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Dear Mr Merrick

Re: Draft End of Waste code – glass fines

The Waste Management and Resource Recovery Association of Australia (WMRR) welcomes the opportunity to provide feedback on the draft *End of Waste Code – Glass Fines*.

WMRR is the national peak body for the \$15.5 billion essential 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 government organisations, the three (3) tiers of government, universities, and NGOs. Our members are involved in the breadth and depth of WARR, engaging in activities fundamental to the success of the Australian economy, including infrastructure investment, collections, manufacturing of valuable products from resource recovered materials, energy recovery, community engagement and education, and responsible management of residual waste. In Queensland, the WARR sector currently employs more than 11,800 people and contributes \$1.5 billion to the state's economy.

WMRR acknowledges the intent of End of Waste (EoW) codes in setting pathways for a waste to become a resource and notes that the purpose of these codes is to simplify and streamline compliance objectives. In theory, these objectives are supported; however, there are concerns that issues related to the development of these codes will create unintended consequences such as greater red tape due to potentially unnecessary government intervention, which could hamper the reuse of resources.

In relation to this particular code, WMRR queries the need and reason for its development at this time, given the reuse of glass fines in civil construction is well underway, supported by the Department of Transport and Main Roads' (TMR) recently released MRTS36 specifications for recycled glass aggregate and parent technical specifications MRTS04 (general earthworks), MRTS05 (unbound pavements), MRTS101 (aggregates for asphalt).

The MRTS36 sets out requirements for recycled glass aggregate used in asphalt and unbound granular road pavements and general earthworks, as well as an alternative to natural sand for these uses, all of which are aligned to the proposed uses stipulated in the draft EoW.

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As there are already established specifications in place, the roll-out of this EoW code could lead to the duplication of resources for producers who would have to demonstrate compliance with both criteria, which represents both a time and cost impost and may result in users finding it more cost-effective to use virgin material. The lack of consistent requirements for the same uses of recovered glass fines further exacerbates these risks.

While WMRR's full submission below provides further details on the risks and issues with the code, this duplication of requirements points to a concern that WMRR has consistently raised in relation to the development of EoW codes – that is, there is a lack of consultation with the broader WARR industry, including the supply chain within which we operate, during the development of these codes which would impact industry significantly.

This lack of transparency in the process is problematic, particularly as the industry bears majority of the responsibilities under the end of waste framework, and as industry was not included in initial consultations (if any) prior to the release of this draft, WMRR is uncertain about the purpose of the code at this time, given the considerable work that has been done by industry to-date to develop this market in Queensland with transport agencies.

As noted above, WMRR acknowledges that the end of waste framework aims to offer a solution in situations where the legitimate re-use of a resource is hindered by red tape, in order to drive uptake of the material. However, such a situation does not appear to exist any longer for glass fines, which is currently being used and is in demand. Thus, this EoW code is deemed unnecessarily interventionist and is unlikely to meet the objectives of the framework in creating greater demand.

However, if the Department should move forward with publishing this EoW code, it is imperative that the requirements of the code are aligned to the established specifications noted above, which were developed through collaboration between TMR and the Australian Road Research Board.

WMRR's submission, which provides details on a range of sections in the draft code, continues below. Please do not hesitate to contact the undersigned if you would like to further discuss our feedback.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Gayle Sloan'.

Gayle Sloan
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Submission

Section/page reference	Summary of issue(s)	Comments
2.2: A waste that is a resource under an EoW code is considered a resource only for the use(s) approved in an EoW code. To be considered a resource under the EoW code, the material used as the resource must meet the requirements of the EoW code and be used in accordance with the conditions of the EoW code, otherwise it is considered a waste and must be managed in accordance with waste management requirements under the EP Act and the WRR Act and their subordinate legislation.	This clause risks hindering operations, potentially reducing a business' agility and ability to reprocess materials when an unplanned opportunity arises during a project. The code would then be overly prescriptive, which is contrary to the Department's intent.	<p>There is potential – and good reason particularly with the existence of TMR specifications and ongoing use of recycled glass aggregates – to develop risk-based exemptions with set parameters to allow for potential and beneficial reuse of resources during a project, even if these uses were not originally specified in the code.</p> <p>These exemptions should be supported by a robust risk assessment, clear and consistent guidance – in consultation with industry and other state departments where there are requirements for reuse in place (or in development) – as well as training of DES' officers in this area.</p>
2.4 The issuing of this EOW code for the use of a resource does not warrant or imply the lawfulness of the activity under all legislation, or that approvals necessary under other legislation have or will be approved. It is the responsibility of the registered resource producer and resource user to identify and obtain all other approvals necessary for the relevant activities.	WMRR acknowledges that other approvals may need to be obtained. At present, the onus is largely on the WARR industry to comply with the code. What is missing is, as evidenced in the development of this code, transparency around the person/ industry/ organisation that has called for a particular end of waste code and the market failures a proposed code is seeking to solve. This lack of transparency makes it challenging to determine the true benefit and potential risks of a code that is being or has been developed.	More stringent parameters and pre-requisites should be set on any stakeholder that seeks the development of end of waste codes, that there is adequate analysis of the market failures that any proposed code is aiming to fix, and that development of all codes must occur in consultation with the WARR industry and impacted supply chain from the outset.

<p>4. This EoW code is limited to glass fines generated by the crushing, milling, grinding and screening of waste glass to produce a 'sand-like' material with a particle size diameter less than 5 mm. The glass fines become a resource when the requirements and conditions under this EOW code are met.</p>	<p>WMRR acknowledges that the required particle size diameter of less than 5mm is aligned to TMR's specifications, and this is supported.</p> <p>However, the process stipulated in the EoW code – crushing, milling, grinding, and screening – may be too prescriptive particularly as there are processes that are being investigated and trialled, e.g., fusing, hydrating, and powdering, that could, when commercialised, meet the code's particle size diameter.</p>	<p>If the particle size diameter of less than 5mm and the resource quality criteria set out in table one (1) under section 6.3 are met alongside the approved uses, then a risk-based (as opposed to prescriptive) technology agnostic approach should be relied on to allow industry to use the most suitable processes to produce the resource.</p> <p>Notably, TMR's specifications do not specify the processes used to generate glass aggregates but sets outcome requirements based on particle size diameter and resource quality criteria (which we note the Department has adopted). For consistency and to remove any confusion, TMR's agnostic approach to processing should be followed.</p>
<p>6.4 The registered resource producer must sample, measure and record the composition of each load of the resource for the quality characteristics in Table one (1): Resource quality criteria.</p>	<p>It is noted on page nine (9) that the definition of load is "the volume of resource put in or on something for conveyance or transportation, carried at one (1) time and to one (1) site of use. For example, a truck and trailer carrying the resource is considered as one (1) load as well as multiple bins travelling by rail. Where the resource is transported via conveyor systems, information should be recorded on a daily basis until the transfer ceases."</p> <p>WMRR believes that the Department does not fully comprehend the impracticality</p>	<p>Firstly, WMRR advocates for a weight-based measurement of resources given this is a widely adopted practice and provides more meaningful information and not, as noted in the document, a volume-based measurement approach.</p> <p>Importantly, while WMRR supports a testing regime to ensure that resources meet the quality characteristics in table one (1), it is proposed that the Department follows the sampling and testing schedule and requirements in TMR's MRTS36, which represent a</p>

	<p>of this requirement, the realities of operations, or the significant resources required to undertake this level of sampling, which is unnecessary.</p> <p>WMRR does not support this proposed requirement as it is overly prescriptive, onerous, and interventionist and goes against the Department's intent to simplify and streamline compliance objectives. It would result in greater red tape and a significant increase in additional resources (which mean extra costs) for the producer that will be passed on to the user, discouraging the latter from using the material given virgin products may be easier and more cost-effective to use.</p>	<p>risk-based approach; in particular:</p> <ul style="list-style-type: none"> • A composite sample comprising five (5) discrete sub-samples of equal size is used to represent a lot of material. • Minimum sampling and testing frequencies correspond to the number of historical test results; if a facility has undertaken fewer than five (5) historical tests (and as such, has limited historical test data), then the minimum frequency is set at one (1) test per 500 tonnes. If there are more than five (5) historical tests (a facility has a history of compliance with specification requirements), the minimum frequency would then be one (1) test per 1,000 tonnes.
<p>7.2 The approved resource is glass fines which complies with Requirement (6.3) of this EoW code and is for the following uses:</p> <ul style="list-style-type: none"> • as aggregate in unbound pavement, up to 20%; • as sand replacement in asphalt, up to 10% in 	<p>There is a general lack of clarity in how these percentages have been determined.</p>	<p>WMRR is seeking advice on whether these requirements rely on TMR's specifications, which WMRR supports.</p>

<p>layers, and 2.5% in surfacing; and</p> <ul style="list-style-type: none"> • as sand replacement in structural and non-structural civil engineering application(s). 		
<p>7.3: The approved uses listed in Condition 7.2 must be carried out in accordance with Australian Standards for that product.</p>	<p>WMRR agrees with this clause and notes the footnote which states that “in the absence of Australian Standards for the product, it is required that the final product meets any other appropriate industry standards, e.g., Registered Professional Engineer of Queensland certified technical specifications).</p> <p>WMRR is concerned that as there are no criteria stipulating what an appropriate alternative industry standard might be, nor a definition of what is “appropriate”, a loop hole will be created where elements of industry (beyond WARR and in particular, users of resources) may create and publish, or use their own “industry” standards and specifications, which may be sub-standard and result in low quality products being made.</p> <p>Meanwhile, genuine and long-term producers of quality materials may need to expend additional resources to find an appropriate standard and/or specification with little direction as to what is “appropriate”. These resources will mean extra costs which may be reflected in the price of</p>	<p>WMRR recommends that criteria be developed in the adoption of alternative standards and that these proposed standards are consulted on with the WARR industry, supply chain and other government departments that are already users of the material before they are deemed appropriate for use.</p>



	end products and lower the ease of use and take-up of resources.	
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