Australian Sustainable Business Group

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Energy from Waste
Environment Protection Authority
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Dear Stephen

The Australian Sustainable Business Group (ASBG) welcomes the opportunity to comment on the *NSW Energy from Waste – Draft Policy (EfW).*

The Australian Sustainable Business Group (ASBG) is a leading environment and energy business representative body that specializes in providing the latest information, including changes to environmental legislation, regulations and policy that may impact industry, business and other organisations. We operate in NSW and Queensland and have over 130 members comprising of Australia's largest manufacturing companies. Members were fully involved in the development of this submission and ASBG thanks them for their contribution.

ASBG strives to assist regulatory agencies to prepare more efficient regulatory process, with the outcome of achieving practical, efficient, low cost solutions to achieve high environmental outcomes.

This policy is long awaited by business and is reflective of shift of increased flexibility shown by the NSW Government. ASBG appreciates the difficulties in getting a broad range of views into such a document give the polarization of this issue. As a first cut in the process of acceptance of EfW across stakeholder groups the EfW Policy is a welcome first step. At least detailed issues are now on the table and are a basis for some concrete progress to be made. Being a first, it naturally has controversial views contained within to appease the stakeholder groups involved. Consequently, ASBG views do point out strongly the issues it has the version presented. This should not distract from the recognised considerable conciliatory outcomes achieved by the NSW EPA waste team.

ASBG comments on EfW Policy include the following issue types:

- The gold plating of EfW facility conditions
- Requirements for pre-treatment of waste streams
- The high standards set for EfW
- Real time emission data publication

1 GOLD PLATING OF THE CONDITIONS

ASBG finds the draft EfW Policy in contradiction to the *Waste Avoidance and Recovery Act 2001's* (WARA) waste hierarchy:

> *(b) to ensure that resource management options are considered against a hierarchy of the following order:*
> *(i) avoidance of unnecessary resource consumption,*
> *(ii) resource recovery (including reuse, reprocessing, recycling and energy recovery),*
> *(iii) disposal,*

Overall the EfW Policy introduces considerably costly emissions and performance standards on EfW facilities by gold plating the emissions standards or introducing arbitrary conditions unique to such developments.

Landfills are EfW's main competition, but no landfill —reflected as *disposal* in the hierarchy—in NSW is required to have its waste streams subject to EfW resource recovery requirements. Indeed no other waste stream in NSW is subjected to resource recovery criteria proposed in the EfW Policy. If implemented in this form it will place a heavy, if not economically fatal, requirement on EfW facilities. Having more stringent and costly conditions of EfW over landfills is clearly contrary to the waste hierarchy in the WAR Act's objectives. The objectives require the EPA to promote and encourage EfW over landfill, however, the EfW policy will have the opposite outcome. The way the EfW Policy reads there are potential legal questions that could be raised.

It appears the development of the EfW Policy is one conducted in an economic assessment vacuum. The EfW Policy is purely concerned with environmental protection and satisfying community concerns. On this basis, it is too risk adverse and is likely to result in economically preventing the use of an internally proven and commonly used waste technology.

NSW is facing tightening economic times ahead with many industry and manufacturing jobs being exported. The NSW Government does not have the luxury of implementing world's best limits and controls on waste infrastructure. The costs of being so risk adverse in one area will show up in other areas such as higher costs of living and employment levels with consequential impacts limiting economic growth. The EfW Policy should also be prepared closer to the real scientifically identified risks rather than those perceived. Otherwise the NSW Government is putting higher costs on areas where they are unnecessary, dealing with imagined rather than real risks.

R1 ASBG recommends the EfW Policy be reconsidered pending an economic assessment of the viability of EfW facilities in the NSW market.

2 RESOURCE RECOVERY REQUIREMENTS

Under the EfW Policy there is a new requirement, which has not as yet been applied to other waste facilities. This is the Resource Recovery Criteria (RRC) that is detailed in Table 1. It purpose is described:

> *In order to ensure energy recovery facilities do not receive as feedstocks, waste materials for which there is an existing higher order reuse opportunity, a resource recovery criteria has been developed for energy recovery facilities. The criteria aims to ensure that only the residual from bona-fide resource recovery operations are eligible for use as a feedstock for an energy recovery facility. Energy recovery facilities may only receive feedstock from the following waste facilities or collection systems that meet the criteria outlined in Table 1 below.*

Table 1 necessitates that certain waste streams require up to 75% by weight of the stream to be recovered before the residuals can be accepted in a EfW facility. No NSW recycling facility can claim to achieve over 65% at its best with 50% being considered a good recovery rate.

ASBG finds the use of this unique and specific criteria economically damaging to establishing many types of EfW facilities. Landfills, generally EfW's main competitor —especially considering Queensland landfill gate prices— has no comparable resource recovery requirement. As a consequence, ASBG finds the economical assessment of the EfW Policy outcomes lacking.

ASBG can see no scientific justification for such percentages in the RRC, which appear *ad hoc* and arbitrary amounts. Essentially these amounts appear to lack any scientific or economic justification and are seen as economic burdens on EfW facilities with the potential to render their development uneconomic. This will simply reduce market choices and drive up the cost of waste management for ASBG members and businesses. It will further ensure more waste will go to landfill, by undermining a proven international technology aimed at reducing waste to landfill.

In its current form, ASBG can only conclude the use of RRC as an indirect means in which to prevent or minimise the development of EfW infrastructure in NSW. As the draft EfW Policy currently stands it appears directed to making EfW economically unviable in NSW, with table 1 leading this outcome.

Under the *Waste Less, Recycle More* document there is a clear need for additional waste infrastructure. However, the EfW Policy undermines this by setting pre-treatment requirements on most waste streams. It should not be applied as there is no demonstrated market failure for EfWs. Additionally, there are no other similar controls in place for landfills or other waste treatment or management options.

R2 ASBG recommends the removal of the Resource Recovery Criteria from the EfW Policy.

In clarifying the above, if a rigours scientific economic and infrastructure studies were to provide clear RRC then such an approach would be considered. Additionally, the application of RRC would also need to be broader, covering other waste streams and facility types including landfills. However, lack of adequate recycling infrastructure and the time lags in its planning and implementation would make this a difficult approach.

Overall the Waste Levy in NSW is the primary mechanism for dealing with the 'market failure' of resource recovery. Why introduce a secondary mechanism, which would lead to inefficiencies and unnecessarily complex regulatory requirements and difficult to police and unpredictable outcomes?

3 USE OF HIGH STANDARDS

3.1 Public Consultation

Many of the tight conditions required under the EfW Policy appear more based on the premises of addressing community concerns, rather than environmental harm. The main message in the section *Public consultation and good neighbour* is concerned about the relationship between the facility and its community and its neighbours. It states:

> *The operators of an energy from waste facility – particularly near a residential setting but also where there are workers in other facilities – will need to be 'good neighbours'.*

There is no argument that getting on with your neighbours is a necessary requirement for any industrial site in Australia. The issue is whether such a policy should be in the EfW Policy. Community issues should be addressed by an overarching separate policy.

ASBG considers that scientifically based environmental conditions should be kept separate to social environmental issues. The simple reason being they have to be addressed in different ways. Using a scientific explanation to a community group is a fraught process. Likewise using an emotional approach to scientific issues won't gel either.

Subjective issues such as neighbour complaints, while needing to be properly managed should be considered under a different set of policy conditions. Such condition should be dealing with subjective conflict resolution which is a different process to assessment under clear scientifically based limits and operating conditions. Including this section in the Policy suggests it be applied in more rigour than applied to other waste facilities and even other Environment Protection Licensed (EPL) sites.

Addressing community concerns of EPLs by the EPA has been a major area of increasing actions by the licence holders and the EPA. ASBG suggests it is time for an overarching policy on how the EPA will deal with EPL community conflict issues in a more structured manner addressing the emotional responses in a professional manner.

3.2 Emission Limits

EfW policy imposes the tightest limits —Group 6 — for all EfW facilities. For new facilities this is following the current requirements under the *Protection of the Environment Operations (Clean Air) Regulation 2010*. However, EfW Policy also applies this for existing EfW facilities or EPL sites such as cement kilns or other eligible fuel users, which also wish to intake high energy waste materials. Again this is an additional requirement just for EfW facilities and does not apply for other EPLs.

ASBG considers the blanket Group 6 requirement for all EfWs as unnecessary as the current requirements under the Clean Air Regulation and the use of ground level concentrations should be sufficiently stringent conditions from a scientific perspective.

Choosing Group 6 across all EfW facilities is again singling out existing EfW facilities and unnecessarily gold plating their environmental requirements. Again this undermines the economic viabilities of many EfW developments, making landfilling a more attractive outcome.

R3 ASBG recommends that the use of the POEO (Clean Air) Regulation and other existing air pollution controls are sufficient to ensure a very high level of environmental protection, hence, the application of Group 6[1] for existing requirements is unnecessary.

Use of both the Group 6 and European Councils Incineration of Waste Directive 2000/76 (EU WID) requires clarification. Simply stating that:

> *The process and air emissions from the facility must satisfy the requirements of the EU Waste Incineration Directive (2000/76/EC) and Group 6 emission standards, as set out in the Protection of the Environment Operations (Clean Air) Regulation 2010.*

Implies that the stricter criteria from the two sets of criteria will apply. This means that NSW EfW facilities will have to meet beyond Best Practice criteria as there are conflicts and higher standards in both that are unsuitable for the viability of most EfW processes. Combining the two criteria to make a higher standard has considerable economic consequences for off-the-shelf technology. It will require many off-the-shelf technology plants to be upgraded to meet the new combined emissions standards under Group 6 and the EU WID combined. Again, another level of gold plating of the environmental performance standard for EfW, one which has not been applied to other waste facility types. Examples of where such differences apply include:

- Oxygen correction factors are set under EU WID at 11% or negotiated on a case-by-case basis, under Group 6 it is hard set at 3% for most major pollutants.
- EU WID permits variations to their emissions limits on a case-by-case basis, most of these are overruled by the EfW conditions.
- The EU WID is based on EfW incinerators being in highly populated areas as most of Europe is. This is not the case in NSW, as there is a much lower population density areas.
- The EU WID is based on larger plants due to the higher populations each serves; this will not be the case for many regional areas in NSW. This affects the thermal efficiencies for the smaller plants which is not taken into account in the EfW Policy.

R4 ASBG recommends that the EPA clarify the use of both EU WID and the Clean Air Regulation be undertaken in a negotiated position using these as guidelines rather than one of the strictest criteria of either applies.

3.3 Real Time Publication of Emission Data

The technical criteria require EfW facilities to publish on-line web based graphical performance of air emissions stating:

> *There must be continuous monitoring of NOx, CO, solid particles (total), total organic compounds, HCl, HF and SO2 and this data must be made publicly available through real-time graphical publication on the internet.*

Such a requirement is fraught and unnecessary as there are many issues, including:

- Duplication of Publication Monitoring Data (PMD) requirements

[1] Note that all new EfW facilities will be subjected to Group 6 conditions as per the current legal operations of the POEO (Clean Air) Regulation. It is the current facilities, such as cement plants, grandfathered to other Group levels that is the issue here.

- Singling out of EfW facilities as the only ones to be subject to real time data publication
- Inability to screen for measurement errors causing false alarms

Under the recent changes to *Protection of the Environment Operations Act 1997 (s66)*, all EPL holders are required to publish their pollution data within 14-days of receiving their data, according to the *Requirements for the Publication of Pollution Monitoring Data*. Given the significant monitoring requirements under an EfW EPL the EPA can establish using existing controls a rigorous monitoring and PMD regime.

ASBG is concerned that under the EfW Policy there appears a doubling up of publishing emissions data. Additionally under POEO Act s320 the EPA is required to supply the monitoring data to any member of the public who requests it.

Additionally, including all the EU WID substances to be subjected to continuous monitoring is excessively costly and in many cases unnecessary. All EPL holders should be able to demonstrate where monitoring is unnecessary following appropriate monitoring or use of mass balances. This is permitted under EU WID (6) for HCl, HF and SO_2, but excluded under the EfW Policy. Where there is little risk that an emission limit will be exceeded, why subject it to mandatory continuous monitoring at all? ASBG contends that monitoring conditions be established by negotiation with EPA and not set under the Policy. This is another example of unnecessary gold plating of the environmental standards.

No other EPL holders are required to publish real time emissions, except under a voluntary provision. If this is required there would be a doubling up of the publication of such data. At least under the Requirements there are provisions and time (14 days) to review breaches of limits and investigate if they are real or measurement errors.

Real time monitoring has the problem of most measurement systems, errors. Spikes and other errors not related to the performance of the facility cannot be removed from real time publication. As a consequence, unnecessarily alarming the community will initially required to be addressed by the EPA and the facility. This is a significant cost on both parties. Also, as an increasing number of false alarms are reported, the community will become complacent to the published data errors and also ignore any real breaches.

R5 ASBG recommends that real time publication of pollution monitoring data be abandoned as the current Publication of Monitoring Data requirements are sufficient.

4 CONCLUSION

Undertaking an economic assessment of EfW to play a role in NSW's waste infrastructure will provide a reality check for the EfW Policy. It should also be a balance between environmental protection, addressing community concerns and the economic assessments of what is financially possible and reasonably affordable.

Removal of the resource recovery requirements on EfW will ensure that it can properly compete with other waste management facilities, especially landfilling. Removal and introducing more flexible emission limits and controls and real time monitoring data publication will remove the gold plating which will add unnecessarily to the cost of building and operating such plants.

While the EfW Policy is aimed for operating facilities the other issue is the need for assistance from Government on the planning and siting of EfW facilities.

ASBG looks forward to working with EPA on the above recommendations and will welcome an additional meeting with the EPA on the above. Should you require ASBG to clarify or elaborate on the above matter please contact me.

Yours Sincerely

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