



BORAL QUARRIES TEVEN

1 November 2018 Teven Quarry offices, Teven



Agenda

- Welcome, administration and 'safety moment'
- > Quarry operations update
- Environmental management and performance
- Future plans: Teven Quarry through the 2020s
- Community participation and general business





Welcome, administration and 'safety moment'

- Welcome and re-introductions
- Previous meetings Community Consultative Committee meeting
 - > 17 May 2018
 - Presentations and meeting notes from previous meetings are available from the quarry's website
 www.boral.com.au/tevenquarry
- Any matters arising?
- Apologies for this meeting
- Safety moment







BORAL TEVEN QUARRY



Teven Quarry is a national champion!

- On 20 September, Teven Quarry became the inaugural winner of the Community Leadership category at the National CCAA Innovation Awards.
 - Award recognised the success of our partnership with the Tintenbar-Teven Community Aid Network (TinCAN) during the past five years.
 - > Nominees included all individual 2017 and 2018 State Award winners.
 - Partnership had been named the NSW/ACT Award winner at the State ceremony on 10 August.
- We are extremely proud of this achievement which we share not only with TinCAN, but the whole Teven and Tintenbar community.
 - The difference TinCAN makes in the community, in particular through the 'bus trip' program, is far more important to us than these Awards.
 - We cannot thank TinCAN enough for giving us the opportunity to support them.







Quarry Operations update

Major projects and jobs

- > Highway upgrade Pimlico to Teven
- > Highway upgrade Woologoolga to Ballina
- Nearing the end of Harwood Bridge construction

Local projects and jobs

- Just finished the construction of Ferngrove residential estate
- Internal supply to Boral Concrete plants
- Internal supply to Boral Asphalt plant
- > Local civil construction companies
- Supply to Ballina Council

Safety and personnel update

- Rod Wallace has left his role with
- Boral Property to become the new
- Environment Manager (NSW/ACT)





Quarry Operations update: Kids Quarry day





- Grassing of the noise bund growing well
- Tree planting with the Quarry operators' kids

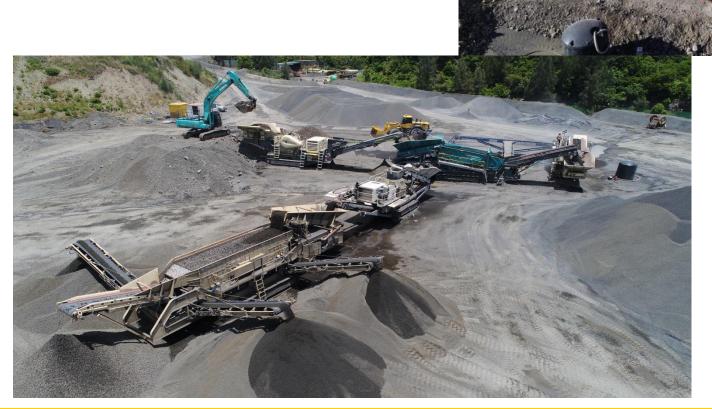






Quarry Operations update

- Mobile crushing update
 - > **55** days of mobile crushing in total this year
 - > **34** days of mobile crushing last year
- Stripping campaign
 - > 1st campaign 160 000t moved
 - > 2nd campaign **20000t** moved so far





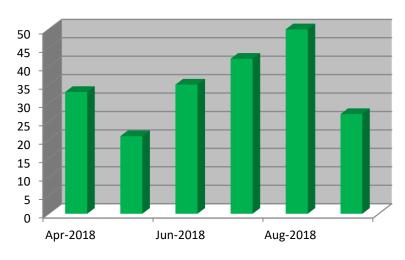
BORAL TEVEN QUARRY

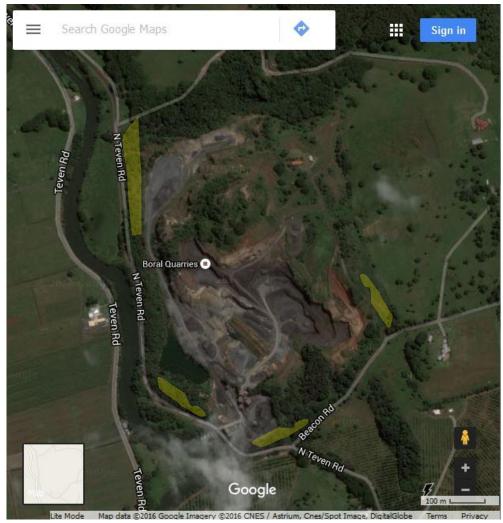




Weed control areas & hours

Weed Control Man Hours







Areas worked





Averaging

Period g/m²/montha

Deposited Dustb Annual 4.00

a - Maximum total deposited dust level

b – Dust is assessed as insoluble solids as defined by AS3580.10.1-1991 (AM-19) (At the nearest existing or likely future off-site sensitive receptor)

Source: Table 7.1 (Page 28) of the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW – DEC 2005

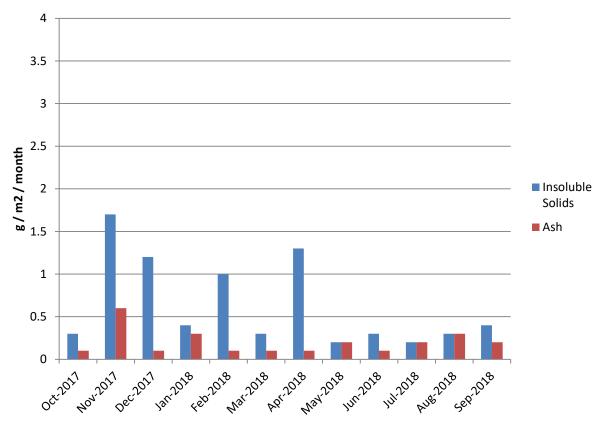
Average Dust Deposition (Insoluble Solids)

Site 1	0.51 g/m ²
Site 2	0.63 g/m ²
Site 3	1.49 g/m ²
Site 4	0.39 g/m ²

As of February 2015 the Environmental Analysis Laboratory (EAL) at Southern Cross University has been collecting and analysing the Deposited Dust sample bottles at the Boral Teven Quarry



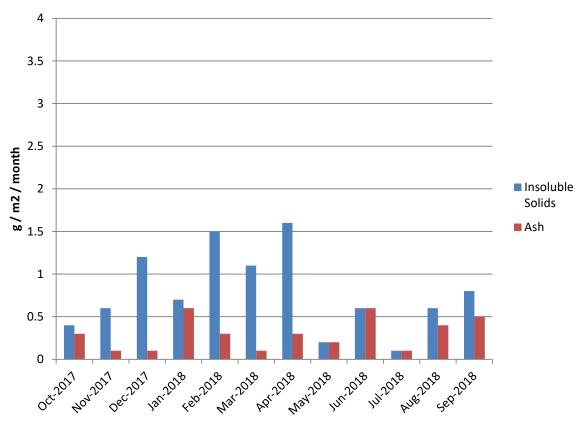




Annual Average Dust Deposition (Insoluble Solids) 0.51 g / m² / month



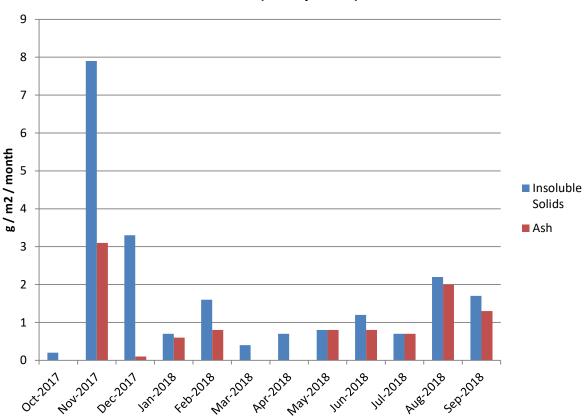




Annual Average Dust Deposition (Insoluble Solids) 0.63 g / m 2 / month

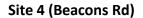


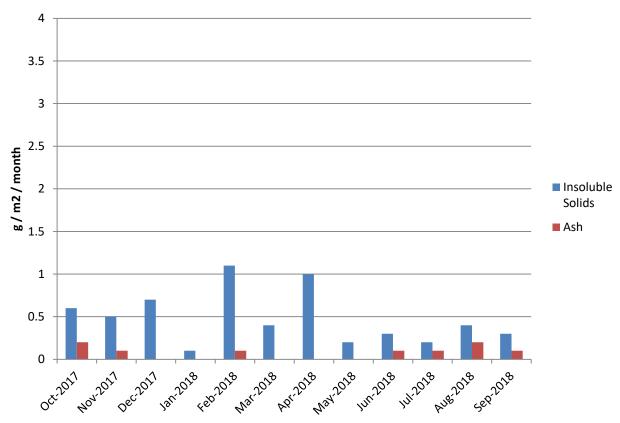




Annual Average Dust Deposition (Insoluble Solids) 1.43 g / m² / month



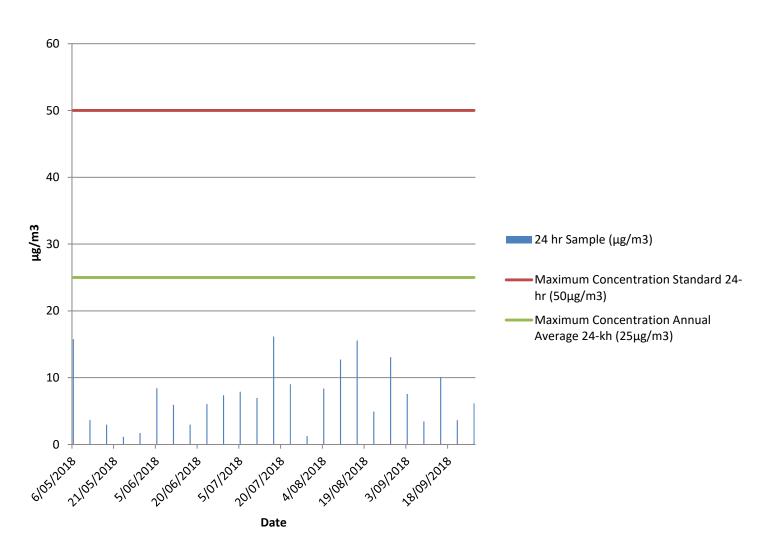




Annual Average Dust Deposition (Insoluble Solids) $0.39~g\ /\ m^2\ /\ month$



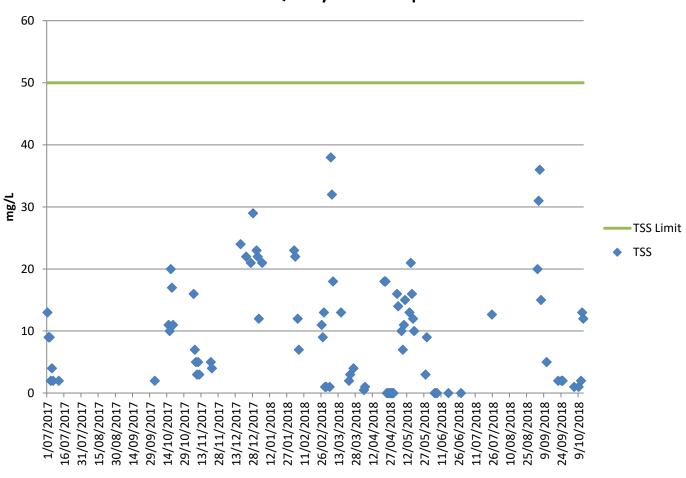
Environmental PM10 monitoring





Environmental water monitoring

Surface Water Quality - Total Suspended Solids

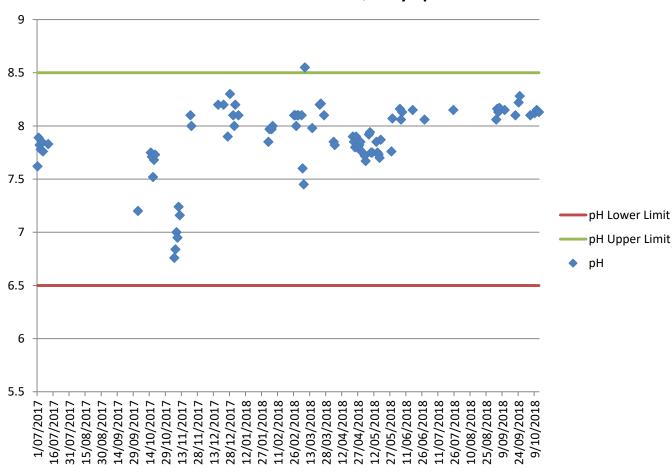


Water quality limits for Boral Teven Quarry from EPA Licence No 2261



Environmental water monitoring





Water quality limits for Boral Teven Quarry from EPA Licence No 2261



Blast Monitoring Results

			660 Teven Rd		54 Beacons Rd	
			Over Pressure	Peak Vibration	Over Pressure	Peak Vibration
Shot No	Date	Time	(dB)	(mm/s)	(dB)	(mm/s)
TQ-1710	2/12/2017	9:42 AM	105.5	2.21	111.5	1.7
TQ-1711	1/11/2018	11:53 AM	101	0.41	111.2	2.1
TQ-1801	20/02/2018	9:46 AM	-	0.43	108.8	2.1
TQ-1802	13/03/2018	9:53 AM	109.5	1.31	104.9	1.1
TQ-1803	28/03/2018	10:10 AM	92.5	0.62	112.3	1.4
TQ-1804	16/04/2018	12:00 PM	97.5	1.03	112.6	2.1
TQ-1805	1/05/2018	12:00 PM	104.2	0.84	108.4	2.38
TQ-1806	12/06/2018	10:01 AM	100	0.794	111.2	2.29
TQ-1807	25/06/2018	2:49 PM	108	2.1	102.8	0.81
TQ-1808	9/07/2018	9:42 AM	98.8	0.6	112.8	2.5
TQ-1809	10/08/2018	9:42 AM	102.8	0.6	110.6	2.2
TQ-1810	30/08/2018	9:42 AM	94	0.6	107.5	3.4
TQ-1811	11/09/2018	9:42 AM	95.9	0.4	106.5	2.1

Boral Teven Quarry Blast Limits

- Only 1 blast per day
- Only blast between 9am to 4pm Monday to Friday
- Vibration limits
 - •5mm/s 95%
 - •10mm/s 100%
- Overpressure Limits
 - 115dB 95%
 - 120dB 100%





BORAL TEVEN QUARRY



Teven Quarry into the 2020s

- As the completion of works on the Pacific Highway draws ever closer, we've started to assess our plans for our North Coast sites.
- Teven serves an area which continues to grow steadily, so we'll be able to keep the quarry operations going in a 'normal' business mode after the years of also supporting the highway program.
- The quarry's current consent remains in place until June 2026.



CREDITS: Wikipaedia Aurecon Group ABC Northern Star



Teven Quarry into the 2020s

- As we've discussed before, we know there is more rock available at the northern end of the current operations, both inside and outside the current approved extraction footprint.
- Gaining approval to extract this rock and/or extend beyond the current consented area will trigger the provisions of State Significant Development (SSD) under NSW planning legislation.
- An SSD application is like a development application (DA) you put to Council, but far more detailed and with a large range of supporting studies required.
- > SSDs are assessed by the NSW Department of Planning and Environment.





Teven Quarry into the 2020s

- > The studies required for the SSD (mostly environmentally focussed) require data to be collected over an extended period (eg two years).
- We therefore wanted to foreshadow at this meeting that we're looking at starting the data gathering phase during 2019.
- We have not, however, set the timeframe for compiling and lodging an SSD application. It is still some while away.
- At our next meeting (our biannual 'whole of community' session), our new Planning Manager will attend and provide more insight on what we'll look at for the SSD, timeframes, and how we'll involve you from the outset.







BORAL TEVEN QUARRY

Community participation

- Since our May meeting, we've continued to deliver on our commitment to be an active part of our community:
 - TinCAN 'bus trip' New Italy historical tour day
 - > Tintenbar Community Hall 'Pledge a Plank' campaign, reopening event on 20 October.
 - > Immune Deficiency Australia and Lions World Festival of Magic Children's Christmas Parties
 - Sponsorship of the Country Fair, Teven-Tintenbar Primary School
 - > Sponsorship of junior touch football team
 - Ballina Lions Club annual charity Christmas party
 - > Richmond River Clay Target Association donation of materials

Wonderful supporters of the Teven-Tintenhar Public School, Country Fair
Dear Scott & Bec,

Thomas you so much for you know

generous donothan & fieling of prizes for

our shool fair, on lendary or Baras!

On the 11th August 2018, Teven-Tintenhar had its Country Fair!

We wanted to thank you so much for the incredible support you have shown us, through the donation of prizes, vouchers, and donations for our country fair. The country fair is our mojor fundraiser for the year, and we were able to raise much needed funds that can go towards programs and equipment for the school, as we

go into the future.

We think it was the biggest fair we have had!

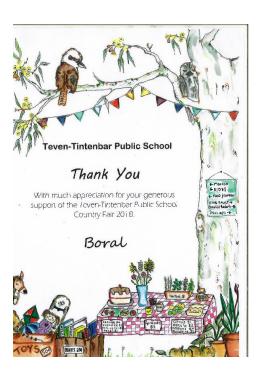
We love our school. So many people in our school community worked so hard to make the country fair a wonderful day - not only for the children, but also for our wider community. It was a truly wonderful community day.

Again, without your generous support, this day would not have been possible. We have included for you a country fair THANK YOU certificate for you to display. One of our clever mums, Lauren Odette has painted it.

From all of the children, parents, teachers, aunties, uncles & grandparents,

THANK YOU









General business and contacts

- Items of general business
 - > Function Centre DA LEC site hearing on Tuesday: update
 - > State of North Teven and other local roads interaction with Council
 - > Other items?
- Next meeting of the Community Consultative Committee
 - > 'Whole of Community' meeting due in 2019. Likely April-May.
- Boral Teven Quarry contacts:
 - Scott Gillieatt Quarry Manager 6687 8360 / scott.gillieatt@boral.com.au
 - Paul Jackson Stakeholder Relations Manager 4677 2946 (Mon/Tue/Fri) / 0401 894 097 (Wed/Thu) / paul.jackson2@boral.com.au
 - > www.boral.com.au/tevenquarry
 - <u>feedback@boral.com.au</u>







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