



Our reference: EF13/2676:DOC15/286517-16:MF
Contact: Matt Fuller (02) 4224 4100

Department of Planning and Environment
(Attention: Sally Munk)
GPO Box 39
SYDNEY NSW 2001

Dear Ms Munk

**DA 401-11-2002 MOD 9 – ENVIRONMENTAL ASSESSMENT
BORAL CEMENT – BERRIMA – USE OF WASTE DERIVED FUELS**

I am writing in response to your letter to the Environment Protection Authority (EPA) dated 30 July 2015 seeking comments on the above application to modify an existing development consent at the Boral Cement plant. This application included an Environmental Assessment (EA) and various supporting reports.

During the exhibition period additional documents were also prepared in discussion with the Department of Planning and Environment (DPE), EPA and the proponent. These relate to a Technology/Engineering Assessment (TEA) and a Human Health Risk Assessment (HHRA). The EPA has engaged an independent expert to undertake the TEA. As at the date of this letter the TEA is in the process of being finalised for submission to the EPA. The proponent has engaged a consultant to prepare a HHRA. The EPA has undertaken an adequacy review of the draft HHRA and provided comments to the proponent. A final HHRA is yet to be submitted to DPE.

Given the above considerations, the EPA will be providing its response to DPE in staged manner to assist the Department in its determination of this proposal.

Following an assessment of the EA completed to date, the EPA provides comments on waste and compliance with the *NSW Energy from Waste Policy Statement* in **Attachment A** to this letter.

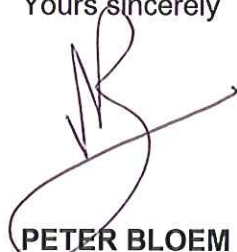
The EPA will provide an additional response to DPE addressing further matters in relation to the proposal. These include but are not necessarily limited to the following:

- Air Quality
- Technology/Engineering Assessment
- Human Health Risk Assessment

The EPA will endeavour to provide a response on these remaining matters as soon as possible. The EPA will continue to liaise with DPE during its assessment of this proposal. The EPA may have additional comments on the waste related matters upon receipt and review of this information.

If you have questions regarding the above please phone the contact, Matt Fuller on (02) 4224 4100.

Yours sincerely

A handwritten signature in dark ink, appearing to be 'PB' with a large loop and a long horizontal stroke extending to the right.

17/09/15

PETER BLOEM
Manager Illawarra
Environment Protection Authority

Att

ATTACHMENT A

EPA comments on the EA in relation to Waste and the NSW Energy from Waste Policy Statement

Section 4.5.1 of the EA – Use of Waste Derived Fuels

Ambiguity over fuel composition and sources

The description of Refuse Derived Fuel (RDF) provided in the EA is very broad and does not provide any detail regarding the potential 'types' of facilities that are likely to be sources for the RDF. These could include Alternative Waste Technologies (AWTs), Materials Recovery Facilities (MRFs), Construction and Demolition (C&D) recycling facilities etc. The source of the material will have a major impact in the fuel composition and its likely contaminants.

Further, the description of RDF provided in the EA does not give any indication of which facilities it will be sourced from and refers simply to "waste streams". Although the EPA appreciates that securing contracts and therefore specific facilities for waste material is unlikely to occur prior to consent being obtained for a proposal, a more detailed, expected typical composition of the RDF should be outlined given its flow-on implications for modelling of emissions and the composition of the clinker.

The EPA notes that an indicative breakdown of the RDF has been provided in Table 3 of the EA. However, there is no mention of the likely sources and there is ambiguity in some of the descriptions provided. For example, the term "wood" is too broad and ambiguous as to whether the waste wood is likely to be virgin wood waste or treated, coated, painted or otherwise contaminated. It is also unclear whether the wood would be sourced from mixed streams, single streams, comprised of 'natural wood' only or engineered/processed timbers. There is also mention of "organic materials" (RDF Supplier 1 – up to 14%), but there is no explanation of what these materials are. These details are important in outlining how these streams will meet the Resource Recovery Criteria (Table 1) in the *Energy From Waste Policy Statement 2015* (Policy) and how Boral will ensure compliance with the criteria.

Section 5.5 of the EA – Energy from Waste Policy Statement – Criteria for Energy Recovery Facilities

Management of residues from the energy recovery process

Table 12 states that there will be no residues from the energy recovery process. The proponent should expand their response and explain why and how this is the case.

Requirement that where waste has a content of more than 1% of halogenated organic substances, expressed as chlorine, the temperature should be raised to 1100°C for at least 2 seconds after the last injection of air

The proponent proposes to meet this requirement by ensuring adherence to a fuel specification that will ensure no waste will have more than 1% halogenated organic substances. However, there are no details of how this is going to be achieved. Alternatively, the proponent should provide an explanation of how the waste will be raised above 1100°C for at least 2 seconds.

Appendix B provides an indicative quality assurance method for testing and sampling the fuel but it provides no details about the test methods or information on what procedures there will be in place to ensure wastes containing more than 1% of these substances are identified and isolated so they do not reach the kiln. This is particularly important if the temperature cannot be raised to 1100°C as required by the Policy. As a result, the proponent must develop a comprehensive quality assurance/quality control framework for this purpose as part of the EA.

There must be continuous measurements of NO_x, CO, particles (total), total organic compounds, HCl, HF and SO₂.

Table 12 acknowledges this requirement will be met but there are no details on how this will be achieved (e.g. methods and equipment). The proponent should clearly explain how this requirement will be met.

Emissions monitoring data must be made available to the EPA in real time

Table 12 states that this data will be made available to the EPA on request. This does not comply with the requirements of the Policy. Data must be provided in real time (e.g. on proponent's website or access to emissions control system).

Requirement to outline a plan for the required proof of performance (POP) trials to demonstrate compliance with air emissions standards.

Table 12 simply states that this requirement has been "noted". This provides no confidence to the EPA that this requirement will be met and how. The proponent should address this requirement and outline how the required POP trials will be put in place.

Waste streams proposed for energy recovery should not contain contaminants such as batteries, light bulbs or other electrical or hazardous wastes.

There is no mention of this requirement in this section. The proponent should outline how they will ensure the proposed fuel will not contain these contaminants and include these requirements as part of any quality control/quality assurance framework and fuel specification.

Section 6 of the EA – Consultation

While there is mention of how issues raised by the Berrima Cement Works Community Liaison Group during consultation activities have been addressed, there is no evidence in the EA of what other methods are being used by the proponent to engage in genuine and ongoing dialogue with the broader community (e.g. mail-outs).

The EPA notes that the composition of this group, provided in Appendix C, includes three or four representatives from the local community. However, there are no details on how information is being distributed from and to the broader community through these representatives.

The proponent must provide specific details of any additional past, current and future community consultation strategies as part of this proposal.