**Supplementary Submission No 172a**

# INQUIRY INTO 'ENERGY FROM WASTE' TECHNOLOGY

**Organisation:** National Toxics Network

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# National Toxics Network comments on: *Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement submitted by DADI to the NSW parliamentary inquiry into waste to energy.*

The National Toxics Network (NTN) is a community-based network working to ensure a toxic- free future for all. NTN was formed in 1993 and has grown as a national network giving a voice to community and environmental organisations across Australia, New Zealand and the South Pacific on a wide range of toxic pollution issues. NTN is the Australian focal point for the International POPs Elimination Network (IPEN). NTN also participates in the work of the Global Alliance for Incinerator Alternatives (GAIA).

NTN is concerned about the accuracy and claims made in the report tabled by DADI - *Feedstock review in accordance with the Resource Recovery Criteria of the NSW EfW Policy Statement, by MRA consulting.* As such we submit these concerns to the inquiry for their consideration.

The pursuit of residual waste as a feedstock for the incineration industry could provide a perverse outcome for sustainable waste management in NSW. This is because the incineration industry competes for the same resources as the recycling sector when the principles of the waste hierarchy are not upheld and inadequate collection and source separation of all waste categories is tolerated. MRA consulting claim that 552 000 tonnes per year of waste from the existing Eastern Creek facility can be correctly defined as 'residual' waste and sent as feedstock to the proposed New Energy incinerator. NTN challenges some of the assumptions and claims made by MRA in this report.

1. The volumes of residual waste generated in our society are directly proportional and dependent upon the waste management practices that are employed and the degree of waste sorting and separation that occurs, at the source. That is, in the home, office, factory, industry and at the material recovery facilities and other waste receiving and sorting centres and especially dirty MRF's. Mixed waste bins in public places generate significant amounts of residual waste as do the commercial, industrial, construction and demolition sectors where waste separation and resource conservation is lacking. Much of our society's residual waste is created through a lack of source separation and therefore there is great potential for a significant reduction in the generation of residual waste through Zero Waste strategies. These

strategies include providing recycling bins in public places, better residential and commercial bins and collection systems, dedicated clean MRF's and waste education and regulation in the commercial, industrial, construction and demolition sectors.

2. The modelling generated by MRA relies on a business as usual scenario in NSW. This creates unreliable data because it fails to account for the projected increase in recycling, composting and reuse rates being planned by the NSW government. Furthermore, MRA appear to be suggesting that the waste to energy incineration industry will benefit from and rely upon, an increase in waste collection centres and materials recovery facilities. Yet these facilities are designed to improve recycling rates and honour the waste hierarchy. Therefore there appears to be a perverse motivation on the part of MRA and DADI to access waste streams from these facilities to fuel incinerators instead of directing this waste towards recycling, composting and reuse outcomes. This is a compelling reason to ensure that the NSW government separates the role of waste collection and source separation from the incineration industry due to their inherent vested interest in classifying recyclable waste as 'residual waste' to allow it to be burned.

3. MRA suggests that diverting waste from other collection facilities around NSW or interstate will ensure the feedstock needed for this facility. However, this represents an undermining of the NSW governments 'proximity principle'.[1] Directing waste from other locations in NSW and transporting this waste to be burnt in the New Energy incinerator places the burden of health and environmental impacts associated with this industry, directly in the communities of Eastern Sydney. The EU has also recognised that waste incineration undermines the proximity principle and warns of the dangers of trading waste between states and the adverse impacts this brings to host communities, the recycling industry and for the sustainable management of finite resources.[2] Transporting waste over large distances substantially increases the GHG footprint of the facility raising further concerns over its contribution to climate change which can no longer be assessed solely on stack emissions.

4. Incinerator proponents claim that the best option to deal with residual waste after recycling, composting and reuse is to recover the energy via waste to energy incineration. However, waste to energy incineration technologies all require landfills to contain the highly toxic ash residues. Therefore, industry's claims that waste to energy incineration addresses the problems of landfill are simply absurd when such technologies require even more secure landfills for the thousands of tonnes of toxic ash generated every year. This type of waste represents a significant increase in human health and environmental risk and hazard, compared to residual MSW entering landfill.[3]

[1] http://www.epa.nsw.gov.au/wasteregulation/proximity-principle.htm
[2] http://www.no-burn.org/wp-content/uploads/Overcapacity_report_2013.pdf
[3] http://ipen.org/sites/default/files/documents/After_incineration_the_toxic_ash_problem_2015.pdf

5. MRA suggest that a massive increase of 226 000 tonnes/yr of residual waste can be generated through the building of a dirty MRF for commercial and industrial wastes. This plan subverts the NSW waste hierarchy by ensuring a contaminated stream of waste is generated through poor collection and source separation. Instead, the NSW government should be discouraging dirty MRF's as they are known to generate high volumes of residual waste. NSW needs to reconcile its desire to divert waste from landfill against support for the establishment of dirty MRF's as they have essentially competing agendas. Even the Plastics and Chemical industry recognise the origins and shortcomings of MRF's or Mixed Waste Processing Facilities, "… MWPFs, in their earliest of designs, were first introduced in the 1970s1 as a way to capture high BTU elements of MSW for combustion-based energy recovery."[4] It should be no surprise then that DADI would pursue dirty MRF's as a way to generate their fuel feedstocks.

6. MRA claim that shredder floc is a suitable residual waste that DADI intends to access as a fuel feedstock. However, the NSW government promotes the recycling of shredder floc through its recycling innovation fund. This waste stream cannot be credibly regarded as a legitimate feedstock because waste to energy incineration is not recycling. Claiming that shredder floc is a suitable residual waste undermines the intent of the NSW recycling innovation fund designed for better ecological and sustainable waste management outcomes.
   http://www.epa.nsw.gov.au/wastegrants/shredder-floc-mgt.htm
   Furthermore, shredder floc is known to potentially contain persistent organic pollutants and other harmful contaminants at high concentrations, making it an unsuitable feedstock for incineration and recycling without prior treatment to remove these contaminants. Burning floc leads to generation of UPOPs in emissions which are subject to elimination under the Stockholm Convention on Persistent Organic Pollutants. As a signatory to the Convention Australia should not be approving a new source of POPs or UPOPs. Rather it should be making efforts to eliminate existing sources.

7. MRA claim that there is potentially another 1.62 million tonnes /yr of residual waste that could be redirected from landfill to the incinerator as fuel feedstock based on FY17 data. However, the MRA are relying on total tonnages sent to landfill in 2017 without any analysis of the composition or suitability of this waste to meet the NSW eligible waste fuels guideline. It is pure speculation and likely to represent a gross inflation of the true quantities of available residual waste eligible for incineration by New Energy.

8. MRA describe some waste categories eligible for combustion that do not meet the NSW waste fuels guidelines relevant for waste to energy incineration. These include:

   *1.* Uncontaminated wood waste.

[4] https://plastics.americanchemistry.com/Education-Resources/Publications/The-Evolution-of-Mixed-Waste-Processing-Facilities.pdf

*Uncontaminated wood waste excludes: • post-consumer waste • wood waste extracted from mixed waste streams, such as construction and demolition waste Eligible Waste Fuels Guidelines 5 • anything defined as a source separated green waste • treated timber • painted or coated wood and most engineered wood products. Uncontaminated wood waste does not include wood waste recovered from highly variable streams, such as mixed municipal solid waste or construction and demolition waste, due to their potential to contain a large number of chemical and physical contaminants over time. Applicants wanting to pursue the use of this material as a fuel should refer to Section 4, Energy recovery facilities, of the NSW Energy from Waste Policy Statement.*

2. Source separated green waste does not include: • green waste extracted from mixed waste streams, such as construction and demolition waste

In conclusion, the MRA have not adequately demonstrated that the quantities of waste they propose are eligible for the New Energy project, are in fact able to meet the NSW waste fuels guidelines. Furthermore, MRA have not shown that the assumptions underpinning their modelling are correct and take into account the increase in recycling, composting and reuse sectors that are foreseeable and predictable through the establishment of better materials recovery facilities and other sustainable waste management policies that are not constrained by the commercial and contractual obligations of the waste to energy incineration sector.

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