

## Erica Flakemore

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**From:** [REDACTED]  
**Sent:** Saturday, 19 August 2017 11:42 PM  
**To:** works.approvals; Adam Boevink  
**Cc:** works.approvals  
**Subject:** Boral Clinker Grinding Works Approval Application - North Shore

Hello Adam and EPA Works Approval Department,

I have taken the opportunity to review the materials submitted by Boral to the EPA for the Works Approval submission for the proposed Clinker Grinding Facility at North Shore. This proposed clinker facility will be initially producing at 900 kT/annum and ultimately up to 1350 kT/annum and will replace the current 600 kT/annum facility at Waurin Ponds.

The volume of 'clinker' moved across Lascelles Port for the Boral facility will increase by up to 225% versus current rates, leading to up to 225% increase in Port noise from clinker ship unloading plus the addition of a new noise producing (tonal) Port conveyor system at Berth 1 (closest proximity to North Shore residents). Accompanying this will be a significant increase in the number of trucks in the North Shore area. In 2013, Boral introduced an additional 15,000 trucks per annum to the North Shore area for the transport of clinker, with the new proposed facility, Boral will in 2020 introduce 77,000 trucks (Cardno Appendix H. 200 cement trucks per day plus 20 limestone trucks per day) to the North Shore area for the delivery of lime and movement of finished product. As the clinker mill capacity grows from 900 to 1350 kT/annum it is reasonable to anticipate that the truck volumes will further rise by a commensurate 37%. This is a completely different outcome than represented by Boral during public briefings and produced information brochures which include:

- "At present, our heavy vehicle movements peak at up to 250 trucks per day over the four to five days it takes to unload a clinker ship. Our proposal will reduce this right down to around 50 to 60 a day, or two to three an hour across a 24 hour cycle." - North Shore resident newsletter August 2017
- "There will be no net increase in trucks; now 1,000 go to Waurin Ponds in 4-5 days (250 per day) when ships come in, in future 50-60 per day/2-3 per hour 24/7 (less anticipated on weekends)" - Table 1-5 Community Engagement Summary. Boral advised the community meeting on 14 Dec 2016)

There are approximately 200 houses in North Shore, which is home to approximately 480 people. The local community is supportive of surrounding industries particularly with activities associated with the Port of Geelong however, there are a number of very concerned residents with the additional industrial background noise that the facility will produce, particularly during the night. The noise modelling presented for the proposed new facility fails to adequately consider the high levels of existing industrial background noise currently experienced by the residents in North Shore and it fails to quantify the cumulative effects of the proposed new facility, Port conveyor and existing industries.

It is noted that results from attended noise measurements from the selected noise sensitive receptor in North Shore are classified as 'High' (~60dBA recorded at night - refer to Table 2) however, the subsequent modelling has been completed on a 'Neutral' basis which, has the effect of significantly under-representing the background noise experienced by North Shore residents. There is no evidence of longer duration noise sampling taken despite comments throughout the report around existing 'high' background noise levels. It is concerning that 'Table 7' in the Marshall Day report under the 'Feature' item 'Noise data for existing off-site industry' indicates that this was based on measurements conducted on-site and detailed in Section 5.3, however, it is observed that Section 5.3 appears to have been removed from the report. It must be questioned whether this section was subsequently removed from the original report because of 'unfavourable' information.

I note the following from the NIRV guidelines regarding the requirement to address 'all industrial noise emission affecting a noise-sensitive area' Section 2.2, Manage noise from multiple sites:

- "Consistent with the requirements of SEPP N-1, clause 18, the recommend levels apply to the total of all industrial noise emissions affecting a noise-sensitive area. A site may need to meet lower levels when more than

one industry contributes or will contribute to the total noise level affecting a noise-sensitive area. See the Applying NIRV guide, section 5.”

There does not seem to be adequate consideration given to the existing industrial activities and the cumulative noise level affecting noise-sensitive receptors. Rather, an estimated cumulative target noise level has been generated for the modelling which is not based on actual measurements but, rather a theoretical estimate assuming a total of three facilities each only emitting 42dBA.

Since 2011, North Shore has experienced a significant increase in industrial activity and with it significant increases in associated noise. Some key increases in activity in recent years includes:

- 2011 - PIVOT fertiliser plant restarts after being shut down for many years with capacity up to 400 kT/y (note: total capacity is less than 45% of proposed initial clinker mill capacity - this is important in relation to the noise associated with the Port conveyor which is a significant noise source affecting residents in North Shore)
- 2013 - Boral commence shipping in clinker through North Shore introducing an additional ~15,000 trucks per annum to the North Shore Roads
- 2016 - PIVOT shift their bagging operations in Lara (from Lara 1 site) to the North Shore facility - increasing noise, traffic and truck movements
- 2016 - Patrick Stevedores move a permanent fleet of trucks into the Corio Quay following significant increases in steel import activities - increasing truck movements
- Wheat bunkers and Graincorp - Very strong wheat production crops increasing traffic intensity to bunkers and export terminal. After delivery of grain, trucks often stay in the area overnight and load out the following day at PIVOT
- Midway Woodchipping continues at high volumes and is an around the clock activity resulting in high levels of background noise from heavy machinery and associated conveyor equipment

There are a number of references in the Marshall Day report that the existing background noise levels at sensitive receptors may already be above NIRV RMNLs however, there is no supporting modelling results presented by the Works Approval applicant which demonstrate the cumulative impacts of existing industries and a new Port Conveyor system. Some references to existing high noise levels include:

- "As mentioned above, it is likely that current operations at some local industry facilities exceed the NIRV recommended levels, and would need to be reduced in order to allow the cumulative noise targets to be met." - Section 10, Conclusions, pg. 28
- "The existing noise environment at nearby noise-sensitive areas was typically found to be characterised by industrial noise from multiple nearby industrial facilities." - Section 10, Conclusions, pg. 28
- "It is likely, based on the measurements contained in Table 2, that existing nearby industries may not currently comply with the target criteria contained in Table 7." - Section 8.1, pg. 24
- "As mentioned above, it is likely that current operations at some local industry facilities exceed the NIRV recommended levels, and would need to be reduced in order to allow the cumulative noise targets to be met."
- "Measured attended background noise level for the night period was 'high', relative to the zoning level" - Appendix D, Table D1
- "...EPA Publication 1513 'North Geelong Noise' has been reviewed with the context of this assessment. The publication identifies North Geelong as an areas with a number of commercial industries contributing to high noise levels at residential locations. The publication notes that Pollution Abatement Notices may be served to industries that exceed their obligations with regard to noise." - Section 4.2, pg. 12

Table 7 Noise model input summary indicates the noise created from the new Port Conveyor system, which is elevated above ground up to a height of 30m, and has multiple elevated conveyor motors with a typical operating noise output of 95 dBA has not been modelled. This conveyor has is located closer distance to North Shore residents than that of the new proposed facility. It is observed that a key mitigation for noise prevention on the Boral site is the locating of conveyor motors at ground level. So, it is clearly recognised that noise from conveyors is a significant concern. However, noise created from the elevated Port conveyor system has been ignored and there is no evidence that appropriate mitigation steps will be implemented on this conveyor.

The noise map presented (Figure 6 - Predicted Noise Levels) takes credit for the shielding benefits from the existing PIVOT buildings however, conveniently does not provide any allowances for the noise continuously produced by the PIVOT facility. The model results provided do not provide details of cumulative effects from PIVOT or the

surrounding industries (including: Pivot operations, Port to Pivot Conveyor [very noisy] or Midway woodchipping operations/conveyor, OMYA mill or the new proposed Port to Boral conveyor). There is also a reasonable possibility that Pivot operations would cease in the future and the buildings may in the future be removed (PIVOT have indicated low financial returns and questionable long-term viability of North Shore production). There is no modelling provided depicting what the noise impacts from Boral would be on the North Shore residents should the PIVOT buildings be removed.

It is concerning to note that Figure C2 in the Marshall Day report is incorrectly labelled as 183 Sparks Road Norlane. The premises in the photo is actually the street address 19 Phosphate Road, North Shore. This mistake might be an example of sloppy data management during the noise sampling and it raises the question of possible additional errors in the tabulated data.

It is difficult to understand why air pollution (dust/particulate) from the Port conveyor system was included in air pollution modelling while at the same time noise produced from the same Port conveyor system is excluded from noise modelling. I am concerned that a 'favorable' outcome may have been engineered through the selective inclusion of measured and modelled noise data. I am fearful that a questionable sequence of events, similar to the following, might have played out in the compiling of the noise model and the works approval:

- Noise data recorded that existing industrial background noise at noise sensitive receptors measured to be above NIRV RMNLs
- Cumulative noise impacts at noise sensitive receptors were adjusted down in the modelling through the adoption of 'Neutral' existing background noise levels versus measured actuals
- Adoption of simplistic assumptions to favour lower cumulative noise outputs from surrounding industries [i.e. "To account for noise from other industry, target criteria were developed on the premise of up to three industries (including the proposed development) contributing equally to the total noise at surrounding receivers. - Section 8.1, pg. 24]. It is noted numerous times in the MD report "that current operations at some local industry facilities exceed NIRV recommended levels - section 10, pg. 28". Despite the actual measured 'high' noise levels the subsequent noise modelling was only completed assuming noise impact from 'two' nearby industries producing noise at similar levels as the Boral plant (and excluding the Port conveyor system)
- Elevated port elevator system, which is known to be high noise producing equipment was selectively excluded from the Noise scope by transferring relevant scope of work into Port of Geelong in December 2016. Plus the BOLD font exclusion statements such as "This component of the operation is not included in the Works Approval application and is provided here for information and context only" - Section 2.2.3 Page 12
- Updating of relevant engineering drawings on 09 Jan, 2017 with comments to exclude from application scope the Port conveyor
- Possible removal of Section 5.3 'Noise data for existing off-site industry' from the Marshall Day report

There are a number of items in the application, particularly in the area of Noise modelling which raise concerns with the validity of presented outcomes. It would be much appreciated if EPA could provide a thorough expert review of the presented material in the Works Approval application and provide feedback to myself and the other concerned North Shore Residents that Traffic and Noise from this proposed facility will not negatively impact the amenity/livability of North Shore.

As already stated, noise levels in the North Shore area are already at unacceptable levels and I suspect at levels higher than acceptable standards and many residents are already adversely affected.

Thanks in advance for ensuring that a fully transparent, independent and expert analysis is completed on this proposal.

Kind regards



