

Teven Quarry Annual Review 2022



Document Control Sheet

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v1.0	Rod Johnson	Boral Resources	1/03/2022	Initial draft for internal distribution for review
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Teven Quarry Annual Review Title Block

Name of operation	Boral Teven Quarry
Name of operator	Boral Resources (Country) Pty Ltd
Development consent	DA 1995/292
Name of holder of development consent	Boral Resources (Country) Pty Ltd
Environment Protection Licence	EPL: 2281
Annual Review start date	1 January 2022
Annual Review end date	31 December 2022
<p>I, Rod Johnson, certify that this audit is a true and accurate record of the compliance statuses of the Teven Quarry for the period of the 2022 Calendar Year and that I am authorised to make this statement on behalf of Boral Resources (Country) Pty Ltd.</p> <p>Note</p>	
Name of reporting officer	Rod Johnson
Title of reporting officer	Quarry Manager - Stockton
Signature	
Date	26/4/2023

Contents

1. Purpose and Scope	5
1.1. Contacts Relevant to Teven Quarry Operations	6
2. Details of Tree and Regenerative Plantings	7
3. Compliance with Development Consent Conditions	10
4. Monitoring Results	12
4.1. Surface Water Monitoring Results.....	12
4.1.1. pH Results	13
4.1.2. Total Suspended Solids Results	13
4.2. Blast Monitoring Results	14
4.2.1. Airblast Overpressure	14
4.2.2. Ground Vibration.....	15
4.3. Deposited Dust	15
5. Plan of Management.....	19
6. Appendix A: Ballina Shire Council Audit Compliance Report.....	20

1. Purpose and Scope

This 2022 Annual Report aims to fulfil the requirements of Boral's Teven Quarry Development Consent (1995/292) Condition No 4 which states;

An annual report shall be prepared and submitted by the applicant to the Community Consultative Committee which will include the following:

- *details of tree and regenerative plantings;*
- *details of how the applicant has acted on, complied with or otherwise dealt with or responded to each condition of development consent within the period up to each annual report;*
- *results of all monitoring, as required by the EPA Licence conditions or otherwise by the EPA or other regulatory authorities, of water discharges, dust emissions and noise and blasting operations;*
- *alterations to the Plan of Management; and*
- *the applicant shall, if requested to do so in writing by the consultative committee or its authorised representative, provide to the members of the committee, reasonable access to the site for the purpose of allowing the committee to determine compliance with these conditions of consent; and*
- *records of ground vibration and peak air overpressure from blasting*

The format of this document is set out in order of the above dot points and covers the period from 1st January 2022 to the 30th December 2022. Additional information has also been provided on a number of improvement projects in sections 6 to 9 of this report.

The CCC as well as members of the community and Council have been shown around the site on multiple occasions in recent years and the above condition relating to allowing access to the CCC for the purposes of an inspection is still current and available.

The information required above has mostly been provided in the presentations presented to the Boral Teven Quarry Community Consultative Committee (CCC) over the previous few years. Copies of previous presentations given at the CCC meetings since 2014 can be viewed online at www.boral.com.au/tevenquarry.

1.1. Contacts Relevant to Teven Quarry Operations

Key contacts associated with the management of the Quarry operations, environment, safety and stakeholder relationships are provided in Table 4.

Table 1 *Contacts Relevant to Teven Quarry Operations*

Contact	Position	Contact Details
Philip Pallisier	Teven Quarry Manager	Tel: (02) 66 878 360 Email: Philip.Pallisier@boral.com.au
Nick White	Quarry Operations Manager NSW/ACT	Email: Nick.White@boral.com.au
Ben Williams	Environment Business Partner	Email: Ben.Williams@boral.com.au
Kate Woodbridge	Stakeholder Relations Manager	Email: Kate.Woodbridge@boral.com.au

2. Details of Tree and Regenerative Plantings

Where possible Teven Quarry has continued to utilise the services of East Coast Bush Regeneration (ECBR) throughout the reporting period. Some difficulty in securing services during the reporting period have been experienced, and as such the site is pursuing alternative suppliers.

The weed control activities have ensured the ongoing health and vitality of revegetated areas including the earth bunds in the basalt pits, shown in figure 2 and the Vegetation Corridor, shown in figure 3.

Teven Quarry also engaged the services of Melaleuca Group to develop a weed management plan for the site. The main focus of works will be areas along the property boundary, including Beacons Road, and also on top of the Quarry hill with three native trees on the hill identified for further assessment. Figure 4.

A work plan is currently being developed to re-establish a vegetation corridor along the eastern boundary of the property. Work will continue to focus on targeted weeds as well as maintenance to prevent returning weed growth. An area in the south of the vegetation corridor has been identified as suitable area for regenerative plantings once the area is re-established and prepared.



Figure 1: Revegetated Noise Bunds – *Vegetation growth on earth noise bund between basalt pit and lower stockpile area. View of bund looking NW*



Figure 2: Vegetation Corridor – *Vegetation growth along the vegetation corridor, highlighting the success of historic tree plantings. View looking NW*



Figure 3: Weed Management Plan – Melaleuca Group developing a Weed Management Plan to identify and target key areas of weed control, and re-vegetation.

3. Compliance with Development Consent Conditions

Ballina Shire Council undertook an Environmental Audit of the Teven Quarry Operations in November 2021. Below is a copy of the findings and outcomes of the audit, and also associated actions undertaken to address non-conformances.

The statement of compliance for the 2022 Calendar Year reporting period (1 January 2022 – 31 December 2022) is contained in Table 2 below.

Table 1 Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	
DA 1995/292	No

Below, Table 3, is an extract from the Audit, highlighting the consent conditions assessed as non-compliant. A full copy of the Audit is provided in the Appendix of this report.

Cond #	DA 1995/292 Condition Description	Compliance Status	Comments and Action Required	Progress
4	An annual report shall be prepared and submitted by the applicant to the Community Consultative Committee which will include the following (a-f).	Non-compliant	<p>Annual report not prepared- Boral representatives have advised that the report will be re-instated.</p> <p>TABLE 2.1 pg. 5 - EMP states that Boral management will:</p> <ul style="list-style-type: none"> • Undertake annual environmental compliance audit. • Submit annual Community Consultative Committee report to Council. • Provide assistance in relation to environmental monitoring as required. • Day to day implementation of the EMP • Ensuring site personnel have undertaken appropriate environmental awareness training and are observing all necessary management requirements • Ensure all required environmental auditing is undertaken 	<p>Rod Johnson has advised that the annual report will be re-initiated and supplied to the CCC and Council.</p> <p>Note: this condition has been previously identified in SOEE Appendix J CM 16/34842</p>
18	All trade waste fluids and materials generated within the site shall be treated and disposed of to the satisfaction of Council's Health and Building Department.	Generally Compliant	<p>Site inspection November 2021 did not identify any waste stored at the site. Waste disposed of by contractors.</p>	<p>Request Boral to identify waste types, waste contractors used and licensed waste facility utilised.</p>

Cond #	DA 1995/292 Condition Description	Compliance Status	Comments and Action Required	Progress
21	All fuel and bituminous products storage facilities are to be properly bunded in accordance with the relevant Australian Standard.	Generally Compliant	Needs to be validated by qualified person Fuel dispenser and storage tank is double walled.	Boral to engage qualified person to advise on compliance with this condition
28	If liquid contaminants and other possible pollutants are stored on site they shall be stored within	Generally Compliant	Requires validation by qualified person	Boral to engage qualified person to advise on compliance with this condition

The re-introduction of this Annual Report is designed to satisfy Condition 4 of the Development Consent (DA 1995/292), and will be prepared and presented on an Annual basis.

Condition 18, Boral provided evidence to Council regarding the removal of all wastes offsite by the Boral engaged Contractor, Cleanaway, also indicating the locations of wastes removed from the premises.

Condition 21 & 28: Boral provided details and information on the self-bunded, double-walled diesel storage tank and the OPil Stores container, below. Boral installed a new purpose built Oils Storage container onsite to ensure that adequate controls were in place for storage of oils and greases and only appropriate volumes were held in stock, see Figure 5.



Figure 4: New Oils Container – External view of recently installed oils container at Teven Quarry.

4. Monitoring Results

The site holds an Environmental Protection Licence (No 2261) with the NSW EPA. Under the conditions of this licence, the following parameters are required to be monitored;

- Surface water discharge from Point 1 (main dam overflow), and
- Ground vibration and overpressure associated with blasting activities.

In addition to the above required monitoring, Boral voluntarily undertakes Deposited Dust monitoring at four locations around the site.

4.1. Surface Water Monitoring Results

Surface water is monitored at EPL Monitoring Point 1 and is a requirement of EPL 2261, as below.

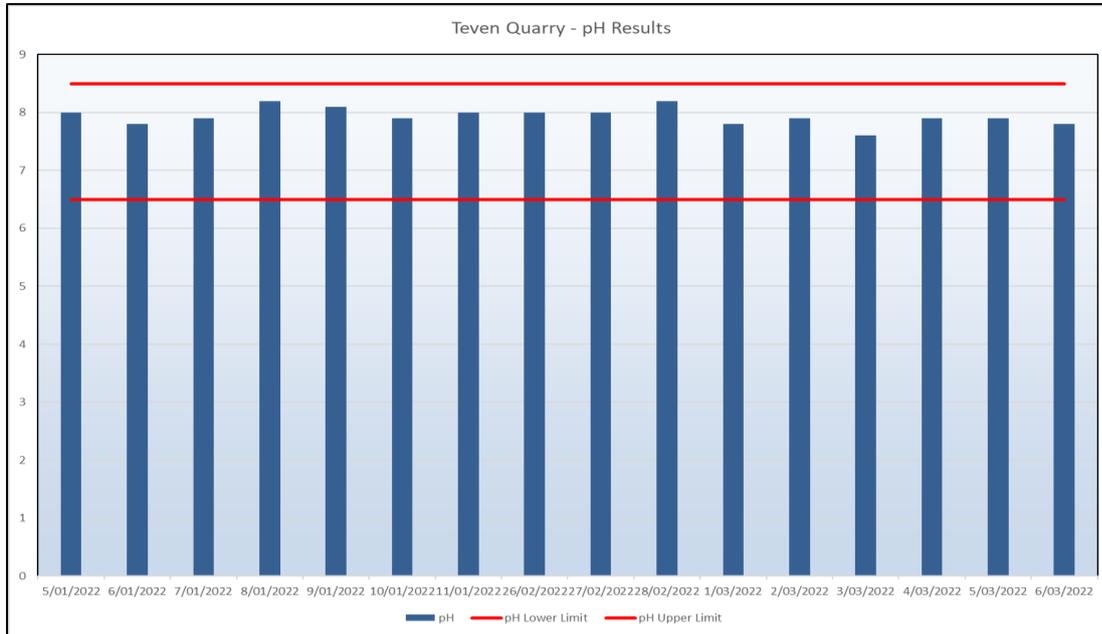
The site monitors for pH and Total Suspended Solids of the discharged water.

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
pH	pH				6.5 - 8.5
Total suspended solids	milligrams per litre				50

The concentration limits in the above table do not apply to any discharge from the final sediment basin arising from rainfall exceeding 63.2mm in total falling over any consecutive five day period

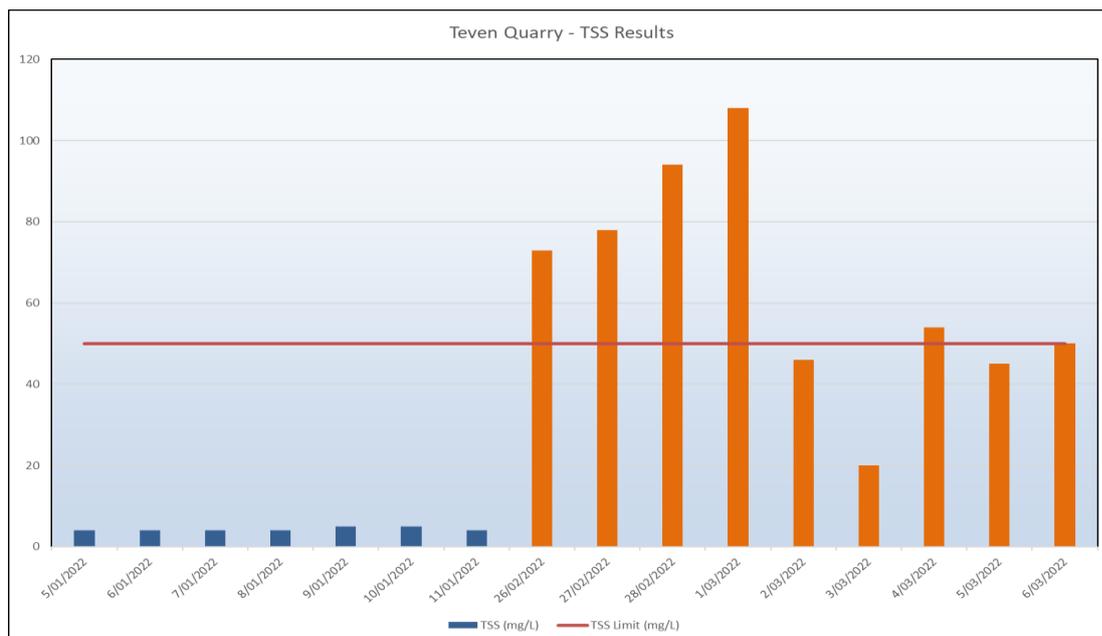
4.1.1. pH Results

As indicated on the graph below all water results for pH were within the EPL limit of 6.5-8.5.



4.1.2. Total Suspended Solids Results

The below table highlights the TSS results for water discharged from the final sediment dam. All results were compliant with the conditions of the EPL. The results highlighted **ORANGE** in the below table were results obtained after rainfall of greater than 63.2mm.



4.2. Blast Monitoring Results

Blast monitoring on the site is conducted in accordance with EPL 2261 and is undertaken at the nearest affected residence not associated with the quarry.

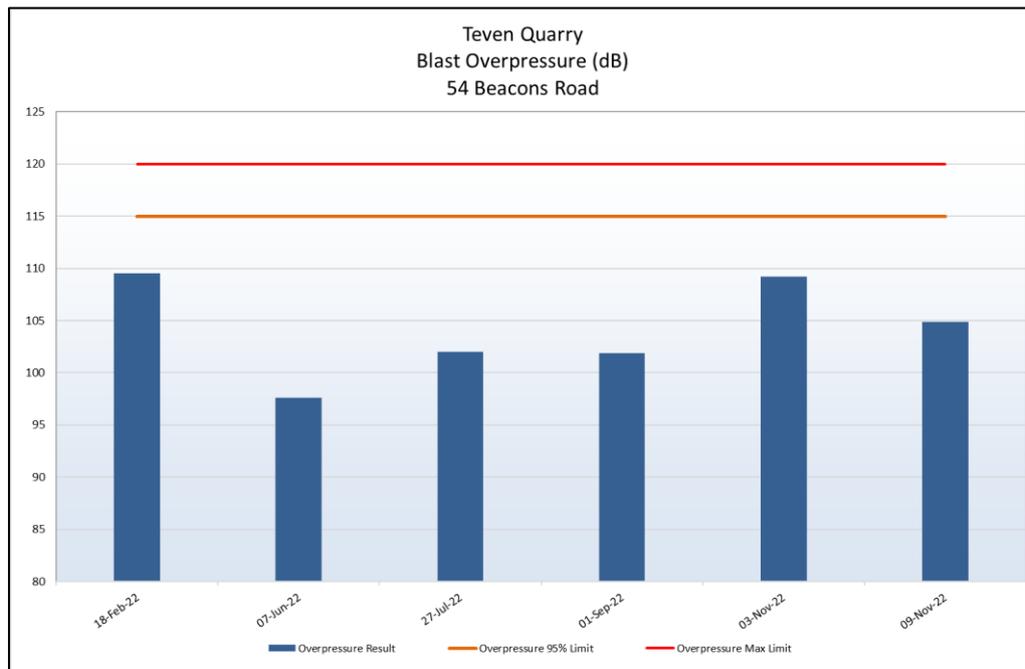
4.2.1. Airblast Overpressure

EPL: 2261 - Condition L5.3.

The airblast overpressure level from blasting operations in or on the premises must not exceed:

- a) 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
- b) 120 dB (Lin Peak) at any time.

At most affected residence or noise sensitive location that is not owned by the licensee or subject to a private agreement between the owner of the residence or noise sensitive location and the licensee as to an alternative overpressure level.



All recorded blasts were within the limits for Air Blast Overpressure during the reporting period.

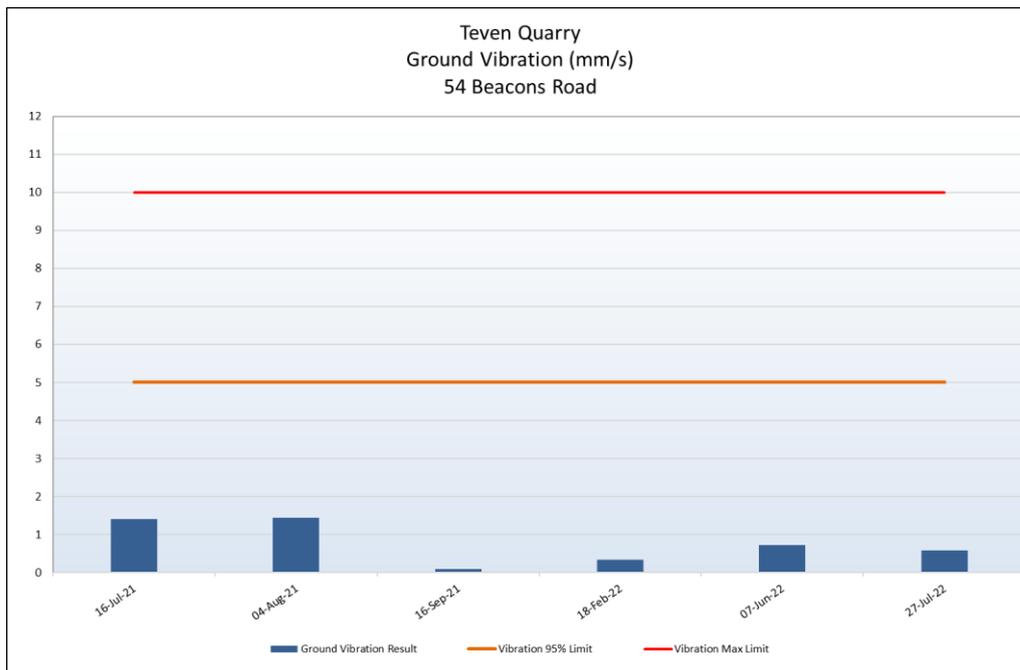
4.2.2. Ground Vibration

EPL:2261 - Condition L5.4.

The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:

- a) 5mm/s for more than 5% of the total number of blasts carried out on the premises during each reporting period; and
- b) 10 mm/s at any time.

At most affected residence or noise sensitive location that is not owned by the licensee or subject to a private agreement between the owner of the residence or noise sensitive location and the licensee as to an alternative overpressure level.



All recorded blasts were within the limits for Ground Vibration during the reporting period.

4.3. Deposited Dust

The Boral Teven quarry site currently has four deposited dust monitors which are used to monitor the dust levels around the Boral Teven Quarry site, these locations are identified in Figure 6 below.

Deposited dust is measured by determining the amount of insoluble solids collected in the monitoring stations during the sampling period, with the results averaged over a period of 12 months in accordance with EPA guidelines.

The Dust Deposition gauges are not requirement under the consent or EPL.

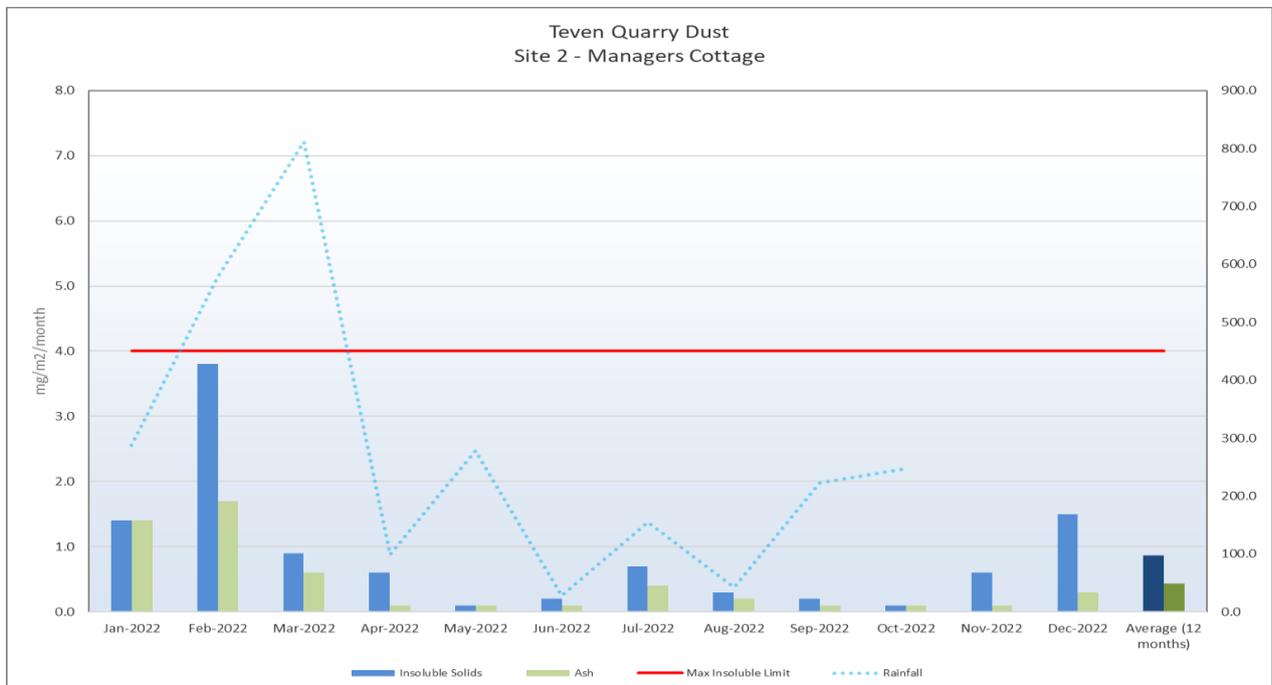
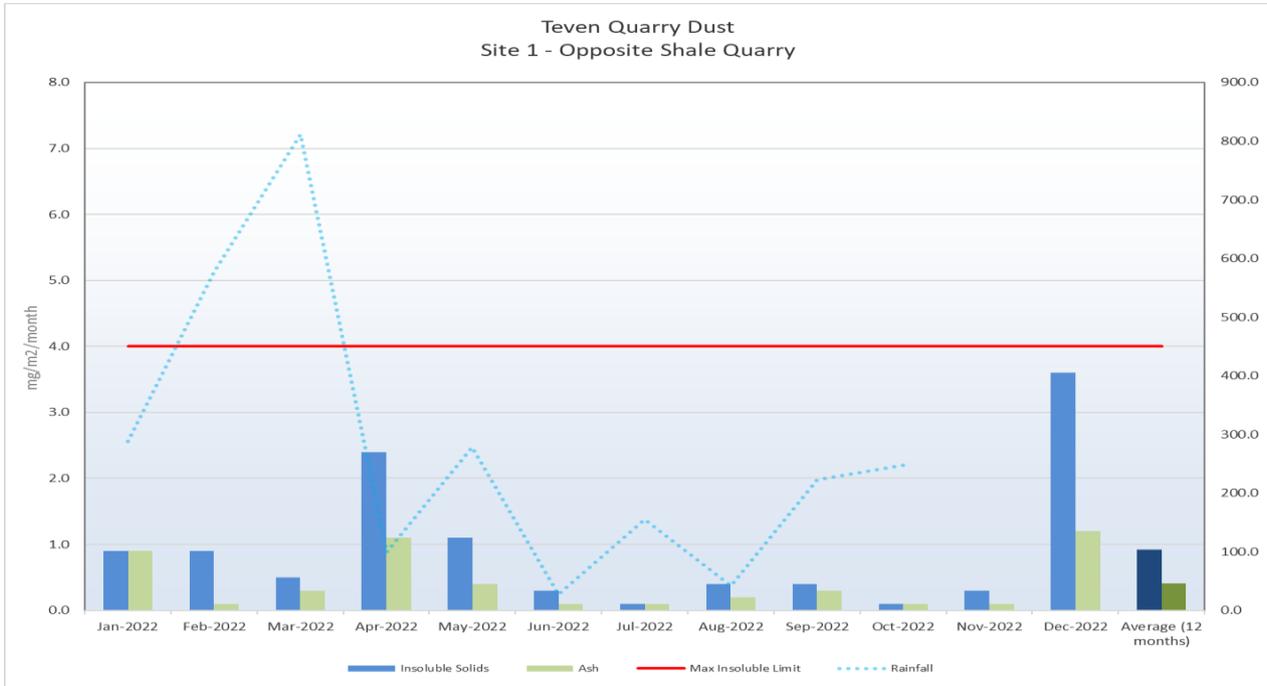


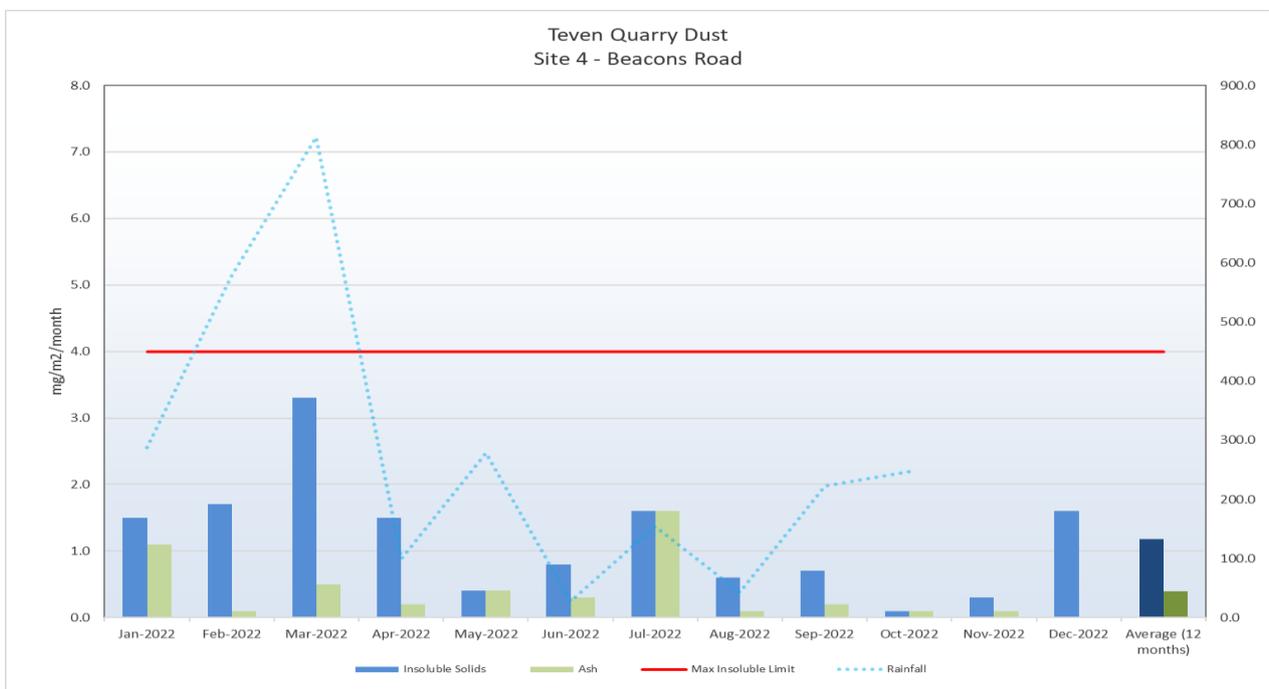
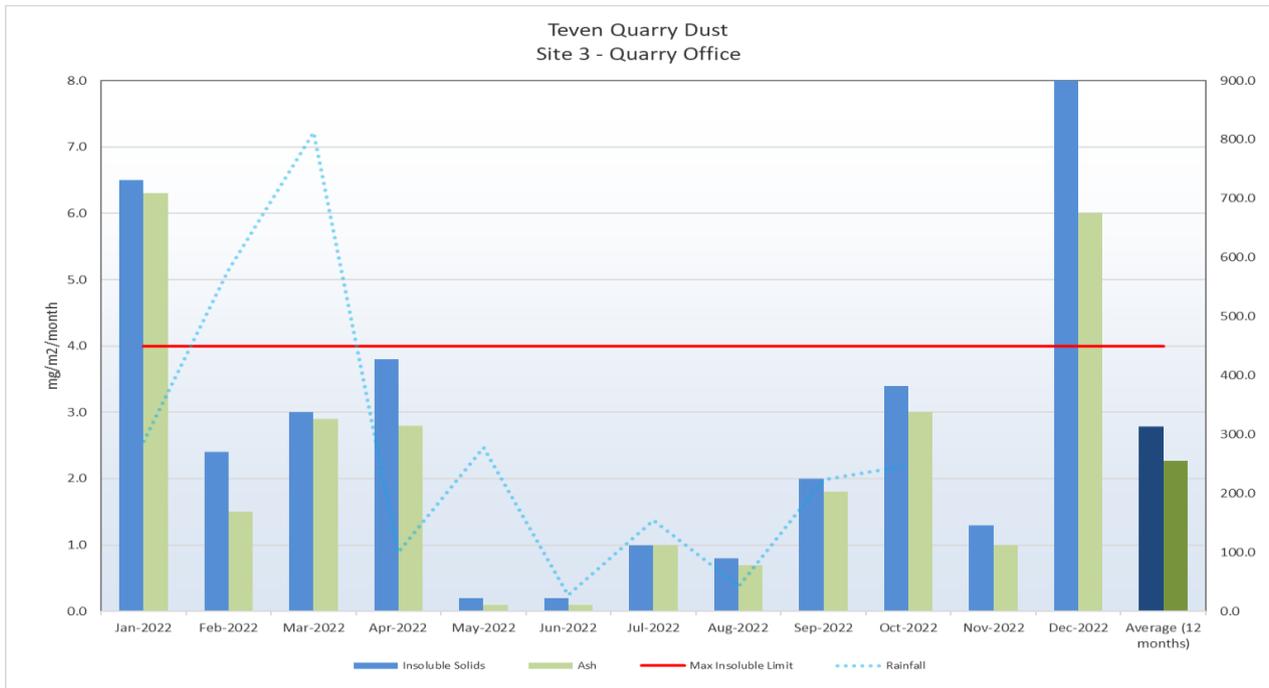
Figure 6. Deposited Dust Gauge Locations. The above image indicates the locations of the 4 onsite Dust Deposition Gauges. (Marked up Google Earth image)

Table 5. Annual Summary of Deposited Dust (12 Month Rolling Average)

	Site 1 grams/m ² /month		Site 2 grams/m ² /month		Site 3 grams/m ² /month		Site 4 grams/m ² /month	
	Insoluble Solids	Ash						
CY22 Average	0.92	0.41	0.87	0.43	2.78	2.27	1.18	0.39
Criterion	4	-	4	-	4	-	4	-

The deposited dust data from the above graphs indicates that the site is expected to be compliant with deposited dust levels experienced at adjoining residential premises.





5. Plan of Management

There have been no alterations to the original Plan of Management dated April 1996, or the Statement of Environment Effects dated April 2016.

Any changes to the Plan of Management will be communicated to the Community Consultative Committee.

6. Appendix A: Ballina Shire Council Audit Compliance Report

Table 1 – Overall Compliance – Boral Quarry- Teven – DA 1995/292.3

Cond no.	DA1995/292 Consent conditions	Compliance	Comments and Action Required	Progress
1. Deferred	Arrangements are to be made with Council's Engineering Department concerning the design, funding and construction of road works in North Teven Road....	Compliant	Condition has been satisfied.	No further action required
1.	Development of the site shall be undertaken generally in accordance with the plans and associated documentation lodged with the Development Application...	Compliant	The quarry is generally consistent with the submitted documentation.	No further action required
2.	Within six (6) months from the date of this consent the applicant shall prepare and submit to Council for approval an environmental management plan ("EMP")	Compliant	Current Environmental Management Plan Teven Quarry – EMM 13/09/12- CM 16/34842.	No further action required
3.	Any changes or amendments to the PPOM shall be lodged with the Community Consultative Committee.	Compliant	Compliant, 2 meetings per year- information presented by power point.	No further action required
4.	An annual report shall be prepared and submitted by the applicant to the Community Consultative Committee which will include the following (a-f).	Non-compliant	Annual report not prepared- Boral reps have advised that the report will be re-instated. Power Point presentation has been utilised to inform CCC in preference to report. TABLE 2.1 pg. 5 - EMP states that the will: • Undertake annual environmental compliance audit. • Submit annual Community Consultative Committee report to Council. • Provide assistance in relation to environmental monitoring as required.	Rod Johnson has advised that the annual report and audit will be re- initiated and supplied to the CCC and Council. Note: this condition has been previously identified in SOEE Appendix J CM 16/34842

Cond no.	DA1995/292 Consent conditions	Compliance	Comments and Action Required	Progress
5.	All operations within the quarry shall be conducted in accordance with the requirements of the NSW Environment Protection Authority	Compliant	Condition Complied with according to CM DW1922423 2011- DW1898468	No further action required
6.	The applicant shall make application to the NSW Department of Land and Water Conservation for closure and purchase of the Crown public	Compliant	Condition Complied with CM DW1922423	No further action required
7.	The applicant shall consult with the Department of Land and Water Conservation to ascertain the need for a license under the Water Act 1912 with respect to the spring to the north of the quarry site	Compliant	Condition Complied with according to CM DW1922423 Teven Quarry Consent Condition Audit 2011- Letter sent to DLAWC in 1996 regarding the spring to the North of the quarry CM 16/34842	No further action required
8.	The normal hours of operation for the various components of the quarry shall, except as specified below, not exceed the following	Compliant	No complaints have been received by Council which relate to breach of hours of operation listed under this condition	No further action required
9.	The applicant shall ensure the area adjacent to the quarry access remains clear of material spillages which may otherwise present a hazard to motorists.	Compliant	Site inspected – no spillages observed – roadway fronting quarry entrance clear of spillage – see 2009 DW1304155 - DW1304145	No further action required

Cond no.	DA1995/292 Consent conditions	Compliance	Comments and Action Required	Progress
10.	The applicant shall pay to Council a Road Maintenance Levy calculated in accordance with the Ballina Shire Council Section 94 Contributions Plan.	Compliant	Compliant- records of contributions to Council are current and in accordance with Council S 94 Plan. Concerns were raised as to the safety and maintenance of the road and specifically utilizing funds identified in (b) of condition 10. CM 15/2779 is a previous request regarding this which identifies safety concerns.	No further action required from Boral.
11.	The applicant shall be responsible for the placement of improved road signage on Emigrant Creek Bridge, including the installation of a "give-way" sign facing southbound traffic. These works shall be conducted in consultation with and to the satisfaction of Council's Engineering Department.	Compliant	Condition signed off by Civil Services during November 2008 Inspection. The bridge has since been replaced by Council.	No further action required
12.	The applicant shall install Hinged Truck Warning signs in North Teven Road on either side of the quarry entrance.	Compliant	Condition signed off by Civil Services during November 2008 Inspection An application was made to Council for signage in 2006 DW855485 Possible changes to the entrance have been proposed CM 19/80043. Image 2009 DW1304154 shows signage in place. Permanent signs now in place.	No further action required
13.	All site rehabilitation and landscaping works shall be designed to ensure the maximum reasonable visual screening of quarry operations	Compliant	Condition Complied with CM DW1922423- inspection 2021 identified site well screened and vegetated along road frontage.	No further action required
14.	All loading and unloading of goods shall be undertaken wholly within the site.	Compliant	Condition Complied with CM DW1922423. Inspection 2021 identified that the operations were consistent with the plans and layout of the approval.	No further action required

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Cond no.	DA1995/292 Consent conditions	Compliance	Comments and Action Required	Progress
15.	The construction of Beacon Road shall be completed in accordance with design plans approved by Council's Engineering Department	Compliant	Condition Complied with CM DW1922423	No further action required
16.	The relocation of dwellings and connection of household services shall not be undertaken without obtaining prior building permits from Council.	Compliant	Condition Complied with CM DW1922423	No further action required
17.	A plan of subdivision which incorporates a consolidation of the respective parcels of land within the site, the closure of the crown public road...	Compliant	Condition Complied with DW385756, CM DW1922423, DW342708	No further action required
18.	All trade waste fluids and materials generated within the site shall be treated and disposed of to the satisfaction of Council's Health and Building Department.	Generally compliant	Site inspection November 2021 did not identify any waste stored at the site. Waste disposed of by contractors.	Request Boral to identify waste types, waste contractors used and licensed waste facility utilised.
19.	A person or persons employed by the applicant shall be appointed to accept responsibility for compliance with the consent conditions	Compliant	Rod Johnson identified in this role. Quarry Manager also identified in TABLE 2.1 pg. 5 - EMP	No further action required

Cond no.	DA1995/292 Consent conditions	Compliance	Comments and Action Required	Progress
20.	The total amount of material which can be removed from the site shall not exceed 500,000 tonnes in any calendar year...	Compliant	Compliant- a review of Council records identified that approximately 240,000 tonnes reported as removed from site 2021 financial year. Advised during interview that operations were not near the upper limits allowed by approval.	No further action required
21.	All fuel and bituminous products storage facilities are to be properly bunded in accordance with the relevant Australian Standard.	Requires further information	Needs to be validated by qualified person Fuel dispenser and storage tank double walled.	Boral to engage qualified person to advise on compliance with this condition
22.	The applicant shall maintain its truck education and training procedures, and shall require an equal standard of courtesy.	Compliant	Condition Complied with CM DW1922423 This is covered at induction to all drivers. A complaint handling system is in place to identify trucks which are the subject of complaints both Boral and contract trucks.	No further action required
23.	A roadside bus shelter shall be constructed by the applicant with Council approval at the intersection of North Teven Road	Compliant	It was stated that Council has removed the bus shelter as part of road works.	No further action required
24.	The final date for termination of the consent is 27 June 2026.	Compliant	Exploring the possibility for extending the life of the quarry however, it is understood that this may be unlikely.	No further action required

Cond no.	DA1995/292 Consent conditions	Compliance	Comments and Action Required	Progress
25.	A Community Consultative Committee shall be formed with the following representation:	Compliant	Confirmed – CCC meets bi-annually	No further action required
26.	After the noise reduction measures set out in the POM and EMP have been carried out.	Compliant	CM 17/54856- complies	No further action required
27.	Quarry operations and monitoring must comply with the Approved Methods for Modelling and Assessment of Air Pollutants	Compliant	Air quality covered in EPL- EPA No current air quality issues/complaints recorded	No further action required
28.	If liquid contaminants and other possible pollutants are stored on site they shall be stored within	Requires further information	Requires validation by qualified person	Boral to engage qualified person to advise on compliance with this condition
29.	In the event of a pollution incident on the premises, that has caused, is causing, or is likely to cause harm to the environment,	Complies	PIRMP in place and on website. Site is obligated to report under EPL 2011- DW1898468	Boral to engage qualified person to advise on compliance with this condition

Cond no.	DA1995/292 Consent conditions	Compliance	Comments and Action Required	Progress
30.	When replacing mobile equipment (haul trucks and front end loaders) they must be replaced with equipment that has a lower sound.	Complies	Compliant – advised that equipment replacement is part of company policy.	No further action required
31.	To determine compliance with the Project Specific Noise Levels (PSNL) under the NSW Industrial Noise Policy	Complies	CM 17/54656 & DW1875009 The noise report from Muller Acoustics identifies the noise contributions from the quarry range from 30 d BA to 33 d BA at the 4 monitoring points and the L90 is 36 d BA at the closest affected residences.	No further action required
32.	The Applicant shall update the Water Management Plan and Environmental Management Plan	Complies	Water management plan and Environmental management plan have been amended and submitted to Council.	No further action required
33.	The following must be carried out prior to using the mobile crusher:	Complies	Onsite discussion identified that the mobile crusher unlikely to be used on site in the future. No record of active complaints have been identified.	No further action required
34.	Waste arising from the construction and operational activities must be stored, transported and disposed	Complies	No stored waste was observed	No further action required

Cond no.	DA1995/292 Consent conditions	Compliance	Comments and Action Required	Progress
35.	If drinking water is supplied from an independent source such as a creek, dam, bore or rainwater tank,	Compliant	Bottled water utilised on site, No potable water supplied from tanks	No further action required
36.	The use and occupation of the proposed development, including all plant and equipment installed thereon,	Compliant	The site appears to be generally compliant.	No further action required
37.	Shielding must be provided to the western side of the proposed mobile crusher prior to use.	Compliant	Shielding in place encompassing crusher	No further action required
38.	The mobile crusher must only be used under the following circumstances:	Compliant	Compliant- advised that mobile crusher is unlikely to be used on site.	No further action required
39.	The existing NSW Environmental Protection Authority Environmental Protection License 2261	Compliant	25-Aug-2014 last EPL non-compliance recorded	No further action required