly-cautious nervousness, risk averse or inflexible licensing, an 'industry is wrong' perspective, in an environment of fixed and difficult to navigate processes.

Working in partnership

Industry and regulators working together to achieve awareness and acceptance of policy and commercial imperatives can achieve great results. Facilitative mindsets and processes are the key to this.

Industry will invest resources into the creation of innovative material reuse alternatives if it sees a reasonable prospect of a commercial return. That return can be in the form of increased international competitiveness, or environmental benefit, or any combination of these.

For these investments to occur, it needs to be in an environment of reasonable certainty and timeliness.

- The investment decision is industry's to make.
- The extent to which certainty and timeliness can be anticipated by industry is the Regulator's responsibility.

It is hoped that the waste reforms extend into ensuring the regulatory process assists with, or facilitates, the creation of new process exchanges that diminish waste. A punitive approach is well and good when applied to those who deliberately breach regulatory conditions, and there will be no argument from industry that is doing the right thing, but for the vast majority of industry, it is just trying to operate profitable businesses and that inherently means minimizing the production of waste. Both industry and the government sectors have the same goal – waste reduction – it's just that they arrive at the shared goal from different directions.

Application of international best practice

There are many benchmarking opportunities for WA if we wish to compare our (waste) material standards, regulatory standards and processes, and targets. From the outside looking in, it seems clear that we have a penchant for reinvention. Reinvention is time consuming, and simply invests scarce regulatory resources into areas that in essence are unproductive.

If these resources were geared toward finding best practice standards and processes etc, and working with industry to tailor these to achieve local policy objectives, then the 'system' is freed up to focus attention on that which will bring the goals of industry and of the Regulator closer together. We just need to acknowledge that other jurisdictions do certain things better than we do, and decide to emulate their 'better practice'.

Unintended consequences

Unintended consequences occur when consultation between industry and the Regulator is inadequate. The waste reform process thus far has been a good one from the perspective of exploring ways to reduce 'surprises'.

Of course, there will always be unintended consequences, and where one has become apparent, the regulatory process needs to have sufficient flexibility in order for the reason for its occurrence to be explored and remedied. It is a punitive and inappropriate remedy to simply apply the penalties and punish the 'offending' party, when from the outset, the breach was never foreseen by either party. It is far better from an industry confidence perspective for the Regulator to openly state 'this' is an unintended consequence, the breach does no harm, therefore we will unwind the process so that it can be rectified.

It is critical to the partnership referred to earlier that the parties are transparent with each other. Complete transparency builds trust. Industry can innovate more effectively when it trusts the Regulator.

Reducing WDM participant risk (so that re-use is encouraged).

The government wants the production of waste reduced, this point is clear (and industry agrees with this policy position). If the beneficial use of waste products is the goal, then re-use of by-products must be genuinely encouraged and actively supported.

If industry is to invest in waste reduction research, it needs a reasonable level of certainty that the solutions its investment decisions deliver are going to be able to be implemented within a reasonable time frame and without the overlaying of excessively onerous regulator conditions. If the risk of this is too high, the investment, put simply, will not occur.

In stating this, I do not purport to condone the Regulator approving situations where the risk to the environment is unreasonable. Nothing comes without some degree of risk, but provided they are sufficiently mitigated, this should be seen as approvable by the Regulator. Excessive nervousness around the possibility of making a flawed decision that may or may not come home to haunt a Regulator seems to reflect the current regulatory consideration and approval environment. This approach suppresses innovation.

Timely decision making

"Time is money", Benjamin Franklin circ 1750. This is as true today as it must have been centuries ago.

In industry, time wasted costs money. Wasted time is time not spent innovating. Time spent innovating in industry is an investment in productivity, and it translates into improved international competitiveness.

In the public service one can speculate that wasted time doesn't really matter because there is no 'customer' who is paying for its product. It can't go out of business because its customers have deserted it.

From industry's perspective, there are a myriad of processes and reviews and consultative processes that take far too long. I cite some examples to support this statement. The review of SPP 4.1 – Industrial Buffers. A review process for that relatively simple Policy is in its 6th year. Additionally, a review of the Noise Regulations to bring about an entirely logical outcome for the Kwinana Industrial Area took 12 years to complete. The first redetermination of the Kwinana Atmospheric EPP took seven years to complete.

The point here is this. If government wants industry to innovate in the waste re-use (or any) space, it will, but it needs to receive the departmental support to do so. Timely responses, efficient systems, a sense of 'let's work together to get this thing done', is all that is required. If work in these fields is going to take too long, industry will move on to areas where innovation can be translated into productivity.

Encouraging the re-use of materials over virgin materials

This is a big issue, and there are a number of elements to it. The use of virgin material is easy to specify, easy to get, and easy to deal with in terms of project specifications. 'Used' products re-purposed to form usable products is, by comparison, hard work.

Why is it, for example, that Main Roads WA continue to be at best highly reluctant to use suitably-specified pre-used materials in their road base construction works?

It is easy to dream up a reason to not do something, like we are worried about the potential for leaching of heavy metals. But when the science says any heavy metals present are chemically bound, surely that should be enough for the project owner. It seems it isn't, and here is where the Regulator can step in to assist industry to break into the market.

- Perhaps there can be an incentive (funded by the Waste Levy) to use suitably quality assured waste materials in favour of virgin materials.
- Alternatively, disincentivizing the use of virgin materials.
- Timely adoption of Australian (or international) standards as acceptable benchmarks.
- A policy requirement that places obligations on users for re-purposed materials over virgin materials, and justifications to be made where this does not occur.
- Formation of specialist multi-agency/industry working groups to efficiently create a solution, and then disband.

This of course doesn't just apply to road base materials. There are vastly more opportunities sitting out there waiting to be taken up. Concrete manufacture for example. In the main, Australian specifications covertly force the use of virgin materials. This is a resolvable problem, if there is a will do so.

General comments:

- It is extremely important for industry, that by-product materials used within the context of IS are not to be captured within the Waste Levy definition.
- This extends of course, to the treatment of potential new by-product synergy exchanges between industries because firstly, they are not a waste product destined for a landfill or some other disposal process, and secondly, the introduction of a levy on the material exchange may render it commercially unviable, thus creating an avoidable waste material.
- If pre-existing synergy exchanges are to be retrospectively captured, we would ask that a grandfathering/ graduated approach be provided so that any existing exchanges are not compromised in the future.
- Some controlled wastes can have a beneficial use, for example use in the manufacture of commercial compost materials. Where a by-product has a beneficial use, and is to be consumed in that use, we would submit that the waste levy should not apply to that by-product exchange.
- If it is simpler or less risky for generators of these 'waste' materials to pay the waste levy and send it to an appropriate landfill, then the application of the waste levy will have been counter-productive.
- We encourage the Department to give serious consideration to the resource implications of the proposed changes. We suspect that for the system to be administered thoughtfully, as opposed to a 'tick the box' approach that does not encourage innovative ideas from industry, there will need to be additional Regulator time allocated to allow for exploration, and evaluation.

- In other words, the process of assessing by-product capture under the Levy needs to be positively skewed toward supporting industry to find uses for waste-products and for by-products, and thus be encouraging of efforts to minimise waste.
- Waste Derived Materials exchanged between suppliers and receivers require some sort of specification, which then forms the basis of a commercial supply contract.
- Once a by-product meets a pre-determined specification, it is a commercially marketable product, and no longer a waste or by-product. All it needs is a customer to buy it, and it is industry's job to find one or more.
- A marketable product would be expected to be exempt from the Waste Levy on the basis that it would meet some sort of licence approval threshold.
- The act of achieving this threshold specification could require considerable product development work, involving engagement in supportive discussions and processes with the Regulator. This interaction could prove to be time consuming and so relates to the previous point we made about adequate resource allocation.

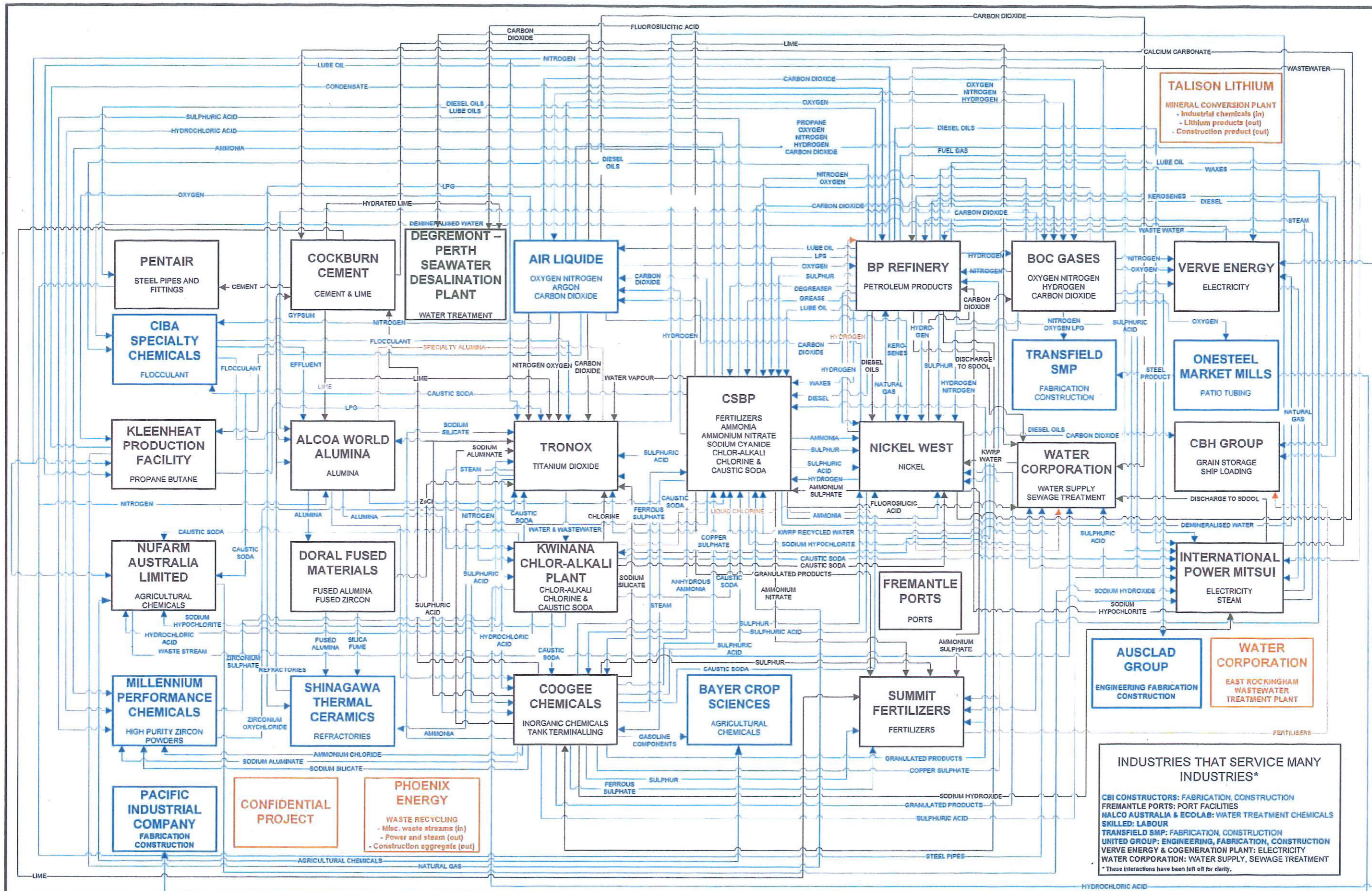
KIC thanks the Department for the opportunity to comment on the guideline. If any aspect of the submission requires clarification I can be contacted on [REDACTED]

Yours sincerely,



CHRIS OUGHTON
Director

Attached: Industrial Symbiosis Schematic



INDUSTRIES THAT SERVICE MANY INDUSTRIES*

CBI CONSTRUCTORS: FABRICATION, CONSTRUCTION
 FREMANTLE PORTS: PORT FACILITIES
 MALCO AUSTRALIA & ECOLAB: WATER TREATMENT CHEMICALS
 SKILLED: LABOUR
 TRANSFIELD SMP: FABRICATION, CONSTRUCTION
 UNITED GROUP: ENGINEERING, FABRICATION, CONSTRUCTION
 VERVE ENERGY & COGENERATION PLANT: ELECTRICITY
 WATER CORPORATION: WATER SUPPLY, SEWAGE TREATMENT
 * These interactions have been left off for clarity.

Legend

Industry from previous studies not participating in 2013	Interaction from previous studies unconfirmed for 2013
2013 participating industry	2013 confirmed interaction
New industry to the WTC and/or the study	New interaction for 2013
Potential industry	Potential interaction



**WESTERN TRADE COAST INTEGRATED ASSESSMENT
 INDUSTRIAL INTEGRATION IN 2013 - KWINANA CLUSTER**



Figure 4-4

**LMS Comments for online submission on *Waste not, want not: valuing waste as a resource*
(A discussion paper for a proposed legislative framework for waste-derived materials)**

Any aspect confidential?

No

5. Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

LMS Energy (LMS) congratulates the Government of Western Australia for seeking to establish a clear legislative framework for waste-derived materials (WDM) that are to be applied to land. This is an important step in supporting increased resource recovery in WA and LMS agrees with the benefits as set out in the discussion paper. It also welcomes that you have considered and drawn from the NSW, SA and QLD frameworks, helping to build general consistency in the approaches used within Australia.

LMS supports the proposed use of general and case-by-case WDM determinations.

The rationale for the proposed framework (page vii) is clearly expressed and generally aligns with NSW approach. However, LMS contends that the proposed system is unduly restrictive as it appears there are no circumstances in which a WDM may cease to be waste following its production and ahead of its having been applied to land. Although this status will be appropriate in many circumstances, used in a blanket manner, it is highly likely to act as a strong impediment to enhancing resource recovery and building a circular economy in Western Australia.

LMS suggests that, under Western Australia's proposed WDM framework, the intended WDM determinations could instead be legislated for and structured to specify that a WDM produced in accordance with a 'WDM product specification' and suitable for general use ceases to be waste BUT will become waste again if not used in accordance with the 'WDM declaration' conditions.

For example, in South Australia, various retailers purchase certain mulches, composts and the like that meet desired quality requirements and are safe for general use from licensed composters and other waste reprocessors. Given SA's legislative provisions, upon sale to the retailer, these materials are no longer a 'waste' and they are sold to the public with simple general instructions on their use. Their sale is thus consistent with comparable virgin products such as fertilisers, soil conditioners and garden chemicals.

Such classification of WDMs broadly suitable for use on any type of land use as no longer being 'waste' at this earlier stage does not undermine environment protection however. If a person uses any of these WDM materials other than in accordance with their instructions, action could still potentially be taken against them under the Environment Protection Act 1993 (SA) for breach of the general environmental duty (s25) or for environmental harm offences (Part 9), given the broad character of 'pollutant' under that Act (s3). This would similarly be the case for virgin competitor products. If the WDM (or a virgin competitor) were to be used excessively, it could also be contended that the material had, once again, become 'waste' (as surplus matter, etc – s4) and action taken for unauthorised dumping (clause 10 Environment Protection (Waste to Resources) Policy 2010), operating without a licence (Part 6) and non-payment of waste levy (s113).

The relative benefit of this approach is that suitable WDMs are treated as equivalent with virgin materials. In contrast, if these WDMs are still classified and regulated as 'waste' until after their application to land by a user, it is understood that retailers would not choose to stock WDMs versus virgin competitor products only, primarily due to a deep aversion to being classed as a 'waste depot'

of any kind or even receiving 'waste'. Being a 'waste depot' is seen as bringing reputation risks, reduced land value and additional regulatory burden. Also, public purchasers are likely to forgo such products if such goods were still classified as 'waste' at the time of application by the user (due to the material only ceasing to be waste after application in accordance with specified conditions). Many agricultural or other commercial users are reluctant to bear any risk of being seen as a 'waste depot' for the same reasons as retailers and, in many cases, protect a 'clean and green' reputation. Furthermore, there can also be a concern that pollution and site contamination reporting requirements could become applicable to a vendor at the sale of land given the nature of questions posed as part of the sale process (refer to the Land and Business (Sale and Conveyancing) Act and Regulations (SA)).

It is hence suggested that the proposed framework be modified to allow suitably low risk WDMs to cease to be waste at the point of sale (even though simple conditions may still apply to their use) by amendment of the WDM determination requirements.

6. Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

The existing definition of 'waste' in the current WARR Act is very broad in character and similar to that more typically used for 'pollutant'. Despite this, apart from the proposed addition to the definition, it may be questioned if the term 'discharged' on its own is sufficient to cover all the manners in which matter can be released into the environment and at which point in time 'matter' will become 'waste'.

LMS understand the intent of the amendment is to have WDMs defined as waste unless used in accordance with a WDM declaration. It refers to the SA example given for question 5 above and reiterates that there may be times at which it is appropriate for material to cease as a waste after its recovery but before its use. Accordingly, LMS suggests the definition's wording be amended to allow for this.

7. To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements: (1) They are currently considered to be products (not waste), and (2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste. This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Rather than any specific comment, LMS notes that Table 1 of the document in section 2.4 covers a range of common wastes. Noting its submission on the draft composting guidelines, LMS suggests that for 'food organics and garden organics', 'anaerobic digestates' ought to be recognised as a separate, additional potential WDMs that may cease to be considered as 'waste'. Anaerobic digestion is a collection of naturally occurring processes that convert organic matter, in the absence of oxygen, into energy-rich biogas and nutrient-rich anaerobic digestates. The character of digestates produced by any anaerobic digestion process is dependent upon the character of waste feedstocks used.

Also, generally, if matter is being recovered within an operation's processes without application to land, it should be taken to not have been discharged to the environment and hence not a waste. Under the proposed amendments, it will be important that on-site recovery without application to land also not be considered a waste requiring regulation.

8. Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

LMS suggests that caution should be taken in including the mandatory consideration of whether “the material is suitable for the activity for which it is being used (fit-for-purpose)” rather than more simply focussing on whether the material poses an unacceptable risk to the environment or not and has a market. The availability of a market is a way of demonstrating that a WDM material is ‘fit-for-purpose’ without the CEO having to consider highly technical matters that may be well outside their expertise.

In contrast to the proposed considerations, in NSW, for example, the Compost Exemption 2016 states in its notes,

“... In gazettement or otherwise issuing this exemption, the EPA is not in any way endorsing the use of this substance or guaranteeing that the substance will confer benefit. The conditions set out in this exemption are designed to minimise the risk of potential harm to the environment, human health or agriculture, although neither this exemption nor the accompanying order guarantee that the environment, human health or agriculture will not be harmed. ...”

LMS has already indicated its strong support for the proposed ability for a broader range of existing documents to be able to be adopted for use under WA law through its submission on the WARR Act review. Here, the CEO should also be empowered to simply make WDM determinations that adopt the substantive content of existing WDM standards, orders, determinations, etc from other Australian jurisdictions. This will promote harmonisation between states and avoid unnecessary work for the Western Australian government.

9. Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

LMS refers to its earlier comments under question 5 and contends that it is necessary that WDM determinations can be made that allow matter to cease being waste ahead of its application to land. This will enable a suitable risk-based framework that helps support enhanced resource recovery.

One other very small observation is that it can be easy to confuse ‘WDM determination’ and ‘WDM declaration’. A somewhat greater difference in terminology between the overarching determination and its sub-element could perhaps be helpful.

10. Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Having general and case-by-case determinations offers an appropriate balance between enabling the recovery of common materials and retaining necessary flexibility to allow for specific WDMs.

11. Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

LMS considers there should be general WDM determinations for anaerobic digestion, aerobic composting, and other soil amendments that relate to their respective processes and risks.

Anaerobic digestion has been well-established in Europe for many years. It is emerging as a desirable technology in Australia as we transition to a circular economy. Anaerobic digestate risk profiles will vary depending upon waste feedstock types, feedstock sources and intended application. These should be considered and supported by general WDM determinations that reflect risk profiles as

appropriate. LMS considers that given the nascent nature of the regulation of anaerobic digestion it may be possible for a national risk-based approach to be developed.

12. Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

None ahead of the proposed new provisions commencing in 2021.

13. Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

LMS believes that as Australia seeks to move to a more circular economy, we need to consider the implications of both material resource use and energy. Consideration should therefore also be given by the CEO to the contribution a recovery technology and its outputs (such as renewable energy) may make to carbon emission reduction.

14. Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

LMS considers general WDM determinations should be prioritised for anaerobic digestion, aerobic composting, and other soil amendments. The WDM determinations should be delineated on the basis of respective processes and risks arising from different waste feedstock types, feedstock sources and intended application.

15. Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials that are of suitable scale should be facilitated and the preparation of guidance on undertaking these will be appreciated.

LMS also refers to its earlier comments for question 8 regarding potentially containing the scope of what the CEO must have regard to in a determination.

16. Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

The content of WDM product specifications in section 2.7 of the paper seem generally appropriate. LMS supports very clearly delineating between the product specification and declaration elements in the WDM determination.

17. Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

No comment

18. Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

Once again, LMS would like to highlight that there will be some circumstances in which a WDM should cease being waste ahead of its application to land and the declarations should allow for this. Otherwise, the content of WDM declarations in section 2.8 of the paper seem generally appropriate. LMS supports very clearly delineating between the product specification and declaration elements in the WDM determination.

19. Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation?

LMS considers it appropriate that the receiving environment for a proposed WDM reuse be considered. Such consideration should reveal when use on specific land or land uses will be acceptable or, indeed, when general reuse may be appropriate and further regulation unnecessary (per detailed comments on question 5). For a circular economy to be effectively promoted, the highest and best safe use of a WDM should be enabled and, where appropriate, unnecessary site contamination framework impediments avoided (again refer to comments on question 5).

20. Do you have any comments on the storage of waste-derived materials before use?

LMS appreciates that material stockpiles need effective management to avoid environmental risks and to promote effective material circulation. However, it strongly contends that where regulation as a 'waste depot' would not otherwise be required for low-risk WDMs, this regulatory outcome will act as a very strong disincentive to using such WDMs in replacement of virgin materials. Other general powers should be expanded if necessary and relied upon to manage such risks (eg a general environmental duty or risk of becoming a 'waste depot'). For sites that the risk profile is such that being classed as a 'waste depot' is appropriate, then also being able to regulate stockpiles at such sites seems suitable.

21. Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework?

LMS considers that on-site reuse activities at landfills require effective controls to ensure that excessive materials are not unnecessarily used on-site for levy avoidance purposes. Such excessive use can result in uncontrolled carbon emissions from the decay of organic material (rather than effective capture through biogas systems) and undercut volumes available to higher order recovery operations (such as anaerobic digestion and compost). Beyond clear operational needs at landfills, LMS believes that materials need to either be safely disposed into the landfill or suitably recovered to enable third party use. LMS does not have a particular preference on the regulatory mechanisms used to achieve these outcomes and notes that a number of states have pursued laws to avoid financial benefits arising from excessive operational use.

22. Do you have comments on the review of WDM determinations?

LMS considers that it is appropriate that review of WDM determinations be permitted in defined circumstances such as substantial new information about the impacts that a WDM is having or is likely to have on a receiving environment or a substantial change in the circumstances applying (such as new treatment or processing options becoming available). The ability for the CEO or Minister for Environment to initiate a review should be generally limited to these circumstances. It is supported that these be undertaken using a rigorous and transparent process.

The suspension of a WDM determination during an inquiry into its appropriateness can be foreseen to have potentially enormous immediate and long-term economic impacts on WDM producers and users who have made significant investments based on WDM determinations in place. Suspension of a WDM determination should only ever be permissible where the risks to human health or the environment are significant. The validity of any such suspension should always be able to be tested in a suitable Court.

23. Do you have any comments on the publication of WDM determinations?

LMS supports the proposal to publish all WDM determinations on a website, with the protection of commercial-in-confidence information where necessary.

24. Do you have any comments on the appeal of decisions regarding WDM determinations?

LMS strongly supports the establishment of appeals against the CEO's decision to amend, suspend or revoke a WDM determination given the substantial investment risks associated with such decisions. It also suggests that appeals should be allowed by WDM applicants against unreasonable WDM condition determinations.

25. Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification?

LMS supports offences as necessary for suitable environment protection and also addressing poor practices from undercutting businesses who are operating to compliance requirements.

The inclusion of offences also highlights the strong need for an appropriate risk approach to be adopted when establishing WDM requirements. If requirements are unnecessarily difficult and onerous for the circumstances applying (as LMS considers is the case for many feedstock types under the draft compost guideline for example) and are underpinned by offences for non-compliance, this will act as a strong deterrent from investing in technologies that increase available resource recovery options.

26. Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials?

The certainty that will be available for WDM users from this provision is likely to help support resource recovery. It again highlights how important the reasonableness of WDM product specification conditions will be however.

27. Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials?

This will be appropriate in many circumstances but LMS refers you to its views on low-risk WDMs as commented upon for question 5.

28. Do you have any comments on the implementation of the framework?

As stated for question 8 also, the CEO should also be empowered to simply make WDM determinations that adopt the substantive content of existing WDM standards, orders, determinations, etc from other Australian jurisdictions. This will promote harmonisation between states and avoid unnecessary work for the Western Australian government.

29. Do you have any general comments on the implications of the proposed legislative framework on producers and users?

No comment

30. Do you have any final comments? Please provide your final comments in the text box below.

No comment

Response ID ANON-NHP8-6B5K-P

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on 2020-12-17 15:04:25

Introduction

1 What is your name?

Name:

John Braid

2 What is your email address?

Email:

3 Which of the following best describes the group or person you represent? (optional)

Government body

If other, please specify.:

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

No

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

There are many other potential applications for WDM to be incorporated into roads during construction and maintenance. Given many of these applications are likely to be innovative and specific, and they can be addressed on a case-by-case basis.

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

Construction and demolition waste for use as road base and drainage rock
Fly ash as a concrete additive
Reclaimed asphalt for use in road base and asphalt
Rubber from used tyres and conveyor belts for use in crumbed rubber modified bitumen
Treated wastewater for use in road construction

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:**Prioritisation of WDM determinations**

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

DWER should prioritise those waste derived material determinations for materials that are currently in use as materials that would now be considered waste under the new waste definition.

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

Construction and demolition waste for use as road base and drainage rock
Fly ash as a concrete additive
Reclaimed asphalt for use in road base and asphalt
Rubber from used tyres and conveyor belts for use in crumbed rubber modified bitumen
Treated wastewater for use in road construction

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

DWER should consider a rapid assessment methodology to allow WDM trials. This would allow innovation in this space and ensure opportunities that develop at a project level can be developed and assessed without a full and prolonged assessment.

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

The date of proclamation should ensure there is sufficient time given to allow the full framework to be implemented prior to the legislative amendments coming into effect. If sufficient time is not allowed, this will cause further uncertainty to those industries developing or relying on WDM, and may result in unintentional breaches of legislation.

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:**Contaminated sites, storage and disposal to landfill**

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

The requirement to obtain waste licences for storage of waste that is intended to become a waste derived material may be prohibitive to the use of the end product. For example if crushed recycled concrete required a licence to store the material prior to its use as a WDM in road construction, it may limit the ability of the road-builder to use the material because a licence may not be able to be readily obtained.

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

Main Roads welcomes the implementation of this legislative framework. A properly executed legislative framework for WDM will provide certainty for an emerging industry and yet be flexible enough to allow innovative WDM ideas to be explored.



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Telephone: [REDACTED]
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18 December 2020

Waste Reform
Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC WA 6919

By email: wastereform@dwer.wa.gov.au

To whom it may concern,

Waste Not, Want Not: Valuing Waste as a Resource Discussion Paper and Proposed Legislative Framework for Waste-Derived Materials - Submissions

Set out below are the submissions made on behalf of the West Australian division of the National Environmental Law Association (NELA(WA)) regarding the discussion paper titled 'Waste Not, Want Not: Valuing Waste as a Resource' (**Discussion Paper**) and the proposed legislative framework for waste-derived materials (**proposed framework**).

We hosted a webinar with the Waste Management & Resource Recovery Association Australia on 7 October 2020 on "Construction and Demolition Products: Challenges and Opportunities in Western Australia". These submissions build on the discussions in this webinar.

About NELA

NELA is Australia's only national, multi-disciplinary, member-based association focused on environmental law and sustainability. NELA serves the needs of practitioners in law, planning, natural resources and environmental science and management. NELA obtains and exchanges information on issues relevant to environmental law and policy.

One of NELA's objectives is to provide a forum for and otherwise assist in the discussion, consideration and advancement of environmental law among the legal profession and the wider community.

Executive Summary

NELA(WA) submits that the proposed framework for waste-derived materials should:

1. Amend the definition of 'waste' to clarify that it includes waste-derived materials except where they are covered by a waste-derived material determination (**WDM determination**).
2. Address various issues with WDM determinations including:
 - a. the matters that the CEO must have regard to in making WDM determinations;
 - b. applicability of WDM determinations to recycled material fill;
 - c. use of construction and demolition materials;
 - d. guidance for trials of waste-derived materials; and
 - e. consequences of WDM determinations for clean fill waste.

3. Provide ‘interested persons’ with rights to appeal to the State Administrative Tribunal in relation to:
 - a. decisions of the CEO to grant, refuse, amend, suspend and revoke WDM determinations; and
 - b. conditions included in WDM determinations.

These submissions do not concern any aspect of the Discussion Paper which NELA(WA) agrees with or supports.

Background

There is a strong appetite for increasing the recovery of materials and decreasing waste in Western Australia, for example through the increased uptake and acceptance of recycled construction and demolition products.

The Discussion Paper outlines the Department of Water and Environmental Regulation’s (**Department**) proposed framework for waste-derived materials to meet the objectives of the *Waste Avoidance and Resource Recovery Strategy 2030*. This includes various legislative reforms and improvements to the existing waste management and waste levy legislative frameworks. Feedback on the proposed framework is sought from the public.

Amend Definition of ‘Waste’

The Discussion Paper and proposed amendments seek to amend the definition of ‘waste’ in the *Environmental Protection Act 1986 (WA) (EP Act)* and the *Waste Avoidance and Resource Recovery Act 2007 (WA) (WARR Act)* to clarify that waste-derived materials are waste unless they are used in accordance with all of the conditions of a relevant WDM determination made by the CEO. If material is considered to be ‘waste’ then this will trigger the application of licensing and potentially waste levy requirements to waste-derived materials.

NELA(WA) supports the amendment of the definition of waste to address waste-derived materials but submits that the definition could be improved by expressly excluding waste-derived material that is covered by a WDM determination from the definition of ‘waste’. In particular, NELA (WA) submits that the definition of ‘waste’ should be amended as follows (proposed amendments are bolded):

waste includes matter:

- a) whether liquid, solid, gaseous or radioactive and whether useful or useless, which is discharged into the environment; or
- b) prescribed by regulations to be waste,

but does not include:

c) matter that is used in accordance with all of the conditions of either a relevant:

(i) general WDM determination made by the CEO; or

(ii) case-by-case WDM determination made by the CEO.

Address Issues with WDM Determinations

NELA(WA) submits that the proposed framework needs to address the following issues in relation to WDM determinations.

Matters that the CEO must have regard to in making WDM determinations

The Discussion Paper states that in deciding whether or not to issue a WDM determination, the CEO must consider whether “there is an established (genuine) market or use (or there is evidence supporting creation of a market or use) for the material and its diversion from landfill is not speculative”. NELA(WA) does not support this requirement as it may inhibit innovation in relation to the development and use of new waste-derived materials where no established market exists. It is also unclear what type of evidence is required to support the creation of a market or use for waste-derived materials.

Applicability of WDM determinations to recycled material fill

Table 1 of the Discussion Paper suggests that the CEO can make a general WDM determination for treated acid sulfate soils that will be used as fill. NELA(WA) submits that the proposed framework should clarify whether the CEO can make a general WDM determination for recycled material fill, such as recycled fill sand.

Use of construction and demolition waste

The Discussion Paper sets out some examples of commonly used waste-derived materials and their uses. NELA(WA) submits that the proposed framework should specify that the use of construction and demolition waste is not limited to road base and drainage rock, but could also include, where suitable:

- (a) fill or to contour land; and
- (b) recycling concrete into aggregate material included but not limited to foundations, pathways and bridges.

Guidance for trials of waste-derived material

The Discussion Paper also suggests that DWER will publish guidance on the evidence required to demonstrate that the proposed trial of waste-derived material addresses the matters the CEO must have regard to in making a WDM determination. NELA(WA) submits that it should be clarified how and when this guidance will be developed and published and if it will be the same as a general WDM determination.

Consequences for clean fill premises

NELA(WA) submits that the proposed framework should clarify when waste recycling facilities and development sites that use waste-derived materials or accept such materials on site (and no longer attract the waste levy or require a licence for those materials) will be considered ‘clean fill premises’.

This could be achieved through amendments of the definitions of ‘clean fill premises’ in the *Environmental Protection Regulations 1987 (WA)* and ‘clean fill’ and ‘uncontaminated fill’ in the *Landfill Waste Classification and Waste Definitions 1996 (Waste Definitions)* to recognise that materials that are covered by WDM determinations are no longer ‘waste’.

Appeal Rights

The Discussion Paper proposes a process for ‘interested persons’ to appeal the CEO’s decision to amend, suspend or revoke general or case-by-case WDM determinations. NELA(WA) submits that these appeal rights should also be extended to decisions of the CEO to grant or refuse WDM determinations.

The Discussion Paper also provides that appeals may be made against conditions included in WDM determinations but does not specify whether these appeals can only be applicant or also by ‘interested persons’. NELA(WA) submits that the proposed framework should provide that ‘interested persons’ can appeal conditions included in WDM determinations, to be consistent with the EP Act.

Further, it is the view of NELA(WA) that appeals of decisions made under the EP Act, including in relation to WDM determinations, should be transferred to the State Administrative Tribunal, rather than the Minister for Environment (through the Appeals Convenor). This submission is made on the basis that transferring appeals of certain decisions to the SAT would:

- increase transparency and public confidence;
- develop environmental jurisprudence, resulting in more consistent and better quality decisions; and
- remove the multiplicity of roles currently played by the Minister for Environment in determining appeals.

Please see parts 2, 3 and 4 of the **enclosed** position paper for more detail on NELA(WA)’s submissions in relation to appeals.

Please contact me if you have any questions in relation to the above submissions.

Yours sincerely

Sarah Flynn and Ruby Hamilton
Co-Secretaries
National Environmental Law Association (WA Chapter)



10 December 2020

Waste Reform
Department of Water and Environmental Regulation
Locked Bag 10
JOONDALUP WA 6919

Email: wastereform@dwer.wa.gov.au

Dear Submission Co-ordinator,

REF: Waste not, want not: Valuing waste as a resource – Submission in response to the Discussion Paper – Proposed legislative framework for waste-derived materials

Thank you for the opportunity to comment on the Discussion Paper.

Valuing waste as a resource requires a significant shift in thinking from government, the community and material users, preparation of this discussion paper is a significant part of that shift.

We have provided below general comments followed by comments on aspects of the discussion paper:

General Comments

- ◆ The stated aim of the framework is to provide certainty as to when waste-derived materials are no longer waste, this is important however, that singular focus misses the opportunity to actively encourage the reduction, recovery, and reuse of waste as a further aim, building momentum as we transition to a more sustainable economic model;
- ◆ What risks to the environment and human health are to be managed in the preparation of WMDs? How will broad opportunities, including externalities, be considered, and factored into the legislative framework and keeping WMD determinations “current”? How will the evolving risk context be considered in the context of “business as usual” There is further work needed to draw out risks and opportunities that would flow from waste derived materials;
- ◆ There is an embedded presumption that has flavoured the discussion paper, at the end of a product/material’s use it is waste and that there is sufficient available land, and ocean, to dispose of that waste. This presumption is embedded in a supply system built on the endlessly mining of virgin materials. Changing that presumption is key to shifting business and community thinking. The legislative framework is the opportunity to foster a much more circular approach to our economy, address some of the consequences of climate change and enable the community to adapt to a new future;
- ◆ The legislative framework should address all waste endpoints not just landfill, specifically the ocean is a waste endpoint for wastewater and industrial process water. Without expanding the application of the framework only half of the waste problem will be addressed, and government will simply be managing the risk of lower waste-levy revenues while missing the opportunity to establish the foundation for circular economy thinking and the creation of new business ventures and models;

- ◆ Waste disposal to landfill and ocean is a planned “business as usual” disposal approach, but “business as usual” is not without risk particularly in an operational environment impacted by climate change, population growth and diminishing quantities of finite raw materials available for the production process; waste-derived materials or secondary raw materials, are a critical substitute for virgin materials;
- ◆ Business innovates because of a need, the need to solve a problem; the legislative framework for waste derived materials will provide an impetus for innovation as business responds to higher input costs and diminishing raw material availability, the need for substitute inputs should not be underestimated. The concerns of business over increased cost should be moderate in consideration of the entirety of the problem to be solved;
- ◆ Waste is currently disposed to landfill and the ocean, business and the community pay the end-point costs. Waste derived material will reduce environment disposal and reduce the demand for virgin materials. Risk should always be considered; part of that consideration through the risk assessment process should be the risk of continuing “business as usual”.
- ◆ There is the opportunity to work with industry or their representative associations now to develop consultation drafts WMDs, this would signal to industry, and the community, future direction, and foster innovation. Rather than putting off a key piece of work until progress is made on the legislative framework, early development of WMDs would enable the Department to better understand the issues, explore opportunities and improve the legislative framework so that it achieves its aims and intended outcomes;
- ◆ Wastewater is not properly considered in the framework, particularly given the volumes disposed to ocean and the overarching context of escalating “fit-for-purpose” water needs to meet public open space, irrigation, industrial and environmental water supply shortfalls. It is noted that water resource legislation is under development, it has been for many years, but until such time as that legislation is in place, the reuse of wastewater and its associated by-products is a lost opportunity. The waste derived material legislative framework, particularly acknowledging the definition of waste as “a) whether liquid, solid, gaseous or radioactive and whether useful or useless, which is discharged into the environment” provides an opportunity to innovate now and address significant environmental needs now.

Specific Comments

- ◆ **Amending the definition of ‘waste’:** the additional term ‘(c) should be drafted in plain English to ensure the broadest understanding and opportunity. Further, given the aspiration of the “Waste Strategy 2030” and the Government’s “Closing the loop: Waste reforms for a circular economy in Western Australia”, the definition should be drafted in the positive with a simple English definition of ‘waste derived materials’ something like:
 - “Wholly or partly comprised of waste and used in accordance with a WMD declaration.”
- ◆ **Compliance and enforcement – Non-compliance with the conditions of a WMD declaration (users of the product);** the legislative framework’s intent is “to ensure the use is a genuine reuse, rather than a means of waste disposal and levy evasion”. Unfortunately, this intent is a disincentive to innovation and embeds a rigid approach to product development, the emerging uses for new materials and, assuming a consistent material specification, is unlikely to present any greater risk to the environment or human health. The development and approval of WMD should be considered in the context of encouraging new products and uses to expand the reduction and reuse of waste and provide viable substitute for finite virgin materials;

- ◆ **Implementation of the framework – Supporting regulations:** As the Department considers fees and charges, consider the existing resource model of a royalty system applied to mining. This type of system reduces upfront capital costs and would become a variable cost in line with sales revenue, encouraging investment in new businesses, plants and facilities established to reduce and reuse waste derived material;
- ◆ **Implementation of the framework – Cost recovery:** The approach should encourage innovation and foster circular economy investments. Aligning payment of fees and charges with revenues would encourage business and industry to think differently to reduce waste going to landfill and ocean; to avoid further reinforcing today's "business as usual".

We trust the comments in this submission provides another perspective, help to foster innovation, and contribute to establishing a more circular economy in Western Australia.

Your faithfully,



DEANNE MCDONALD
Managing Director

Enquiries: Jane O'Malley
Our Ref: 0165_2020_12_18
File No.: BUA_707__04



18 December 2020

Department of Water and Environmental Regulation
Locked Bag 10, Joondalup DC
JOONDALUP WA 6919
Via email: wastereform@dwer.wa.gov.au

Dear Sir / Madam

Submission to Discussion Paper: Waste not, want not: Valuing waste as a resource

Thank you for the opportunity to provide feedback on the Discussion paper of September 2020 Waste not, want not: Valuing waste as a resource; Proposed legislative framework for waste-derived materials.

The PHCC strongly supports the development of a legislatively-based framework to regulate waste-derived materials (WDM).

By way of background, the PHCC has been involved in the use of WDM for many years, including the use of products derived from the bauxite refining process (e.g. products such as Alkaloam® and Red Sand™). This is reflected in our submissions of 2015 on the End-of-Waste process and our 2019 submission on the Legislative framework for waste-derived materials issues paper.

WRM such as by-products of mineral-refining processes, have the potential to significantly improve environmental outcomes in the Peel-Harvey Catchment and beyond, especially along the coastal plain catchment. The PHCC notes the DWER factsheet "Assessing whether material is waste" states that "material wanted for sale to another person is not considered to be waste". The PHCC does not consider products such as Alkaloam® and Red Sand™ to be waste because of their potential commercial viability. The environmental benefits of these products is such that the legislation should encourage and facilitate their use.

The impact of the proposed legislation ought to be reviewed to fully assess its impact on the potential for getting soil amendment products to market and on government in terms of its ability to facilitate this occurring in a timely manner. This is consistent with the recently released "Binjareb Djilba – a Plan for the Protection of the Peel-Harvey Estuary" (DWER, 2020), Action C2 (b) "Improve phosphorus retention in sandy soils used for intensive and broad-scale agriculture through the use of soil amendments.... Changes to regulation may facilitate wider use of soil amendments...". To assist in achieving this outcome, the PHCC recommends that further consultation is undertaken when further details on the legislation is available for review.

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*We acknowledge the Noongar people as Traditional Custodians
of this land and pay our respects to all Elders past and present*

1. Waste-derived materials to be addressed in general WDM determinations

The PHCC considers that soil amendment products that address water quality issues in the Peel-Harvey catchment including Red Sand™ and Alkaloam®, ought to be addressed in the general WDM determinations.

Red Sand™ - replacing the use of virgin fill material

Sand fill has traditionally come from coastal plain sands and has led to the clearing of Banksia Woodlands. Banksia Woodlands are now a Threatened Ecological Community (TEC) listed under the Environment Protection and Biodiversity Conservation Act. Products such as Red Sand™ have the potential to significantly reduce the use of virgin material and the loss of biodiversity from the Peel-Harvey catchment, with Banksia Woodlands being a prime example. Banksia woodlands and their associated dunes when cleared are commonly bordered by wetland seepage areas also representing sensitive ecological communities. Even where the vegetation has been removed from the dunal system, mining of the sand resource removes the hydrological influence of providing extended seepage water for adjacent wetland communities. The result being a cumulative impact on the water quality and the entire ecosystem, which soil amendment products such as Alkaloam® and Red Sand™ can reduce the need for further clearing, and assist in legacy nutrients.

Alkaloam® - nutrient-retentive soil amendment products derived from bauxite refining process.

Modelling by the (then) Department of Water has shown that the use of soil amendments, such as Alkaloam®, on the Peel-Harvey Catchment's high nutrient-leaching soils would achieve 68% of the water quality improvement target for the Peel-Harvey Estuarine System. This equates to a phosphorus reduction of 48.5 tonnes of phosphorus, given a 71 tonnes reduction is required in total to meet the EPA's Environmental Protection Policy for the Peel-Harvey Coastal Plain Catchment (Kelsey *et al*, 2011)

The impact of Alkaloam® on the retention of phosphorus from the agricultural landscape has been shown in the field to be rapid, effective, cheap and long lasting (Summers *et al* 2020) while other management techniques referred to in Kelsey *et al*, 2011 have been modelled at some equilibrium point which is likely to be far into the future and have not been testing in the field. The time lag for the impact of soil amendment with Alkaloam® has been well established to be immediate at the farm scale while other management practices have a range of implementation and physical lags which hamper the effective and timely treatment of eutrophication. These lags defer addressing the historical nature of eutrophication and defer them to future generations.

2. Additional matters to those listed in Section 2.5, which should be considered in determining the priority of materials for developing general WDM determinations

Materials which achieve environmental outcomes that address matters of national environmental significance as determined by the Commonwealth's Environmental Protection and Biodiversity Conservation Act 1999 ought to be included.



As an example by-products from the processing of bauxite such as Red Sand™ has the potential to replace the use of virgin fill material. Sand fill has traditionally come from coastal plain sands and has led to the clearing of Banksia Woodlands. Banksia Woodlands are now a Threatened Ecological Community (TEC) listed under the Environment Protection and Biodiversity Conservation Act.

Natural Bassendean sand is not fit for purpose for urban fill in phosphorus sensitive catchments. The use of fill has increasingly been in low-lying areas as land zoned urban encroaches further south into the Peel-Harvey catchment. Noting that most of the higher land has been developed for urban purposes, increasingly the urban land being developed in the Peel-Harvey catchment is low-lying and thus in need of considerable volumes of fill. Fill derived from Banksia woodland has very poor phosphorus retentive capacity which results in increased losses of phosphorus from urban land use in these low lying areas when replacing broadacre beef grazing. Fill derived from Red Sand™ has sufficient phosphorus retentive capacity to enable the urbanization of previously grazed land to retain phosphorus and reduce the eutrophication of the estuarine system.

Another example is the use of Alkaloam®, as a retentive soil amendment product derived from bauxite refining process to reduce the phosphorus leaching into the Ramsar listed Peel-Yalgorup System. The wetlands in the Peel-Harvey catchment are surrounded by poorly nutrient retentive sands which Alkaloam® can effectively treat to retain phosphorus. The close proximity of the Bassendean sands results in a continuous flux of nutrients from surrounding farmland.

3. Materials which be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials.

The PHCC considers that soil amendment products such as Red Sand™ and Alkaloam® should be prioritised given their benefit in addressing environmental matter of national significance as identified under the EPBC Act. In order to ensure a smooth transition, the PHCC requests that these products be prioritised to the extent that they can be used as of the date of the legislation being promulgated.

4. Comments about WDM determinations for trials of waste-derived materials.

Both Alkaloam® and Red Sand™ have been the subject of many trials and investigations summarised in Harris and Howard (2010) and Red Sand™ has been the subject of a joint study for use as a fill material with the then Landcorp at a test bed in Mandogalup. The PHCC understands that Alkaloam® has previously been the subject of a Public Environmental Review.

5. WDM production specifications

The content as outlined in the discussion paper for the product specifications is generally considered to be appropriate and acceptable, however the PHCC does have concerns with any time limits on the storage of soil amendments products.



6. Content of WDM declarations

The PHCC expectation is that labels on products is all that would be required when products are sold in small quantities. In larger quantities, codes of practice or guidelines should be in place, which outline the most appropriate use and application of the product. In short the PHCC recommends the removal of unnecessary and burdensome requirements on the end user. The concern is that any disincentives imposed along the supply chain has the potential to limit the use of soil amendment products, will therefore limit the environmental (and economic) benefits that result from their use.

7. Storage of waste-derived materials before use

The PHCC understands that a code of practice has previously been created as part of the Public Environmental Review into the use of Alkaloam® as a soil amendment which the PHCC understands addressed the storage and stockpiling of Alkaloam®.

The PHCC position is that imposing storage time limits for soil amendment products may be counterproductive. Our recommendation is that compliance with a code of practice which requires any nuisances such as dust to be addressed, be put in place rather than a time limitation. A time limitation and the subsequent implications of one, may be counterproductive to the commercialism of the products. This will reduce their use resulting in with the environmental benefits being missed.

The imposition of the landfill levy on soil amendment products is not supported by the PHCC and the PHCC recommend that this not be introduced in the Peel-Harvey Catchment.

References

Harris, S. and Howard, B., 2010. Bauxite residue (Alkaloam) sustainability assessment: technical, community consultation, benefit-cost and risk assessment. *URS Australia Pty Ltd: Perth.*

Kelsey P., Hall J., Kretschmer P. Quinton B. and Shakya D. (2011) *Hydrological and nutrient modelling of the Peel-Harvey Catchment*, Water Science Technical Series WST. 33, Department of Water, February 2011, Perth, Western Australia

Summers, R, Richards, P, Weaver, D & Rowe, D 2020, 'Soil amendment and soil testing as nutrient reduction strategies for the Peel Integrated Water Initiative', Resource management technical report 416, Department of Primary Industries and Regional Development, Perth.

Thank you again for the opportunity to comment.

Please do not hesitate to contact me on (08) 6369 8800 or email admin@peel-harvey.org.au if you would like any further information.

Yours sincerely



ley
utive Officer

From: [Benjamin Rooke](#)
To: [Waste Reform](#)
Cc: [AssetsExec](#); [David Jones](#)
Subject: RE: Invitation to comment: Proposed legislative framework for waste-derived materials
Date: Monday, 4 January 2021 8:46:04 AM
Attachments: [image001.png](#)
[image002.png](#)

Hi there

Thank you for inviting the Department of Communities to comment on the proposed legislative framework for waste derived materials. Congratulations on the progress made so far on addressing this very important issue, namely, how to encourage greater recycling and reuse of waste.

As you are aware, the Department of Communities has two actions as part of the Waste Avoidance and Resource Recovery Action Plan, being:

- Action 3.8: Construction Project Targets – work with industry to establish targets (to be determined) for recycling and recycled material content to be used in construction projects over certain thresholds; and
- Action 3.9: Project Tendering – Include provisions for consideration of waste avoidance and resource recovery in tender documentation.

The Department of Communities considers the proposed legislative framework will reduce the cost to recyclers of storing what was formerly classed waste material and/or reduce disposal costs for the construction industry. In light of this, the Department supports the proposed legislative framework and looks forward to the progression of the legislation.

If you have any further queries, please contact Mr David Jones, Acting Manager, Innovation and Sustainability at the Department of Communities on telephone [REDACTED] or by email ([REDACTED]).

Regards

Ben

Ben Rooke

Assistant Director General
Assets
Department of Communities

M [REDACTED]
W communities.wa.gov.au



Government of **Western Australia**
Department of **Communities**

The Department of Communities acknowledges the Traditional Owners of Country throughout Western Australia and their continuing connection to land, waters and community. We pay our respects to them and their cultures, and to their Elders past, present and emerging.

From: Waste Reform <wastereform@dwer.wa.gov.au>
Sent: Friday, 25 September 2020 4:30 PM
Subject: Invitation to comment: Proposed legislative framework for waste-derived materials

Dear stakeholder,

The Department of Water and Environmental Regulation (the department) invites your comments on the discussion paper *Waste not, want not: valuing waste as a resource - proposed legislative framework for waste-derived materials*.

The purpose of the legislative framework is to provide certainty around when waste-derived materials are no longer waste and depositing them to land in quantities above licensing thresholds would not be considered 'waste disposal', meaning licensing and waste levy requirements would not be triggered.

The discussion paper and information on how to provide your feedback is available [on the department's website](#).

The department will hold information sessions during the second half of the consultation period. To register your interest, please send an email to wastereform@dwer.wa.gov.au including 'waste-derived materials - information session - register' in the heading and your name and preferred contact details in the email.

Kind regards,
Department of Water and Environmental Regulation

Disclaimer: This e-mail is confidential to the addressee and is the view of the writer, not necessarily that of the Department of Water and Environmental Regulation, which accepts no responsibility for the contents. If you are not the addressee, please notify the Department by return e-mail and delete the message from your system; you must not disclose or use the information contained in this email in any way. No warranty is made that this material is free from computer viruses.

The Department of Communities acknowledges the traditional owners of country throughout Western Australia and their connection to land, waters and community. We pay our respects to them and their cultures, and to their elders past and present.

The Department of Communities (Communities) formed on 1 July 2017 and is responsible for the delivery of child protection and family support, community grants, funding and initiatives, education and care regulation, disability services, housing and regional services reform. During the transition phase emails sent from the Housing Authority domain will be converted to the Communities email address. This message may contain privileged and confidential information and is intended for the exclusive use of the addressee(s). You must not disclose this communication to anyone without the prior consent of Communities. If you have received this email in error, please notify us by return mail, delete it from your system and destroy all copies. Communities has exercised care to avoid errors in the information contained in this email but does not warrant that it is error or omission free.



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ABN: 97 008 734 852

Submission to the:

Department of Water and Environmental Regulation (DWER)

Richgro's response to the DWER legislative framework: Waste not, want not: Valuing waste as a resource

Richgro is a Western Australian family-owned company that has been in operation since 1916, employing over 75 full time staff both in WA and nationally. Richgro has been composting for retail, commercial landscaping and horticulture since 1988, and has been an active participant in the Australian standards committee for these products. Additionally, Richgro provides a valuable service to the Water Corporation by composting approximately 15,000 tonne / year of biosolids. Richgro's core values lie within the heart of recycling and the concept of the circular economy for waste minimisation by significant transformations of waste into valuable end products by diversion from landfill.

Richgro predicts this proposed legislative framework will negatively impact the composting and recycling sector, and provides the below feedback for consideration:

- 1. Removal of all compost related WDM determinations from this legislative framework if proof of purchase is evidenced, and transformation of the original waste input to saleable product is demonstrated.**

If a consumer purchases our product, we should be able to sell without a WDM determination, regardless of the history of once being made or product thereof a waste. This is because our core business is transforming waste into a saleable product, that is, through a biological, chemical, or physical process the product has undergone a transformation that is completely (biological, chemical, or physical) different to the original waste input.

Richgro has invested significant capital expenditures into such transformation technologies to fundamentally transform waste, and it should be clear that a waste is no longer a waste if there is a financial transaction from consumer (customer) and producer (Richgro), and the original waste input has undergone significant biological, chemical, or physical changes. Additionally, all licensed composters already must meet environmental regulatory controls of the final products (composts, or parts thereof), and we question as to why composts are mentioned specifically in this framework, as composts have fundamental changes, and are purchased by willing customers.

Richgro recommends: That a higher level of WDM determination to be made above this legislative framework to remove organic based composts (or parts thereof) “if there is a financial transaction between consumer (customer) and producer (Richgro), and the original waste input has undergone significant biological, chemical, or physical changes”

2. Consumer market perceptions

Labelling a product as a “waste derived material” (WDM) automatically gives negative perceptions which will have adverse consequences for the price point and saleability of the product. Through privately funded and extensive market research, we know that the customers value recycling, and the circular economy. However, using the word “waste” is problematic due to the negative connotations of waste being associated with something dangerous and being a potentially environmental or of human health concern.

Richgro recommends: the name of the “Waste Derived Materials” to be changed to exclude the word waste, with a recommendation of “Sustainably Sourced Materials”

3. Lack of consideration to the nutrient value of composts in terms of nutrients applied in an agronomic context.

Richgro sees the “WDM” determinations as an additional hurdle to cross for large applications of WDM to substantial land holdings. To clarify, the WDM only applies to compost (or product thereof) once the trigger point reaches 1,000 tonne per property. Using composts as an example, this is problematic because there is no consideration to the size of the property, where the composts are to be applied to, for example a 10,000-hectare farm can put the same tonnage per hectare without a WDM as a 10-hectare hobby farm. This means that smaller land holdings could have adverse environmental consequences up to the 1,000 tonnes trigger point is reached, and the opposite for the substantial land hold holdings. Western Australian farms, in the wheatbelt are growing into corporate enterprises with considerably larger land holdings where the volumes of composts could easily reach over the trigger (1,000 tonnes), though the actual environmental risks are so low because the application rate in nutrients/hectare is very low if to any at all.

Richgro recommends: The trigger point for compost (and products thereof) application to not be based on tonnage per property. Application rates to land should be based on the nutrient content in respect to the size of the land holding and utilising similar agronomic nutrient application rates for standard chemical fertilisers in terms of nutrient per hectare e.g., N (kg) / ha.

4. Administrative burden, and time in limbo until a WDM determination

In the framework there is sparse information on timelines and process for the WDM determination to be held, and what is allowed of the product until a determination is made e.g., is the WDM product allowed to be applied to land whilst under review - this is not clear.

Richgro recommends: A clearer timeframe and process of the WDM determination, with a stated allowable usage of a product until a WDM is determined.

Final statement

I thank DWER for the opportunity to comment on the proposed legislative framework “Waste not, want not: Valuing waste as a resource”. I recognise that the DWER must go beyond a fact sheet in the determination and clarification of waste related products. However, I strongly recommend the DWER reconsider the framework to include a market-based approach utilising evidence of a financial transaction, and the original inputs undergoing a fundamental and valuable change is evidence that the material is no longer a waste, and therefore should not be part of the WDM determination process. Additionally, these regulatory imposts will add significant extra capital costs to all composting facilities in Western Australia which may jeopardise currently operating, and future investment in the waste diversion of organics, which goes against state and federal government recycling policy. Western Australian soils are extremely low in carbon, with implications for decreased water and nutrient retention, we need to facilitate as a state the ongoing diversion of composted organics into agricultural soils to increase soil health and carbon sequestration to mitigate climate change. Composting needs to be cost effective, otherwise organic materials run the risk of being channeled to incineration (Waste to Energy) or landfill where the valuable carbon and nutrients will be lost forever. Composting is not a high value resource industry that can easily absorb the extra costs associated with the legislative framework regulatory requirements; as compared to other industries e.g., extractive resources, and the petroleum industries.



Mr. Tim Richards

Managing Director: Richgro Garden Products

National Vice Chairman: Australian Organic Recycling Association

State Vice Chair, Western Australia; Australian Organic Recycling Association

The Shire of Serpentine Jarrahdale appreciates the opportunity to be involved in the consultation to inform the development of reforms to the legislative framework associated with the reuse of waste materials. Activities associated with waste-derived materials are sensitive to any community, given the some of the risks of reuse specific to environment and human health.

The Shire supports reuse of waste-derived materials in principle, however, there is uncertainty how the process to convert waste into waste derived material for the purposes of being reused will occur. These processes are often intense and causes impacts upon a locality, especially with a rural setting.

The Shire has seen a growth in the number of rural properties being used to dump/stockpile unauthorised material. These materials generally comprising of building waste and ACM. A large portion of the material however, cannot be appropriately characterised due to the sheer volume of waste brought to site. Aside from the noise emissions generated from associated temporary works, the processing of uncharacterised material significantly increases the risk to public health and environment.

Emphasis needs to be given to identifying the source of materials. This needs to be in the form of receipting at the source and place of disposal with records being kept and provided as proof. Ultimately, controls need to be put in place to ensure the waste that has come to site has been properly characterised. More robust monitoring and compliance mechanisms must also follow to ensure operators are kept accountable.

Furthermore, there needs to be consideration to amending the *Department of Water and Environmental Regulation's Landfill Waste Classification and Waste Definition 1996* to reflect the proposed changes. Currently, local governments through an application for planning approval can consider accepting material for the purposes of fill which meet the definitions of clean or uncontaminated within the aforementioned documents. Changes to the document can only occur where it is demonstrated that the composition of the waste type will not adversely impact upon the environment.

Liquid Waste

There needs significant consideration to limiting the reuse of liquid waste, as it poses a greater risk to the environment and public health. A number of the Shire's rural properties depend on ground water for irrigation and the land for agricultural purposes. There is greater risk of contaminating these properties from the application of liquid waste. Ultimately, impacting upon the use of the land.

The reuse of liquid waste should be considered on a performance based approach, taking account of the resource vs the risk. The application of liquid waste, should be avoided where the site is located in close proximity to environmentally sensitive areas. This includes (but not limited to) wetlands, water ways, flood ways and groundwater dependent social settings. Additionally, consideration needs to be considered to nearby land uses. Typically, where adjoining /nearby land is being used for agricultural purposes, the application of liquid waste should not be supported.

Overall, the Shire as a result of historic issues associated with liquid waste, do not support the reuse of this waste type. If the reforms however are progressed, significant and more robust monitoring and compliance procedures must be implemented to audit operators to ensure compliance at all times.

Yours faithfully,

Andrew Trosic
Director Development Services

Shire of Serpentine Jarrahdale
6 Paterson Street Mundijong, WA 6123

www.sjshire.wa.gov.au



Response ID ANON-NHP8-6B51-V

Submitted to **Waste not, want not: Valuing waste as a resource: Discussion paper**

Submitted on 2020-12-09 16:47:44

Introduction

1 What is your name?

Name:

Simonne Grimes

2 What is your email address?

Email:

[REDACTED]

3 Which of the following best describes the group or person you represent? (optional)

Private citizen

If other, please specify.:

4 Are there specific parts of your submission that you want to keep confidential? If yes, please outline which specific parts of your submission must be kept confidential and explain why.

No

Confidential segments:

Proposed legislative framework

5 Do you have any comments on the purpose, scope and overview? Please provide your comments (specifying the section) in the text box below.

Purpose, scope and overview:

No comment on Executive summary or background or overview sections

Definition of waste

6 Do you have any comments on the proposed amendment to the definition of waste? Please provide your comments in the text box below.

Proposed amendment to the definition of waste:

I think this is well overdue in WA - good to see its changing

7 To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify (in the text box below) any materials which meet all of the following requirements:(1) They are currently considered to be products (not waste), and(2) They are deposited to land in quantities above the licensing thresholds, and (3) Under the proposed amended definition of waste, they would be considered waste.This includes instances where manufacturers use waste in their processes (e.g. treated wastewater).

Identify materials:

I am unaware of any products deposited to land under the proposal would be considered waste - isnt that the point?

Making a waste-derived materials (WDM) determination

8 Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination? Please provide your comments in the text box below.

Matters the Chief Executive Officer must consider in making a WDM determination:

I agree with the matters the CEO must consider

9 Do you have any other comments on the making of WDM determinations? Please provide your comments in the text box below.

WDM determinations:

No

Types of WDM determinations

10 Do you have any comments on the types of WDM determinations (general and case-by-case)? Please provide your comments in the text box below.

Types of WDM determinations:

I think its important to have the general WDM determinations finalised and out for use to ensure the department is not over run with individual applications.

I think this is a great initiative but.....In an already under-resourced with DWER approvals taking alot longer than they should - is DWER going to employ more people to deal with WDMs? As I think the dept is already stretched beyond max capacity with approvals already in hand.

With regards to prioritisation if a number of case by case determinations are submitted and can be grouped into a general WDM and this would assist multiple parties and streamline approval then these should also be given priority.

11 Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations? Please provide your comments in the text box below.

Waste-derived materials:

Bioremediated soil - clean fill

Clay fines from mineral sands processing - soil ameliorant

Bu k bags - reuse

12 Which material(s) would you wish to seek a case-by-case WDM determination? Please provide your comments in the text box below.

Case-by-case WDM determination:

Prioritisation of WDM determinations

13 Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations? Please provide your comments in the text box below.

Priority:

I mentioned it in above answer

Priority to those case by case WDMs that could be grouped and upgraded to a General WDM (ie different companies applying for same thing)

14 Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials? Please provide your comments in the text box below.

Materials prioritised :

Those with no health or environmental impacts followed by those with low health/enviro impacts then any others that are currently going to waste where there is a great opportunity for use

15 Do you have any comments about WDM determinations for trials of waste-derived materials? Please provide your comments in the text box below.

Trials:

Sounds straight forward enough

WDM product specifications – producers

16 Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM production specifications:

No

17 Do you have any comments about transitional arrangements for producers? Please provide any comments in the text box below.

Transitional arrangements:

WDM declarations –users

18 Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions? Please provide any comments in the text box below.

WDM declarations:

Contaminated sites, storage and disposal to landfill

19 Do you have comments on interaction between the proposed framework for waste-derived materials and the contaminated sites legislation? Please provide any comments in the text box below.

interaction between the proposed framework for waste-derived materials and the contaminated sites legislation:

Sounds reasonable

20 Do you have any comments on the storage of waste-derived materials before use? Please provide your comments in the text box below.

storage of waste-derived materials before use:

No

21 Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework? Please provide your comments in the text box below.

disposal of waste-derived materials:

No

Review of WDM determinations, publication and rights of appeal

22 Do you have comments on the review of WDM determinations? Please provide your comments in the text box below.

review of WDM determinations:

No

23 Do you have any comments on the publication of WDM determinations? Please provide your comments in the text box below.

publication of WDM determinations:

Transparent is good

24 Do you have any comments on the appeal of decisions regarding WDM determinations? Please provide your comments in the text box below.

appeal of decisions regarding WDM determinations:

No

Compliance and enforcement

25 Do you have any comments on the new offence for producers for non-compliance with conditions of a WDM product specification? Please provide your comments in the text box below.

new offence for producers for non-compliance with conditions of a WDM product specification:

Sounds reasonable

Although I believe the corporate fine should be more than double the individual

26 Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials? Please provide your comments in the text box below.

new offence for producers for provision of a false statement :

Statement of compliance should be simple and online or merged with already existing reporting periods/requirements (eg. Annual Environmental Reports)

27 Do you have any comments regarding non-compliance with WDM declarations by users of waste-derived materials? Please provide your comments in the text box below.

non-compliance with WDM declarations:

Again penalty for body corporate should be more than double individual

Implementation of the framework

28 Do you have any comments on the implementation of the framework? Please provide your comments in the text box below.

implementation of the framework:

The WDM regulations need to be supported by appropriate simple to understand guidelines.

DWER use to have guidelines but they are disappearing or no longer available or draft but not final. This is not handy for anyone trying to find information.

It should be an online system (eg. DMIRS POW system or DWER water online or the like)

Final comments

29 Do you have any general comments on the implications of the proposed legislative framework on producers and users?

general comments:

30 Do you have any final comments? Please provide your final comments in the text box below.

any final comments:

This is a great initiative and think it will be well received by industry who has been trying to use there waste more productively for years but has been blocked by red tape. I never agreed with the WA definition of what is waste: ie waste is as defined by the producer. No matter if there are benefits/users/no or negligible health and enviro impacts. Looking forward to the WDM system being in place and using it.

Information sessions



18 December 2020

Waste Reform
Department of Water and Environmental Regulation
Locked Bag 10
JOONDALUP DC WA 6919

Email: wastereform@dwer.wa.gov.au

Dear Sir/Madam

Re: Waste not, want not: Valuing waste as a resource

SUEZ welcomes the opportunity to contribute to the consultation on the Department of Water and Environmental Regulation's 'Waste not, want not: Valuing waste as a resource' discussion paper on the proposed legislative framework for waste-derived materials.

We understand the legislative amendments proposed are aimed at providing certainty around when waste-derived materials are no longer considered waste and under what circumstance that waste is considered a resource. This would require amendments to a number of regulations including the *Environmental Protection Act 1986 (EP Act)*, *Waste Avoidance and Resource Recovery Act 2006 (WARR Act)* and *Waste Avoidance and Resource Recovery Levy Act 2007 (WARR Levy Act)*.

SUEZ is supportive of the intention of the proposed legislative framework for waste-derived materials to encourage the use of those materials to build confidence in recycled products, increase demand for them and develop relevant markets while protecting the environment. We encourage DWER to build on the experience of reuse frameworks in other states to develop legislative amendments that meet the intended purpose.

As a member of the Waste Management and Resource Recovery Association of Australia, SUEZ is supportive of the organisation's submission and would like to provide the following comments given our experience operating across numerous states:

- South Australia's General Environmental Duties (GED) framework provides a useful reference model on how the use of waste-derived materials can be maximised. The GED framework allows



businesses with good management practices to demonstrate compliance and meet their obligations in a non-prescriptive manner. This allows for greater collaboration with regulators to improve practices and reduce regulatory burden for business. A nationally consistent approach utilising such a framework would help drive real change in the industry and support a true demand model for resources.

- The New South Wales Resource Recovery Framework based on resource recovery orders (RROs) and exemptions (RREs) allows some wastes to be beneficially re-used either through a general or specific order and exemption. In our experience this type of framework can be improved upon as it allows for uncertainty in its current format and we wish to highlight two areas of note. RROs and RREs can be revoked with significant consequences to industry and the customers they serve, driving uncertainty for reuse of waste-derived materials. In its current format the framework impedes the trialling of small-scale innovative solutions prior to RRO/E application, which ultimately hinders the opportunity to increase knowledge and upscale beneficial reuse.
- 'Unacceptable risk' and 'beneficial' as assessment parameters by which DWER will determine the use of waste-derived materials require clear and specific definitions to provide confidence to industry and customers.

SUEZ appreciates the opportunity to provide input. Should you require any further information please don't hesitate to contact either myself or Dan Pagoda, External Relations Manager, on [REDACTED].

Yours sincerely

DANIEL VAN VEEN
INFRASTRUCTURE MANAGER (WESTERN AUSTRALIA)

Waste Reform
Department of Water and Environmental Regulation
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By email: wastereform@dwer.wa.gov.au

Wednesday, 16 December 2020

SUBMISSION
WASTE NOT, WANT NOT: VALUING WASTE AS A RESOURCE

WA Limestone makes the following submission in response to the departments Discussion Paper *Waste Not, Want Not: Valuing waste as a resource*, dated September 2020. WA Limestone is generally supportive of the departments proposed approach however considers there are several aspects of the proposal which are of concern and require further investigation and refinement.

Waste Definition

The proposed amendment to the definition of "waste" seeks to expand the definition of waste to include waste derived materials however does not address the more fundamental issue and current uncertainty around what is waste? Given the proposed changes and broadened scope of the definition, it is critical that any uncertainty around whether material is waste or not is first resolved.

The construction materials industry in particular has been significantly affected by uncertainty around whether material is waste or not. As the discussion paper identifies, the proposed definition to include waste-derived-materials would exacerbate this issue by broadening its scope and potentially capture many more products and materials which are not currently considered to be waste.

The regulatory regime for waste and waste-derived-materials is both onerous and costly. As such it should be limited as far as practicable to material which is genuinely "waste" and not unreasonably burden other materials and products.

To address this, a similar approach is required to determine whether material is waste as is proposed for waste-derived-materials (WDM). I.e. a mechanism to provide for case-by-case rulings on whether material is waste or not, and by consequence whether the waste regulatory framework and requirement for WDM determinations should apply to that material or not.

Waste-Derived-Material Determinations

WA Limestone supports the concept of waste-derived-material determinations. However we are concerned the discussion paper appears to propose that upon the commencement of the legislative changes, WDM would only be able to be produced and/or consumed in accordance with a granted WDM determination.

This is acknowledged by the discussion paper however the proposed solution to "prioritise" applications does not appear to be practicable. As currently drafted it would appear that the department would be unable to issue WDM determinations until after the commencement of the legislative changes, with the significant risk of further delays given the proposed rights of appeal against all WDM determinations.

If this was to occur, it has the potential to effectively shut down the industry for an extended period whilst WDM determinations are resolved, with catastrophic impacts to producers and consumers of WDM. Instead of prioritising applications, what is required is for the legislation to include a transition period to allow producers and consumers to continue to operate under the existing system and provide sufficient time to undertake the requisite assessments and obtain WDM determinations. Given the likely initial high number of WDM determination applications, the level of assessment which will be required, and allowances for appeals, WA Limestone suggests that a transition period of 5 years is necessary.



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A number of construction materials not currently considered to be waste would appear likely to be impacted by the proposed changes. These include:

- Recycled asphalt
- Aggregates made from construction & demolition waste
- Returned concrete
- Crushed glass
- Blocks and pavers containing recycled construction & demolition waste

Storage of Waste-Derived-Materials

The proposed concept that WDM is no longer considered "waste" only once it has been used appears highly problematic and is not supported by WA Limestone. Furthermore the proposal that the storage of WDM be classified as a prescribed activity and require a Category 61A or 62 Licence is also not supported.

The proposed changes would appear to mean that consumers of WDM would be purchasing the material as "waste" and it only ceases to be considered waste if the end-consumer uses it in the "prescribed manner".

Not only would this be an unreasonable regulatory burden and significant disincentive to producers and consumers of recycled materials, it would appear to classify wholesalers and retailers of products containing waste-derived-materials as "waste depots" and require them to obtain prescribed premises licences. Given the number of everyday products which contain waste-derived-materials (e.g. recycled paper, plastic, glass, aggregates, etc.), this would be a regulatory nightmare.

WA Limestone further notes that the proposed treatment of WDM is grossly disproportionate and more onerous than compared to the regulatory requirements for comparable materials which do not contain waste. The additional regulatory risk to consumers to use WDM compared to natural materials is currently one of the principal market barriers to recycled materials acceptance and use.

Disappointingly the discussion paper and proposed changes perpetuates the perverse and unsustainable notion that materials derived from waste are somehow inherently more harmful than materials that do not contain waste, regardless of the actual composition of the material. In order for WDM to have any hope of meaningful market penetration and acceptance by consumers it must be treated by regulators in the same way as comparable non-waste derived materials.

To resolve these issues and improve market acceptance, WDM must cease to be classified as waste at the point when the WDM has been produced in accordance with a WDM determination (i.e. the material has been transformed into a product). This would additionally resolve the potential unintended consequences to wholesalers and retailers as the storage of compliant WDM would not be considered a prescribed activity.

Exemptions

WA Limestone recommends that the legislative changes include a schedule of "exempt" low risk waste and waste-derived materials to avoid what would appear to be a costly and time-consuming process of having to obtain WDM determinations and the resulting ongoing regulatory burden for their production and use.

Cost Recovery

WA Limestone acknowledges the costs involved with regulatory processes and is not opposed to the principle of cost recovery. However the discussion paper does not make any mention of assessment timeframes or other performance metrics to justify the imposition of cost recovery on proponents.

Unfortunately to date, in WA Limestone's experience the introduction of cost recovery for other regulatory processes by DWER has not led to any tangible improvement in assessment timeframes, quality of determinations, etc., which remains a significant burden and impact to industry.

In the absence of legislated performance and accountability criteria commensurate to the fees to be charged to proponents, WA Limestone does not support cost recovery for these processes.

Appeals

WA Limestone is concerned by the proposed appeals process for WDM determinations, particularly the potential impact from appeals by third-parties to WDM determinations.

The lack of any substantive requirement for appellants to provide supporting evidence or justification, and the minimal cost with no consequences to appellants by the Appeals Convenor process, has led to a growing number of appeals by vexacious appellants and environmental groups who frequently appeal on ideological and/or political grounds rather than genuine grounds relating to the decision. This has resulted in the clogging of the appeals system and the resulting delays and costs have become a major burden and barrier to the regulatory processes. If not addressed this has the potential to significantly frustrate and prevent the positive environmental benefits these reforms seek to achieve.

WA Limestone submits that an appeals process administered by the State Administrative Tribunal would provide a far more transparent, independent, and legally robust process than is currently afforded by the Appeals Convenor process.

WA Limestone further submits that if cost recovery is to be imposed to WDM determinations then this should be applied to appeals against WDM determinations, particularly for appeals lodged by third-parties. Appeals by third-party appellants typically result in both the regulator and the proponent incurring substantial costs with little if any cost to the appellant. By requiring appellants to contribute towards the cost of an appeals process would assist in reducing the number of frivolous and vexatious appeals to the benefit of regulators, industry, taxpayers and the community.

Sincerely

WA Limestone

Submission on the DWER Discussion Paper Proposed Legislative Framework for waste derived materials



December 2020

Status of this Submission

This Submission has been prepared through the Municipal Waste Advisory Council (MWAC) for the Western Australian Local Government Association (WALGA). MWAC is a standing committee of WALGA, with delegated authority to represent the Association in all matters relating to solid waste management. MWAC's membership includes the major Regional Councils (waste management) as well as a number of Local Government representatives. This makes MWAC a unique forum through which all the major Local Government waste management organisations cooperate.

This Submission therefore represents the consolidated view of Western Australia Local Government. However, individual Local Governments and Regional Councils may have views that differ from the positions taken here.

This Submission was endorsed by the Municipal Waste Advisory Council on Wednesday 9 December 2020.

1 Introduction

The Association appreciates the opportunity to comment on the Department of Water and Environmental Regulation (DWER) Discussion Paper – *Waste Not, Want Not: Proposed Legislative framework for waste derived materials* (Discussion Paper). Through the Waste Reform Advisory Group, MWAC had the opportunity for input into the Discussion Paper and appreciates that many of the issues raised have been addressed in the final draft. These amendments, and the worked examples included in the Discussion Paper, make the intent and process regarding the framework much clearer.

The scope of the Discussion Paper is waste-derived materials that are applied to land in amounts that are regulated by the Licencing system under the Environmental Protection Act. Waste-derived materials includes materials which are wholly or partly comprised of waste or wholly or partly derived from waste. The licence threshold used relates to the type of material – for example, a licence is required for a throughput of 1,000 tonnes or more per annum of construction and demolition materials, therefore the Framework would not apply to use of less than that amount.

In WALGA's previous Submissions on the establishment of a Legislative framework, the following key outcomes were identified that the framework:

- Risk based, fit for purpose standards – the standards should be based on the risk associated with the material and its use in specific applications.
- Streamlined approval process for waste derived materials – a process which does not require an application to be lodged with the Department for every use of material and that is supported by clear guidance documentation (developed in consultation with industry).
- WA specific evidence base – To be able to make risk based assessments DWER will need to establish a reliable WA specific evidence base, and secured staff with the necessary skills and experience to successfully implement a framework.
- Certainty and stability for markets - the establishment of a legislative framework for waste derived materials will not automatically create market demand for waste derived materials. A range of other initiatives are required to support uptake of these materials, such as active engagement with potential end users and the inclusion of recycled content targets in Government procurement.

2 Key Outcomes for a Legislative Framework

Key Outcome	Comment on Proposed Framework
Risk Based, Fit for Purpose Standards	<i>The proposed Framework meets this outcome.</i> The Discussion Paper identifies that a risk based approach will be used and that fit for purpose standards developed in collaboration with industry.
Streamlined Approval Process for Waste Derived Material	<i>The proposed Framework meets this outcome.</i> It is proposed that the producers do not have to apply for each application of product, if using the General WDM Determinations.
WA Specific Evidence base	<i>The proposed Framework may meet this outcome.</i> The specific resourcing of the development of the WDM is not discussed, however the Discussion Paper notes that “A collaborative approach to developing general WDM determinations would be undertaken with industry, particularly where they relate to waste-derived materials produced by multiple producers. Legislative amendments would require the CEO to consult with relevant stakeholders on proposed general WDM determinations.”
Certainty and Stability for Markets	<i>The proposed Framework has the potential to contribute to this outcome.</i> This is the area where the Framework has the largest potential to undermine certainty and stability for the market if the WDM Determinations are not truly fit for purpose and based on achievable outcomes for the industry.

3 Detailed Comments on the Discussion Paper

Section of the Framework	Comments
2.1 Overview The proposed legislative framework would empower the Chief Executive Officer (CEO) of the department to assess an application for, and grant or refuse to grant, a WDM determination.	It is recommended that the CEO should be empowered to grant approval, subject to amendment to a WDM determination. This will ensure that amendments can be made, rather than having to resubmit an application.
2.1 Overview The framework proposes that material does not cease to be waste until used in accordance with all the conditions of the relevant WDM declaration. This is because material that has been subject to some degree of processing may still be used inappropriately, resulting in harm to human health and the environment, or used in a way that constitutes disposal.	While the Association understands the rationale for the requirement for ‘use’ of the product, the proposed requirements on end users may impact on market acceptance of the materials.
2.3 Making a WDM determination 4. ‘principles for the use of a waste-derived materials’, being that it must be considered whether: o the use of the material would pose an <u>unacceptable risk</u> of harm to human health or the environment o where this is relevant to the proposal, the material will be used as a substitute for a recognised raw material or product and, <u>when compared with the material it replaces, has no greater potential risk of causing harm</u> to public health and the environment or is otherwise assessed to have acceptable and manageable risks (beneficial).	How ‘unacceptable’ is defined needs further clarification as this is a key principle in relation to whether a WDM can be used. The comparison of risk is one way to determine whether a product can be used. However there will be a potential gap in evidence in relation to the risks associated with the use of basic raw materials. The Discussion Paper identifies that the Department “would publish guidance on how the CEO would consider these matters, including further detail on the evidence applicants should provide in their application for a WDM determination.” For priority materials contained in the Waste Avoidance and Resource Recovery Strategy, for example

	FOGO, the Association considers the Department should have a strong role in commissioning the data collection to inform the assessment.
2.3 Making a WDM determination In undertaking a risk assessment of the material's use, the department would apply the risk framework outlined in its <i>Guidance statement: Regulatory principles</i> .	The Guidance statement took effect 13 July 2015 and is due to be reviewed "no later than as soon as practicable following the fifth year of its commencement".
2.3 Making a WDM determination In circumstances where the use of the material is low risk, there may be fewer conditions in the WDM product specification and WDM declaration than for higher- risk material. This would ensure that WDM determinations do not create unnecessary regulatory burden.	Support, this is taking a risk based approach, however there will need to be a clear process for identifying what is high and low risk.
2.4 Types of waste-derived materials determinations General WDM determinations could be made on the department's initiative or on application from industry. The department would publish guidance on the information to be provided in applications. A collaborative approach to developing general WDM determinations would be undertaken with industry, particularly where they relate to waste-derived materials produced by multiple producers. Legislative amendments would require the CEO to consult with relevant stakeholders on proposed general WDM determinations.	Strongly support this approach as it is a streamlined process including collaboration with industry.
Questions from the Discussion Paper Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations under the proposed legislative framework? Which material(s) would you wish to seek a case-by-case WDM determination for under the proposed legislative framework? Is there anything else that the department should consider in determining the priority of materials for developing general WDM determinations? Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials?	<p>The Department leading the development of the general WDM Determinations would be most appropriate where the Determinations will assist in meeting the Targets of the WARR Strategy, Export Bans and potentially where there are multiple processors of the product. The Department also identifies other factors which are relevant, such as the tonnage of material generated.</p> <p>As significant resources will be required for the development of these resources the Department will need to focus on these materials.</p> <p>It is considered much less of a priority for the Department to lead the development of Determinations where the principal beneficiary is one organisation and the material is not related Targets in the WARR Strategy or the Export Bans.</p> <p>The materials it will be absolutely essential to have WDM Determinations in place for include: Organics – from FOGO, GO and from other collections sources Construction & Demolition waste</p>

	Glass Tyres and conveyor belts Asphalt.
2.6 Trials of waste-derived materials In implementing the framework, the department would publish guidance on the evidence required to demonstrate that a proposed trial of waste-derived material addresses the matters the CEO must have regard to in making a determination. This would enable researchers to ensure their trials address the matters required for a WDM determination to be made before submitting an application.	Strongly support.
2.7 Content of WDM product specifications (general or case-by-case) Producers of waste-derived materials would be required to provide users of the waste-derived material with a written statement of compliance stating that all the requirements set out in the WDM product specification have been met.	Concern has been expressed that this effectively labels the material a waste and could make any market development more difficult or impact on existing markets.
2.7 Content of WDM product specifications (general or case-by-case) In setting the conditions in a WDM product specification, the department would ensure consistency and avoid duplication with the requirements in licenses for prescribed premises that produce waste-derived materials	Strongly support. Some Local Government organics processors have indicated that their licences contain product specifications. It is considered that products are better regulated through the Framework as it will take a risk based, fit for purpose approach.
2.7 Content of WDM product specifications (general or case-by-case) Transitional arrangements The department acknowledges that a number of waste-derived materials may have been determined not to be waste with reference to the factsheet <i>Assessing whether material is waste</i> before the proposed waste-derived materials framework would come into effect. In developing a relevant WDM determination, the department may need to consider transitional arrangements for materials already produced and would consult with relevant producers as required.	Strongly support. This approach acknowledges work already undertaken and that materials are being used.
2.8 Content of WDM declarations (general or case-by-case) The WDM declaration would clearly articulate: 4. conditions, all of which the user(s) of the waste-derived material(s) must meet for the material to not be 'waste', such as: • holding a statement of compliance from the producer that all the conditions of the WDM product specification have been met at the time of receipt of the waste-derived material on site • information that must be provided by the supplier and <u>stored by the user(s)</u> (such as a statement of compliance from the producer and any other evidence of compliance)	The intent of the WDM declaration is to outline how the material can be used and sets conditions on the user of that material. The supplier can only guarantee the material at the time that it leaves their premises (see comments Section 2.14). This requires the user to store the various statements of compliance from the producer.

<ul style="list-style-type: none"> • record-keeping and reporting requirements, including registration with the department, <u>depending on the level of risk.</u> 	<p>This requirement means that the user of product potentially has to register with the Department. This is a significant requirement and how 'risk' is defined in this context needs to be clearly identified. Record keeping and reporting also puts significant onus on a user of waste derived materials.</p>
<p>2.14 Compliance and enforcement Non-compliance with the conditions in a WDM product specification (producers) Amendments would be made to the EP Act to make it an offence to produce and supply a waste-derived material, other than in accordance with all the conditions in the relevant WDM product specification. The maximum penalty for breaching conditions of a WDM product specification would be \$50,000 upon conviction for an individual and \$100,000 upon conviction for a body corporate.</p>	<p>Noting that there are significant penalties for supply of material which does not meet specifications.</p>
<p>2.14 Compliance and enforcement Providing a false statement of compliance WDM product specifications would require that the producer of a waste-derived material provide a statement of compliance to users of waste-derived materials, stating that the conditions of the WDM product specification have been met. This statement would provide assurance that, at the <u>time of delivery</u> of material to the users, all the conditions of the WDM product specification had been met.</p>	<p>It would be difficult for a processor to warrant at the time of delivery that the material meets an output unless they are also responsible for the transport of the product. The statement should provide assurance that, at the time of production, all the conditions had been met.</p>
<p>2.14 Compliance and enforcement Non-compliance with the conditions of a WDM declaration (users of the product) In instances where a user does not comply with the conditions of a WDM declaration, the department will identify the appropriate enforcement action in accordance with its <i>Compliance and Enforcement Policy (2017)</i> and <i>Enforcement and Prosecution Policy (2013)</i>. The intent behind requiring users to comply with conditions of a WDM declaration is not only to protect human health and the environment, but to also ensure the use is genuine reuse, rather than a means of waste disposal and levy evasion. Where a user does not comply with a WDM declaration, reliance on the WDM declaration becomes null and void and the licensing and levy frameworks would apply. The user may then be committing an offence if they did not hold the requisite licence (under s.52 and s.56 of the EP Act), the maximum penalty for which would be: a \$50,000 fine and/or a daily penalty of \$10,000 for an individual a \$100,000 fine and/or a daily penalty of \$20,000 for a body corporate.</p>	<p>The Association understands the Department is motivated by ensuring that material is used correctly, to minimise impact on human health and the environment and minimise any Levy evasion. However, these are significant potential penalties for use of a product, which are likely to have a negative impact in relation to existing markets and market development for waste derived materials.</p> <p>Compliance and Enforcement Policy (2017) is an interim policy and the final Policy (consulted on 2019) has yet to be released. Enforcement and Prosecution Policy (2013), was due for review "no longer than four years from the approval date of the current version", it is not clear if this has occurred.</p>

In addition, consideration may need to be given to levy evasion under s.78 of the WARR Act.	
<p>The conditions of the WDM declaration would require the user to:</p> <ul style="list-style-type: none"> - maintain evidence that demonstrates compliance with the conditions of the declaration (e.g. a statement of compliance from the producer of the material stating that all conditions of the WDM product specification were met) - produce evidence and records relating to the declaration if requested by an inspector authorised under the EP Act (e.g. records of the quantity of material received and the name and address of the supplier). 	Again this is a significant impost on the user to keep records relating to this and have to produce them. Any such requirements need to be time bound rather than in perpetuity and the requirement to produce records be based on evidence that there is some cause for concern.

4 Implementation and Administration of the Legislative Framework

As the agency responsible for the legislative framework for waste derived materials, the Department of Water and Environmental Regulation will need to dedicate resources to its implementation and administration. This will include the development of WDM Determinations, guidance and/or supporting documents, the establishment of a streamlined assessment and approval process, and the delivery of compliance and enforcement activities. To be successful, the framework will need to be resourced with staff that have an appropriate level of skill and experience.

5 Review mechanism

In NSW, an approach has been taken where specific orders and exemptions are reviewed every two years on a rolling basis. The Discussion Paper identifies that the WDM Determinations would be “subject to periodic review on initiation by the CEO to ensure the determinations continue to be appropriate”. As the Framework for the Determination is part of the WARR Act and EP Act it is anticipated that it would be reviewed at the same time as the Acts. A review of the WARR Act is currently underway, so potentially the Framework would not be reviewed until 2025. The Association suggests that the Framework should be assessed not later than 2 years after implementation, to ensure it is meeting its objectives.

6 Conclusion

Local Government appreciates the opportunity to comment on the Discussion Paper and the resolution of many of the issues raised through the Waste Reform Advisory Group process. An outcomes based approach needs to be used in the development of the legislative framework, with the requirements that fit for purpose waste derived materials must fulfil clearly articulated in guidance and/or supporting documents. Where waste derived materials fulfil these requirements they can be used. There is an expectation that guidance and/or supporting documents will be developed in consultation with industry in a timely manner. WALGA looks forward to working with the Department as it develops a legislative framework for waste derived materials.

11 December 2020

Mr Mike Rowe
Director General
Department of Water and Environmental Regulation
Locked Bag 10
JOONDALUP DC WA 6919

Lodged by email: wastereform@dwer.wa.gov.au

Dear Mr Rowe,

RE: SUBMISSION ON DISCUSSION PAPER: “PROPOSED LEGISLATIVE FRAMEWORK FOR WASTE-DERIVED MATERIALS”

The Water Corporation (the Corporation) welcomes the release of this Discussion Paper (the Paper) and appreciates the opportunity to provide feedback through this submission.

The Corporation has also previously provided submissions on the following related papers from the Department of Water and Environmental Regulation (the Department):

- On 30 August 2019, for the issues paper “Waste not want not – valuing waste as a resource” (Waste Reform Paper 2017);
- On 3 July 2020, for the consultation paper “Closing the loop – waste reforms for a circular economy; and
- On 17 November 2020, for the discussion paper “Review of the *Waste Avoidance and Resource Recovery Act 2007*”

As advised in these previous submissions, the Corporation now includes ‘Lowest Environmental Impact’ as a key component of its Corporate Vision and subsequent corporate objectives, including progress towards the State’s Waste Avoidance and Resource Recovery Strategy and strong alignment with state aspirations for a circular economy. The Corporation fully supports the high level proposed legislative framework for waste-derived materials (WDM) in the Paper. It should provide greater certainty regarding when waste can be considered a resource, which will assist industry planning and better enable the Corporation to meet its corporate objectives.

The Corporation also believes that the detail and determinations within the proposed legislative framework for WDM (the Framework) can have a significantly high consequential effect on our future environmental aspirations, as well as our existing operations and infrastructure requirements. We would therefore like to offer our contribution to the development of this framework. As a prelude to this, the Corporation would like to raise the following issues for further discussion with the Department (and as further explained below):

1. Confirming and developing framework detail
2. Progress priority materials for WDM determinations
3. Treated wastewater
4. Triple bottom line considerations
5. Support for users to ensure market acceptance

Confirming and developing framework detail

The Corporation would like to better understand the detailed components of the framework and would offer its assistance and insights for their development. This interest is wide ranging, and includes the following examples:

- How user determinations will operate when there are several steps involved in the value chain, e.g. different stages of processing and retailing for the same material;
- How uncontaminated fill will be managed under this reform;
- If /how groundwater replenishment and managed aquifer recharge will be considered within this legislative framework and in relation to any other reforms underway;
- Fee structure and how the Department would “bring cost recovery into effect”;
- How the interplay between conditions placed on producers and users from WDM determinations will be monitored, managed, and enforced by the Department;
- The process and criteria for determining what the paper refers to as “unacceptable risk”;
- How conditions will be determined for both producers and users;
- How/if stormwater will be considered;
- Transition from current regulatory position to the new legislative framework before new legal requirements come into effect (generally considered highly important for the Corporation but particularly so for treated wastewater); and
- Expected timeframe for implementation.

Progress priority materials for WDM determinations

The Corporation proposes that Biosolids is suitable for early development of a general WDM determination, as it represents significant volume and proportional impact on the Corporation’s state waste strategy aligned targets (see Attachment 1) and is already well supported by existing guidelines and regulatory instruments. As such Biosolids would present a good

opportunity for both the Department and Corporation to familiarise themselves with the process and learn valuable lessons that can be utilised in more complex applications of the Framework. Treated wastewater is a crucial high priority for early examination but the Corporation expects that it may require more time to develop and implement while being aided by lessons learned through the experience with Biosolids.

The tables in Attachment 1 show further information on materials the Corporation considers to be products (or potential products) and for which it is likely to seek WDM determinations. While Biogas appears to be out of scope for this paper, it has been included in Attachment 1 as it appears to be included in the definition of waste unless granted a WDM determination, and the Corporation would like to include it in related discussions with the Department.

In terms of how the Department considers priority for WDM determinations, the Corporation advocates for materials with the following attributes to receive a higher priority:

1. Materials created from the provision of essential services;
2. Magnitude of contribution to waste recovery; and
3. Replacement of alternatives that can deplete the natural environment.

Treated wastewater and transition planning

The reuse of treated wastewater is such a fundamentally important component of the state's transition towards a circular economy (and as a replacement for groundwater abstraction), it warrants high priority and focus for both the Department and the Corporation. Because of variable receiving environments managed by users of the product, and the high level of state infrastructure investment involved, it is also particularly complex and deserving of close collaboration to determine an approach that delivers optimum outcomes and value for the state.

The Corporation proposes the following approach, which at a high level appears to be supported by the Framework, for the reuse of treated wastewater:

- A risk-based approach for conditions, incorporating a comparison “to the material it replaces”;
- Alignment with the *Australian Guidelines for Water Recycling* (which the Corporation is aligned to);
- Considered principles for where and how a general vs case-by-case determination is appropriate (a tiered approach within general may be appropriate);
- Proactive and practical transition planning and considerations;

- Consideration of the interplay between conditions placed on producers and users, and consequences of failure to meet;
- Minimising burden and constraints placed on 3rd party users and retailers, and how these users can be supported (see below for further commentary);
- Consideration of capability of infrastructure to deliver (see below for further commentary); and
- Consideration of circular economy principles (e.g. ensuring storage of treated wastewater in winter for summer use is not constrained by conditions and recognising where there is benefit from discharging to waterways).

Triple bottom line considerations

The Framework offers significant opportunities across the wider social, environment and financial spectrum, but also presents some risks and challenges that need to be considered. Conditions for essential services related WDM specifications should be set with a clear understanding and consideration of the capability of existing infrastructure to deliver, otherwise the result could be significant additional investment requirements for the state and constrained resource recovery outcomes. As recognised in the Paper, it will also be important to ensure consistency and avoid duplication with the requirements in licences for prescribed premises that are producing these materials.

The Paper references the concept of assessing risk “compared to the product it replaces”, which the Corporation feels is an important principle to underpin the framework. As an example, the risk of treated wastewater as a product for irrigation of public open space should be assessed with the consideration of any resulting reduction in the need for groundwater abstraction in that area, as well as the benefits of social amenity it could deliver.

Support users to ensure market acceptance

Strong markets for WDM products are critical to support the circular economy, which may be constrained if restrictive conditions on users become overly burdensome. The Corporation feels that producers of WDM products are better placed to deliver requirements to address identified risks, and that the weighting of conditions should be applied accordingly. Conditions on users should be developed with a clear understanding of their practical application and then minimised according to risk.

There will be value chains for WDM products that have multiple handover points, and it will be important to avoid duplication, or at least minimise requirements for user conditions, at different



stages of processing and retailing for the same material. The Paper states that "...the storage of a waste-derived material could trigger the requirement to hold a category 61A or 62 licence. WDM declarations would include a time limit...", and while the Corporation understands the purpose of this position, it suggests that it can be served by limiting these requirements to producers. In general, the Corporation believes that government and producers will need to actively support users in order to develop, grow, and maintain markets for WDM products to support the circular economy.

The Corporation appreciates the opportunity to comment on this Discussion Paper. We would be pleased to discuss this submission further as required and would welcome the opportunity to collaborate further with the Department as the detail and determinations within the framework are developed. In the first instance contact should be made with our Manager Environment, Dr Digby Short, by phone on [REDACTED], or by email at [REDACTED].

Yours sincerely,

A handwritten signature in blue ink, appearing to read "E Hambleton", with a long horizontal flourish extending to the right.

Evan Hambleton
General Manager
Assets Planning and Delivery Group

Attachment 1 Priority list for early WDM determinations

General WDM Determinations

Waste type	Current use(s)	Produced in 19/20	Comment
Biosolids (pathogen grade 1-3 and contaminant grade 1-2)	Soil amendment/composting	148,193.46T	licenced sites
Dewatered sludge (low quality biosolids, pathogen grade 4 and/or contaminant grade 3)	Composting		
Treated Wastewater	Irrigation	165,175ML	Some licence requirements
	Industrial processes		
	Aquifer replenishment		
Clean fill	Fill		
Green waste	Mulch		
C&D waste	Road base, etc.		

Case-by-Case WDM determinations

Waste type	Current use(s)
Cleaned/processed contaminated soil	Reuse on site as fill
Struvite	Fertiliser
Calcite pellets (Neerabup WTP)	Compost
Lime sludge (from desalination)	Soil improver
GWTP sludge	Soil amelioration
Biogas	CO ₂ for drinking water production
Biogas	Green hydrogen & graphite
Desalination brine	Magnesium production



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18 December 2020

Dear Sir/Madam

Re: Waste not, want not: Valuing waste as a resource

The Waste Management and Resource Recovery Association of Australia (WMRR) welcomes the opportunity to provide feedback on the Department of Water and Environmental Regulation's (DWER) *Waste not, want not: Valuing waste as a resource* discussion paper on the proposed legislative framework for waste-derived materials (WDMs).

The Waste Management and Resource Recovery Association of Australia (WMRR) is the national peak body for all stakeholders in the \$15.5 billion waste and resource recovery (WARR) industry. Nationally, we have more than 2,000 members representing over 500 entities that operate in a broad range of organisations, the three (3) tiers of government, universities, and NGOs. Our members are involved in a range of important waste management and resource recovery activities within the Australian economy, including community engagement and education, infrastructure investment and operations, collection, manufacturing of valuable products from resource recovered materials, energy recovery, and responsible management of residual materials.

WMRR recognises and acknowledges DWER's ongoing legislative reform efforts and notes that WA continues to show a sustained commitment to improving waste reduction and recycling, a positive trend that began in 2011. In 2017-18, the projected value of the State's waste and resource recovery activity was an estimated \$1.4 billion and total waste generation during that period was approximately 5.15 million tonnes, of which 2.73 million tonnes were disposed to landfill and 2.77 million tonnes recovered¹.

For every 10,000 tonnes of waste recycled, 9.2 full-time equivalent jobs are created, compared to only 2.8 jobs for the same volume sent to landfill²; there is a significant opportunity for WA to maximise the waste and resource recovery industry as a vehicle for job and economic growth. As such, WMRR supports DWER's intent in establishing a legislative framework for WDMs given it is an essential step that would create pathways and encourage the use of, and confidence in, recycled products.

A missed opportunity

WMRR's feedback on elements of the paper can be found below; however, at the outset, it must be noted that WMRR considers that there is a significant opportunity DWER has missed with this paper.

¹ Inside Waste Industry Report: volumes and values 2017

² Access Economics 2009

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As highlighted in the paper, current WA legislation does not expressly allow WDMs to be deposited to land without triggering licensing and waste levy requirements. What this means is DWER has an opportunity to build a forward thinking, future-proof framework that lends itself to national harmonisation, instead of relying on traditional models such as NSW's resource recovery orders and exemptions that have proven to be overly onerous and prescriptive, and have had known challenges in moving materials through the supply chain. If DWER is committed to maximising the use of WDMs, then it must seriously consider South Australia's General Environmental Duties (GED) framework, which is also a model that will be rolled out in Victoria in 2021.

WMRR continues to advocate for a consistent national approach to managing waste as a resource, and if the WA government is committed to creating a circular economy (or even a closed loop one at first instance), it would give serious consideration to supporting a nationally consistent regulatory framework based on the GED framework, to ensure resources can move through the supply chain and continue to be re-used, repaired, and ultimately re-manufactured.

WMRR acknowledges DWER's efforts in finding a pathway for waste to become a resource and to develop a risk-based approach in doing so. However, DWER should go one step further to allow businesses that are currently managing their environmental risks and following good management practices to continue to ensure compliance and meet their obligations in a non-prescriptive manner. A national GED model can facilitate this and has the added benefit of allowing for a genuine national common market for material, as well as greater coordination and collaboration with regulators and other industry stakeholders to improve practices and environmental performance, while reducing unnecessary regulatory burden that will have the perverse effect of restricting demand for materials, leaving WA in a no better position than it is in today.

As such, WMRR urges DWER to consider how it can move to a GED model and in doing so, collaborate with Victoria and South Australia to drive a nationally consistent regulatory framework. Please do not hesitate to contact the undersigned if you would like to further discuss WMRR's feedback.

Yours sincerely

Gayle Sloan
Chief Executive Officer
WMRR

Lia Barnett
WA Branch President
WMRR

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SUBMISSION

Question	Section	Feedback
Do you have any comments on the purpose, scope and overview?	2.1	<p>As noted above, WMRR advocates that DWER moves to a GED framework as this would give WA the greatest opportunity for success in the use of WDMs in a facilitative, environmentally sound manner.</p> <p>Broadly however, WMRR does agree with DWER's aims to provide certainty around when, and under what circumstances, a waste material ceases to be a waste and is considered a resource – the development of a robust framework would drive this certainty - and supports the proposal to develop WDM determination conditions that would commensurate with risk, as well as fit-for-purpose standards that would be developed in consultation with industry.</p> <p>WMRR also supports the proposal to develop general WDM determinations alongside case-by-case determinations. In addition to consultation with industry and all relevant stakeholders, WMRR also recommends collaboration with other government departments that are already users (or potential users) of WDM materials, and importantly, that these determinations are decided on by a skilled and expert team from within the Department and across industry; at present, there are no details in the paper that discusses how the development of WDM determinations will be resourced within DWER.</p> <p>There is a concern however, that there may be a disconnect between the intent of drafting these determinations and the interpretation and their enforcement. It is important that there are defined processes, guidance, and terms that are based on robust scientific evidence that could be based on Australian Standards and adopted specifications.</p>
Do you have any comments on the proposed amendment to the definition of waste?	2.2	<p>WA has an opportunity to shift the paradigm and language to recognise the true value of WDMs and the benefits that secondary materials create when they are circulated (e.g. job creation, new industries, economic growth, environmental protection, carbon reduction). Thus, it is disappointing that given this paper seeks to increase the reuse of materials, that terms such as</p>

		<p>resource management and/or material management are not used within the amended definition.</p> <p>Language should not be understated as it can drive positive (or negative) connotations and encourage actions that would meet DWER’s objectives. As such, WMRR proposes a minor tweak to the amended definition so that it now reads:</p> <p><i>Waste includes matter:</i></p> <p>(c) wholly or partly comprised of waste, or wholly or partly derived, recovered or produced from waste, unless used in accordance with all of the conditions of either a relevant:</p> <p>(i) general WDM declaration made by the CEO; or (ii) case-by-case WDM declaration made by the CEO</p> <p>During which time, the material is deemed a resource.</p> <p>Additionally, WMRR encourages DWER to consider how it can increase its use of terms related to material and resource management in the paper and all associated guidance to encourage producers to use WDMs.</p>
<p>To help the department understand potential impacts of the framework and ensure a smooth transition through the implementation phase, please identify any materials which meet all of the following requirements:</p> <p>(1) They are currently considered to be products (not waste);</p> <p>(2) They are deposited to land in quantities above the licensing thresholds; and</p> <p>(3) Under the proposed amended definition of waste, they would be considered waste. This includes instances where manufacturers use waste in</p>	<p>2.2</p>	<p>Materials that DWER should consider against the listed requirements in order to facilitate a smooth transition are:</p> <ul style="list-style-type: none"> • Recovered aggregates including concrete, bricks, stone, sand, fines • End-of-life tyres • Glass sand • Water treatment residuals • Coal washery rejects • Compost and garden organics • Solid and liquid food waste • Mulch • Stormwater • Treated grease trap waste • Biosolids • Ash from burning biomass as well as coal ash <p>Note that this is not an exhaustive list.</p>

their processes (e.g. treated wastewater).		
Do you have any comments on the matters the Chief Executive Officer must consider in making a WDM determination?	2.3	<p>WMRR is seeking clarity around 2.3(4) related to the principles for the use of WDMs, in particular, the parameters and scientific evidence by which DWER will follow in determining if the material poses an ‘unacceptable risk’. It is vital that ‘unacceptable risk’ is clearly defined as this is one of the key factors that will determine whether a material is eligible for a WDM determination, and in the same vein, how “beneficial” is defined and determined is equally important and should be defined at the outset.</p> <p>The requirement for the CEO to “have regard for an established (genuine) market or use (or there is evidence supporting the creation of a market or use) for the materials and its diversion from landfill is not speculative” may present a catch-22.</p> <p>WA is seeking to create a more circular economy which requires viable end markets to absorb recycled products. However, this requirement means that WDMs may not be used until there is a market or strong evidence of a market, both of which may not exist yet but can be created through the WDM determination. For instance, Incinerator Bottom Ash Aggregates (IBAA) is a new product but falls short of this requirement as there is no established market as yet (other comments related to IBAA can be found in the next section).</p> <p>Creating markets for new WDMs requires producers to create confidence with end users as an initial step may be challenging in the absence of a trial phase. As such WA must have regard to creating a regulated process that provides the ability to undertake trials to prove that a product can be produced, as well as enabling a product to be produced for a particular accepted use, as a commercial arrangement between parties, similar to the approach proposed in Victoria.</p> <p>WMRR supports the consideration of site-specific matters in determining the risks associated with the material’s use.</p>

Do you have any other comments on the making of WDM determinations?	2.3	<p>Related to the use of IBAA as noted above, WMRR highlights that the WA EPA created a regulatory framework for energy from waste by first looking at international best practice through Section 16 (e) advice to the Minister. This approach has resulted in WA achieving the first two (2) projects in Australia. A similar approach should be taken to the reuse of IBAA. The UK has a well-established framework for the beneficial reuse of IBAA and this should be considered as part of a general WDM determination by the CEO, while considering any WA-specific risk factors.</p> <p>Presently, the use of WDMs faces numerous barriers, including competition with virgin materials. Thus, the Department needs to ensure that the framework to make a WDM determination is as expedient as possible and as mentioned above, as non-onerous and non-prescriptive as possible (WMRR reiterates that the GED model should be used). Any framework that makes it easier for the market to keep using virgin materials (by making the use of WDMs more complex, costly, and cumbersome) does not support the WARR Act or the State Waste Strategy 2030.</p>
Do you have any comments on the types of WDM determinations (general and case-by-case)?	2.4	WMRR supports the approach to create both general and case-by-case WDM determinations and would encourage the Department to consider as many (and to do so early) general determinations as possible, and eventually move away from case-by-case determinations as the latter presents an additional market risk that would negatively impact the uptake of WDMs.
Which waste-derived materials and/or uses of such materials would you want to be addressed in general WDM determinations?	2.4	<p>As a start, the Department should consider:</p> <ul style="list-style-type: none"> • Material streams captured in the WARR strategy that will assist the State in meeting its state-wide targets, including organics (FO and GO), C&D waste, glass, tyres, asphalt and materials noted above in section 2.2. • Materials that fall under the COAG waste export bans. • IBAA – once operational, WA’s two (2) energy from waste projects will be treating a large proportion of metropolitan Perth’s residual MSW. IBAA also has various applications/uses as a WDM, including in bound (concrete) and unbound (sub-base for road construction). The

		industry would be seeking application-based WDM determinations that would have differing risk analysis based on the leaching profile of the application.
Besides the matters listed in Section 2.5, is there anything else the department should consider in determining the priority of materials for developing general WDM determinations?	2.5	WMRR believes the factors listed in 2.5 are adequate and as noted above, would urge the Department to consider its resources in appropriately determining all WDM determinations. Additionally, WMRR recommends that the development of all guidance documents, as acknowledged in the paper, is completed at least six (6) months before the framework is implemented.
Which materials do you think should be prioritised to be addressed in general WDM determinations issued upon enactment of the legislative framework for waste-derived materials?	2.5	The materials that should be prioritised are listed above, in sections 2.2 and 2.4.
Do you have any comments about WDM determinations for trials of waste-derived materials?	2.5	While WMRR supports trials of WDMs, it is important that defined milestones and timeframes are developed to ensure that these trials do not prolong the approval of WDMs. Additionally, evidence from other domestic as well as international markets should be able to be considered in assessing evidence of WDM usage.
Do you have comments on the content of WDM production specifications (general or case-by-case) and their conditions?	2.7	<p>WMRR supports the WDM product specifications as outlined in the consultation paper and notes that identifying the source of the waste requirements should mirror or consider the reporting requirements of the facility and not impose new conditions. For instance, both waste to energy projects in WA have significant reporting requirements that should satisfy the requirements set out in the paper.</p> <p>On the requirement for producers to provide a written statement of compliance, WMRR again urges the Department to consider how language can drive the uptake of WDMs and that this statement should no longer label the material a “waste” but a “resource” so as not to hinder market development.</p>
Do you have any comments about transitional arrangements for producers?	2.7	WMRR agrees that the Department must consider transitional arrangements for materials already being produced and that these arrangements should be

		<p>developed in consultation with all impacted producers and purchasers.</p> <p>The factsheet - “Assessing whether material is a waste” - should remain in place until the WDM determination is developed as recycling markets utilising WDMs are very difficult to establish and should not be impacted while new legislation is being created, particularly when there are no statutory timeframes to introduce the new legislation.</p>
<p>Do you have comments on the content of WDM declarations (general or case-by-case) and their conditions?</p>	<p>2.8</p>	<p>The main concern is that this model, much like NSW’s framework, could become overly onerous, creating a barrier to the use of WDMs (increased cost and complexity associated with the process). The GED model is preferred. That said, in relation to the paper, WMRR suggests that consideration is also given to the user of the WDM when detailing legislation around their responsibilities and requirements. While WMRR supports the concept of ensuring WDMs are used appropriately, if the end market perceives using the WDM as risky and more complex and expensive than the use of virgin materials, then the market for WDMs will be limited.</p> <p>Further, the notion of “level of risk” needs to be clearly defined and identified.</p>
<p>Do you have any comments on the storage of waste-derived materials before use?</p>	<p>2.9 - 2.11</p>	<p>WMRR supports the inclusion of a time limit under which the storage of a waste-derived material would not trigger the requirement to hold a category 61A or 62 license. In setting this time limit, WMRR recommends considering:</p> <ul style="list-style-type: none"> • The timeframe by which a WDM (whether for a new product, general or case-by-case) determination is made, noting that this could take considerable time alongside the time to establish markets. • The timeframe related to trials - products where trials are required should have longer stockpiling timeframes that take this into consideration alongside the time taken to establish markets. • The nature of use of certain materials, e.g. IBAA and C&D materials. These materials are often used sporadically by end users such as local government and Main Roads. As such, stockpile sizes will vary widely from time-to-time.

Do you have any comments on the disposal of waste-derived materials to landfill not being captured by the proposed framework?	2.9 - 2.11	WMRR notes that the use of materials by landfills (e.g. as alternate daily cover) is not covered under WDM determinations but addressed in the WARR Levy Regulations. It is important however, that the principles of beneficial reuse are addressed consistently across all state legislation and frameworks.
Do you have comments on the review of WDM determinations?	2.12 - 2.13	WMRR supports section 2.12 and 2.13 and agrees that amendments to WDM determinations should not be applied retrospectively and that there'll be transitional arrangements. Additionally, WMRR strongly supports the requirement for a full inquiry, in consultation with relevant industry and technical experts, before making any significant amendments or suspending or revoking a WDM determination – these actions are important to provide certainty to industry, enable investment and to prevent a similar situation to the MWOO (mixed waste organics output) exemption revocation debacle in NSW from occurring in WA. All results and reports related to the inquiry must be made public in a timely fashion and allow for further consultation if necessary.
Do you have any comments on the publication of WDM determinations?	2.12 - 2.13	WMRR supports DWER's recommendations to publish determinations and amendments to facilitate transparency and accountability of all stakeholders.
Do you have any comments on the appeal of decisions regarding WDM determinations?	2.12 - 2.13	WMRR queries how the Department will ensure that there are no unnecessary delays driven by appeals that may not be backed by scientific evidence. Developing markets for recycled products requires a level of certainty; users and producers may refrain from committing to a WDM if there are no requirements around when and how a determination may be overturned or how long the full appeal and approval process would take (after the initial 28-day appeal period).
Do you have any comments on the new offence for producers for provision of a false statement of compliance with a WDM product specification to users of waste-derived materials?	2.14	Instead of requiring the producer to provide assurance that all conditions of the WDM product specification have been met at time of delivery , WMRR proposes that assurance is provided at time of production as the producer may not have control of the product when it leaves the facility.
Do you have any comments regarding non-compliance with WDM declarations by	2.14	WMRR agrees that the use of WDMs should not negatively impact environmental and human health or port the levy system. However, as there are already significant potential penalties associated with the

users of waste-derived materials?		improper use of WDMs, it is important to re-enforce in the proposed legislation that when WDMs are used in accordance with the declaration, that there would be no long-term liability hanging over the head of the user. It is extremely difficult to get WDMs reused in a highly prescriptive environment where users are subject to additional long-term liabilities by “doing the right thing” and using WDMs.
Do you have any comments on the implementation of the framework?	4	WMRR understands that this process commenced as early as 2014; as such, it is concerning and disappointing that no timeframe has been given to the implementation of this framework. WMRR urges the Department to determine a timeframe with set milestones and complete this significant work as soon as practically possible. This framework is critical to transition WA from a linear model to one that is based on circular principles.
Do you have any general comments on the implications of the proposed legislative framework on producers and users?		The only further comment WMRR would make relates to the review of this Framework; WMRR recommends that any review is aligned to reviews set for the WARR Act and EP Act as this framework comes under these Acts.