Ms Jacqueline Moore
Acting CEO
NSW EPA
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PARRAMATTA NSW 2124

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

18 March 2022

Dear Ms Moore

Re: Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2021

The Waste Management and Resource Recovery Association of Australia (WMRR) welcomes the opportunity to provide feedback on the draft Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2021.

WMRR is the national peak body for all stakeholders in the essential waste and resource recovery (WARR) industry. We have more than 2,000 members across the nation, representing a broad range of business organisations, the three (3) tiers of government, universities, and NGOs. Our members are involved in the breadth and depth of WARR, including community engagement and education, infrastructure investment and operations, collection, manufacturing valuable products from resource recovered materials, energy recovery, and responsible management of residual materials. In NSW, the WARR sector remains a key contributor to the state's economy and environment. The value of NSW's WARR sector is estimated to be about $5.3 billion in 2017-18 across the collection, transport, processing, disposal and recovery (including energy) of MSW ($1.65 billion), C&I ($1.54 billion), and C&D ($1.1 billion); the approximate value of recovered materials for that period was $1 billion[1].

WMRR continues to strongly advocate for a systems-based approach to managing materials in NSW, which must be underpinned by the adopted waste management hierarchy, as we move Australia towards a genuine circular economy that emphasises design, extended producer responsibility and sustainable natural material management, as well as having clear pathways for the use of secondary raw materials in order to keep these in circulation.

A true systems-based approach recognises that a variety of treatment options are required as part of resolving the challenges posed by materials discarded once generated by the community. Energy from waste (EfW) can form a vital part of a sustainable waste management chain, where there are in place complementary policies and initiatives that first and foremost focus on avoidance and waste reduction, reuse, and recycling. These are the leading priorities of the hierarchy where energy recovery is in fact preferable to landfill disposal.

[1] Inside Waste Industry Report 2017-18: Volumes and Values

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WMRR advocates that as per the hierarchy, EfW can and must co-exist and play a complementary and fundamental role in an integrated waste management and resource recovery model in NSW, as it does in jurisdictions both in Australia and globally; however, we also recognise that this window of opportunity is under pressure from NSW, given the state's adopted EfW policy and infrastructure plan.

While WMRR's comments on the draft regulation can be found below, our overarching constructive feedback is that given the NSW EfW policy is, at this time, the most stringent and restrictive EfW policy in place in Australia, the intervention in the market to restrict development to only prescribed sites is highly concerning and represents poor policy. The role of government should be to provide investment and regulatory certainty and create a level playing field for both community and business. The market should be able to develop these projects based on where material is generated and therefore managed, in accord with the proximity principle. Government needs to strategically plan for all infrastructure required to support resource recovery and the implementation of the waste management hierarchy (which clearly places energy recovery over landfill). Government should also ensure that there is appropriate contingency and accessibility across the network, even in times of disaster, as a result of appropriate strategic planning. This lack of integrated strategic planning across the waste and resource recovery system has been particularly obvious in recent weeks when 50% of putrescible assets were inaccessible to industry. With the lead time to develop such infrastructure being lengthy, limiting sites and rules around their development at this time is extremely problematic particularly for metropolitan Sydney where the vast majority of waste is currently generated in NSW.

WMRR would encourage the government to expand the range of potentially permissible types of locations to include: Clean Manufacturing Precincts; Renewable Energy Zones; and land zoned IN 1 General Industrial or IN 3 Heavy Industrial within State Significant Precincts[2], for reasons detailed below.

Further, we note that due to the current drafting within the policy, there are potentially downstream restrictions on the use of materials, in particular fuel utilised for pyrolysis. WMRR would encourage government to ensure this policy is limited to simply EfW and not move into downstream matters, whether intentionally or otherwise.

Please do not hesitate to contact the undersigned if you would like to further discuss WMRR's submission.

Yours sincerely

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

[2] Under the *State Environmental Planning Policy (SEPP) (State Significant Precincts) (2005)*

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SUBMISSION

Section	WMRR's feedback
128A Definitions Energy recovery means the recovery of energy, either as heat or fuel.	WMRR understands that facilities that make fuel without thermal treatment, e.g., RDF and PEF, would not be prohibited, but facilities that make fuel using thermal treatment (e.g., pyrolysis) will be prohibited. As fuel combustion is captured within the definition of thermal treatment, it is recommended that the EPA clarifies this definition so that it reads: "energy recovery means the recovery of energy, either as heat or through the combustion of fuel". We note that there is no reference to 'fuel' in the scheduled activity of 'energy recovery' in the POEO Act.
128A Definitions ***Former mine site*** means a mine site other than a derelict mine site.	We would like to understand the policy position for limiting this to "former" mine sites. If there are operating mine sites that can pursue an additional or transitional opportunity with an EfW facility, should that be precluded? In any case, please clarify whether this includes an operating mine site that is scheduled for closure, where the EfW facility is intended to commence operations after the cessation of mining operations.
128A Definitions ***Former thermal electricity generation site***	Not defined. Please insert a definition for former thermal electricity generation site. As per mine sites, we recommend that the definition covers thermal electricity generation sites, whether operating or otherwise. In the case of "former" sites, the definition should include those that are either already closed, have been announced as being scheduled for closure, or those that will otherwise cease operating as thermal electricity generation sites at or around the time of the commencement of operations of the intended EfW facility.

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128A Definitions ***Regional Jobs Precinct***	Not defined. Please insert a definition for Regional Jobs Precinct.
128A Definitions Thermal treatment means the processing of waste by burning, incineration, thermal oxidation, gasification, pyrolysis, plasma or other thermal treatment process but does not include the following: (d) the incineration of waste for destruction or disposal. (i) the thermal treatment of plastic waste to produce plastic products, or inputs for plastic products, where at least 75% of the weight of the waste plastic thermally treated in a 12-month period is converted into plastic products or inputs for plastic products.	(d) The regulation implements the EfW infrastructure plan, which states that the NSW government "supports thermal energy recovery as a residual waste management option where it can deliver positive outcomes for the community while protecting human health and the environment..." and "not as an alternative to waste reduction or recycling." While WMRR acknowledges the intent of the NSW government, the distinction between energy recovery through thermal treatment (prohibited) and incineration of waste for destruction or disposal (exempted) needs to be better defined and clarified, as both undergo combustion of waste that is destined for final disposal. (i) This definition requires further clarification to ensure that plastic waste processing and reforming are not inadvertently captured by the regulation. Further, the 75% requirement will be challenging to meet. As an example, in February 2022, Qenos and Cleanaway signed an MOU to undertake a joint feasibility study for plastic-to-plastic advanced recycling in NSW and Victoria. Qenos is leading this study on one (1) or more advanced recycling plants using its existing steam cracker and polymerisation facilities that would convert plastic waste pre-processed by Cleanaway. Typically, these facilities take in most plastics except PVC (though preferencing PE and PP) and use a pyrolysis process to covert this feedstock to a naphtha which is a feedstock for the PE plant. Notably, the process would not come close to 75% conversion back to plastic and in reality, sits between 50% and 60%.

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128C Exceptions to prohibition on energy recovery from thermal treatment of waste (1) A person is not guilty of an offence under clause 128B if the activity or work prohibited by the clause is carried out at – (b) 1 of the following nominated precincts, identified on a map published in the Gazette by the EPA – (i) the Richmond Valley Regional Jobs Precinct (ii) the Southern Goulburn Mulwaree Precinct (iii) the West Lithgow Precinct (c) 1 of the following nominated precincts or sites, identified on a map or specified in a notice published in the Gazette by the EPA – (i) an Activation Precinct (ii) a Regional Jobs Precinct (iii) a former mine site (iv) a former thermal electricity generation site (2) The EPA may, by notice published in the Gazette, vary or revoke a nomination referred to in subclause (1)(b) or (c).	(1)(b) and (2) To provide project proponents with investment certainty and to allow for the planning and development process to occur, WMRR is seeking: • The gazettal of the nominated precincts under 128(C)(1)(b) and (c) before or on the commencement of the Protection of the Environmental Operations (General) Amendment (Thermal Energy from Waste) Regulation 2021. • An inclusion stipulating that once those precincts [(1)(b) and (c)] are gazetted, revocation by the NSW government will not be possible. • WMRR notes that this is an administrative process and understands that the process will not be automatic, rather it will occur following an assessment against both the Infrastructure Plan and if required, a needs analysis. This approach results in considerable uncertainty for any project that falls outside of the four (4) gazette zones. (1)(c) WMRR believes that it would be prudent of the NSW government to allow itself a wider range of potentially permissible locations, in alignment with national trends such as greater focus on a federal level (and internationally) in areas such as renewable energy and sustainable manufacturing/production, as well as to allow for the development of localised solutions in regional locations that support the NSW government's broader objectives, driving circular economy outcomes as part of these major industrial and manufacturing initiatives. WMRR proposes expanding the scope of 1(c) to also include: (v) Clean Manufacturing Precincts (vi) Renewable Energy Zones (vii) A site that is zoned IN1 General Industrial or IN3 Heavy Industrial and is

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	within a State Significant Precinct under the *State Environmental Planning Policy (SEPP) (State Significant Precincts) (2005)*, where the energy generated is intended to be mostly used to power industrial or manufacturing processes within that site or within the closest SAP, CMP, REZ or SSP. WMRR is also seeking clarity on the following wording: "1 of the following nominated sites, identified on a map or specified in a notice published in the Gazette by the EPA" – would this publication in the Gazette be made by the EPA or by the nominated site? Further, WMRR is asking the EPA to describe the processes of how, when, and under which circumstances and conditions a site or a precinct can be nominated to become an EfW site or be excluded from the general prohibition, and to also describe the process of how, when and why the EPA would make a decision to revoke such a nomination. If those descriptions are not added, the processes are left in the absolute discretion of the EPA and there is the risk of inconsistencies and arbitrariness, which would be in contradiction to the "Better Regulation" policy of the government. It would also lead to, or contribute to, a general sense of uncertainty potentially prohibiting (much-needed) investment in this sector.
128C(3)(a)(ii) "the energy generated from thermally treating the less environmentally sound fuel, *including any energy generated from the energy*…" [italics added]	We expect this is a typo and that the language in italics should be amended to read, "*including any energy generated from that fuel…"*
128C (4) Exceptions to prohibition on energy recovery from thermal treatment of waste In this clause – ***Mostly used,*** in relation to powering industrial or manufacturing processes on site, means at	While the 90% requirement may be workable in normal operating conditions to require that the EfW facility delivers energy to industrial or manufacturing offtakers, this mechanism needs to retain some flexibility to allow for maintenance and operational shutdowns of the

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least 90% of the energy generated on site in a 12-month period is used on site.	offtaker, during which time the EfW will still be producing energy and should be permitted to export that energy to the grid. In addition, from a bankability perspective for the EfW facility, the EfW facility will need to retain the ability to export energy to the grid in the event of insolvency or breach of contract by the industrial or manufacturing offtaker. In terms of the use of the energy "on site", we recommend that the EPA consider a broader approach to the utilisation of the energy generated by an EfW such that the EfW would be able to provide the energy to other users within the same precinct, whether within a Special Activation Precinct, Regional Jobs Precinct, Renewable Energy Zone, Clean Manufacturing Precinct or otherwise. To the extent that the EfW facility enters into an energy supply agreement with one (1) or more offtakers within the same designated precinct, we submit that the policy objectives for the recovery and use of the energy for closely located industrial or manufacturing processes would be achieved.
128D Effect of prohibition on environment protection license The EPA must refute an application for the issue, transfer, or variation of a license if granting the application would purport to authorise an activity or work prohibited by this part.	Clarity is sought on whether this will apply to intensifying and/or changing uses if an applicant has existing use rights in the planning context.

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