

Tuesday, 10 May 2022

Sally Munk

Principal Planning Officer - Industry Assessments

Planning Services Division - NSW Department of Planning and Environment

(By email to Sally.Munk@planning.nsw.gov.au)

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Dear Sally

Boral Berrima Cement (DA 401-11-2002-i) – Request to increase Feed Rate of SWDF – Request for Additional Information dated 28 April 2022

I refer to your letter dated 28 April 2022 and a request from the EPA for additional information following the submission of three high rate RDF Proof of Performance Trials.

In your letter the EPA has requested information on:

- additional justification and / or an explanation of why only three of the PoP trials were completed, and
- clarification of whether wood waste is proposed to be used in operational scenarios at high feed rates (i.e. greater than 23% of the total fuel consumed).

Proof of Performance Trials

In previous correspondence dated 19 September 2021 the EPA recommended 5 additional stack tests be undertaken via a Proof of Performance (POP) test under 5 high rate conditions to support such an application. That was 1 for Wood Waste (WW), 3 for Refused Derived Fuels (RDF) and one test of a combined WW and RDF.

SWDF Type	% of total SWDF by mass	Number of stack testing events
WW (high feed rate)	40 – 50%	1
RDF (high feed rate)	40 – 50%	3
Combined WW and RDF (high feed rate)	40 – 50%	1

On 8 October 2021 Boral met with the EPA, including representatives of their air branch to discuss the POPTs. In that meeting we said we would focus on the 3 RDF POP trials as the RDF would be the one out of either of the fuels to potentially impact emissions (see email dated 8 October 2021 attached).

In our submission on 31 March 2022 we did not make that clear. It is important to remember that both WW and RDF have the same fuel specification that suppliers are to meet. We did include chemical analysis comparisons of the RDF compared to the WW in our letter.

To avoid any doubt or concerns with using WW and WW & RDF combined at higher rates, additional testing has been scheduled on 24-25 May and 31-1 June subject to kiln performance. We will provide POP trial responses as soon as the results are available.

Wood Waste at High Feed Rates

Boral will have the capacity to use Wood Waste at greater than 23% of total fuel consumed within the parameters of our existing consent limitations.

Our current Environmental Protection Licence, 1698, limits percentage mass to equal to less than 50%, reduced to 40% at present, as subject to this request.

As per our current conditions of approval, Boral are permitted to consume up to 100,000t of AKF5 (Tyres), Wood Waste, RDF and Woodchips. With specific annual limits of 50,000t per annum for Wood Waste.

Table 1 – Permitted Fuels for use in upgraded Kiln 6

Fuel	Category	Tonnes per annum	
Natural Gas, Fuel Oil, Diesel	Standard Fuel	No limits	
Coal	Standard Fuel	No Limit	
Coke Fines	Standard Fuel	No Limit	
Hi Cal 50	Non-Standard Fuel	10,000	
AKF1	Non-Standard Fuel	20,000	
AKF5	Non-Standard Fuel	30,000	≤100,000 combined
Wood Waste	Non-Standard Fuel	50,000	
RDF	Non-Standard Fuel	80,000	
Woodchips	Standard Fuel	50,000	

O6.3 Except as permitted by any other condition of this licence, the following fuels only are permitted to be fed to Kiln 6 string at the firing rates or proportions as specified in the table below.

Fuel	Category	Tonnes per annum	Tonnes per hour	Percent of total fuel (by mass)
Natural gas, Fuel oil, Diesel	Standard Fuel	-	No Limit	-
Coal	Standard Fuel	No limit	No limit	equal to or greater than 60.0
Coke Fines	Standard Fuel	No limit	equal to or less than 10.0	equal to or less than 30.0
Hi Cal 50	Non-Standard Fuel	10000	equal to or less than 1.0	equal to or less than 4.0 in the coal blend
AKF1	Non-Standard Fuel	20000	equal to or less than 2.8	equal to or less than 10.0
AKF5	Non-Standard Fuel	30000	equal to or less than 4.5	equal to or less than 21.0
Wood Waste	Non-Standard Fuel	50000		Equal to or less than 50
RDF	Non-Standard Fuel	80000		Equal to or less than 50

O6.4 The combined annual usage of AKF5, Wood Waste and RDF must not exceed 100,000 Tonnes for the

Environment Protection Authority - NSW
Licence version date: 18-Dec-2019

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Section 55 Protection of the Environment Operations Act 1997

Environment Protection Licence

Licence - 1698



Reporting Period and must not be greater than 40% of total fuel mass.

If you or the EPA require any further information or clarification, I can be contacted on 0401 893 420 or by email greg.johnson@boral.com.au.

Regards

Greg Johnson



Environmental Sustainability Manager – Boral Cement



Attachments

Boral Berrima & EPA meeting outcomes

- You forwarded this message on Fri 04/03/2022 3:49 PM
- Retention: Never Delete Default

 **Greg Johnson**
Fri 08/10/2021 12:21 PM
To: matthew.fuller@epa.nsw.gov.au (matthew.fuller@epa.nsw.gov.au); William Dove (william.dove@epa.nsw.gov.au); Gabriel Paicu; Sunil Ram; Scott McLeod; Dean Beltrame; julie.moriarty@epa.nsw.gov.au; alejandro.vesga@epa.nsw.gov.au +1 other
Cc: Mahi Singh

Good afternoon,

Thanks for your time this morning and feedback to the current projects we have in the pipeline at Berrima. As agreed, the following actions include:

- Cleanaway Sour Water usage - EPA to consult with the Waste branch/Policy on our interpretation of the levy guidelines Section 6, table 6.1 and respond to Boral.
<https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/wasteregulation/181272-waste-levy-guidelines.pdf>
- AKF1 -
 - EPA to review both Cleanaway and Boral QA/QC procedures for the AKF1 and provide feedback to Boral.
 - Boral to update EF of mass balance calculation based on RDF PoPT to 50%.
- PoPT 50% SWDF
 - Boral will pass on first results of testing underway at the moment to EPA when available. Boral will aim to complete the 3 RDF trials over the coming month subject to availability of Ektimo.
 - ESP trip study will be included in the final PoPT report.
- Tyre Trial - EPA to respond to tyre trial request.

Regards

GREG JOHNSON

Environmental Sustainability Manager
Boral Cement

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