

**LINWOOD QUARRY –
HALLETT COVE & MARINO JOINT WORKING GROUP
MEETING MINUTES 18 May 2011**

Present: Fifteen people attended the meeting (list attached)

Apologies: Glen Sorensen (EPA)

Agenda Item	Topic of Discussion	Actions
1	Welcome and Introductions	
<ul style="list-style-type: none"> • Tony Ward (TW) welcomed all attendees to the meeting and advised that Glen Sorensen from the EPA is an apology 		
2	Review of last meeting – 16 February 2011	
<p>Amendments to the minutes:</p> <ul style="list-style-type: none"> • Nicole Edkins to be added as an apology • Omit word 'find' from fourth dot point page 1, under "EPA discussion" • Change 'noisy' to 'not suitable' page 1, point 4, under "EPA discussion" • Change 'PM10' to 'PM2.5, page 1 in Actions column • Change 'Neighbourhood Watch' to 'SAPOL', page 2, under "Blasting Results" <p>Actions from the last meeting:</p> <p>1. TW to review Professor Wilson's paper and discuss further at next meeting</p> <ul style="list-style-type: none"> • TW advised that he had reviewed the paper and had no objections to the content • TW advised he has prepared a summary review of papers on the effects of blasting on structures and provided this to EB along with a copy of the paper 'Structure Response and Damage produced by Ground Vibration from Surface Mine Blasting' which provide readers with a further understanding behind the Australian Standard • EB advised he didn't dispute the Australian Standard, but did not accept Professor Wilson's findings • EB went on to state that MIC and firing distance from the monitor are the two parameters required to measure air blast which wasn't considered in Professor Wilson's paper • TW disagreed with EB's comments saying that this is not correct and said that Boral measures vibration directly at the source, the same as noted In Professor Wilson's paper • TW also advised that standards world-wide for blasting are very close to Australian Standard and Boral was working to these • FS asked if there was any differences when blasting coal (overburden) • TW advised that blasting of the overburden didn't make a difference. Measuring blast impacts at the nearest receptor (house) was the objective. 		<p>KM to amend minutes and arrange placement on website</p>

- TW summarised the outcomes of Professor Wilson's paper by saying that Boral's blasting levels should not be sufficient to cause property damage, unless a house was highly stressed by other environmental factors.
- General discussion among residents took place regarding:
 - blasting east-west to north-south;
 - the strata of the material in which a blast took place
 - how occasional blasts were 'frightening' to residents yet could record low levels on the monitor;
 - how in the same house a person could feel a 'rumble' during blasting and the window panes shake and in another room of the same house a person couldn't feel anything.
- There was general consensus among resident representatives that the inconsistency and unpredictability of the blasting outcomes were still of some concern
- RK advised that in his opinion the blasting techniques and results Boral was getting were much better in the last year
- TW also advised that Boral had done a lot to reduce the levels of blasting and while they would continue to try and limit the blast levels to under 3 millimetres per sec, they would never eliminate vibration impacts on residents altogether. By mixing up firing of holes and increasing the size of the shot, Boral has achieved 30-40% less blasts than last year
- AB stated that the problem with an academic study (Professor Wilson's paper), there are so many variables
- FS asked if Boral was still using Orica, to which TW replied 'yes', and said that Orica has been used by Boral for the past 18 months.

2. TW to find out about health related issues associated with PM2.5

- TW advised he has nothing yet in writing to table, however Boral has recently engaged Golders to prepare a Dust Monitoring Plan which will outline 'what, where and how'. The plan will be used to determine what dust levels Boral is contributing as opposed to the general environment.
- DS advised that it was not as useful for Boral to monitor dust in winter
- TW advised that Boral was already doing several things to minimise dust disturbance such as:
 - Shifting the truck area to another location
 - Minimising / reducing stock piles
 - Monitoring employees dust and silica levels
- TW said that Boral was committed to implementing dust management improvements and Frank Fleer from Golders will provide expert advice on how Boral can achieve this
- FS asked if the 'monitoring plan' was still in play in Marino
- NE advised that yes, this is her understanding
- CW stated that the EPA was going to get back to residents about the dust but they haven't heard anything
- TW advised that he could not speak on behalf of the EPA. While dust information from the EPA would be useful, Boral was responsible for dust management and would proceed on this basis
- TW also advised that Boral's long term objective is to use dust monitors at residential properties in addition to placing these at the quarry boundary, in a similar arrangements as blasting monitors.

<ul style="list-style-type: none"> • EB asked that it be noted in the minutes that residents express extreme disappointment at the lack of EPA action in the matter. • KT asked if the dust monitoring plan will be in place next year • TW advised yes, he would hope so and would like to do some trial monitoring from August 2011. <p>3. TW to provide more regular blasting results on the website</p> <ul style="list-style-type: none"> • TW advised that this was an outstanding action and he would aim to post more frequent blasting results on the website, starting from the results to be tabled at tonight's meeting. <p>4. TW to find out what the blast monitors triggering point is currently set at</p> <ul style="list-style-type: none"> • RK advised that the blast monitoring trigger point was currently set at 85db and 0.5 millimetres per second with the length of blast time, 5 seconds. • TW advised that some monitors can trigger on vibration, or air blast or both. <p>5. TW to investigate what Boral can do to get other trucks to start tarping</p> <ul style="list-style-type: none"> • TW advised that all Boral trucks should be tarping going in and out of the quarry. He also advised that most sub-contractors use the tarp when going out of the quarry, but that for owner/operators Boral doesn't have entire control, although all were required to secure their load. 		
<p>3</p>	<p>Marino and Hallett Cove Working Group presentation on the residents questionnaire results</p>	
<ul style="list-style-type: none"> • GB tabled the residents questionnaire administered by the Joint Working Group and distributed to 110 homes in Marino and 100 homes in Hallett Cove around the Linwood Quarry in 2011. The purpose of the survey was to establish resident views about whether they had any dust or blasting related issues. A total of 129 questionnaires were returned. • FS and KT outlined the results from the Marino and Hallett Cove surveys and CW distributed photos around the table to demonstrate some of the dust issues residents raised. • TW thanked residents for their efforts in administering the questionnaire and asked if he could have time to review the questionnaire results, taking these on notice to respond to the questionnaire's 9 questions ./ points as quickly as possible.. • TW advised that in general terms however, Boral was doing what they can and had made several improvements to their blasting process and will continue to try and reduce the levels further, and also look at other areas within the plant to blast. He also indicated that Boral will never be able to stop surrounding residents from feeling vibration but that the vibration levels were not sufficient to cause property damage, as supported by Professor Wilson's paper. 	<p>TW to review resident questionnaire results and respond to the nine questions as quickly as possible.</p>	

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	<ul style="list-style-type: none"> • TW reiterated that he takes all resident concerns seriously and was seeking professional advice on dust management and Boral would also try and avoid blasting when strong winds were crossing residential areas. • FS asked if there may be any trade off regarding mining expansion in an easterly vs. southerly direction. • TW advised that this may be a possibility but he couldn't commit at this stage, that Boral will go no further south in the future. He also advised that to mine further east, Boral would have to consider the implications of a private lease which may not provide too many restrictions and an extracted mining lease which would pose more restrictions. No current plans are in place to pursue this option. • TW also explained that Linwood Quarry was an important part of Boral's business and that the company will want to continue as long as possible and continue to work with residents in a positive way to address any issues. 	
4	Update on Linwood Quarry	
	<p>BLASTING</p> <ul style="list-style-type: none"> • TW tabled the air blast and vibration recordings tables over the last year, explaining the results and confirming that discussion regarding Linwood Quarry's blasting had been previously discussed earlier in the meeting. • TW confirmed that these results would be placed on the website as soon as possible. <p>DUST MONITORING</p> <ul style="list-style-type: none"> • TW tabled the monthly average dust readings from static monitors for the period between June 2010 and March 2011. • TW reiterated his earlier comments, that Boral was seeking expert advice on dust monitoring from Golders and he keep the JWG updated on Boral's dust monitoring plan. <p>STORMWATER AND RECYCLING PROJECT</p> <ul style="list-style-type: none"> • TW advised that there was still more work to be done on this project and that currently Boral was pumping water run-off into the quarry and using it as best as they can. • In response to a general query, JW advised that the rehabilitation of the Lorenzin site is an ongoing issue. While the owners want to redevelop the land, it is subject to re-zoning and the owners have a few hurdles to jump in this regard. <p>QUARRY REHABILITATION PLAN</p> <ul style="list-style-type: none"> • TW advised that he has spoken to the Sheidows and Boral will proceed with rehabilitation plans and bund off the area and eventually plant trees. • FS enquired about plantings on the overburden. • TW advised that the overburden area was recently seeded and Boral expects that the area will green up in the next few months and that tree planting will be the next step. <p>COMMUNITY NEWSLETTER</p> <ul style="list-style-type: none"> • TW advised that the April/May edition of the community newsletter had 	<p>TW to post blasting results on website and update the results on a regular basis.</p> <p>TW to update the JWG up on Boral's dust monitoring plan.</p>

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<p>been held off to wait for more information. He further advised that the next community newsletter would acknowledge the resident's survey and be distributed in the next 6-8weeks approximately.</p>	<p>TW to proceed with putting together the next community newsletter for release late June/early July 2011.</p>
<p>5</p>	<p>General Business</p>
<ul style="list-style-type: none"> • TW tabled a City of Marion information sheet about street scaping of Perry Barr Road • GB asked if solid blocks of cement were being brought into the crushing plant and TW advised that sometimes Boral took returned concrete back from operations and this would crushed in the main plant by a sub-contractor • KT stated that the residents' questionnaire demonstrated that dust and blasting were widespread local issues which Boral needs to better appreciate. • NE advised that PIRSA has undergone recent staffing changes and that she would be taking on additional responsibilities. While she still anticipated being able to attend future Linwood Quarry meetings, she advised the Joint Working Group that she may at times need to send another delegate from PIRSA to meetings. • KM advised that the next Joint Working Group meeting of Linwood Quarry would be on Wednesday 17th August 2011. • Meeting closed at 7:15pm. 	

LINWOOD – HALLETT COVE & MARINO JOINT WORKING GROUP MEETING
WEDNESDAY 18 May 2011 ATTENDANCE RECORD

<u>NAME</u>	<u>REPRESENTING</u>
Tony Ward (TW)	Boral
Vince Nigro (VN)	Boral
Ben Davis (BD)	Boral
Rodney Kazem (RK)	Boral
Kath Moore (KM)	Boral
Colin Waterman (CW)	Hallett Cove residents
Ed Benesh (EB)	Hallett Cove residents
Anna Bakuszonski (AB)	Hallett Cove residents
Ken Turnbull (KT)	Hallett Cove residents
Alan Brokenshire (ABO)	Marino residents
Glenys Brokenshire (GB)	Marino residents
Dennis Southern (DS)	Marino residents
Fran Southern (FS)	Marino residents
John Valentine (JV)	City of Marion
Nicole Edkins (NE)	PIRSA