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BORAL QUARRIES TEVEN

1 June 2021

Whole of Community Meeting

> Community Consultative
Committee meeting

Agenda

- > **Welcome, administration and 'safety moment'**
- > **Quarry operations update**
- > **Environmental management and performance**
- > **General business including election of CCC community representatives for '21-23**



Welcome, administration and 'safety moment'

- > **Welcome and re-introductions**
- > **Safety moment**
- > **Previous meeting**
 - > **November 2020**
 - > Presentations and meeting notes from previous meetings are available from the quarry's **website**
– www.boral.com.au/tevenquarry
- > **Any matters arising?**
 - > Presentation on blasting practices for site: **will be presented at next meeting**
 - > Morning Glory infestation: **being monitored and treated**
 - > Assist neighbour with removal of dead trees from common fence line: **action arranged**
 - > Write to Ballina Shire Council regarding improvement works program for Beacon Road on amenity and safety grounds: **letter to be sent**
- > **Apologies for this meeting**
Beverley Garrett

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> Quarry operations update

Quarry development: basalt pit

- > We are currently looking at reshaping the northern wall of the basalt pit to create a new north 'ramp', allowing us to extract the existing central ramp.



Quarry development: new ramp

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Development – Current State



ZEROHARMTODAY

Quarry development: new ramp

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Development – 47m AHD Bench

Z	air	clay	regolith	basalt	Total
47.0 -> 57.0			7,563	21,811	29,374



ZEROHARMTODAY

Quarry development: new ramp

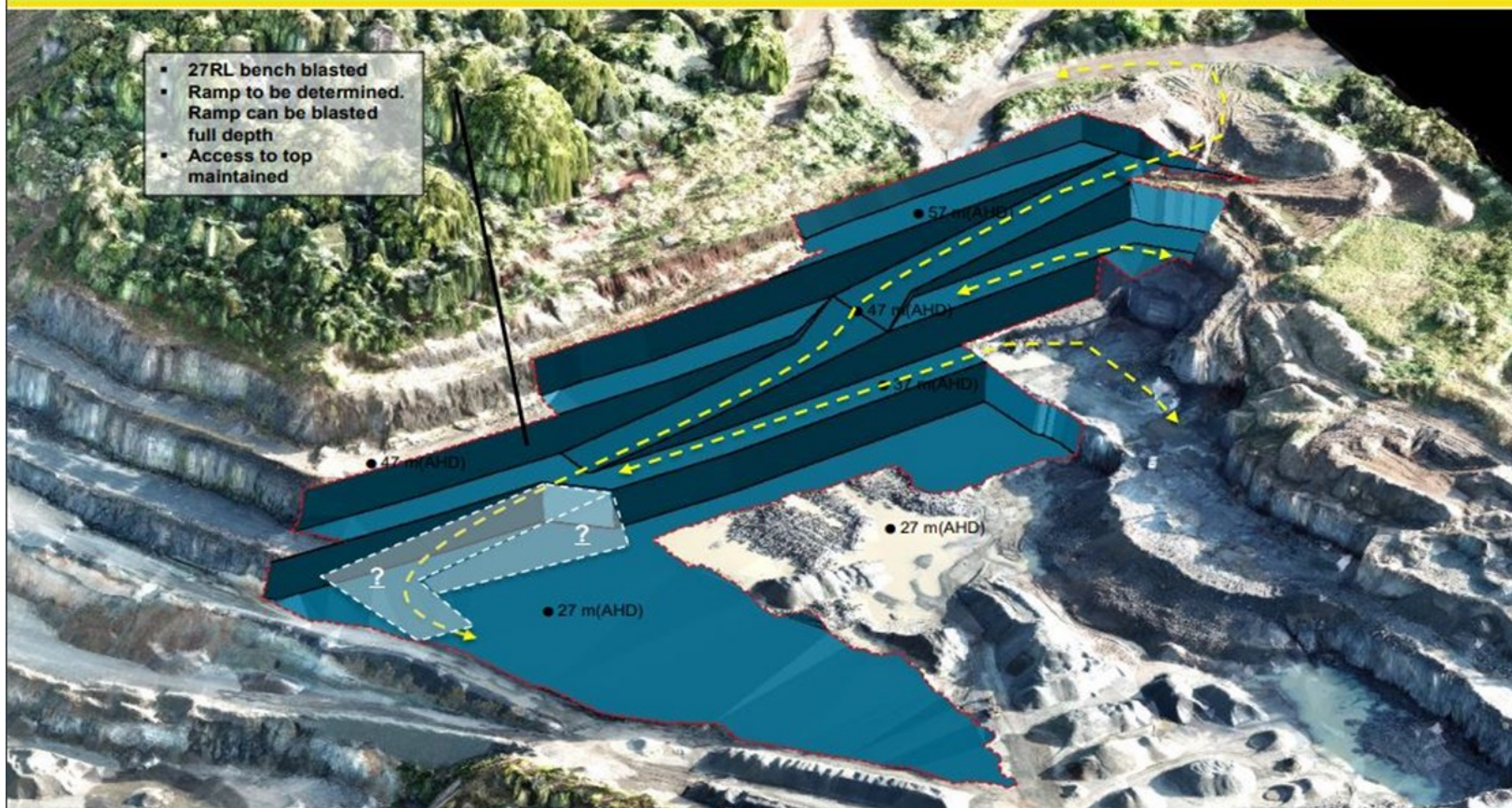
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Development – 27m AHD Bench

Z	air	clay	regolith	basalt	Total
27.0 -> 37.0				27,625	27,625
Central Ramp					
Z	air	clay	regolith	basalt	Total
27.0 -> 37.0	14,045	2,875	3,688	179,988	200,596



- 27RL bench blasted
- Ramp to be determined. Ramp can be blasted full depth
- Access to top maintained



ZEROHARMTODAY

Quarry development: basalt pit

- > We are currently looking at reshaping the northern wall of the basalt pit to create a new north 'ramp', allowing us to extract the existing central ramp.



Operations update

- > **Dust emissions control**
 - > **Cool fog** system is now installed and working well
- > **Concreting works around site**
 - > Works have commenced, contractors currently onsite
- > **Conveyor & bin wall Replacement**
 - > We are in the process of replacing 2 Conveyors and upgrading Tipping bin wall





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> Environmental management and performance

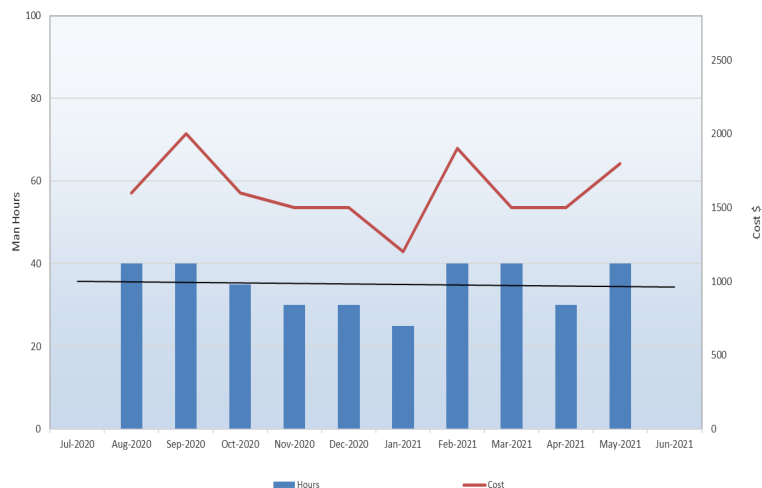


Weed control areas and hours

■ Weed management

- Works ongoing.
- Main focus areas along property boundary and top of Hill
- Hours continue to increase
- Works to focus on targeted weeds and maintenance of weed growth

Teven Quarry
Weed Management



Areas worked

Environmental monitoring – site averages



	Averaging	
	Period	g/m ² /month ^a
Deposited Dust^b	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)

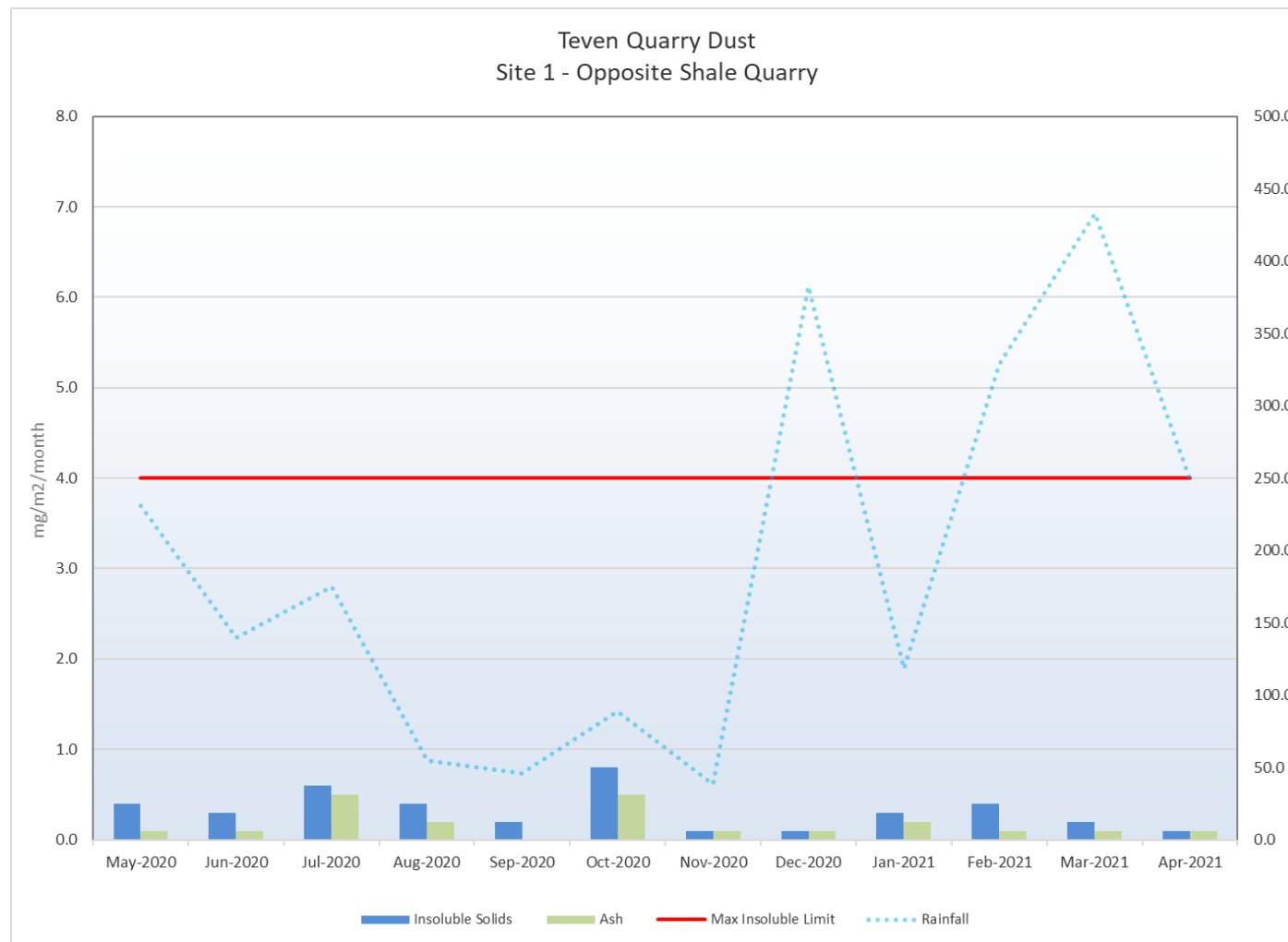
Source: Table 7.1 (Page 28) of the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW – DEC 2005

Average Dust Deposition (Insoluble Solids)

Site 1	0.33 g/m ²
Site 2	1.18 g/m ²
Site 3	1.88 g/m ²
Site 4	0.59 g/m ²

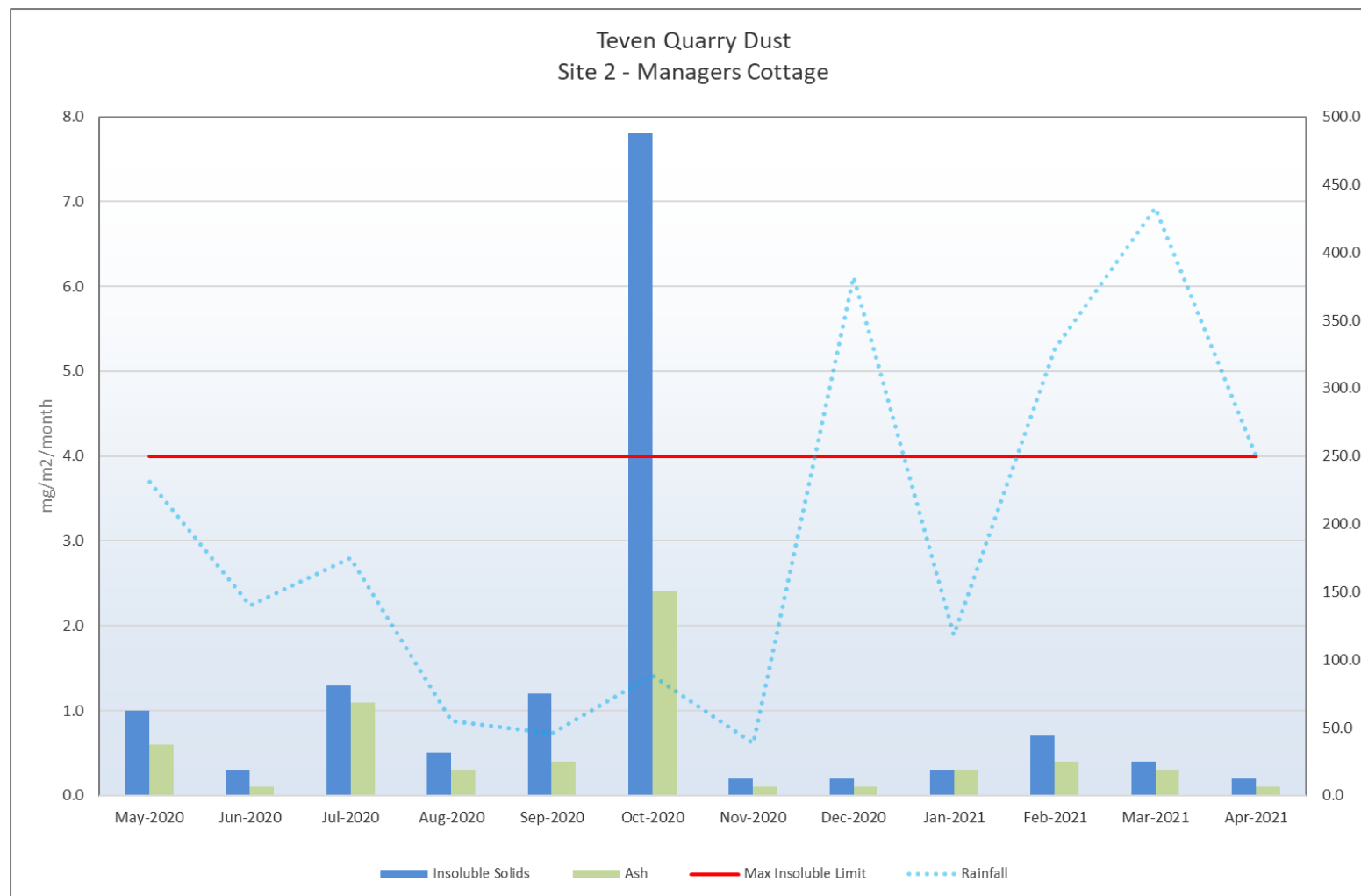
As of February 2015 the Environmental Analysis Laboratory (EAL) at Southern Cross University has been collecting and analysing the Deposited Dust sample bottles at the Boral Teven Quarry

Environmental dust monitoring – Site 1



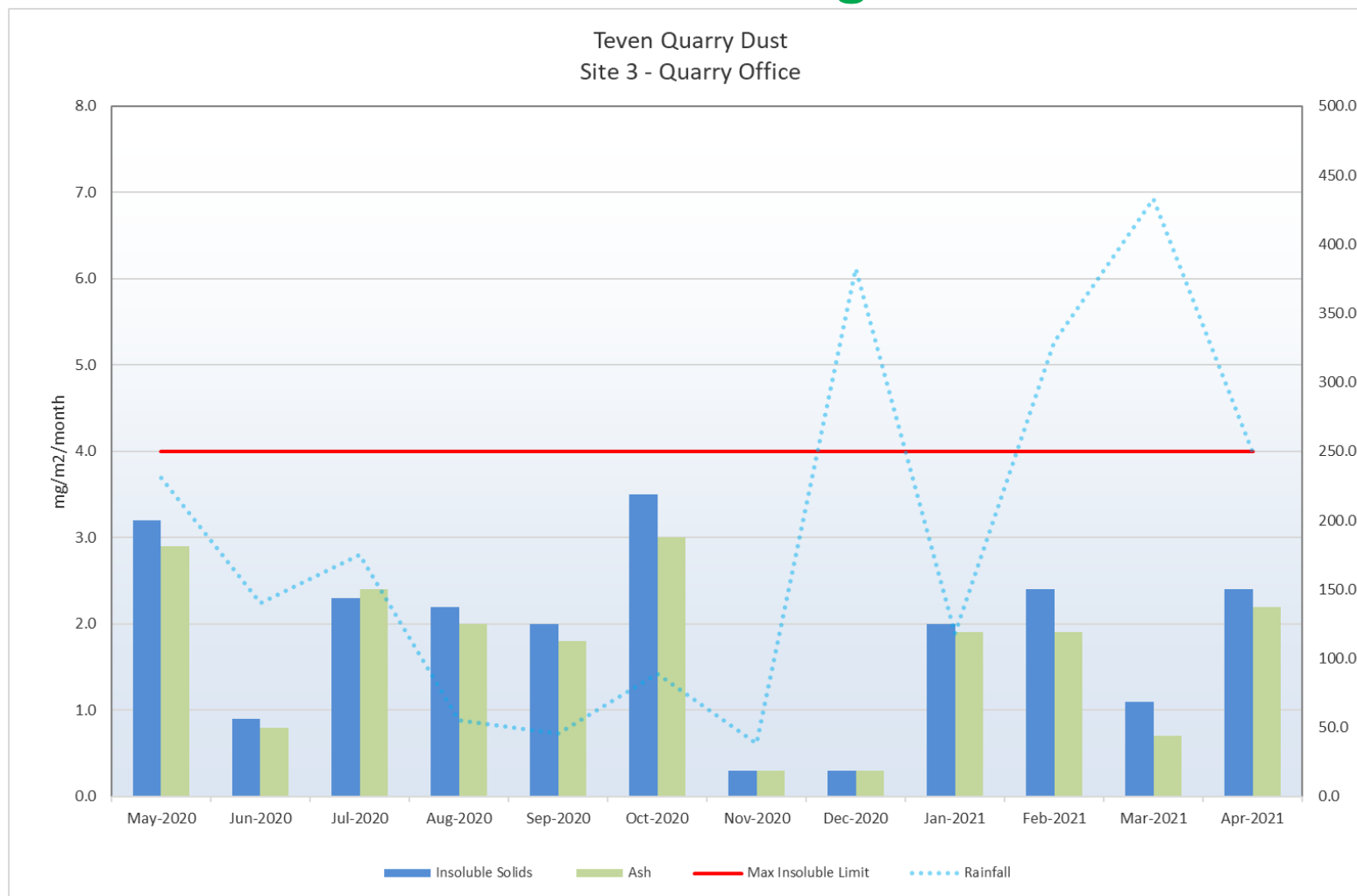
Annual Average Dust Deposition (Insoluble Solids) $0.33 \text{ g} / \text{m}^2 / \text{month}$

Environmental dust monitoring – Site 2



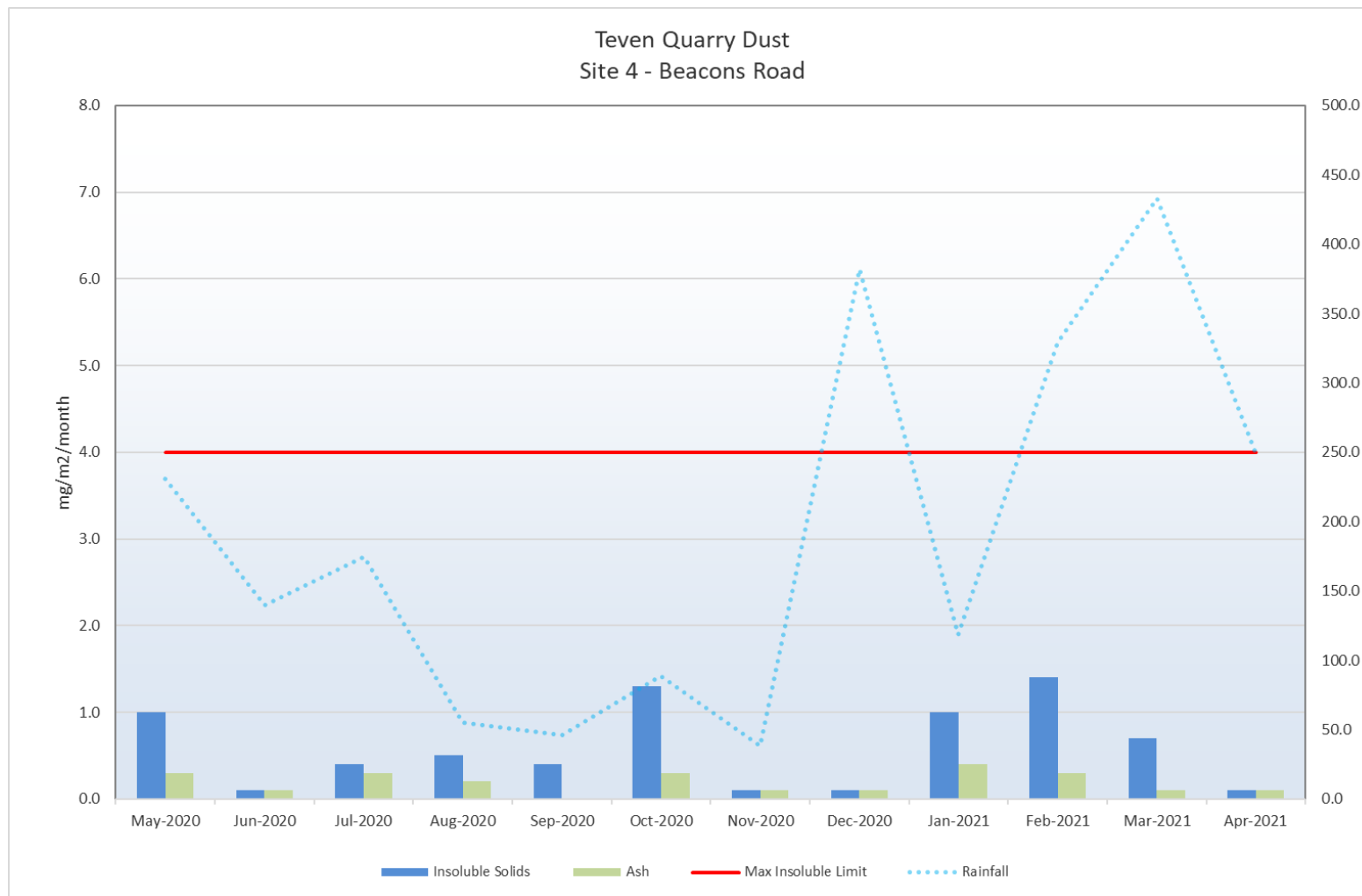
Annual Average Dust Deposition (Insoluble Solids) 1.18 g / m² / month

Environmental dust monitoring – Site 3



Annual Average Dust Deposition (Insoluble Solids) $1.88 \text{ g} / \text{m}^2 / \text{month}$

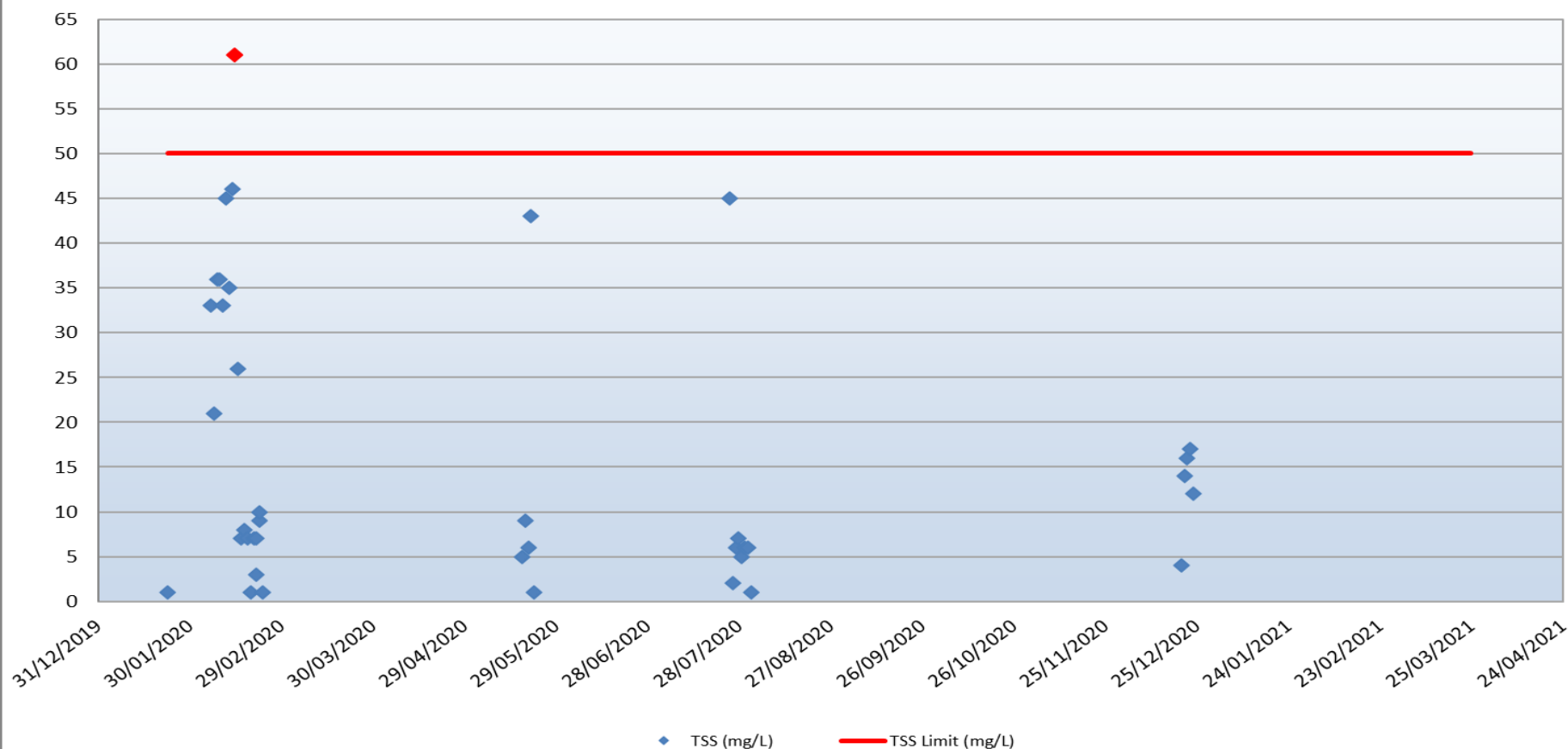
Environmental dust monitoring – Site 4



Annual Average Dust Deposition (Insoluble Solids) 0.59 g / m² / month

Environmental water monitoring – TSS

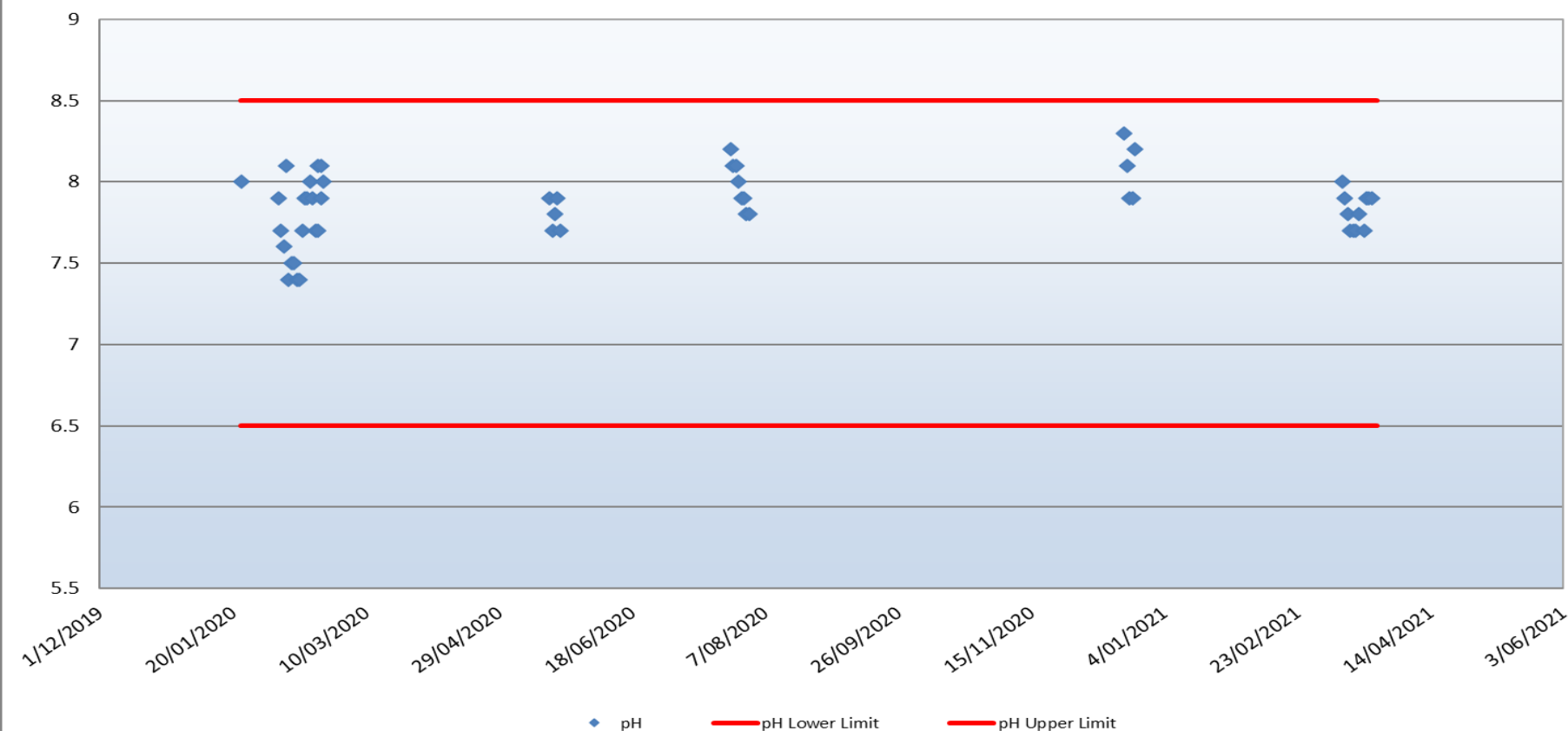
Surface Water Quality - Total Suspended Solids (TSS)



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

Environmental water monitoring – pH

Surface Water Quality - pH



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

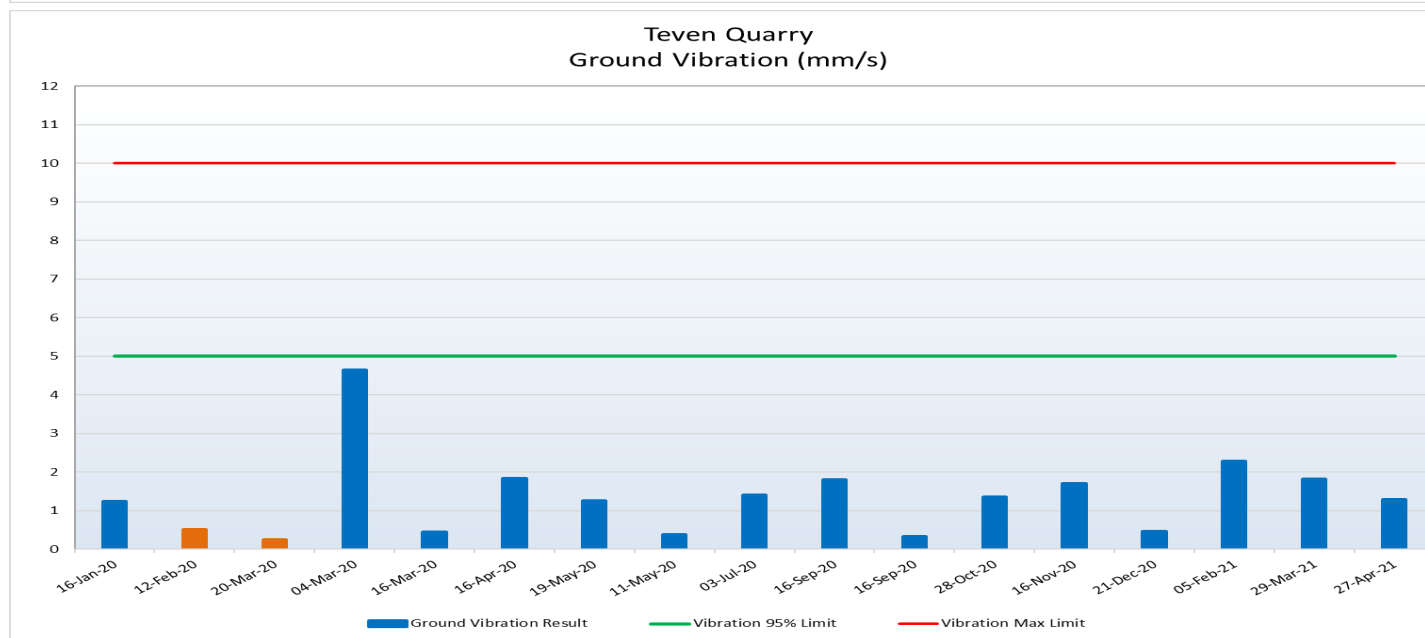
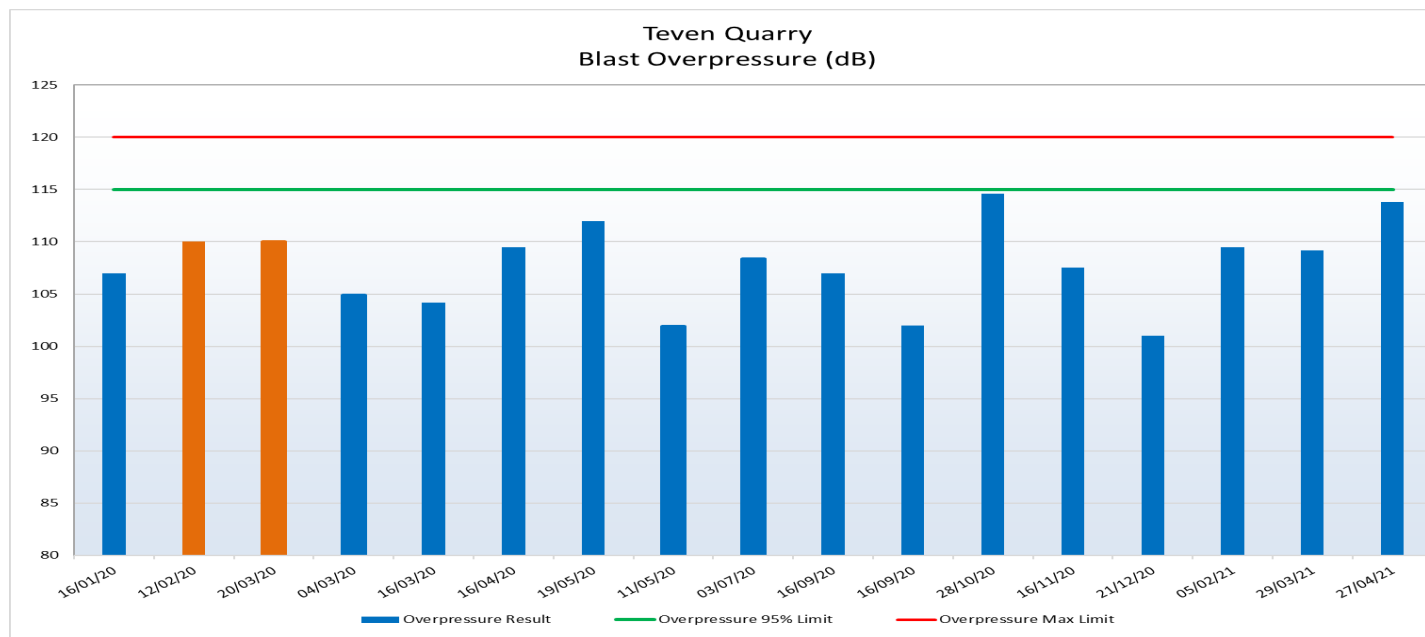
Blast Monitoring Results

Date	Blast ID	Time	Overpressure [dB]	Peak Vibration [mm/s]	Monitor
21 Dec 2020	BTQ-2018	14:09	112	3.08	Teven Rd
5 Feb 2021	BTQ-2101	13:32	109.5	2.28	Beacon Rd
29 Mar 2021	BTQ-2102	11:36	109.2	1.82	Beacon Rd
27 Apr 2021	BTQ-2104	12:00	113.8	1.287	Beacon Rd
28 May 2021	BTQ-2103	12:00	114.2	1.04	Beacon Rd



Boral Teven Quarry Blast Limits

- Only 1 blast per day
 - Blast between 9am to 4pm Monday to Friday
 - **Vibration limits**
 - 5mm/s 95%
 - 10mm/s 100%
 - **Overpressure Limits**
 - 115dB 95%
 - 120dB 100%
- No Trigger set at:
- >110db
 - >0.51 mm/s





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> General business

General business and contacts

- > **Items of general business**
 - > One way traffic system – awaiting advice from Council
- > **Election of Committee**
- > **Next meeting: September 2021 (TBC)**
- > **Boral Teven Quarry contacts:**
 - > **Phil (Dick) Pallisier** Quarry Manager
6687 8360 / 0427 600 194 / phillip.pallisier@boral.com.au
 - > **Jenny Smillie** Stakeholder Relations Manager
0401 894 097 / jenny.smillie@boral.com.au
- > www.boral.com.au/tevenquarry
- > feedback@boral.com.au

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> Thank you for your attendance