

Strength. Performance. Passion



ANNUAL REVIEW

1 January 2022 – 31 December 2022

Teven Quarry

TABLE OF CONTENTS

1	STATEMENT OF COMPLIANCE	7
2	INTRODUCTION	9
2.1	Contact Details	11
3	APPROVALS	12
4	OPERATIONS SUMMARY	13
4.1	Exploration	13
4.2	Land Preparation	13
4.3	Construction Activities	13
4.4	Quarry Operations	13
4.5	Next Reporting Period	14
5	ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW	15
5.1	Actions from 2021 Annual Review – DPE Actions	15
5.2	Actions from 2021 Annual Review - Holcim Proposed Actions for 2022	15
6	ENVIRONMENTAL PERFORMANCE	16
6.1	Meteorological Monitoring	16
6.2	Noise	17
6.2.1	EIS Predictions	17
6.2.2	Approved Criteria	17
6.2.3	Key Environmental Performance	17
6.2.4	Management Measures	19
6.2.5	Proposed Improvements	19
6.3	Air Quality	20
6.3.1	EIS Predictions	20
6.3.2	Approved Criteria	20
6.3.3	Key Environmental Performance	20
6.3.3.1	PM ₁₀ Monitoring	20
6.3.3.2	Depositional Dust Monitoring	22
6.3.3.3	Long-term Trends:	24
6.3.3.4	Comparison to EIS Predictions:	24
6.3.4	Management Measures	24
6.3.5	Proposed Improvements	24
6.4	Blasting	25
6.4.1	EIS Predictions	25
6.4.2	Approved Criteria	25
6.4.3	Key Environmental Performance	Error! Bookmark not defined.
6.4.4	Management Measures	27
6.4.5	Proposed Improvements	27

6.5	Traffic Management	28
6.5.1	EIS Predictions	28
6.5.2	Approved Criteria	28
6.5.3	Key Environmental Performance	28
6.5.4	Management Measures	29
6.5.5	Proposed Improvements	29
6.6	Biodiversity	30
6.6.1	EIS Predictions	30
6.6.2	Approved Criteria	30
6.6.3	Key Environmental Performance	30
6.6.4	Management Measures	30
6.6.5	Proposed Improvements	30
6.7	Heritage (Aboriginal Archaeology and Historic Heritage)	31
6.7.1	EIS Predictions	31
6.7.1.1	Aboriginal Archaeology	31
6.7.1.2	Historic Heritage	31
6.7.2	Approved Criteria	31
6.7.3	Key Environmental Performance	31
6.7.4	Management Measures	31
6.7.5	Proposed Improvements	31
7	WATER MANAGEMENT	32
7.1	EIS Predictions	32
7.1.1	Surface Water	32
7.1.2	Groundwater	32
7.2	Approved Criteria	32
7.3	Water Usage and Storage	33
7.4	Surface Water Results	33
7.5	Groundwater Results	34
7.6	Water Take	34
7.7	Water Management – Pollution Reduction Program	34
7.7.1	Basis for PRP	34
7.7.2	Improvements Completed	34
7.7.3	Proposed Improvements	35
8	REHABILITATION AND LANDSCAPE MANAGEMENT	36
8.1	Rehabilitation Performance during the Reporting Period	36
8.2	Summary of Current Rehabilitation and Performance	36
8.3	Actions for the Next Reporting Period	37
9	SUMMARY OF ENVIRONMENTAL PERFORMANCE	37
10	WASTE MANAGEMENT	40

10.1	Waste Streams	40
10.2	Waste Management	40
11	COMMUNITY	41
11.1	Community Engagement Activities	41
11.2	Complaints	41
12	INDEPENDENT AUDIT	42
13	INCIDENTS AND NON-COMPLIANCES	43
14	ACTIVITIES TO BE COMPLETED IN THE NEXT REPORTING PERIOD	44

TABLES

Table 1:	Statement of Commitments	7
Table 2:	DPE Compliance Status Key	7
Table 3:	2022 Summary of Non-Compliances for SSD 6422	8
Table 4:	Annual Review Requirements.....	10
Table 5:	Approvals for Teven Quarry Operations	12
Table 6:	Operating Hours.....	14
Table 7:	Total Annual Product Distributed (Holcim Teven Quarry).....	14
Table 8:	Update on Holcim Proposed Actions for 2022	15
Table 9:	Meteorological Monitoring Results 2022 (Ballina Airport AWS, station 058198)	16
Table 10:	Noise Criteria for Teven Quarry (SSD 6422)	17
Table 11:	Noise Compliance Assessment for Teven Quarry	18
Table 12:	Air Quality Monitoring Criteria (SSD 6422)	20
Table 13:	2022 Dust Monitoring (PM ₁₀) at Teven Quarry	20
Table 14:	2022 Dust Monitoring (Depositional Dust)	23
Table 15:	Comparison of Depositional Dust Data (with contamination removed)	23
Table 16:	Blast Monitoring Criteria from EPL 3293 for Teven Quarry	25
Table 17:	2022 Blast Monitoring Results	26
Table 18:	Teven Quarry Long-term Blasting Trends	27
Table 19:	Average Truck Movements for 2022.....	28
Table 20:	Environmental Performance at Teven Quarry in 2022	Error! Bookmark not defined.
Table 21:	Water Monitoring Criteria (Teven Quarry EPL 3293) – LDP001	32
Table 22:	Discharge Sampling Measurement Requirements (Teven Quarry EPL 3293).....	32
Table 23:	Summary of Water Quality Data at Teven Quarry – 2022.....	33
Table 24:	Biodiversity and Rehabilitation Requirements for Teven Quarry (SSD 6422)	36
Table 25:	Rehabilitation and Disturbance Status.....	36
Table 26:	Rehabilitation and Closure Actions for the 2023 Reporting Period	37
Table 27:	Summary of Incidents and Non-Compliances	43
Table 28:	Improvement Actions for 2023	44

FIGURES

Figure 1: Regional Locality..... 9
Figure 2: Aerial view of the Teven Quarry, located on Stokers Lane 10

APPENDICES

Appendix 1:Quarterly Noise Results
Appendix 2: Surface Water Quality Results.
Appendix 3:Independent Environmental Audit Action Plan
Appendix 4: Independent Environmental Audit

SITE DETAILS

Name of operation	Teven Quarry
Name of operator	Holcim (Australia) Pty Ltd
Development consent / project approval #	SSD 6422
Name of holder of development consent / project approval	Holcim (Australia) Pty Ltd
Annual review start date	1 January 2022
Annual review end date	31 December 2022
<p>I, Matt Kelly, certify that this audit report is a true and accurate record of the compliance status of the TEVEN QUARRY for the period of 1 JANUARY 2022 - 31 DECEMBER 2022 and that I am authorised to make this statement on behalf of HOLCIM (AUSTRALIA) PTY LTD.</p> <p>Note.</p> <p>a) <i>The Annual Review is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p>b) <i>The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Name of authorised reporting officer	Matt Kelly
Title of authorised reporting officer	Quarry Manager
Signature of authorised reporting officer	
Date	31/03/2023

1 STATEMENT OF COMPLIANCE

The statement of commitments for the 2022 reporting period for Teven Quarry is provided in **Table 1**. **Table 3** details the non-compliances of SSD 6422 identified within the 2021 reporting period, with the compliance status key provided in **Table 2**.

Table 1: Statement of Commitments

Were all conditions of the relevant approval(s) complied with?	
SSD 6422	No
EPL 3293	Yes

Table 2: DPE Compliance Status Key

Risk level	Colour code	Description
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence.
Medium	Non-compliant	Non-compliance with: <ul style="list-style-type: none"> • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences but is likely to occur.
Low	Non-compliant	Non-compliance with: <ul style="list-style-type: none"> • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences but is likely to occur.
Admin NC	Non-compliant	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

Table 3: 2022 Summary of Non-Compliances for SSD 6422

Relevant Approval	Condition	Condition Description	Status	Relevant Section of the Annual Review/ Issue															
SSD 6422	Schedule 3 Condition 4	<p>The Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.</p> <table border="1"> <caption>Table 2: Noise criteria dB(A)</caption> <thead> <tr> <th>Receiver</th> <th>Day dB(A) (L_{Aeq}(15 min))</th> <th>Evening dB(A) (L_{Aeq}(15 min))</th> </tr> </thead> <tbody> <tr> <td>R3, R4, R13, R15, R16, R17, R18, R20</td> <td>38</td> <td>35</td> </tr> <tr> <td>All other residences</td> <td>37</td> <td>35</td> </tr> </tbody> </table> <p><i>Note: Receiver locations are shown on the figure in Appendix 4.</i></p>	Receiver	Day dB(A) (L _{Aeq} (15 min))	Evening dB(A) (L _{Aeq} (15 min))	R3, R4, R13, R15, R16, R17, R18, R20	38	35	All other residences	37	35	Low Risk Non-Compliant	<p>Section 6.2 Noise</p> <p>Receiver R10 exceeded the approved performance criteria in Q1 with a result of 47 LAeq(15min)</p>						
Receiver	Day dB(A) (L _{Aeq} (15 min))	Evening dB(A) (L _{Aeq} (15 min))																	
R3, R4, R13, R15, R16, R17, R18, R20	38	35																	
All other residences	37	35																	
SSD 6422	Schedule 3 Condition 11	<p>The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 4 at any residence on privately-owned land.</p> <table border="1"> <caption>Table 4: Air quality criteria</caption> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>Annual</td> <td>a,d 30 µg/m³</td> </tr> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>24 hour</td> <td>b 50 µg/m³</td> </tr> <tr> <td>Total suspended particulates (TSP)</td> <td>Annual</td> <td>a,d 90 µg/m³</td> </tr> <tr> <td>^c Deposited dust</td> <td>Annual</td> <td>^b 2 g/m²/month ^{a,d} 4 g/m²/month</td> </tr> </tbody> </table>	Pollutant	Averaging Period	Criterion	Particulate matter < 10 µm (PM ₁₀)	Annual	a,d 30 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	24 hour	b 50 µg/m ³	Total suspended particulates (TSP)	Annual	a,d 90 µg/m ³	^c Deposited dust	Annual	^b 2 g/m ² /month ^{a,d} 4 g/m ² /month	Low Risk Non-Compliant	<p>Section 6.3 Air Quality</p> <p>There were six missed samples due to invalidation. All recorded during the 2022 reporting period.</p>
Pollutant	Averaging Period	Criterion																	
Particulate matter < 10 µm (PM ₁₀)	Annual	a,d 30 µg/m ³																	
Particulate matter < 10 µm (PM ₁₀)	24 hour	b 50 µg/m ³																	
Total suspended particulates (TSP)	Annual	a,d 90 µg/m ³																	
^c Deposited dust	Annual	^b 2 g/m ² /month ^{a,d} 4 g/m ² /month																	

2 INTRODUCTION

Holcim (Australia) Pty Ltd (Holcim) operates Teven Quarry, a hard rock quarry located on Stokers Lane in the Ballina Shire Local Government Area (refer to **Figure 1** and **Figure 2**). The site operates under Development Consent (SSD 6422 as modified) approved by then New South Wales (NSW) Department of Planning and Environment (DPE) on 15 July 2015.

The site also operates in accordance with Environment Protection Licence (EPL) No. 3293 issued by the NSW Environmental Protection Authority (EPA).

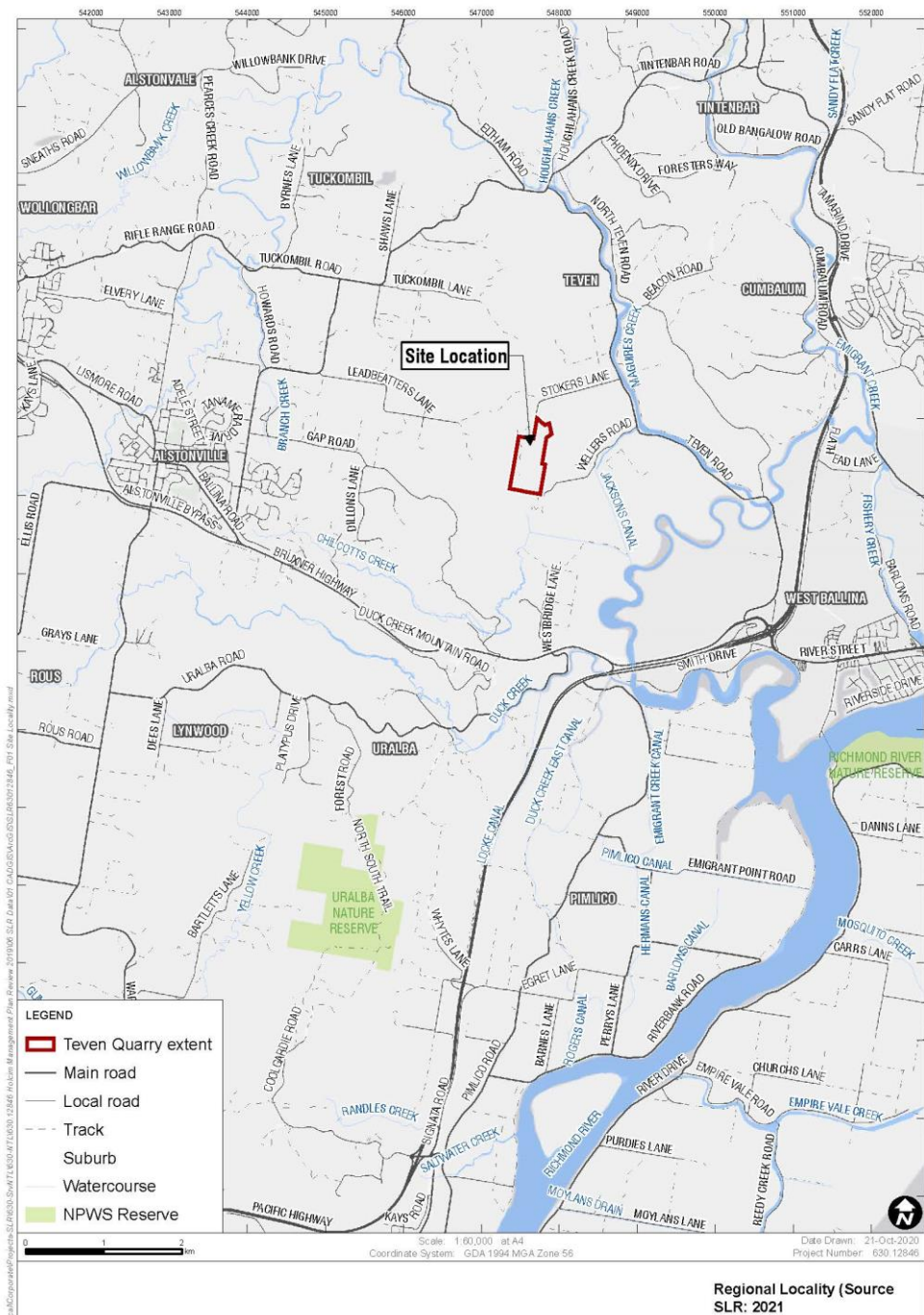


Figure 1: Regional Locality



Figure 2: Aerial view of the Teven Quarry, located on Stokers Lane, Teven

In accordance with Schedule 5, Condition 4 of the modified Development Consent the site is required to undertake an Annual Review of the site in accordance with the conditions provided in **Table 4**.

Table 4: Annual Review Requirements

Condition	Section addressed in Annual Review
By the end of March each year, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must:	
a) describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;	Section 4 and 6
b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the: <ul style="list-style-type: none"> - relevant statutory requirements, limits or performance measures/criteria; - requirements of any plan or program required under this consent; - the monitoring results of previous years; and - the relevant predictions in the EIS. 	Section 6, 7 and 10.3
c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;	Section 1 and 11
d) identify any trends in the monitoring data over the life of the development	Section 6 and 7
e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and	Section 6
f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.	Section 13

This Annual Review has also been prepared in accordance with the *Annual Review Guideline: Post-approval Requirements for State Significance Mining Developments* (October 2015). This report documents the environmental performance of the site from 1 January 2022 to 31 December 2022.

2.1 Contact Details

The key contact details for the site are outlined below:

Quarry Manager

Matt Kelly
Mob: 0429 790 895
Email: matt.kelly@holcim.com

Area Manager Aggregates – NSW North

Chris Hamilton
Work: +61 2 6656 8620
Mob: +61 429 790 213
Email: chris.s.hamilton@holcim.com

Acting Environment Manager – NSW

Rob Townsend
Tel: (02) 9412 6600
Email: Rob.Townsend.ext@holcim.com

3 APPROVALS

The site operates under the approvals listed in Table 5.

Table 5: Approvals for Teven Quarry Operations

Approval	Regulatory Authority
SSD 6422	NSW DPE
EPL No. 3293	NSW EPA

4 OPERATIONS SUMMARY

4.1 Exploration

There was no exploration undertaken within the Annual Review period.

4.2 Land Preparation

There was no clearing undertaken during the Annual Review period.

4.3 Construction Activities

There were no construction activities during the Annual Review period.

4.4 Quarry Operations

Teven Quarry updated two crushers on site during the 2022 reporting period.

Operational activities undertaken at Teven Quarry in 2022 included:

- Stripping of topsoil and overburden within the existing approved extraction limit boundary;
- Drill, blast, load and haul activities; and
- Crushing, screening and stockpiling of product.

A list of the permissible operating hours under Schedule 3 Condition 1 is outlined below in **Table 6**.

Table 6: Operating Hours

Activity	Permissible Hours
Extraction operations Processing operations Overburden management	7 am to 6 pm Monday to Friday; 7 am to 4 pm Saturday; and At no time on Sundays or public holidays.
Blasting	10 am to 3 pm Monday to Friday; and At no time on Sundays or public holidays.
Loading and dispatch Stockpile management Maintenance of plant and equipment	7 am to 10 pm Monday to Friday; 7 am to 4 pm Saturdays; and At no time on Sundays or public holidays.

All activities took place within the approved operating hours in 2022.

Table 7 includes a summary of the operations undertaken during the reporting period against the Development Consent conditions regarding product transported from Teven Quarry.

Table 7: Total Annual Product Distributed (Holcim Teven Quarry)

Material	Approval Limit (Tonnes)	2018 (Tonnes)	2019 (Tonnes)	2020 (Tonnes)	2021 (Tonnes)	2022 (Tonnes)	Proposed 2023
Product Distributed - Total	500,000	372,640	458,679	292,701	299,713	295,018	306,696

4.5 Next Reporting Period

Development activities proposed to be carried out at Teven Quarry in 2023, include:

- Stripping of topsoil and overburden within the existing approved extraction limit boundary;
- Drill, blast, load and haul activities; and
- Continuation of crushing, screening and stockpiling of product.

5 ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

5.1 Actions from 2021 Annual Review – DPE Actions

Holcim submitted the 2021 Annual Review to the Major Projects Portal by 31st March 2022. Holcim did not receive a response from DPE.

5.2 Actions from 2021 Annual Review - Holcim Proposed Actions for 2022

Table 8 provides an update on Holcim Proposed Actions for 2022 provides an update on the proposed actions from Holcim staff.

Table 8: Update on Holcim Proposed Actions for 2022

Improvement Measure	Activities	2022 Actions
PM ₁₀	Continue the improvement of the air quality monitoring program through ensuring the reliability of internal processes and transparency through the presentation of monitoring data in the Holcim environmental monitoring portal. Maintain a HVAS monitoring program which meets Development Consent requirements. Manage dust control measures to reduce short term non-compliances.	Continued management of air quality and associated monitoring program as required
Biodiversity	Weed spraying will continue at site during the next Annual Review period.	Continuation of spot spraying.
Water sampling	Complete water sampling for at least the parameters pH, Total Suspended Solids, and Oil and grease.	Surface water quality monitoring was undertaken in line with the Water Management Plan.
Groundwater Assessment	<p><u>Condition 3, Schedule 19</u></p> <p><i>In the event that groundwater in excess of negligible quantities is intersected during extraction activities, the Applicant shall undertake a hydrogeological investigation, in consultation with NOW, to the satisfaction of the Secretary.</i></p> <p><i>The investigation must report on groundwater sources, levels, yield and quality; identify any risks to groundwater users or groundwater dependent ecosystems and propose recommended management measures. The Applicant must implement reasonable and feasible management measures to the satisfaction of the Secretary.</i></p> <p>Holcim will continue to monitor the quarry void for groundwater seepage to ensure that groundwater quantities remain negligible.</p>	Groundwater seepage was negligible in the quarry void in the report period.

6 ENVIRONMENTAL PERFORMANCE

6.1 Meteorological Monitoring

This report uses 2022 weather data collected from the Bureau of Meteorology's Ballina Airport station, approximately 5km southeast of the site to provide a summary for the period. These meteorological results are presented in **Table 9**.

Table 9: Meteorological Monitoring Results 2022 (Ballina Airport AWS, station 058198)

Month	Total Rainfall (mm)	Minimum Temperature (°C)	Maximum Temperature (°C)
January	288.0	20.7	27.4
February	577.8	19.6	26.9
March	811.8	19.3	26.4
April	99.2	17.2	25.4
May	278.4	16.8	22.6
June	27.8	8.4	20.2
July	154.4	9.7	19.0
August	42.4	9.4	20.8
September	222.6	12.8	22.2
October	247.2	15.7	24.2
November	27.2	15.3	26.0
December	119.6	17.6	25.8
Annual TOTAL	2896.4		

Annual rainfall experienced at Teven Quarry during the 2022 reporting period was 2896.4mm, with 811mm occurring in March alone. This was an increase from the previous 2021 reporting period of 2026mm and 2020 reporting period of 2174mm.

6.2 Noise

6.2.1 EIS Predictions

The 2014 EIS found that the Project was not predicted to exceed the project specific noise levels at any privately owned residences surrounding the Project Area, with the exception of Receiver 9. Receiver 9 has since been purchased by Holcim.

Road traffic noise levels were predicted to increase at some receivers whilst decreasing at others, with the criteria proposed in the EIS predicted to be met.

6.2.2 Approved Criteria

In accordance with Schedule 3, Condition 5(c) of SSD 6422, *'the Applicant shall: carry out noise monitoring (at least every 3 months) to determine whether the development is complying with the relevant conditions of this consent.'*

Approved noise criteria from the Development Consent are outlined in **Table 10**.

Table 10: Noise Criteria for Teven Quarry (SSD 6422)

Receiver	Day dB(A) (L _{Aeq(15 min)})	Evening dB(A) (L _{Aeq(15 min)})
R3, R4, R13, R15, R16, R17, R18, R20	38	35
All other residences	37	35

Note: Receiver locations are shown on the figure in Appendix 4.

6.2.3 Key Environmental Performance

Quarterly noise monitoring was undertaken 2022 in accordance with the requirements of the Schedule 3, Condition 4. Monitoring was completed by Muller Acoustic Consulting (MAC) on the following dates:

- 2 February 2022;
- 19 May 2022;
- 21 August 2022; and
- 13 December 2022.

Noise results at all locations were generally in the approved performance criteria. Receiver R10 exceeded the approved performance criteria of 37 LAeq(15min) in the first quarter with a result of 47 LAeq(15min). The Quarterly noise monitoring results are shown in **Table 11**.

Copies of the quarterly noise monitoring reports for 2022 are attached as **Appendix 1**.

Table 11: Noise Compliance Assessment for Teven Quarry

Note: Monday to Saturday; Day 7am to 6pm; Evening 6pm to 10pm; Night 10pm to 7am. On Sundays and Public Holidays, Day 8am to 6pm; Evening 6pm to 10pm; Night 10pm to 8am.

Assessment Period	Receiver No.	Monitoring Location	Quarrying Noise Criteria	Q1 2022	Q2 2022	Q3 2022	Q4 2022				
			L _{Aeq} (15min)	Quarry Noise Contribution (L _{Aeq} (15min)))	Compliance	Quarry Noise Contribution (L _{Aeq} (15min))	Compliance	Quarry Noise Contribution (L _{Aeq} (15min)))	Compliance		
Day	R2	N3/NM3	37	<35	✓	<35	✓	<30	✓	<37	✓
	R3/R4	N2/NM2	38	<35	✓	<37	✓	<38	✓	<38	✓
	R7	N1/NM1	37	<35	✓	<30	✓	32	✓	<37	✓
	R10	N4/NM4	37	47	X	37	✓	37	✓	<37	✓
	R15	NM5	37	<35	✓	35	✓	<35	✓	<37	✓
Evening	R2	N3/NM3	35	Not operational	✓	Not operational	✓	Not operational	✓	Not operational	✓
	R3/R4	N2/NM2	35	Not operational	✓	Not operational	✓	Not operational	✓	Not operational	✓
	R7	N1/NM1	35	Not operational	✓	Not operational	✓	Not operational	✓	Not operational	✓
	R10	N4/NM4	35	Not operational	✓	Not operational	✓	Not operational	✓	Not operational	✓
	R15	NM5	35	Not operational	✓	Not operational	✓	Not operational	✓	Not operational	✓

Long-term Trends:

2022 is the sixth year of complete noise monitoring as per the Project Approval. The site has generally been compliant since 2017. An exceedance occurred at receiver N4 in quarter 1 in 2022. In previous years exceedances have occurred at receiver N4. These exceedances had been caused by changes in loading quantities and the plant at the time of being monitored and a significant decrease in size of quarry stockpiles functioning as a noise barrier between the site and receiver N4. A noise investigation assessment was carried out after the exceedance.

Comparison to EIS Predictions:

At the time of monitoring one exceedance occurred outside of the predicted limits of the EIS in 2022.

6.2.4 Management Measures

Noise impacts are managed in accordance with the specific management strategies, procedures, controls and monitoring programs within the Teven Quarry Noise Management Plan (2021). The site will ensure that stockpiles are kept at a level to reduce noise from operations.

6.2.5 Proposed Improvements

There are no proposed improvements relating to noise.

6.3 Air Quality

6.3.1 EIS Predictions

The 2014 EIS predicted that the change in air quality impacts due to the Project when compared to existing approved operations was predicted to be negligible, with the results for all scenarios predicted to be very similar.

The Project is predicted to comply with the relevant air quality criteria at all nearby sensitive receiver locations under worst case operating conditions, with the exception of 24-hour average PM₁₀ concentrations at two nearby sensitive receiver locations - Receiver 9 and Receiver 6. This exceedance is due to the combined effect of Teven Quarry activities and maximum background levels. Receiver 9 has since been purchased by Holcim. If, on any day, the background levels were average rather than at maximum levels, then no property would be predicted to experience 24-hour average PM₁₀ concentrations above the criteria.

6.3.2 Approved Criteria

Air Quality monitoring conducted at Teven Quarry is compared with the monitoring criteria stipulated in Schedule 3, Condition 11 of SSD 6422 and reproduced in **Table 12**.

Table 12: Air Quality Monitoring Criteria (SSD 6422)

<i>Table 4: Air quality criteria</i>			
Pollutant	Averaging Period	Criterion	
Particulate matter < 10 µm (PM ₁₀)	Annual	a,d 30 µg/m ³	
Particulate matter < 10 µm (PM ₁₀)	24 hour	b 50 µg/m ³	
Total suspended particulates (TSP)	Annual	a,d 90 µg/m ³	
^c Deposited dust	Annual	b 2 g/m ² /month	a,d 4 g/m ² /month

Notes for Table 4:

- Cumulative impact (ie increase in concentrations due to the development plus background concentrations due to all other sources).
- Incremental impact (ie incremental increase in concentrations due to the development on its own, with zero allowable exceedances of the criteria over the life of the development).
- Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.
- Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed to by the Secretary.
- "Reasonable and feasible avoidance and mitigation measures" includes, but is not limited to, the operational requirements in conditions 12 and 13 to develop and implement a air quality management system that ensures operational responses to the risks of exceedance of the criteria.

6.3.3 Key Environmental Performance

6.3.3.1 PM₁₀ Monitoring

Condition 11, Schedule 3 (PM₁₀)

In 2022 dust monitoring was undertaken using a High Volume Air Sampler (HVAS) to monitor particulate matter (PM₁₀). PM₁₀ monitoring results for 2022 are provided in **Table 13**. A conversion factor outlined in the Air Quality Management Plan was used to calculate from the actual monitoring result to derived TSP result.

Table 13: 2022 Dust Monitoring (PM₁₀) at Teven Quarry

Sample Date	TSP (µg/m ³)	HVAS PM ₁₀ (µg/m ³)	24-hour PM ₁₀ Criterion
	Calculated Result	Actual Result	
3 January 2022	17.25	6.9	Compliant
9 January 2022	85.25	34.1	Compliant

Sample Date	TSP ($\mu\text{g}/\text{m}^3$)	HVAS PM ₁₀ ($\mu\text{g}/\text{m}^3$)	24-hour PM ₁₀ Criterion
	Calculated Result	Actual Result	
15 January 2022	11	4.4	Compliant
21 January 2022	9	3.6	Compliant
27 January 2022	61.25	24.5	Compliant
2 February 2022	40.75	16.3	Compliant
8 February 2022	33.25	13.3	Compliant
20 February 2022	NS	NS	Invalidated sample – filter remained in unit for three sampling dates
26 February 2022	NS	NS	Invalidated sample – filter remained in unit for three sampling dates
14 February 2022	48	19.2	Compliant
4 March 2022	NS	NS	Invalidated sample – filter remained in unit for three sampling dates
10 March 2022	14.25	5.7	Compliant
16 March 2022	15.25	6.1	Compliant
22 March 2022	11.75	4.7	Compliant
28 March 2022	29.25	11.7	Compliant
3 April 2022	70	28	Compliant
9 April 2022	46.5	18.6	Compliant
15 April 2022	46.25	18.5	Compliant
21 April 2022	19.25	7.7	Compliant
27 April 2022	23	9.2	Compliant
3 May 2022	13	5.2	Compliant
9 May 2022	26.75	10.7	Compliant
15 May 2022	10.5	4.2	Compliant
21 May 2022	24.25	9.7	Compliant
27 May 2022	15.5	6.2	Compliant
2 June 2022	21.75	8.7	Compliant
8 June 2022	18.25	7.3	Compliant
14 June 2022	11	4.4	Compliant
20 June 2022	30	12	Compliant
26 June 2022	19.75	7.9	Compliant
2 July 2022	9.25	3.7	Compliant
8 July 2022	13.25	5.3	Compliant
14 July 2022	24.25	9.7	Compliant
20 July 2022	60.5	24.2	Compliant
26 July 2022	15.25	6.1	Compliant
1 August 2022	19.75	7.9	Compliant
7 August 2022	20	8	Compliant
13 August 2022	NS	NS	Invalidated sample - Sample lost
19 August 2022	16.25	6.5	Compliant
25 August 2022	39.5	15.8	Compliant
31 August 2022	74.25	29.7	Compliant
6 September 2022	29.25	11.7	Compliant
12 September 2022	33.75	13.5	Compliant
18 September 2022	14.5	5.8	Compliant

Sample Date	TSP ($\mu\text{g}/\text{m}^3$)	HVAS PM ₁₀ ($\mu\text{g}/\text{m}^3$)	24-hour PM ₁₀ Criterion
	Calculated Result	Actual Result	
24 September 2022	35.25	14.1	Compliant
30 September 2022	32.5	13	Compliant
6 October 2022	NS	NS	Invalidated sample – filter remained in unit for two sampling dates
12 October 2022	NS	NS	Invalidated sample – filter remained in unit for two sampling dates
18 October 2022	39.25	15.7	Compliant
24 October 2022	35	14	Compliant
30 October 2022	17.25	6.9	Compliant
5 November 2022	42.75	17.1	Compliant
11 November 2022	13.25	5.3	Compliant
17 November 2022	45.75	18.3	Compliant
23 November 2022	54	21.6	Compliant
29 November 2022	87.75	35.1	Compliant
5 December 2022	23	9.2	Compliant
11 December 2022	52.75	21.1	Compliant
Minimum	10.3	3.6	
Maximum	87.75	35.1	
Average	34.8	12.5	
Result	Compliant	Compliant	

Note: Contaminated results are marked with an asterisk (*).

There were 59 sampling events for PM₁₀ and TSP in 2022. There were three invalidated samples in February and March as the filter remained in the unit for three sampling dates and two invalidated samples in October as the filter remained in the unit for two sampling dates. A sample was lost in August Due to six missed samples over the year this is considered non-compliant under Schedule 3, Condition 11 of SSD 6422.

The PM₁₀ 2022 average was 12.5 $\mu\text{g}/\text{m}^3$ This is significantly below the annual criteria of 30 $\mu\text{g}/\text{m}^3$ and compliant with the Development Consent. This 2022 average is lower than the 2021 average of 13.9 $\mu\text{g}/\text{m}^3$. The PM₁₀ annual average for 2022 was significantly less than for 2019 and 2018, which were 32.4 $\mu\text{g}/\text{m}^3$ and 28.6 $\mu\text{g}/\text{m}^3$, respectively.

The annual average for derived TSP was 34.8 $\mu\text{g}/\text{m}^3$ which is significantly below the annual criteria of 90 $\mu\text{g}/\text{m}^3$ and meets conditions of the Development Consent.

While the annual averages for both PM₁₀ and TSP meet the conditions of the Development Consent, Teven Quarry has recorded a low risk non-compliance in sampling frequency as a result of the six invalidated samples under Schedule 3 Condition 11 of SSD 6422. Given the compliant results obtained for the vast majority of the reporting period which were significantly below criteria, this is considered low risk. During the 2023 monitoring period, Teven will continue to monitor in accordance with Schedule 3 Condition 11.

6.3.3.2 Depositional Dust Monitoring

Condition 11, Schedule 3 (Dust Deposition)

Depositional dust continued to be monitored at three depositional dust gauges at Teven Quarry throughout 2022. Results for this monitoring are provided in **Table 14**.

Table 14: 2022 Dust Monitoring (Depositional Dust)

Sample Period	Insoluble Solids DDG1 (g/m ² /month)	Insoluble Solids DDG2 (g/m ² /month)	Insoluble Solids DDG3 (g/m ² /month)
January	0.1	0.9	1.1
February	0.6	0.8	1.0
March	0.4	0.7	0.8
April	1.0	1.4	1.6
May	0.6	1.0	1.1
June	0.1	0.2	0.7
July	0.4	1.1	0.3
August	8.2*	1.1*	0.3
September	0.1	0.6	0.1
October	0.2	0.3	0.2
November	0.2	NS	1.2
December	0.4	2.0*	1.0
Annual Average	1.03	0.92	0.78
Result	Within Criteria	Within Criteria	Within Criteria

Note: Contaminated results are marked with an asterisk (*).

The complete monitoring program was undertaken at Teven in this report period. DDG1, DDG2, and DDG 3 were within the annual average criteria of 4 g/m²/month.

The result from DDG 2 in November 2022 was recorded as 'Not Sampled' due to an invalid returned value caused by a frog trapped in the sampling equipment – this invalid value was removed from the annual average for DDG 2.

A comparison of depositional dust results from 2018 to 2022 is provided in **Table 15**. Contamination of the depositional dust gauges by insects, leaves, bird faeces, and other organic material and its impact on depositional dust monitoring has been noted from 2017 to 2022.

Table 15: Comparison of Depositional Dust Data

Dust Depositional Gauge	Monitoring Summary for Annual Review Period	2018 (g/m ² /month)	2019 (g/m ² /month)	2020 (g/m ² /month)	2021 (g/m ² /month)	2022 (g/m ² /month)
DDG1	Insoluble Solids Reporting Period Average	2.7	1.3	1.97	1.04	1.03
	Max. Insoluble Solids	5.0	3.9	5.2	4.8	1.0
	Min. Insoluble Solids	0.6	0.1	0.5	0.1	0.1
DDG2	Insoluble Solids Reporting Period Average	1.7	2.8	2.85	1.02	0.92
	Max. Insoluble Solids	2.1	5.5	2.9	3.7	1.4
	Min. Insoluble Solids	1.2	0.6	2.8	0.2	0.2

Dust Depositional Gauge	Monitoring Summary for Annual Review Period	2018 (g/m ² /month)	2019 (g/m ² /month)	2020 (g/m ² /month)	2021 (g/m ² /month)	2022 (g/m ² /month)
DDG3	Insoluble Solids Reporting Period Average	0.7	1.5	1.41	0.88	0.78
	Max. Insoluble Solids	1.6	3.8	0.1	2.5	1.6
	Min. Insoluble Solids	0.3	0.1	3.6	0.2	0.1

6.3.3.3 Long-term Trends:

Trends analysis for depositional dust results in 2022 has found that depositional dust levels generally decreased in 2022 compared to previous years.

The 2022 annual average for PM₁₀ remains below long-term criteria which is consistent with 2017, 2018, 2020 and 2021 results with the exception of the 2019 average which was above criteria. Results from the reporting period also found no numbers of exceedance in PM₁₀ 24-hour criteria.

6.3.3.4 Comparison to EIS Predictions:

The Project is predicted to comply with the relevant air quality criteria at all nearby sensitive receiver locations under worst case operating conditions, with the exception of 24-hour average PM₁₀ concentrations at two nearby sensitive receiver locations - Receiver 9 and Receiver 6. Predictions suggest that 24-hour average PM₁₀ levels may exceed the criteria of 50µg/m³ up to one day per year at these two receivers by between 1 and 7µg/m³. PM₁₀ samples were below the short-term criteria prediction with no exceedances for all of 2022.

Key historical contributions to PM₁₀ exceedances are bushfires and nearby agricultural activity such as cutting of cane and slashing. Previous laboratory analysis indicates outside dust sources are the major contributor to dust levels at DDG1 and DDG2.

6.3.4 Management Measures

Teven Quarry is committed to implementing reasonable and feasible avoidance and mitigation measures and to continue to investigate ways to minimise any air quality impacts from the quarry. Air quality management measures implemented at Teven Quarry are detailed in the *Air Quality Management Plan* (AQMG) dated May 5 and approved by DPE on May 25 2022.

6.3.5 Proposed Improvements

Holcim is committed to improving air quality management at Teven Quarry. There are no proposed improvement measures for 2022. Teven will continue to implement the site's Air Quality Management Plan (AQMP) .

6.4 Blasting

6.4.1 EIS Predictions

The 2014 EIS found that the Project could comply with relevant vibration and air blast criteria at all sensitive residential receivers through ongoing management of blast design and size.

6.4.2 Approved Criteria

Blasting was undertaken at Teven Quarry throughout 2022 in accordance with the conditions of the Development Consent and EPL No. 3293. The criteria for blasting at the site as per the EPL are detailed in **Table 16**.

Table 16: Blast Monitoring Criteria from EPL 3293 for Teven Quarry

Blasting	
L5.1	Blasting operations at the premises may only take place between 10:00 to 15:00 Monday to Friday. (Where a blast failure has occurred or there are compelling safety reasons, the EPA may permit a blast to occur outside the above hours. The licensee must provide prior written notice of any such blast to the EPA by contacting 131 555.)
L5.2	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 any point within 1 metre of any affected residential property or other sensitive noise location.
L5.3	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: a) 5 mm/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 any point within 1 metre of any affected residential property or other sensitive noise location.
L5.4	All sensitive receivers are to be given at least 24 hours notice when blasting is to be undertaken.
L5.5	To determine compliance with condition(s) L4.2 and L4.3: a) Airblast overpressure level and ground vibration peak particle velocity must be measured at the 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 airblast overpressure level and/or ground vibration peak particle velocity for all blasts carried out in or on the premises; and b) Instrumentation used to measure the airblast overpressure level and ground vibration peak particle velocity must meet the requirements of the current Australian Standard.
L5.6	The licensee must report any exceedance of the licence blasting limits to the EPA within 24 hours of the exceedance becoming known to the licensee or to one of the licensee's employees or agents.

In accordance with Schedule 3, Condition 1 of the Development Consent, blasting is to be undertaken between 10am and 3pm Monday to Friday, with no blasting to occur on Sundays or public holidays.

Table 17: 2022 Blast Monitoring Results

Location	Description	Upper Limit Criteria	Date									
			27/01/2022	15/03/2022	14/04/2022	08/06/2022	15/07/2022	09/08/2022	12/09/2022	12/10/2022	14/11/2022	22/12/2022
Residence on Wellers Rd	Over Pressure - dB (Lin Peak)	120	104.3	107.5	114.7	109.4	113.6	110.9	107.3	106	108.3	111.9
	Ground Vibration - (mm/s)	10	3.07	2.1	0.66	2.84	2.56	3.6	2.06	2.82	2.37	0.7
Site Entrance, Stokers Lane	Over Pressure - dB (Lin Peak)	120	111.1	109.8	104.2	110.8	75.8	112.6	110.9	110.8	109.9	105.3
	Ground Vibration - (mm/s)	10	0.51	1.61	2.25	0.57	0.53	0.55	0.74	0.67	0.45	0.92

Long-term Trends:

From 2015 – 2022 the blasting levels have been within the Development Consent and EPL criteria. Long term blast results are provided in **Table 18**. These show long-term consistency for overpressure results. There has been a notable increase in the vibration results for 2021 and 2022 compared to previous years.

Table 18: Teven Quarry Long-term Blasting Trends

Year	Number of Blasts	No. of blasts below vibration or overpressure trigger level	Max. Overpressure (dBL)	Average Overpressure (dBL)	Max Vibration (mm/s)	Average Vibration (mm/s)
2015	14	10	113.1	109.3	0.66	0.44
2016	12	7	112.1	109.6	0.45	0.37
2017	15	8	114.0	106.9	0.5	0.33
2018	12	11	114.1	112.4	0.05	0.05
2019	11	11	NT	NT	NT	NT
2020	12	7	109.3	106.2	1.9	0.9
2021	10	0	117.50	108.28	4.99	2.07
2022	10	10	114.7	107.76	3.07	1.58

NT –Not Triggered

Comparison to EIS Predictions:

The 2022 results for blasting were within the limits of the EIS predictions, with the EIS predicting blasts to be below criteria.

6.4.3 Management Measures

Blast emission related impacts (vibration and air blast) are managed in accordance with the specific measures within the Teven Quarry Blast Management Plan (2021).

6.4.4 Proposed Improvements

Given the long term and ongoing performance within criteria, no further improvements to blast management are proposed for 2023.

6.5 Traffic Management

6.5.1 EIS Predictions

The 2014 EIS assessment of traffic impacts associated with the Project found that impacts on the road network and principle intersections would be satisfactory and there was no requirement to upgrade the roads or intersections surrounding the site once minor improvements to Route 1 were undertaken.

A review of road safety conducted as part of the EIS recommended prioritising the use of Route 1 for product transport and recommended a number of minor improvements to Route 1 to improve the safety for night time haulage, including centre line marking, reflectors and maintenance of existing guard rails at locations along Route 1. Holcim has implemented these recommendations.

6.5.2 Approved Criteria

According to Development Consent SSD 6422 the site is required to monitor transport in accordance with the following requirements:

Schedule 2, Condition 9: *The Applicant will not dispatch more than 73 laden trucks from the site per day, averaged over the total number of dispatch days in any calendar month.*

Schedule 3, Condition 23: *The Applicant shall keep accurate records of all laden truck movements to and from the site (hourly, daily, weekly, monthly and annually) and publish a summary of records on its website every 6 months.*

6.5.3 Key Environmental Performance

Teven Quarry undertook monitoring of truck movements on a daily basis throughout 2022 to ensure compliance with movements and volume requirements discussed above. A copy of these monitoring results has been included in **Table 19**.

Table 19: Average Truck Movements for 2022

Month	Total Truck Movements	Active days	Average Truck Movement per active day
January	935	18	52
February	1245	24	52
March	763	27	32
April	1361	22	62
May	1628	26	63
June	1803	25	72
July	1285	26	49
August	1733	27	64
September	1257	25	50
October	1116	25	45
November	1810	26	70

December	958	20	60
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Long term Trends:

Review of truck transport data for Teven Quarry since 2015 indicates average daily truck movements have not exceeded the maximum of 73 laden trucks from the site per day, averaged over the total number of dispatch days in any calendar month.

The annual average for laden truck movements per active day in 2022 was 55, which has been consistent to previous reporting periods. Between 2018-2021 reporting periods the annual average was between 53-56 laden trucks.

This is consistent with the EIS predictions.

6.5.4 Management Measures

Traffic and transport impacts are managed in accordance with the specific management strategies, procedures, controls and monitoring programs within the Teven Quarry Transport Management Plan (April 2021). The Teven Quarry Transport Management Plan (April 2021) was approved by DPE on 20/05/2021.

6.5.5 Proposed Improvements

Truck movements will continue to be monitored and recorded in the oncoming reporting period to ensure that they remain within the approved criteria.

6.6 Biodiversity

6.6.1 EIS Predictions

The 2014 EIS found the Project is unlikely to result in a significant change to the existing noise, dust and water runoff impacts of Teven Quarry, therefore it is considered that any indirect impacts to ecology that occur will be minor and will be consistent with the existing approved impacts. The results of the impact assessments under the Environmental Planning and Assessment Act (EP&A Act) and the Environment Protection and Biodiversity Conservation Act (EPBC Act) conclude that the indirect impacts of the Project are unlikely to have a significant impact on any threatened flora or fauna species, migratory fauna species, endangered population or threatened ecological communities listed under the Threatened Species Conservation Act (TSC Act) and/or the EPBC Act.

6.6.2 Approved Criteria

There are no specific criteria associated with biodiversity management for the site.

6.6.3 Key Environmental Performance

Teven Quarry conducted targeted primary and secondary weed control and hand spraying of areas where cut and paints works have been undertaken in 2022. No additional clearing occurred in the report period. This has had a limited impact on biodiversity.

No feral animal management occurred in the report period.

6.6.4 Management Measures

Teven Quarry implemented biodiversity management measures from its updated Biodiversity and Rehabilitation Management Plan (2021). The main procedures include:

- Weed management;
- Habitat reinstatement;
- Pre-clearance permit process; and
- Bushfire management.

6.6.5 Proposed Improvements

Weed spraying will continue at site during the next Annual Review period.

There are no additional proposed improvements for the next reporting period.

6.7 Heritage (Aboriginal Archaeology and Historic Heritage)

6.7.1 EIS Predictions

6.7.1.1 Aboriginal Archaeology

No known Aboriginal cultural heritage sites occur within or in close proximity to the Teven Quarry Project Area. Given the terrain and history of extensive clearing, grazing and quarrying, the area is considered to have low archaeological potential.

No known items or places of Aboriginal heritage significance are located in or within 50 metres of the Project Area. As such, the potential for impacts on items of Aboriginal cultural heritage is limited to indirect impacts such as from blasting or runoff.

6.7.1.2 Historic Heritage

No known items of historic heritage significance occur within the Teven Quarry Project Area.

No historic heritage sites were found to be located within or in close proximity to the Project Area. The closest heritage item was located approximately three kilometres to the south east in Alstonville, a sufficient distance to not experience or be impacted by indirect impacts associated with the Project.

6.7.2 Approved Criteria

There are no specific criteria associated with heritage relating to the quarry.

6.7.3 Key Environmental Performance

There were no issues relating to Aboriginal and historic heritage during the reporting period.

6.7.4 Management Measures

If during the course of operations, Holcim becomes aware of any previously unknown Aboriginal archaeological material, all works likely to affect the material or site will cease immediately and Office of Environment and Heritage (OEH), relevant Aboriginal stakeholders and a suitably qualified archaeologist will be consulted to determine an appropriate course of action prior to the commencement of work at the site.

6.7.5 Proposed Improvements

As there have been no heritage items located to date, no improvements to management measures are proposed.

7 WATER MANAGEMENT

7.1 EIS Predictions

7.1.1 Surface Water

The 2014 EIS stated the Project will not result in any changes to the quarry water management system or associated water management measures. The only potential changes that could result in surface water impacts as a result of the Project are associated with the change in water demands e.g. requirement to use more water for dust suppression or processing.

7.1.2 Groundwater

The results of the hydrogeological assessment conducted during preparation of the 2014 EIS indicate that the local and regional groundwater table is located below the current and proposed elevation of the Teven Quarry pit floor. The quarry has been extracted to its maximum depth of 4m AHD without any evidence of groundwater inflows. For this reason, the assessment concludes that the Project will have a negligible impact on groundwater levels, groundwater quality, groundwater receptors, groundwater dependent ecosystems and groundwater users in the local area.

7.2 Approved Criteria

Holcim are required to monitor water quality from discharge events at the Teven Quarry licenced discharge points, in accordance with the requirements of EPL 3293 (provided in **Table 20** and **Table 21**).

Table 20: Water Monitoring Criteria (Teven Quarry EPL 3293) – LDP001

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

Table 21: Discharge Sampling Measurement Requirements (Teven Quarry EPL 3293)

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Oil and Grease	milligrams per litre	Special Frequency 1	Visual Inspection
pH	pH	Special Frequency 1	No method specified
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample

In addition to these surface water requirements, the site has been requested by the NSW DPE to undertake an assessment of groundwater (should the requirement be triggered) based on the condition below:

Schedule 3 Condition 19

In the event that groundwater in excess of negligible quantities is intersected during extraction activities, the Applicant shall undertake a hydrogeological investigation, in consultation with NOW, to the satisfaction of the Secretary.

The investigation must report on groundwater sources, levels, yield and quality; identify any risks to groundwater users or groundwater dependent ecosystems and propose recommended management measures. The Applicant must implement reasonable and feasible management measures to the satisfaction of the Secretary.

Teven Quarry is currently operating above the groundwater table. No groundwater seepage into the quarry void has been recorded. The quarry will continue to visually monitor the void for groundwater seepage and a detailed assessment will be undertaken in accordance with Schedule 19 Condition 3 of the Development Consent should groundwater in excess of negligible quantities be intercepted. During the reporting period this was not required.

7.3 Water Usage and Storage

Clean upstream catchment runoff is diverted away from the quarry and conveyed to the cane field drains which flow to Maguire's Creek and Emigrant Creek. Runoff from disturbed areas within the quarry operations are managed within the water management system, with this outlined in the Water Management Plan.

The Teven Quarry water management system has two dams/storages, the Main Dam and the Pit Dam. Runoff within the quarry pit is managed in the primary siltation storage (Pit Dam), from which surplus water is pumped to the main silt retention storage (Main Dam) at the northern end of the quarry. The quarry water management system is designed to maximise sedimentation of pit runoff on site, prior to reuse on site or discharge via the licensed discharge point.

7.4 Surface Water Results

Table 22 summarises the water quality results during discharge events at LDP001. A copy of the full data is included in **Appendix 2**.

Table 22: Summary of Water Quality Data at Teven Quarry – 2022

Location/ Frequency	Lower Limit	Upper Limit	Unit	Description	2022 Average	2022 Minimum	2022 Maximum	2021 Average
LDP001 Wet Weather Discharge - Special Frequency 1	6.5	8.5	pH	pH	7.5	6.6	8.4	7.6
	N/A	50	mg/L	Suspended Solids	3.4	<1	9	1.4
	N/A	10	mg/L	Total Oil & Grease	0.0	0.0	0.0	0

There were no exceedances in p H and suspended solids criteria. Monitoring data at LDP001 in 2022 met the EPL criteria. This is consistent with EIS predictions.

No other discharges were recorded on site during the 2022 reporting period.

7.5 Groundwater Results

Groundwater monitoring was not undertaken during the 2022 reporting period. As per Schedule 3 Condition 19 of the Development Consent, in the event that groundwater in excess of negligible quantities is intersected during extraction activities, Holcim will undertake a hydrogeological investigation, in consultation with Department of Industry Water, to the satisfaction of the Secretary.

There are no groundwater trends or comparison to EIS predictions.

7.6 Water Take

There has been no groundwater take during the Annual Review period.

7.7 Water Management – Pollution Reduction Program

A Pollution Reduction Program (PRP) was prepared by EMM Consulting, dated 31 January 2019, in order to improve sediment basin management and stormwater management at Teven Quarry.

7.7.1 Basis for PRP

On 7 June 2018, the EPA undertook an inspection of Teven Quarry and observed turbid water in the drainage line between the Main Dam and the current licensed discharge point (LDP 1). The EPA noted concern that water was being discharged from the Site when less than the five-day rainfall event has occurred and that, based on the presence of turbid water, there may be disturbed areas of the Site not draining to a sediment basin.

The EPA also noted concern that:

- Site personnel present at the time of inspection were not aware of the requirement to monitor discharges in accordance with EPL conditions; and
- The Teven Quarry *Water Management Plan* did not adequately reflect EPL conditions in relation to the correct monitoring location of the LDP, and that sampling was being undertaken in the cane drain adjacent to and downstream of the Site which does not accurately reflect the quality of water leaving the Site.

Subsequently the EPA varied EPL 3293 through addition of a PRP as Clause U1, which is reproduced below:

U1 Report – Review the current sediment basin management and stormwater management.

U1.1 The licensee is to review the current sediment basin management and stormwater management of the premise to ensure that:

- 1. All disturbed areas on the quarry including run-off from access roads flows to a settlement basin.*
- 2. The quarry has capacity to capture the five-day rain event.*
- 3. Monitoring occurs for all discharge less than the five-day rain event of 82.5mm.*

A report is to be submitted to the EPA by the 3 September 2018 detailing the review the current sediment basin management and stormwater management.

7.7.2 Improvements Completed

The following recommendations outlined in the PRP were completed in recent years:

- All Management Plans were updated in accordance with collaboration with DPE and EPA by the 2020 report period.
- Review/audit of all existing bunding of various forms/construction around Catchment C5 should be undertaken to confirm that containment measures are continuous and effective at

preventing offsite discharge. If necessary, improvement or enhancement of existing controls should then be undertaken.

- It is noted that bunding is considered to form an effective sediment control for this area, and with no prior evidence or history of uncontrolled discharge from the Site, a formal sediment basin is not considered necessary to manage the risk of discharge in this location.
- Several improvements to water monitoring procedures and record keeping are recommended for capture in an updated version of the WMP (refer Section 7), including:

On 14 April 2021 Holcim received a Notice of Variation of EPL3293 from EPA. This letter acknowledged the EPA's receipt of the EMM 2019 report titled, "Holcim Teven Quarry – Review of Current Sediment Basin Management and Stormwater Management" which was submitted in response to the PRP.

The April 2021 Notice of Variation removed PRP U1.1 from EPL 3293.

In this Annual Review period, Holcim continued its revision of the Water Management Plan to improve water management measures at Teven Quarry. The Water Management Plan was revised and approved in 2022.

7.7.3 Proposed Improvements

Holcim will continue to implement the Water Management Plan.

8 REHABILITATION AND LANDSCAPE MANAGEMENT

8.1 Rehabilitation Performance during the Reporting Period

The site is required to undertake biodiversity and rehabilitation in accordance with the requirements in Table 23.

Table 23: Biodiversity and Rehabilitation Requirements for Teven Quarry (SSD 6422)

27. The Applicant shall rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy in the EIS and the conceptual final landform in Appendix 2, and must comply with the objectives in Table 5.	
<i>Table 5: Biodiversity and Rehabilitation objectives</i>	
Feature	Objective
Site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and designed to minimise the visual impacts of the development when viewed from surrounding land • Restored with native, endemic vegetation
Surface Infrastructure	<ul style="list-style-type: none"> • Decommissioned and removed, unless the Secretary agrees otherwise
Quarry Benches	<ul style="list-style-type: none"> • Landscaped and vegetated using native tree and understorey species
Quarry Pit Floor	<ul style="list-style-type: none"> • Landscaped and revegetated using native tree and understorey species, above the final anticipated void water level
Progressive Rehabilitation	
28. The Applicant shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.	
<i>Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.</i>	

Holcim will continue to implement the Biodiversity and Rehabilitation Management Plan.

8.2 Summary of Current Rehabilitation and Performance

No rehabilitation was completed in 2022 at the site as there was no opportunity for progressive rehabilitation due to ongoing operations..

A summary of the rehabilitation and disturbance status of Teven Quarry is outlined in Table 24.

Table 24: Rehabilitation and Disturbance Status

Quarry Area Type	2018 Annual Review Period (ha)	2019 Annual Review Period (ha)	2020 Annual Review Period (ha)	2021 Annual Review Period (ha)	2022 Annual Review Period (ha)	Next 2023 Annual Review Period (ha)
	Actual					Forecast
A. Total Quarry Footprint ¹	17.1	17.1	17.1	17.1	17.1	17.1

B. Total Active Disturbance ₂	17.1	17.1	17.1	17.1	17.1	17.1
C. Land Being Prepared for Rehabilitation ₃	0	0	0	0	0	0
D. Land Under Active Rehabilitation ₄	0	0	0	0	0	0
E. Completed Rehabilitation ₅	0	0	0	0	0	0

1 Total disturbance and rehabilitation.

2 Total disturbance within the Project Approval boundary

3 Rehabilitation that is being shaped in a phase of decommissioning, landform establishment and growth medium development.

4 Rehabilitation under a phase of ecosystem and land use establishment or ecosystem and land use sustainability

5 This refers to rehabilitation that has been signed off from the DRG.

At the end of 2022 there was approximately 17.1 Ha of active disturbance. This area remains consistent upon previous years given that the open pit is active and does not yet present an opportunity for progressive rehabilitation to occur. There was no active rehabilitation at Teven Quarry during the 2022 reporting period..

8.3 Actions for the Next Reporting Period

The DPE 2015 Annual Review Guidelines require the Annual Review to outline the rehabilitation actions proposed during the next reporting period. These actions are detailed in **Table 25**.

Table 25: Rehabilitation and Closure Actions for the 2023 Reporting Period

Requirement	Site Comment
Describe the steps to be undertaken to progress agreement during next reporting period, where final rehabilitation outcomes have not yet been agreed between stakeholders.	Progressive rehabilitation will be performed once areas become available for rehabilitation. No areas are anticipated to become available during 2023.
Outline proposed rehabilitation trials, research projects and other initiatives to be undertaken during next reporting period.	No proposed rehabilitation trials.
Summary of rehabilitation activities proposed for next report period.	Holcim will assess opportunities to perform progressive rehabilitation.

9 Summary of Environmental Performance

A summary of the performance of environmental management measures and sampling results for 2022 are detailed in Error! Reference source not found..

Table 26: Environmental Performance at Teven Quarry in 2022

Aspect	Approval Criteria / EIS Prediction	Performance during 2022 reporting period	Trend / key management implications	Implemented / proposed management actions
Meteorological	Development Consent.	Within criteria. Continuous meteorological data collected from BOM station.	Meteorological data collected at the site. Inspections done on the site station for maintenance.	None required.
Noise	EIS predictions are all below Development Consent criteria.	Exceedance recorded at receiver R1. Remainder within criteria.	Noise monitoring results consistently met criteria.	None required.
Blasting	EIS predictions are all below Development Consent criteria.	All other results in 2022 were compliant.	2022 averages were mostly consistent with long-term trends.	None-required.
Air Quality	EIS predictions are all below Development Consent criteria.	Due to six missed samples, Teven Quarry has called themselves non - compliant relating to sampling frequency of Schedule 3, Condition 11 of SSD 6422. All other air quality results were compliant.	PM ₁₀ is consistent with long term data. Depositional dust monitoring continued in 2022.	Teven will continue to undertake management measures in line with the Air Quality Management
Traffic Management	EIS predictions are all below Development Consent criteria.	Within criteria.	Consistently meets criteria.	None required.
Biodiversity	No proposed impacts. No Development Consent criteria.	As per criteria. No issues identified.	No long-term negative trends.	None required. Teven will continue to implement the Biodiversity and Rehabilitation Management Plan.
Heritage	No proposed impacts. No Development Consent criteria.	As per criteria. No issues identified.	No issues have been identified in recent years.	None required.
Water Management	EIS predictions are all below Development consent criteria.	No discharges in 2022 triggered surface water monitoring.	Consistently meets criteria.	None required.

Aspect	Approval Criteria / EIS Prediction	Performance during 2022 reporting period	Trend / key management implications	Implemented / proposed management actions
Rehabilitation and Landscape Management	No proposed impacts. No Development Consent criteria.	As per criteria. No issues identified	No long-term negative trends.	None required.

10 WASTE MANAGEMENT

10.1 Waste Streams

Waste streams produced at Teven Quarry are categorised as:

- Waste oil, filters, grease cartridges;
- Scrap metal;
- Tyres;
- Office paper and general rubbish;
- Silt (from aggregate washing); and
- Waste water from amenities and office.

10.2 Waste Management

All waste generated by Teven Quarry is managed by way of Council collection services, via licensed waste contractors or onsite treatment. No on-site disposal of general waste occurs. Teven Quarry is committed to reducing, reusing and recycling wastes prior to disposal.

Key components of waste management are:

- All waste oil is collected and stored in containers within a covered and bunded area and is removed from the site by an appropriately licensed contractor as required;
- All oil filters are separately stored and returned to the manufacturer for reuse by appropriately licensed contractor;
- Scrap metal is deposited into a dedicated skip bin for periodic collection and recycling (approximately every three months) by an appropriately licenced contractor;
- Diesel fuel is stored within a self-bunded, above-ground tank and all refuelling is undertaken on a hardstand area which drains to an oil/water separator (refer waste oil disposal);
- Silt is captured in on-site silt control structures and is periodically removed and placed/stored in the product stockpile area or overburden materials for use;
- All waste tyres are removed by the supplier of replacement tyres;
- All paper/cardboard (1 x 3m³ bin) and general waste (2 x 3m³ bin) originating from the office and amenities buildings, as well as packaging from routine equipment is placed in the appropriate skips for collection by Council or a licensed contractor for disposal/ recycling at an appropriate waste management facility every month; and
- Wastewater from amenities is treated and disposed of via an on-site septic tank with absorption trenches/pump out.

11 COMMUNITY

11.1 Community Engagement Activities

Holcim has maintained community engagement measures during the reporting period by undertaking the following activities:

- Maintenance of a website containing publicly available documents as required by approvals;
- A telephone number, email and postal address (on the website) for community complaints and feedback;
- A copy of the Complaints Register is maintained on the company website; and
- All documents and items displayed on the website are regularly updated by Holcim staff.

11.2 Complaints

A copy of the complaints register, as well as all publicly listed information including contacts for locals in the community is publicly available on the Teven Quarry webpage in accordance with the Development Consent requirements (<https://www.holcim.com.au/about-us/community-link/teven-quarry-teven-ballina-nsw>).

There was one community complaint received on 9 August 2022 in regard to blasting, however following investigation this was closed out as the blast was within criteria, with a result of 112.6 dBL.

There were no complaints in 2017, three complaints in 2018, one complaint in 2019, three complaints in 2020 and three complaints in 2021.

12 INDEPENDENT AUDIT

The site undertook an Independent Environmental Audit (IEA) in August 2022 in accordance with the requirements of Schedule 5, Condition 9 of the Development Consent. The Independent Environmental Audit (IEA) was closed out in March 2023 and the next IEA is due in August 2025. The IEA Action Plan is presented in **Appendix 3**. Teven continues to work the actions outlined in this plan.

13 INCIDENTS AND NON-COMPLIANCES

Table 27: Summary of Incidents and Non-Compliances

Date	Incident/Non-Compliance	Action
2 February 2022	<p>Schedule 3 Condition 5c – SSD 6422 – Noise Monitoring</p> <p>Noise receiver R10 exceeded the approved performance criteria of 37 LAeq(15min) with a result of 47 LAeq(15min)</p>	Holcim will continue to monitor noise and investigate any exceedances.
20 February 2022 26 February 2022 4 March 2022	<p>Schedule 3 Condition 11 – SSD 6422 Air Quality</p> <p>Invalidated HVAS sample due to filter remaining in unit for three sample dates.</p>	<p>Holcim will continue to monitor Air quality in accordance with Schedule 3 Condition 11.</p> <p>Continue the improvement of the air quality monitoring program through ensuring the reliability of internal processes.</p>
13 August 2022	<p>Schedule 3 Condition 11 – SSD 6422 Air Quality</p> <p>Lost HVAS sample</p>	<p>Holcim will continue to monitor Air quality in accordance with Schedule 3 Condition 11.</p> <p>Continue the improvement of the air quality monitoring program through ensuring the reliability of internal processes.</p>
6 October 2022 12 October 2021	<p>Schedule 3 Condition 11 – SSD 6422 Air Quality</p> <p>Invalidated HVAS sample due to filter remaining in unit for two sampling dates</p>	<p>Holcim will continue to monitor Air quality in accordance with Schedule 3 Condition 11.</p> <p>Continue the improvement of the air quality monitoring program through ensuring the reliability of internal processes.</p>

14 ACTIVITIES TO BE COMPLETED IN THE NEXT REPORTING PERIOD

Holcim staff will undertake the following works and improvement measures and projects at Teven Quarry in 2023 to ensure compliance with the Development Consent and EPL 3293, and to ensure that effective environmental management controls are in place and operating in accordance with the requirements of the Development Consent. **Table 28** outlines proposed actions for 2023.

Table 28: Improvement Actions for 2023

Improvement Measure	Activities
PM ₁₀	Maintain a HVAS monitoring program which meets Development Consent requirements.
Biodiversity	Weed spraying will continue at site during the next Annual Review period.
Water sampling	Complete water sampling for the parameters pH, Total Suspended Solids, and Oil and grease.
Groundwater Assessment	<p><u>Condition 3, Schedule 19</u></p> <p><i>In the event that groundwater in excess of negligible quantities is intersected during extraction activities, the Applicant shall undertake a hydrogeological investigation, in consultation with NOW, to the satisfaction of the Secretary.</i></p> <p><i>The investigation must report on groundwater sources, levels, yield and quality; identify any risks to groundwater users or groundwater dependent ecosystems and propose recommended management measures. The Applicant must implement reasonable and feasible management measures to the satisfaction of the Secretary.</i></p> <p>Holcim will continue to monitor the quarry void for groundwater seepage to ensure that groundwater quantities remain negligible.</p>

APPENDIX 1:QUARTERLY NOISE RESULTS

Noise Monitoring Results

Location	Lower Limit	Upper Limit	Unit	Description	Quarter	2022 Q1	2022 Q2	2022 Q3
					Sample Date	1/02/2022 & 2/02/2022	18/05/2022 & 19/05/2022	30/08/2022 and 31/08/2022
N1 (R7)	0	37	dB	LAeq (15 min) Day	Result	53	55	47
					Estimated quarry contribution	<35	<30	32
					Pass / Fail	Pass	Pass	Pass
	0	37	dB	LAeq (15 min) Day	Result	54	48	44
					Estimated quarry contribution	<35	<29	<30
					Pass / Fail	Pass	Pass	Pass
	0	35	dB	LAeq (15 min) Evening	Result	57	41	47
					Estimated quarry contribution	0	0	0
					Pass / Fail	Pass	Pass	Pass
	0	35	dB	LAeq (15 min) Evening	Result	59	41	45
					Estimated quarry contribution	0	0	0
					Pass / Fail	Pass	Pass	Pass
N2 (R3/R4)	0	38	dB	LAeq (15 min) Day	Result	67	69	63
					Estimated quarry contribution	<35	<32	<35
					Pass / Fail	Pass	Pass	Pass
	0	38	dB	LAeq (15 min) Day	Result	67	64	64
					Estimated quarry contribution	<35	<37	<38
					Pass / Fail	Pass	Pass	Pass
	0	35	dB	LAeq (15 min) Evening	Result	62	56	58
					Estimated quarry contribution	0	0	0
					Pass / Fail	Pass	Pass	Pass
	0	35	dB	LAeq (15 min) Evening	Result	54	59	58
					Estimated quarry contribution	0	0	0
					Pass / Fail	Pass	Pass	Pass
N3 (R2)	0	37	dB	LAeq (15 min) Day	Result	60	45	36
					Estimated quarry contribution	<35	<29	<30
					Pass / Fail	Pass	Pass	Pass
	0	37	dB	LAeq (15 min) Day	Result	60	58	38
					Estimated quarry contribution	<35	<35	<30
					Pass / Fail	Pass	Pass	Pass
	0	35	dB	LAeq (15 min) Evening	Result	58	41	38
					Estimated quarry contribution	0	0	0
					Pass / Fail	Pass	Pass	Pass
	0	35	dB	LAeq (15 min) Evening	Result	61	41	36
					Estimated quarry contribution	0	0	0
					Pass / Fail	Pass	Pass	Pass
	0	37	dB	LAeq (15 min) Day	Result	65	63	62
					Estimated quarry contribution	47	37	37

N4 (R10)	0	37	dB	LAeq (15 min) Day	Pass / Fail	Fail	Pass	Pass
					Result	64	64	57
					Estimated quarry contribution	47	36	37
	0	35	dB	LAeq (15 min) Evening	Pass / Fail	Fail	Pass	Pass
					Result	65	46	40
					Estimated quarry contribution	0	0	0
	0	35	dB	LAeq (15 min) Evening	Pass / Fail	Pass	Pass	Pass
					Result	54	38	41
					Estimated quarry contribution	0	0	0
N5 (R15)	0	38	dB	LAeq (15 min) Day	Pass / Fail	Pass	Pass	Pass
					Result	57	62	56
					Estimated quarry contribution	<35	30	<35
	0	38	dB	LAeq (15 min) Day	Pass / Fail	Pass	Pass	Pass
					Result	58	63	60
					Estimated quarry contribution	<35	35	<35
	0	35	dB	LAeq (15 min) Evening	Pass / Fail	Pass	Pass	Pass
					Result	50	52	37
					Estimated quarry contribution	0	0	0
	0	35	dB	LAeq (15 min) Evening	Pass / Fail	Pass	Pass	Pass
					Result	50	37	49
					Estimated quarry contribution	0	0	0
Laboratory Report Issue Date					09/02/2022	30/05/2022	07/09/2022	

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QUARTERLY NOISE MONITORING ASSESSMENT – QUARTER 4 2022 TEVEN QUARRY, TEVEN, NSW

**QUARTERLY NOISE MONITORING ASSESSMENT –
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CONTENTS

Abbreviations and Definitions	2
1. Overview	3
1.1 Project Driver	3
1.2 Site Location and Sensitive Receptors	3
2. Noise Criteria	5
3. Methodology	6
4. Results and Discussion	7
4.1 Location NM1	7
4.2 Location NM2	8
4.3 Location NM3	9
4.4 Location NM4	10
4.5 Location NM5	11
5. Conclusion	12
6. References	13

Tables

Table 1-1: Monitoring locations locality and sensitive receptors	3
Table 2-1: Monitoring locations and noise criteria	5
Table 4-1: Noise survey results and observations for Location NM1	7
Table 4-2: Noise survey results and observations for Location NM2	8
Table 4-3: Noise survey results and observations for Location NM3	9
Table 4-4: Noise survey results and observations for Location NM4	10
Table 4-5: Noise survey results and observations for Location NM5	11

ABBREVIATIONS AND DEFINITIONS

Ambient Noise	The all-encompassing noise within a given environment. It is the composite of sounds from many sources, both near and far.
Background noise	The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is described using the LA90 descriptor (see below).
dB	Abbreviation for decibel, a measure of sound equivalent to 20 times the logarithm (to base 10) of the ratio of a given sound pressure to a reference pressure, and 10 times the logarithm of a given sound power to a reference power.
dB(A)	A measure of A-weighted sound levels. A Weighting is an adjustment made to the sound level measurement to approximate the response of the human ear.
Extraneous noise	Noise resulting from activities that are not typical of the area. Atypical activities may include construction, and traffic generated by holiday periods. Normal daily traffic is not extraneous noise.
LA1	The noise level, measured in dB(A), which is exceeded for 1 per cent of the measurement period.
LA1(1min)	The noise level, measured in dB(A), which is exceeded for 1 per cent of the time over a 1-minute measurement period, i.e., is exceeded for 0.6 seconds. This measure can approximate to the maximum noise level but may be less if there is more than 1 noise event during this 0.6 second period.
LA10	The noise level, measured in dB(A), which is exceeded for 10 per cent of the time.
LA90	The noise level, measured in dB(A), which is exceeded for 90 per cent of the time, referred to as the background noise level. This is considered to represent the background noise (see above).
LAeq	The level of noise equivalent to the energy average of noise levels occurring over a defined measurement period.
LAeq (period)	The average equivalent noise level, measured in dB(A), during a measurement period (e.g., 15-minute, day, evening, or night).
LAm_{ax}	The A-weighted sound pressure level that represents the maximum noise level measured over the time that a given sound is measured.
NMA	Noise Monitoring Assessment
NMP	Noise Management Plan

Source: Noise Guide for Local Government (NSW EPA, 2013)

1. OVERVIEW

1.1 Project Driver

Ramboll Australia Pty Ltd (Ramboll) has been commissioned by Holcim (Australia) Pty Ltd (Holcim) to complete a Noise Monitoring Assessment (NMA) for Teven Quarry (“the quarry”) at Teven, NSW.

This NMA was done in accordance with the following documents:

- Noise Policy for Industry (NPI) (NSW EPA, 2017).
- Teven Quarry Noise Management Plan (NMP) (Holcim Australia, 2021).
- Environment Protection Licence (EPL) number 3293 (NSW EPA, 2021).
- Development Consent Application Number SSD_6422 (Minister for Planning and Environment, 2015).
- Australian Standard AS 1055:2018 Acoustics—Description and measurement of environmental noise (Standards Australia, 2018).
- IEC 60942 Ed. 3.0 b:2003 Electroacoustics - Sound calibrators (Standards Australia, 2003).

This NMA has been undertaken in accordance with the NMP for the quarterly period October to December 2022, and forms part of the monitoring program to determine compliance with conditions of the Development Consent.

1.2 Site Location and Sensitive Receptors

The quarry is in Teven, NSW, approximately 7 km west of Ballina, NSW.

Sensitive receptors surrounding the quarry are primarily rural and residential properties in coastal bushland with elevated and undulating topography.

Five monitoring locations have been selected as part of the NMA and in accordance with the EPL and Development Consent and are shown in **Table 1-1**.

Table 1-1: Monitoring locations locality and sensitive receptors

Monitoring Locations	Nearest Receiver	Locality and Sensitive Receptors
NM1	R7	West of the quarry situated at a rural residential property at the end of Leadbeatters Lane.
NM2	R3/R4	East of the quarry situated at a rural residential property on Teven Road.
NM3	R2	South of the quarry situated at a rural residential property at the end of Wellers Road.
NM4	R10	North of the quarry situated at a rural residential property adjacent the site off Stokers Lane.
NM5	R14	Northeast of the quarry situated at a rural residential property of Teven Road.

The monitoring locations with respect to the quarry and assessed receivers are presented in the locality plan shown in **Figure 1**.



Legend

- Noise monitoring location

Figure 1 : Noise monitoring locations at Teven Quarry



2. NOISE CRITERIA

Table 2-1 summaries the applicable noise criteria outlined in the NMP and Development Consent for residential receivers (NM1, NM2, NM3, NM4, NM5) surrounding the quarry.

Table 2-1: Monitoring locations and noise criteria

Receivers	Monitoring Locations	Day ¹	Evening ²
		L _{Aeq} (15min)	L _{Aeq} (15min)
		Db(A)	
R3, R4, R13, R15, R16, R17, R18, R20	NM2	38	35
All other receivers	NM1, NM3, NM4, NM5	37	35
¹ 7 am–6 pm Monday to Saturday and 8 am–6 pm Sunday and public holidays ² 6 pm–10 pm Monday to Sunday			

3. METHODOLOGY

The monitoring program was created in accordance with the procedures described in Australian Standard AS 1055:2018 and the Approval Documents referenced in Section 1. The measurements were carried out using a RION Sound Level Meter NL-52 on Tuesday 13 December 2022 and Wednesday 14 December 2022. The acoustic instrumentation used carries current NATA calibration and complies with AS/NZS IEC 61672-1:2013/2002 class 1. Calibration of all instrumentation was checked prior to and following measurements using a Pulsar Acoustic Calibrator 105 which also carried a current NATA calibration and complies with IEC 60942:2003. Drift in calibration did not exceed ± 0.3 dBA.

Attended noise monitoring was conducted for 15-minute periods at each location over two days. As per the NMP, two measurements were conducted during the day, and two measurements were conducted during the evening, at each monitoring location. It is noted that the quarry was not operational during the evening periods, however, monitoring was conducted as per requirements of the EPL.

Where the quarry was not distinctly audible during the attended monitoring, the quarry contribution is estimated to be at least 10 dBA below the ambient noise level, as determined by the LA90, or estimated to be less than criteria value.

4. RESULTS AND DISCUSSION

4.1 Location NM1

Noise monitoring at location NM1 conducted on Tuesday 13 December 2022 and Wednesday 14 December 2022 resulted in inaudible quarry noise during both the day and evening periods. These results meet the established noise criteria and indicate that noise emissions from Teven Quarry did not contribute to noise nuisance. The results and observations taken during the monitoring event at Location NM1 are presented in Table 4-1.

Extraneous noise sources and the dominant background contribution was from birds and insects.

Table 4-1: Noise survey results and observations for Location NM1

Date	Time	Descriptor (dBA)			Meteorology	Apparent Noise Source, Description and LAeq (dBA)	Teven Quarry LAeq(15min) Contribution (dBA)	LAeq(15min) Criteria (dBA)
		LAmx	LAeq	LA90				
14-12-22	7:00 (Day)	82	46	32	WD: n/a WS: 0 Rain: Nil	Background 35 Birds 40 Quarry inaudible	<37	37
14-12-22	7:15 (Day)	60	35	30	WD: n/a WS: 0 Rain: Nil	Background 35 Birds 40 Quarry inaudible	<37	37
13-12-22	20:53 (Evening)	61	42	40	WD: n/a WS: 0 Rain: Nil	Insects 40-48 Distant Road traffic 40 Aircraft 45 Quarry inaudible	<35	35
13-12-22	21:09 (Evening)	58	40	39	WD: n/a WS: 0 Rain: Nil	Insects 40-45 Distant Road traffic 40 Aircraft 58 Quarry inaudible	<35	35

4.2 Location NM2

Noise monitoring at location NM2 conducted on Tuesday 13 December 2022 and Wednesday 14 December 2022 resulted in inaudible quarry noise during both the day and evening periods. These results meet the established noise criteria and indicate that noise emissions from Teven Quarry did not contribute to noise nuisance. The results and observations taken during the monitoring events at Location NM2 are presented in Table 4-2.

Extraneous noise sources measured included birds, aircraft, a barking dog, and cars and trucks passing on Teven Road.

Table 4-2: Noise survey results and observations for Location NM2

Date	Time	Descriptor (dBA)			Meteorology	Apparent Noise Source, Description and LAeq (dBA)	Teven Quarry LAeq(15min) Contribution (dBA)	LAeq(15min) Criteria (dBA)
		LAmx	LAeq	LA90				
14-12-22	8:53 (Day)	88	66	45	WD: n/a WS: 0 Rain: Nil	Birds Car passing 73 Truck passing 80 Quarry inaudible	<38	38
14-12-22	9:09 (Day)	85	66	41	WD: n/a WS: 0 Rain: Nil	Birds Trucks passing 61-79 Dog barking Quarry inaudible	<38	38
13-12-22	18:57 (Evening)	81	59	35	WD: 270° WS: 0.4 m/s Rain: Nil	Birds 50-63 Cars passing 55-80 Aircraft 57 Dog barking 55-57 Quarry inaudible	<35	35
13-12-22	19:12 (Evening)	83	57	35	WD: 270° WS: 0.3 m/s Rain: Nil	Birds 48-59 Cars passing 52-80 Quarry inaudible	<35	35

4.3 Location NM3

Noise monitoring at location NM3 conducted on Tuesday 13 December 2022 and Wednesday 14 December 2022 resulted in inaudible quarry noise during both the day and evening periods. These results meet the established noise criteria and indicate that noise emissions from Teven Quarry did not contribute to noise nuisance. The results and observations taken during the monitoring events at Location NM3 are presented in Table 4-3.

Noise sources measured included birds, aircrafts, distant road traffic and chirping insects (mostly cicada). Insects were the dominant noise source.

Table 4-3: Noise survey results and observations for Location NM3

Date	Time	Descriptor (dBA)			Meteorology	Apparent Noise Source, Description and LAeq (dBA)	Teven Quarry LAeq(15min) Contribution (dBA)	LAeq(15min) Criteria (dBA)
		LAmix	LAeq	LA90				
14-12-22	9:29 (Day)	73	58	56	WD: n/a WS: 0 Rain: Nil	Aircraft 60 Birds Insects (dominant source) Quarry inaudible	<37	37
14-12-22	9:45 (Day)	82	58	56	WD: n/a WS: 0 Rain: Nil	Birds Insects 54-59 Quarry inaudible	<37	37
13-12-22	18:07 (Evening)	67	41	37	WD: 270° WS: 0.6 m/s Rain: Nil	Bird 47 Insects chirping 37-39 Cicada 43-45 Distant Road traffic 38-47 Quarry inaudible	<35	35
13-12-22	18:38 (Evening)	59	40	37	WD: 270° WS: 1.6 m/s Rain: Nil	Aircraft 59 Bird calls 37-52 Insects chirping 37-39 Distant Road traffic 38-43 Quarry inaudible	<35	35

4.4 Location NM4

Noise monitoring at location NM4 conducted on Tuesday 13 December 2022 and Wednesday 14 December 2022 resulted in inaudible quarry noise during both the day and evening periods. These results meet the established noise criteria and indicate that noise emissions from Teven Quarry did not contribute to noise nuisance. The results and observations taken during the monitoring events at Location NM4 are presented in Table 4-4.

Noise sources measured included birds, traffic to site, reverse beeper, front end loader, aircraft, passing trucks, passing cars and insects (mostly cicada).

Table 4-4: Noise survey results and observations for Location NM4

Date	Time	Descriptor (dBA)			Meteorology	Apparent Noise Source, Description and LAeq (dBA)	Teven Quarry LAeq(15min) Contribution (dBA)	LAeq(15min) Criteria (dBA)
		LAmx	LAeq	LA90				
14-12-22	8:20 (Day)	80	58	41	WD: n/a WS: 0 Rain: Nil	Birds Traffic to site Trucks passing 71-80 Front end loader up incline 52 Quarry inaudible	<37	37
14-12-22	8:35 (Day)	77	56	43	WD: n/a WS: 0 Rain: Nil	Birds Traffic to site Trucks passing 60-75 Reversing beeper 46 Quarry inaudible	<37	37
13-12-22	20:07 (Evening)	79	59	49	WD: n/a WS: 0 Rain: Nil	Insects (mostly cicada) 48-59 Quarry inaudible	<35	35
13-12-22	20:23 (Evening)	89	55	47	WD: n/a WS: 0 Rain: Nil	Insects (mostly cicada) 48-56 Aircraft 53-55 Car passing 65 Sneeze 88 Quarry inaudible	<35	35

4.5 Location NM5

Noise monitoring at location NM5 conducted on Tuesday 13 December 2022 and Wednesday 14 December 2022 resulted in inaudible quarry noise during both the day and evening periods. These results meet the established noise criteria and indicate that noise emissions from Teven Quarry did not contribute to noise nuisance. The results and observations taken during the monitoring events at Location NM5 are presented in Table 4-5.

Noise sources measured included birds, frogs, insects, aircraft, passing trucks and the nearby Boral quarry to the east of the quarry.

Table 4-5: Noise survey results and observations for Location NM5

Date	Time (hrs)	Descriptor (dBA)			Meteorology	Description and SPL, dBA	Teven Quarry LAeq(15min) Contribution	LAeq(15min) Criteria
		LAmx	LAeq	LA90				
14-12-22	7:43 (Day)	75	44	38	WD: n/a WS: 0 Rain: Nil	Insects Birds Frogs Truck pass 40 Boral quarry nearby audible Quarry inaudible	<37	37
14-12-22	7:59 (Day)	73	44	36	WD: n/a WS: 0 Rain: Nil	Insects Birds Frogs Truck pass 40 Boral quarry nearby audible Quarry inaudible	<37	37
13-12-22	19:31 (Evening)	68	41	35	WD: 270° WS: 1.3 m/s Rain: Nil	Birds 39-44 Insects 36-41 Quarry inaudible	<35	35
13-12-22	19:46 (Evening)	59	46	40	WD: 270° WS: 0.5 m/s Rain: Nil	Aircraft 39-45 Birds 40-49 Insects 38-41 Cicada 40-49 Quarry inaudible	<35	35

5. CONCLUSION

Monitoring was carried out on Tuesday 13 December and Wednesday 14 December 2022 at five locations selected as representative to the sensitive receptors at the surroundings to Teven Quarry.

This NMA completed by Ramboll at the Holcim Teven Quarry, Teven, NSW as a quarterly requirement of the NMP showed compliance to the relevant noise criteria.

6. REFERENCES

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Standards Australia (2003) *AS 60942:2003 Electroacoustics - Sound calibrators*. Australian Standard.

APPENDIX 2: SURFACE WATER QUALITY RESULTS

LDP1			
Date	pH	Suspended Solids (mg/L)	Oil and Grease (mg/L)
03/02/2022	7.73	9	0
04/02/2022	7.75	9	0
07/02/2022	7.75	9	0
09/02/2022	7.8	8	0
23/02/2022	7.4	4	0
24/02/2022	7.6	4	0
07/03/2022	8.38	4	0
08/03/2022	7.11	1	0
09/03/2022	7.01	1	0
10/03/2022	6.89	1	0
13/03/2022	7.35	1	0
14/03/2022	7.36	1	0
15/03/2022	7.39	1	0
16/03/2022	7.39	2	0
17/03/2022	7.43	2	0
20/03/2022	7.42	1	0
05/03/2022	7.87	1	0
05/04/2022	7.57	1	0
05/05/2022	7.55	1	0
05/06/2022	7.52	13	0
20/07/2022	6.9	5	0
21/07/2022	7.2	3	0
22/09/2022	7.78	<1	0
23/09/2022	7.83	<1	0
24/09/2022	7.8	1	0
23/10/2022	7.8	1	0
24/10/2022	7.87	<1	0
25/10/2022	6.57	1	0

**APPENDIX 3:INDEPENDENT
ENVIRONMENTAL AUDIT ACTION
PLAN (2022)**

Reference	Approval or licence requirement	Evidence collected 2022	Audit Finding	Audit Finding Compliance status	Audit Action Reference	Holcim Response / Action	Holcim Response / Action Timeframe
Development Consent (SSD 6422)							
Schedule 2 - Administrative Conditions							
16	To ensure that strategies, plans and programs required under this consent are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis. With the agreement of the Secretary, the Applicant may prepare a revision of or a stage of a strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent. Notes: • While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. • If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.	Teven Quarry (TQ) EMS April 2021 TQ Blast Management Plan Sept. 2021 TQ Transport Management Plan April 2021 TQ Air Quality Management Plan May 22 TQ Biodiversity & Rehabilitation Management Plan Nov. 2021 TQ Noise Management Plan April 2021 TQ Water Management Plan March 2022	There is no intent to stage the development. The various management plans listed have been prepared and submitted to DPE and other departments and Council as part of the review process. DPE have highlighted a number of issues that need to be addressed in order for the plans to be approved. Plan updates and improvements were ongoing at the time of the audit.	Not-compliant	Plans Require finalisation and approval from DPE.	Plans to be reviewed and updated if necessary as (per conditions of consent) with regard to this IEA and the 2022 Annual Report to be submitted on 31 March.	30/06/2023
17	Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant shall implement the existing strategies, plans or programs for the site that have been approved under previous consents.	As above	There is no intent to stage the development. The various management plans listed have been prepared and submitted to DPE and other departments and Council as part of the review process. DPE have highlighted a number of issues that need to be addressed in order for the plans to be approved. Plan updates and improvements were on going at the time of the audit.	Not-compliant	Finalise and have plans approved by DPE.	Plans to be reviewed and updated if necessary as (per conditions of consent) with regard to this IEA and the 2022 Annual Report to be submitted on 31 March.	30/06/2023
18	The Applicant shall: (a) provide annual quarry production data to DRE using the standard form for that purpose; and	TQ Annual Review 2019, 2020 and 2021.	Report form not available	Not-compliant	Include report form or lodgement screen shot in Annual Review, or delete condition from consent.	The online form was completed. Moving forwards a screenshot of the submission will be kept for records.	N/A
	(b) include a copy of this data in the Annual Review (see condition 4 of Schedule 5).	Annual Review Teven Quarry 2019, 2020 and 2021.	Copy of report not included in AR	Not-compliant	Include report form or lodgement screen shot in Annual Review, or delete condition from consent.	The production data was included in Table 7 of each the 2019, 2020 and 2021. Annual Reviews	N/A
Schedule 3 - Environmental Performance Conditions							
10	The Applicant shall prepare and implement a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	TQ Blast Management Plan 2021	Blast Management Plan 2021 developed and has been submitted to DPE for review and approval. Some outstanding matters to be resolved by TQ prior to approval of the plan.	Not-compliant		Plans to be reviewed and updated if necessary as (per conditions of consent) with regard to this IEA and the 2022 Annual Report to be submitted on 31 March.	30/06/2023
14	The Applicant shall prepare and implement an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agree by the Secretary;	Air Quality Management Plan 2021. Site observation	TQAQMP submitted to DPIE for review and DPE October 2020 required alterations to the plan which have not been addressed.	Not-compliant		Plans to be reviewed and updated if necessary as (per conditions of consent) with regard to this IEA and the 2022 Annual Report to be submitted on 31 March.	30/06/2023
29	The Applicant shall prepare and implement a Biodiversity and Rehabilitation Management Plan for the site to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with OEH, and be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise;	Biodiversity and Rehabilitation Management Plan Nov 2021 (BRMP). Previous Audit Findings GHD 2020.	BRMP was available on the TQ website at the time of the audit. The previous version of the plan was compliant in the last audit. The August 2020 BRMP was submitted to DPE in August 2020 and DPE provided comments on 7/10/2020. Holcim submitted the updated document to BCD (Now BCS) on 4/2/2021. BCD provided feedback on the BRMP on the 9/3/2021. Holcim addressed BCS and DPE comments in appendix A of the BRMP. At the time of the audit no evidence could be found that the current version of the BRMP was approved by DPE.	Not-compliant	Request final approval from DPE to the BRMP	Plans to be reviewed and updated if necessary as (per conditions of consent) with regard to this IEA and the 2022 Annual Report to be submitted on 31 March.	30/06/2023

33	The Applicant shall: (a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council;	Site observations	On site sewage is regulated by the Local government Act. The system was installed prior to 2017 when council updated its OSSM policy. The system is in low risk setting with a small number of non residential users and an adequate effluent disposal area. At the time of the audit an approval to operate the system from BSC was not available.	Not-compliant	Seek approval to operate the system from BSC.	The Teven Quarry Manager emailed Ballina Council on 13 March 2023 requesting a copy of the approval to operate. Council responded on 27 March 2023 and advised 'There is no record of an OSSM approval to operate for the Teven Quarry. Please fill out the attached form and send back to Council and an approval to operate certificate will be issued. The attached form has an inspection checklist which will need to be completed by a NSW licensed plumber and drainer. However, if the OSSM system is an AWTS which gets serviced quarterly then you will only need to submit the latest service report along with the application form attached (the inspection checklist does not need to be filled out in this case).' Holcim to engage plumber to complete checklist and submit form.	30/06/2023
Schedule 5 - Environmental Management, Reporting and Auditing							
1	The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent;	TQ Environmental Management Strategy April 2021 Update (TQEMS). Independent Environmental Audit 2020.	The 2020 IEA by GHD found that the original EMS was submitted. Section 2.2 of the EMS 2021 states that an updated EMS was submitted to DPE in August 2020 and Holcim received comments in October 2020. DPE's comments were addressed and the response to DPE comments are in Appendix A of the EMS. No evidence of DPE approval of the EMS is provided in its current form.	Not-compliant	Submit updated EMS for DPE Approval and append approval to Appendix A of the EMS when obtained.	EMS to be reviewed and updated if necessary as (per conditions of consent) with regard to this IEA and the 2022 Annual Report to be submitted on 31 March.	30/06/2023
4	By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must: (a) describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	Annual reviews prepared and submitted to DPE. Annual review for 2021 not available at the time of the audit.	Not-compliant	Prepare annual review and submit.	The 2021 Annual Review was completed and submitted to DPIE. It is available on the Holcim Teven Website at: https://www.holcim.com.au/about-us/community-link/teven-quarry-teven-ballina-nsw	N/A
8	The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	Annual Reviews uploaded to Holcim website	The annual review for 2021 has not been submitted or displayed in a timely fashion.	Not-compliant		The 2021 Annual Review was completed and submitted to DPIE. It is available on the Holcim Teven Website at:	N/A
Environment Protection Licence - EPL 3293							
O4.7	Each sedimentation basin must have a marker (the "sedimentation basin marker") that identifies the upper level of the sediment storage zone.	Site observations	No marker observed	Not-compliant		In agreement with the EPA the marker is to be reinstated following the current ongoing clear out of dam. The works are estimated to be completed by 28 April 2023	28/04/2023
O4.8	Whenever the level of liquid and other material in any sedimentation basin exceeds the level indicated by the sedimentation basin marker, the licensee must take all practical measures as soon as possible to reduce the level of liquid and other material in the sedimentation basin.	Site observations	No marker observed	Not-compliant		In agreement with the EPA the marker is to be reinstated following the current ongoing clear out of dam. The works are estimated to be completed by 28 April 2023	28/04/2023

O4.11	The level of sediment in any sedimentation basin on the premises must be maintained below the upper level indicated by the sedimentation marker.	Site observations	No Marker observed	Not-compliant		In agreement with the EPA the marker is to be reinstated following the current ongoing clear out of dam. The works are estimated to be completed by 28 April 2023.	28/04/2023
M1.3	b) the time(s) at which the sample was collected;	Sample records	Time not recorded	Not-compliant		Sampling periods are monthly for Dust Deposition and 24 hourly for PM10. Time the sample was collected is therefore the date. The time the sample was provided to the lab is on the Chain of Custody certificate.	N/A
M5.2	b) the method by which the complaint was made;	Holcim Complaint Register - Teven	Method not recorded	Not-compliant	N/A	Teven Quarry Manager to create procedure for complaints to include method of reporting.	31/03/2023
	c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;	Holcim Complaint Register - Teven	More recent record included some personal details	Not-compliant	N/A	Teven Quarry Manager to create procedure for complaints to include method of reporting.	31/03/2023

Appendix 4 - Independent Environmental Audit



NGH



Independent Environmental Audit Report 2022

Teven Quarry

March 2023

Project Number: 22-207



Document verification

Project Title:	Teven Quarry
Project Number:	22-207
Project File Name:	22-207 Teven Quarry Independent Environmental Audit Report_Final v1.0

Revision	Date	Prepared by	Reviewed by	Approved by
Draft v1.0	19/12/2022	W. Heiniger	M. Sutherland	M. Sutherland
Final v1.0	2/03/2023	W. Heiniger	N. Arens	N. Arens

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Table of contents

Acronyms and abbreviations	iii
1. Introduction	4
1.1 Background.....	4
1.2 Audit team.....	4
1.3 Objectives.....	4
1.4 Audit scope.....	4
1.5 Audit period.....	5
2. Independent audit declaration	6
3. Audit methodology	7
3.1 Auditor approval.....	7
3.2 Audit process.....	7
3.3 Audit interviews.....	7
3.4 Site inspection.....	7
3.5 Consultation.....	8
3.6 Compliance status descriptors.....	8
4. Audit findings	9
4.1 Document list.....	9
4.2 Summary of compliance.....	11
4.3 Summary of non-compliance.....	11
4.4 Previous audits.....	13
4.5 Notices, orders or prosecutions.....	17
4.6 Development consent approval.....	17
4.7 Environment Protection Licence.....	18
4.8 Complaints.....	19
4.9 Incidents.....	19
4.10 Key strengths.....	19
5. Recommendations	20
6. Conclusions	21

Tables

Table 4-1 Non-compliances within this reporting period.....	11
Table 4-2 Non-compliances detailed in the 2019 IEA (GHD).....	13

Appendices

Appendix A	Audit table.....	22
Appendix B	DPE auditor approval.....	B-I
Appendix C	Agency consultation.....	C-I
Appendix D	Site inspection photos.....	D-I

Acronyms and abbreviations

AQMP	Air Quality Management Plan
AWS	Automatic weather station
BC Act	<i>Biodiversity Conservation Act 2016 (NSW)</i>
BMP	Blast Management Plan
BRMP	Biodiversity and Rehabilitation Management Plan
BoM	Australian Bureau of Meteorology
BSC	Ballina Shire Council
Cth	Commonwealth
DCCEEW	Department of Climate Change, Energy, the Environment and Water (formerly DAWE)
DPE	Department of Planning and Environment (NSW) (formerly DPIE)
DPIE	(Former) Department of Planning, Industry and Environment (now DPE)
EIS	Environmental impact statement
EMS	Environmental Management Strategy
EPA	Environment Protection Authority (NSW)
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
ha	hectares
IEA	Independent Environmental Audits
km	kilometres
m	metres
NMP	Noise Management Plan
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
SSD	State Significant Development
TfNSW	Transport for New South Wales
TMP	Traffic Management Plan
WMP	Water Management Plan

1. Introduction

1.1 Background

NGH were engaged by Holcim Australia Pty Ltd (Holcim) to carry out the Independent Environmental Audit (IEA) 2022 for Teven Quarry, Ballina New South Wales (NSW). The audit is required in accordance with Condition 9 of Schedule 5 of State Significant Development (SSD) Consent SSD-6422 for Holcim's operations at Teven Quarry.

1.2 Audit team

A team of environmental auditing professionals from NGH was approved for the audit by the Department of Planning and Environment (Appendix B). Natascha Arens was approved as Lead Auditor. Natascha has 30 years' experience as an environmental professional and auditor and oversaw the audit process.

The site audit was completed by Michial Sutherland and Whitney Heiniger. Michial has 35 years' experience as an environmental professional and 25 years of auditing experience. Whitney Heiniger supported Michial during the audit. Whitney has 4 years of experience as an environmental professional, including internal and external auditing, and has completed training as a Lead Auditor in Environmental Management Systems ISO 14001:2015 and ISO 19011:2018.

1.3 Objectives

The objectives of the audit were to conduct an independent review of compliance with the Development Consent for SSD-6422 as modified, issued by the delegate for the Minister for Planning, Environment Protection Licence (EPL) 3293 issued by the NSW Environment Protection Authority (EPA) and in accordance with the requirements of the Independent Audit Post Approval Requirements, May 2020 (DPE 2020).

1.4 Audit scope

As required under Development Consent SSD-6422 Schedule 5, Condition 9, the audit covered the following areas of the Holcim, Teven Quarry operations:

- Assessment of compliance with the conditions of the Development Consent and the site EPL
- All aspects of monitoring and environmental performance, both operational and organisational relating to Holcim's Teven site
- Compliance with reporting requirements imposed on the site

Statutory compliance of Teven Quarry was assessed with reference to the requirements of the following approvals and licences:

- Development Consent SSD-6422 as modified.

Monitoring and environmental performance, along with compliance and reporting requirements, were evaluated against:


- EPL 3293
- Observations made during audit activities on site.

The audit was conducted with reference to the Department of Planning and Environment (DPE) guidelines, *Independent Audit Post Approval Requirements May 2020*.

1.5 Audit period

The reporting period for the audit is from the date of the last IEA, 2nd October 2019, up until the date of the site audit, 4th August 2022.

2. Independent audit declaration

Project Name	Teven Quarry
Consent No.	SSD-6422 as modified
Description of Project	Material extraction
Project Address	Stokers Lane, Teven NSW 2478
Proponent	Holcim Australia Pty Ltd
Operator Address	Stokers Lane, Teven NSW 2478
Title of Audit	Independent Audit
Date	August 2022
<p>I declare that I have undertaken the Independent Audit and prepared the contents of the attached Independent Audit Report and to the best of my knowledge:</p> <ul style="list-style-type: none"> the audit has been undertaken in accordance with relevant condition(s) of consent and the <i>Independent Audit Post Approval Requirements (Department 2020)</i>; the findings of the audit are reported truthfully, accurately and completely; I have exercised due diligence and professional judgement in conducting the audit; I have acted professionally, objectively and in an unbiased manner; I am not related to any proponent, owner or operator of the project neither as an employer, business partner, employee, or by sharing a common employer, having a contractual arrangement outside the audit, or by relationship as spouse, partner, sibling, parent, or child; I do not have any pecuniary interest in the audited project, including where there is a reasonable likelihood or expectation of financial gain or loss to me or spouse, partner, sibling, parent, or child; neither I nor my employer have provided consultancy services for the audited project that were subject to this audit except as otherwise declared to the Department prior to the audit; and I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from payment for auditing services) from any proponent, owner or operator of the project, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so. <p>Notes:</p> <p>a) Under section 10.6 of the <i>Environmental Planning and Assessment Act 1979</i> a person must not include false or misleading information (or provide information for inclusion in) in a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000; and</p> <p>b) The <i>Crimes Act 1900</i> contains other offences relating to false and misleading information: section 307B (giving false or misleading information – maximum penalty 2 years imprisonment or 200 penalty units, or both)</p>	
Name of Auditor	Natascha Arens
Signature	 1/03/2023
Qualification	BAppSc. MBEM, Exemplar Global lead auditor
Email Address	natascha.a@nghconsulting.com.au
Company	NGH Pty Ltd
Company Address	Level 1, 31-33 Beaumont St, Hamilton NSW 2303

3. Audit methodology

3.1 Auditor approval

The Department approved the nominated audit team with of Natascha Arens as Lead Auditor for the Project on 22/06/2022 (Appendix B), supported by Michial Sutherland and Whitney Heiniger.

3.2 Audit process

A document review was completed prior to the audit on site. The document review included a review of the Conditions of Consent and all management plans, monitoring reports, the Teven Quarry website and site registers using evidence submitted.

The audit program was submitted to the auditee on 28th July 2022 indicating the dates of the site audit, scope, criteria, audit details and required site representatives.

An opening meeting was held on 4th August 2022 at 08:45am on site. Present at the opening meeting were:

- Matt Kelly, Holcim – Quarry Manager
- Reece O'Brien – Site Supervisor
- Michial Sutherland, NGH – Auditor
- Whitney Heiniger, NGH – Auditor.

A closing meeting was held on 4th August 2022 at 4:30pm at the site office with the staff noted above present at the closing meeting.

3.3 Audit interviews

Interviews were held with Matt Kelly and Reece O'Brien throughout the duration of the audit. No interview requests were denied.

3.4 Site inspection

A site inspection was with Matt Kelly was conducted on 4th August 2022 (9:30am – 10:45am) following the audit opening meeting. The purpose of site visit was to inspect the works on site, view the site and access arrangements, and gain an understanding of the current scope of activities occurring on site, including the following areas:

- Site entry/exit points
- Weighbridge and wheel wash
- Main pit and active benches
- Chemical storage areas
- Maintenance workshop
- Crusher control room
- Crushing plant
- Mobile plant items
- Licence discharge location
- Water storage pits and sediment basins.

No restrictions to access occurred during the site visit.

During the site inspection, conditions were clear, cool and sunny. The Bureau of Meteorology (BoM) weather station at Ballina Airport (station 058198), approximately 5km southeast of the site, recorded a maximum temperature of 24°C, minimum temperature of 10°C and 0 millimetres (mm) of rainfall. Total rainfall for the previous month of July 2022 at the Ballina Airport weather station was 154.4mm.

3.5 Consultation

Email consultation with the following agencies as part of the audit process occurred prior to the site inspection:

- NSW Department of Planning and Environment
- NSW Crown Lands
- Biodiversity Conservation Division (BCD) of DPE
- Ballina Shire Council (BSC)
- NSW EPA.

Responses were received from BCD, BSC and NSW EPA (Appendix C) and agency requests were assessed as part of the audit criteria (Appendix A).

3.6 Compliance status descriptors

The compliance descriptors used in this report are:

- **Compliant** Requirement has been met
- **Non-Compliant** Requirement has not been met
- **Not Triggered** Requirement not triggered

4. Audit findings

4.1 Document list

Documents were requested during the audit and were provided by Holcim. Management Plans and Records were viewed electronically and in hard copy format. Records (photographs, notes, digital files) were made of the documents examined. Notes were made about the documents against and regarding the CoA and license requirements. Documents viewed included:

- Holcim Annual Review 1 January 2019 – 31 December 2019 – Teven Quarry
- Holcim Annual Review 1 January 2020 – 31 December 2020 – Teven Quarry
- Holcim Annual Review 1 January 2021 – 31 December 2021 – Teven Quarry
- EPA Annual Return – Licence 3293 1/5/2020 – 30/4/2021
- Holcim Australia and New Zealand Teven Quarry Complaints Register – 01 January 2019 – 31 December 2019
- Holcim Australia and New Zealand Teven Quarry Complaints Register – 01 January 2020 – 31 October 2020
- Holcim Australia and New Zealand Teven Quarry Complaints Register – 01 October 2020 – 31 December 2020
- Holcim Australia and New Zealand Teven Quarry Complaints Register – 01 January 2021 – 31 March 2021
- Holcim Australia and New Zealand Teven Quarry Complaints Register – 01 April 2021 – 30 June 2021
- Holcim Australia and New Zealand Teven Quarry Complaints Register – 01 July 2021 – 31 December 2021
- Holcim Australia and New Zealand Teven Quarry Complaints Register – 01 January 2022 – 31 March 2022
- Teven Quarry Pollution Incident Response Management Plan Rev 8 (September 2021)
- Teven Quarry Environmental Management Strategy (April 2021)
- Teven Quarry Noise Management Plan (April 2021)
- Teven Quarry Blast Management Plan (September 2021)
- Teven Quarry Water Management Plan (March 2022)
- Teven Quarry Biodiversity and Rehabilitation Management Plan (November 2021)
- Teven Quarry Air Quality Management Plan (May 2022)
- Teven Quarry Transport Management Plan (April 2021)
- Teven Quarry EXBIN Driver Induction Rev 2.3 (November 2020)
- Teven Quarry Standard 2.3 Site-Specific Induction (September 2020)
- Teven Quarry Transport and Truck Movement Summary 2019
- Teven Quarry Transport and Truck Movement Summary 2020
- Teven Quarry Transport and Truck Movement Summary Q1 2021
- Teven Quarry Transport and Truck Movement Summary Q2 2021
- Teven Quarry Transport and Truck Movement Summary Q3 2021

- Teven Quarry Transport and Truck Movement Summary Q4 2021
- Blast Report 292 – Holcim Teven (Maxam, 26/07/21)
- Blast 293 reporting and records – Holcim Teven (Maxam, 23/08/21)
- Blast 302 reporting and records – Holcim Teven (Grande Drill & Blast, 9/08/22)
- Ballina Shire Council Contribution Invoice 7/02/2022
- Ballina Shire Council Contribution Invoice 7/03/2022
- Ballina Shire Council Contribution Invoice 6/04/2022
- Ballina Shire Council Contribution Invoice 12/05/2022
- Ballina Shire Council Contribution Invoice 10/06/2022
- Ballina Shire Council Contribution Invoice 8/07/2022
- Teven Quarry Project Environmental Impact Statement (Umwelt, December 2014)
- Noise Monitoring Assessment Teven Quarry Q4 2019 (Muller Acoustic Consulting (MAC))
- Noise Monitoring Assessment Teven Quarry Q1 2020 (MAC)
- Noise Monitoring Assessment Teven Quarry Q2 2020 (MAC)
- Noise Monitoring Assessment Teven Quarry Q3 2020 (MAC)
- Noise Monitoring Assessment Teven Quarry Q4 2020 (MAC)
- Noise Monitoring Assessment Teven Quarry Q1 2021 (MAC)
- Noise Monitoring Assessment Teven Quarry Q2 2021 (MAC)
- Noise Monitoring Assessment Teven Quarry Q3 2021 (MAC)
- Noise Monitoring Assessment Teven Quarry Q4 2021 (MAC)
- Noise Monitoring Assessment Teven Quarry Q1 2022 (MAC)
- Noise Monitoring Assessment Teven Quarry Q2 2022 (MAC)
- Teven Quarry Independent Environmental Compliance Audit Report (GHD, September 2016)
- Teven Quarry Independent Environmental Compliance Audit Report (GHD, April 2020)
- Teven Quarry Project Independent Environmental Compliance Audit Action Plan (April 2020)
- Pollution Monitoring Data Summary Teven Quarry EPL 3293 (January 2020)
- Pollution Monitoring Data Summary Teven Quarry EPL 3293 (January 2022)
- Holcim Document Creation and Retention Policy (January 2016)
- Incident Report – INC-0189603 (21/09/2021)
- Holcim internal spreadsheet – Teven Outgoing Waste Register
- Holcim internal spreadsheet – Concrete Waste Truck to Teven Quarry 2022
- Holcim Teven Blasting Neighbour Notification Checklist
- Holcim internal spreadsheet – 2022 Teven Daily Sales
- Plant maintenance records – CAT 980G Loader
- Plant maintenance records – CAT 345D Excavator
- Holcim internal spreadsheet – 2020 – 2022 Teven Live Environmental Monitoring Worksheet
- DPE email correspondence – Teven_SSD-6422 Rehab Bond Calculation

- Rehabilitation and Conservation Bond Verification Report for Teven Quarry (Quanto, 9 July 2021)
- Holcim internal spreadsheet – Teven MSDS Register
- Teven Quarry Manifest of Hazardous Chemicals and Workplace Plan
- Teven Liquid Fuel & Chemical Transfer Procedure (October 2021)
- Holcim Spill Response Procedure (April 2017)
- Surface water analysis results – Environmental Analysis Laboratory (SCU) (23/07/2021)
- Letter from Holcim to EPA – ‘Response to the complaint received for Teven Quarry (EPL 3293)’ (21 December 2021)

4.2 Summary of compliance

Between the Project Development Approval, EPL and consultation requirements, a total of 261 individual clauses or requirements were examined as part of the audit. Of those approval and consent requirements it was found that:

- 17 were not compliant
- 44 were not triggered
- 200 were compliant.

4.3 Summary of non-compliance

Table 4-1 Non-compliances within this reporting period

ID	CoA/EPL ID	Details
22/1	Schedule 2, Condition 16	The various management plans listed have been prepared and submitted to DPE and other departments and Council as part of the review process. DPE have highlighted a number of issues that need to be addressed in order for the plans to be approved. Plan updates and improvements were ongoing at the time of the audit.
22/2	Schedule 2, Condition 17	The various management plans listed have been prepared and submitted to DPE and other departments and Council as part of the review process. DPE have highlighted a number of issues that need to be addressed in order for the plans to be approved. Plan updates and improvements were on going at the time of the audit.
22/3	Schedule 2, Condition 18(a)	Standardised report form providing annual quarry production data to DRE was not available at the time of audit.
22/4	Schedule 2, Condition 18(b)	Report described in Condition 18(a) not included in Annual Reviews.
22/5	Schedule 3, Condition 10(a)	Blast Management Plan 2021 developed and has been submitted to DPE for review and approval. Some outstanding matters to be resolved prior to DPE approval of the plan. Plan is currently not approved.
22/6	Schedule 3,	TQAQMP submitted to DPIE for review and DPE October 2020 required

ID	CoA/EPL ID	Details
	Condition 14(a)	alterations to the plan which have not been addressed.
22/7	Schedule 3, Condition 29(a)	At the time of the audit no evidence could be found that the current version of the site BRMP was approved by DPE.
22/8	Schedule 3, Condition 33(a)	At the time of the audit an approval to operate the system from BSC was not available.
22/9	Schedule 5, Condition 1(a)	At the time of the audit, no evidence of DPE approval of the EMS was provided in its current form.
22/10	Schedule 5, Condition 4	Annual review for 2021 was not available at the time of the site inspection and is not available on the site website.
22/11	Schedule 5, Condition 8	The annual review for 2021 has not been submitted or displayed on the site website in a timely fashion.
22/12	EPL O4.7	No marker observed within the site sedimentation basin.
22/13	EPL O4.8	No marker observed within the site sedimentation basin.
22/14	EPL O4.11	No marker observed within the site sedimentation basin.
22/15	EPL M1.3(b)	Time not recorded on samples collected for the EPL.
22/16	EPL M5.2(b)	Method of complaints not recorded in the complaints register.
22/17	EPL M5.2(c)	Personal details of complainants generally not recorded in the complaints register.

4.4 Previous audits

Table 4-2 Non-compliances detailed in the 2019 IEA (GHD)

ID	Details	Comment	2022 Status
Schedule 2, Condition 18(b)	A copy of the 2018 DRE standard form was provided but it was not included in the Annual Review.	No monitoring form for production data was available during the 2022 IEA.	Open
Schedule 3, Condition 4	The Annual Review summarises the noise monitoring results from Muller Acoustic Consultants which indicate compliance with the relevant criteria. While the monitoring locations appear to surround the quarry, providing a reasonable indication of the noise levels, there is nothing linking the monitoring locations with all the receivers in Table 2 of the consent.	The NMP and noise monitoring reports have been updated to reflect required monitoring locations.	Closed
Schedule 3, Condition 10(d)	The Blast Management Plan describes the control measures, monitoring program and protocol for investigating complaints. However it does not include a community notification procedure.	The Blast MP was updated in 2021 and measures to ensure community notification are described in Chapter 9.	Closed
Schedule 3, Condition 11	According to the Annual Review, the PM10 annual average was below the annual average criteria but the PM10 24 hour criteria was exceeded on 5 occasions during 2018 (11 August, 6 September, 6 November, 10 November and 4 December). The depositional dust results in the Annual Review also indicate some exceedances of the approval criteria, however, it explains the exceedances were due to sugar farming operations that surround the monitoring locations.	A range of dust avoidance and mitigation measures were observed on site. Visible dust was not observed crossing the site boundaries during the audit. Monitoring results indicate dust levels are below the applied criteria.	Closed
Schedule 3, Condition 15	The Annual Review reported a non-compliance with this condition due to a faulty weather station. However, a meteorological station was observed, which Holcim advised was installed by VGT.	Addressed during the previous reporting period.	Closed
Schedule 3, Condition 20	The Water Management Plan includes a water balance, management system and monitoring program, however, it does not include:	Water Management Plan was updated in March 2022 and consultation with DPE for approval of the plan is currently ongoing.	Closed

ID	Details	Comment	2022 Status
	<ul style="list-style-type: none"> • Evidence the author was approved by the Secretary • Approved within 6 months • Detailed baseline data • Erosion and sediment controls <p>In relation to erosion and sediment controls, the basin management is discussed but there are no other erosion and sediment controls mentioned.</p>		
Schedule 3, Condition 23	Monthly truck movements are included in the Annual Review. A summary is also on the website for 2016 and 2017 but it does not appear to be updated every 6 months.	Truck movement data posted quarterly during 2021.	Closed
Schedule 3, Condition 30	Holcim was not able to provide any evidence a bond had been lodged with the Department. Holcim was also not able to confirm when the Biodiversity and Rehabilitation Management Plan (EMM 2016) was approved, however, as it was prepared in 2016, it is assumed the Plan has been approved for more than 6 months, so the bond is required.	DPE correspondence indicates that the Rehabilitation Bond was paid to DEP in 2017.	Closed
Schedule 3, Condition 31	Holcim was not able to provide any evidence the Conservation and Rehabilitation Bond had been reviewed following the previous Independent Environmental Audit.	Rehabilitation bond was reviewed in 2021 following the 2019 IEA.	Closed
Schedule 3, Condition 33	Ballina Shire Council have indicated there is not a current Approval to Operate the on site sewage treatment and disposal system. Holcim advised the system has been in place since they started operating the quarry.	No approval from BSC for the operation of the OSSMS was available at the time of the audit.	Open
Schedule 4, Condition 1	Exceedances of the air quality criteria were recorded but Holcim advised landowners were not notified. It was claimed that the air quality exceedances were not due to Holcim activities but there is nothing in the condition indicating it is only quarry related exceedance that are to be	Exceedances during the reporting period were not notified to landowners however exceedances were minor and likely due to summer fire events in 19/20.	Closed

ID	Details	Comment	2022 Status
	notified.		
Schedule 5, Condition 2	None of the management plans included a contingency plan to manage unpredicted impacts.	Management plans have been updated to include contingency plans.	Closed
Schedule 5, Condition 3	Exceedances of the air quality criteria were recorded but Holcim advised that the Secretary was not notified. It was claimed that the air quality exceedances were not due to Holcim activities but there is nothing in the condition indicating it is only quarry related exceedance that are to be notified.	Exceedances during the reporting period reported as required.	Closed
Schedule 5, Condition 5	Holcim was not able to provide any evidence there had been a review of the strategies, plans and programs required under this consent, following any of the triggers.	Management plans are currently being updated, including during the reporting period, based upon recommendations from the 2019 IEA.	Closed
Schedule 5, Condition 7	The Annual Review identifies two Incidents/Non compliances. Holcim advised that the Secretary was not notified other than inclusion in the Annual Review.	No incidents causing material harm or reaching limits occurred during the 2022 reporting period.	Closed
Schedule 5, Condition 8	Truck movement data, complaints register and Annual Reviews are provided on the website, however the most recent truck monitoring data was from 2017, complaints register was 2018 and Annual Review 2017. No noise, dust or water monitoring was on the website at the time of the audit.	The annual review for 2021 has not been submitted or displayed on the website in a timely fashion.	Open
Schedule 5, Condition 9	The Applicant had not commissioned and paid the full costs of an Independent Environmental Audit by the anniversary date of the consent.	NGH were approved as the 2022 IEA Auditors three weeks prior to the consent anniversary date.	Closed
Schedule 5, Condition 11	The website contains some of the information required but is missing: <ul style="list-style-type: none"> • Statement of commitments • Comprehensive summary of monitoring results • An updated complaints register (last updated quarter 1 2018) 	Website has been updated with necessary information.	Closed

ID	Details	Comment	2022 Status
	<ul style="list-style-type: none"> • The 2018 and 2019 Annual Review • The last Independent Environmental Compliance Audit was provided but Holcim response was not 		
EPL M1.3	Review of the Annual Review indicated the date and monitoring location of the sample but not the time or person who collected the sample.	Time of sampling has not been noted during the reporting period.	Open
EPL M4.2	Records of complaints received during the audit period did not contain: <ul style="list-style-type: none"> • Time of the complaint • The method by which the complaint was made • Personal details 	Complaints records are still missing required details.	Open
EPL M6.1	The Quarterly Noise Monitoring Assessment indicates the noise monitoring was done for a period of 15 minutes, rather than the 1.5 hours required.	Noise monitoring completed in accordance with the EPL during the reporting period.	Closed

4.5 Notices, orders or prosecutions

No Penalty Notices or Official Cautions were issued by DPE or the EPA to Holcim's Teven Quarry during the reporting period.

4.6 Development consent approval

Administrative conditions

Generally, Holcim were compliant with administrative conditions outlined within the consent, with production quantities, transport movements and recycled material deliveries within annual and lifetime limits for the site. Hours of operation are abided by on site and truck movements are occurring within approved hours. Evidence of submission of annual quarry production data to the Department was not able to be supplied on the prescribed form, however it is evident that production data is being tracked by Holcim and reported in the Annual Review. No demolition or alternations to existing buildings or structures occurred during the reporting period.

Management plans are currently undergoing an update and the approval process for these plans is ongoing at the time of the audit however it is evident that Holcim are considering previous IEA recommendations in the updates of these plans.

Environmental performance conditions

Minor exceedances in air quality, noise and surface water reporting occurred during the reporting period however no offsite impacts occurred. Dust is generally well-managed on site, with water trucks, enclosed buildings and chemical additives utilised during dust-generating activities. Surface water is being captured and used on site where practicable, with any discharges from site tested prior to discharge.

Transport requirements have been well-managed during the reporting period, with site staff aware of consent limits and limits dictating daily and monthly traffic movements to and from the site. Infrastructure repairs are managed by BSC with required financial contributions being regularly made by Holcim.

Waste is appropriately managed on site, with clear waste segregation evident and materials recycled where possible. Material reuse is prioritised and in line with the Waste Classification Guidelines (EPA 2014). Spill response procedures are clear and appropriately displayed and spill kits are well-stocked and suitably placed. Chemical storage areas on site are appropriately bunded and site staff have access to Safety Data Sheets (SDS) through an internal Holcim manifest and ChemAlert.

Rehabilitation of the site is yet to commence however vegetation protection boundaries are delineated and communicated to site staff where relevant.

Notification to landowners of blasting activities is well-managed, including ongoing communication between site staff and affected residents and notification checklists completed prior to commencing blasting activities.

Environmental management conditions

Holcim is carrying out appropriate environmental data collection and compilation in accordance with the consent. All Annual Reviews for the reporting period were made available upon request

and contained all required information, however the 2021 Annual Review was not available on the Teven Quarry website at the time of the audit. IEAs are being carried out within specified timeframes and recommendations from the 2019 IEA are in the process of being implemented by Holcim in environmental management plan updates.

4.7 Environment Protection Licence

Administrative conditions

All production within and transport from Teven Quarry was within limits specified by the EPL and all activities are being carried out within the approved site boundary.

Discharges to air, water and land

Discharge monitoring is generally compliant with conditions specified in P1.1 – P1.3, with all monitoring being carried out at defined locations.

Limit conditions

Holcim are considered to be operating generally in compliance with the *Protection of the Environment Operations Act 1997* (POEO Act). Some minor exceedances were noted during the reporting period however monitoring is being carried out as required, material deliveries are being conducted within approved hours and general site activities are all occurring within approved hours.

Operating conditions

All activities observed during the site audit were found to be carried out in a competent manner and in accordance with the EPL operating conditions. The sedimentation basin on site requires general maintenance and the installation of a marker as specified in O4.7 should be considered during maintenance works.

Monitoring and recording conditions

Data is being collected and collated by Holcim and by external specialists and is being reviewed regularly by relevant site staff. Contact details are available as required and communication between affected residents and site staff is ongoing and effective. Some details required on complaint (complainants details) and sample records (time stamping) are not being taken however these records are otherwise robust.

Reporting conditions

Annual Returns have been submitted to the EPA as required during the reporting period. Only one Annual Return was available for review during the audit process and this document generally contained all required information. Holcim provided a response to the EPA as required regarding a complaint about tree clearing activities during the reporting period.

No incidents causing or threatening material harm occurred during the reporting period.

General conditions

A hardcopy of the EPL was available for review on site and no requests to produce the EPL were made by the EPA during the reporting period.

4.8 Complaints

A total of seven complaints from external parties were received during the reporting period, including one complaint in 2019, three complaints in 2020 and three complaints in 2021. The majority of these complaints were related to traffic movements and were closed out by Holcim within a timely manner.

4.9 Incidents

A total of 12 incidents, including non-compliances, occurred during the reporting period, however no incidents caused or threatened to cause material harm. No external incident notification was required during the reporting period. Four incidents or non-compliances were noted in each 2019, 2020 and 2021. The majority of these incidents related to dust, noise and surface water limits, however exceedances were minor and recorded as required.

4.10 Key strengths

The auditor notes the following key strengths regarding environmental performance as observed during the audit:

- The environmental controls on site, particularly the stormwater and sediment management system, are in good condition and well maintained
- Noise management is a focus on site, particularly the complete enclosure of crushing equipment
- Dust management is effective, with the use of chemical additive (DustChem 76) in crushing activities and water trucks evident on site
- Housekeeping and site cleanliness was of a high standard
- Site staff are knowledgeable of statutory and best practice requirements in implementing environmental management techniques on site
- Display of environmental approvals, procedures and maps within staff common areas was clear and up to date
- Waste segregation is being effectively carried out and spill kits are well-stocked and appropriately placed around the site.

5. Recommendations

The IEA identified 17 non-compliances during the reporting period. A large portion of these non-compliances relate to administrative matters, particularly the ongoing updates to site environmental management plans, approval of these management plans by DPE and records taken during monitoring and sampling.

With respect to the non-compliances listed above and in Appendix A, consideration should be given to the following:

- Approval of the site environmental management plans by DPE should be sought as soon as practicable to ensure approved plans are being implemented on site.
- The project website should be kept as up to date as possible, including the provision of Annual Reviews.
- Conditions such as Schedule 2, Condition 18 should be revised with DPE to ensure their relevance, including the use of the specified 'standard form', or submission of production data should be carried out as required using an alternate method as agreed with DPE.
- Approval for the operation of the onsite sewage treatment system should be sought from Ballina Shire Council to prevent ongoing non-compliance with Schedule 3, Condition 33(a).
- A marker should be installed in the site sedimentation basin during the next round of maintenance activities to ensure compliance with the site EPL.

6. Conclusions

In general, Holcim are broadly compliant with the site Approval and EPL. A number of non-compliances exist. Of the 261 individual clauses from approval and EPL requirements it was found that:

- 17 were not compliant
- 44 were not triggered
- 200 were compliant.

The majority of non-compliances reported during the audit process relate to document approvals and administrative requirements as opposed to onsite environmental management.

Recommendations from the 2019 IEA have either been addressed during the reporting period or are currently being addressed, displaying a willingness by Holcim to consider IEA findings in ongoing improvements to the site's environmental management.

Appendix A Audit table

Development Consent and EPL Compliance Status - August 2022

Reference	Approval or licence requirement	Evidence collected 2022	Audit Finding	Compliance status	Action Reference	Holcim Comment
Development Consent (SSD 6422)						
Schedule 2 - Administrative Conditions						
1	In addition to meeting the specific criteria in this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Management Plans Site observations	The management plans required by the consent were current and approved by DPE. Mitigation measures relevant to quarry operations were in place and generally operational at the time of the audit. Records were kept as required, legible and generally both hard copy and electronic.	Compliant		
2	The Applicant shall carry out the development generally in accordance with the a) EIS;	Management Plans Site observations Aerial photography and mapping	The development footprint, operations and amount of annual extraction were as described in the EIS.	Compliant		
	(b) Statement of Commitments; and	Management Plans Site records Site observations	The operation of the site were generally in accordance with the statement commitments outlined in Appendix 3 of the consent.	Compliant		
	(c) conditions of this consent. Note: The Applicant's Statement of Commitments is reproduced in Appendix 3.	Management Plans Site observations	The development was generally carried out in accordance with the consent.	Compliant		
3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.	Noted	Noted	Not triggered		
4	The Applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent;	Independent Environmental Compliance Audit – Action Plan – GHD April 2020 Management Plans	Appended to the current management plans is correspondence between Teven Quarry and DPE indicating open discussion on the review and updating of management plans requested by the department.	Compliant		
	b) any reviews, reports or audits, commissioned by the Department regarding compliance with this consent; and	Independent Environmental Compliance Audit – Action Plan – GHD April 2020 Management Plans	An action plan was prepared to address the findings of the 2020 independent audit, these actions have in general been addressed by Holcim. Management plans have addressed comments raised by agencies during consultation as part of the plan approval.	Compliant		
	c) the implementation of any actions or measures contained in these documents.	Independent Environmental Compliance Audit – Action Plan – GHD April 2020 Management Plans Site observations	At the time of the audit it was observed that actions and measures required were in general being implemented.	Compliant		
5	If the development has not been physically commenced within 5 years of the date of this consent, then this development consent shall lapse.	Site Inspection and previous audits	Development commenced in 2015.	Compliant		
6	The Applicant may carry out quarrying operations on the site until 30 June 2045. Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.	Date	This has not been reached.	Not triggered		
7	The Applicant shall not extract extractive materials below RL 4 metres AHD.	Site inspection Quarry Survey Results - Propeller Lidar Survey 2022	Lowest point of the quarry floor shown as 4.441 m AHD	Compliant		
8	The Applicant shall not extract more than 6.6 million tonnes of quarry products from the site.			Not triggered		
9	The Applicant shall not: (a) transport more than 500,000 tonnes of quarry products from the site in any calendar year;	Annual Review Teven Quarry 2019, 2020 and 2021. Quarry production figures 2021	2019-458679t, 2020-292701t and 2021-299,713t	Compliant		
	(b) accept and recycle more than 10,000 tonnes of clean, surplus concrete in any calendar year; and	Annual Review Teven Quarry 2019, 2020 and 2021. Quarry waste register.	Holcim concrete plants delivered in 2021 <2000t for the year	Compliant		
	(c) dispatch more than 73 laden trucks from the site per day, averaged over the total number of dispatch days in any calendar month.	Annual Review Teven Quarry 2018, 2019, 2020, 2021 and Q1&2 2022. Transport data	Truck movements averaged about 60 movements per day over a one month period. The truck movements did not exceed an average 73 of per day in any year.	Compliant		

10	<p>Within 6 months of the date of this consent, or as otherwise agreed by the Secretary, the Applicant shall surrender all existing development consents for the site in accordance with Section 104A of the EP&A Act.</p> <p>Prior to the surrender of such development consents, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of these consents.</p> <p>Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&A Act. Surrender of a consent should not be understood as implying that works legally constructed under a valid consent can no longer be legally maintained or used.</p>	Previous GHD audit report 2016	Signed letters with evidence of surrendered consent, Dec 2015	Compliant		
11	<p>The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.</p> <p>Notes:</p> <ul style="list-style-type: none"> Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works; and Part 8 of the EP&A Regulation sets out the requirements for the certification of the development or project. 	Pers Com Matt Kelly Aerial photography review	No alterations or additions to existing buildings and structures in the audit period.	Not triggered		
12	<p>The Applicant shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version</p>	Pers Com Matt Kelly Aerial photography review	No demolition of structures have occurred in the audit period.	Not triggered		
13	<p>The Applicant shall:</p> <p>(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and</p> <p>(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.</p> <p>Note: This condition does not apply to damage to roads caused as a result of general road usage.</p>	Pers Com Matt Kelly	No damage of any structures in the audit period.	Not triggered		
13		Pers Com Matt Kelly Aerial photography Review	No relocation of structures required in the audit period.	Not triggered		
14	NO CONDITION 14 LISTED ON CONSENT					
15	<p>The Applicant shall ensure that all the plant and equipment used at the site is:</p> <p>(a) maintained in a proper and efficient condition; and</p>	<p>Site observations at the time of the audit including: crushing and screening plant, dust suppression system, water cart WT04, oil and fuel storage, water recycling, Cat Excavators(x2) at Face, 980G loader, delivery trucks (x2). 980G Loader Maintenance Records incl. Inspection Checklist Loader 16/6/2022, 9/5/2022, prestart check 28/1/2022 Cat 345D Maintenance Records incl. Inspection Checklist Loader 17/2/2022, 18/1/2020, 05/11/19, prestart check 21/7/2022</p>	<p>Crushing and screening plants housed and shielded, dust suppression(Dust Chem 76) in place and active. Noise audible but not excessive, no indication of seized bearings or broken steel work. Trucks loader and excavators largely smoke free and with exhaust muffled.</p>	Compliant		
	<p>(b) operated in a proper and efficient manner.</p>	As above	Plant not left idling and operating only when in active use.	Compliant		
16	<p>To ensure that strategies, plans and programs required under this consent are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.</p> <p>With the agreement of the Secretary, the Applicant may prepare a revision of or a stage of a strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent.</p> <p>Notes:</p> <ul style="list-style-type: none"> While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program. 	<p>Teven Quarry (TQ) EMS April 2021 TQ Blast Management Plan Sept. 2021 TQ Transport Management Plan April 2021 TQ Air Quality Management Plan May 22 TQ Biodiversity & Rehabilitation Management Plan Nov. 2021 TQ Noise Management Plan April 2021 TQ Water Management Plan March 2022</p>	<p>There is no intent to stage the development.</p> <p>The various management plans listed have been prepared and submitted to DPE and other departments and Council as part of the review process. DPE have highlighted a number of issues that need to be addressed in order for the plans to be approved. Plan updates and improvements were ongoing at the time of the audit.</p>	Not-compliant	Plans Require finalisation and approval from DPE.	

17	Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant shall implement the existing strategies, plans or programs for the site that have been approved under previous consents.	As above	There is no intent to stage the development. The various management plans listed have been prepared and submitted to DPE and other departments and Council as part of the review process. DPE have highlighted a number of issues that need to be addressed in order for the plans to be approved. Plan updates and improvements were on going at the time of the audit.	Not-compliant	Finalise and have plans approved by DPE.
18	The Applicant shall: (a) provide annual quarry production data to DRE using the standard form for that purpose; and	TQ Annual Review 2019, 2020 and 2021.	Report form not available	Not-compliant	Include report form or lodgement screen shot in Annual Review, or delete condition from consent.
	(b) include a copy of this data in the Annual Review (see condition 4 of Schedule 5).	Annual Review Teven Quarry 2019, 2020 and 2021.	Copy of report not included in AR	Not-compliant	Include report form or lodgement screen shot in
19	By 31 October 2015, unless otherwise agreed by the Secretary, the Applicant shall: (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and	GHD 2016 App A, 1st Compliance audit.	Survey provided in October 2015 and then updated and submitted in May 2016	Compliant	
	(b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.	GHD 2016 App A, 1st Compliance audit.	Survey provided in October 2015 and then updated and submitted in May 2016	Compliant	
20	While quarrying operations are being carried out, the Applicant shall ensure that these boundaries are clearly marked at all times in a manner that allows operating staff to clearly identify the approved limits of extraction.	Site observations	Large white poles mark the boundary of the approved pit.	Compliant	
21	The Applicant shall pay a contribution of \$0.3501 per tonne of quarry products transported and recycled concrete transported to the site from the site to Ballina Shire Council for the maintenance of the local road network. The contribution shall be paid and indexed in line with the provisions of Ballina Shire Heavy Haulage Contributions Plan 2011 or any subsequent relevant contributions plan adopted by Council. Note: If the parties are unable to agree on any aspect of the maintenance contributions, either party may refer the matter to the Secretary for resolution.	Correspondence from Ballina Shire Council to Holcim 25 June 2022, Confirming Monthly Remittance for quarry product haulage.	Letter discusses new rate increase to \$0.419/tonne. Letter confirms process for issuing remittance notice on monthly basis. Letter confirms supply by Holcim of survey data for extraction and produced product exported from site.	Compliant	

Schedule 3 - Environmental Performance Conditions

NOISE																							
1	The Applicant shall comply with the operating hours set out in Table 1. <table border="1" style="width: 100%; border-collapse: collapse;"> <caption>Table 1: Operating Hours</caption> <thead> <tr> <th>Activity</th> <th>Permissible Hours</th> </tr> </thead> <tbody> <tr> <td>Extraction operations</td> <td>7 am to 6 pm Monday to Friday;</td> </tr> <tr> <td>Processing operations</td> <td>7 am to 4pm Saturday, and</td> </tr> <tr> <td>Overburden management</td> <td>At no time on Sundays or public holidays.</td> </tr> <tr> <td>Blasting</td> <td>10 am to 3 pm Monday to Friday; and</td> </tr> <tr> <td></td> <td>At no time of Sundays or public holidays.</td> </tr> <tr> <td>Loading and dispatch</td> <td>7 am to 10 pm Monday to Friday;</td> </tr> <tr> <td>Stockpile management</td> <td>7 am to 4 pm Saturdays, and</td> </tr> <tr> <td>Maintenance of plant and equipment</td> <td>At no time on Sundays or public holidays.</td> </tr> </tbody> </table>	Activity	Permissible Hours	Extraction operations	7 am to 6 pm Monday to Friday;	Processing operations	7 am to 4pm Saturday, and	Overburden management	At no time on Sundays or public holidays.	Blasting	10 am to 3 pm Monday to Friday; and		At no time of Sundays or public holidays.	Loading and dispatch	7 am to 10 pm Monday to Friday;	Stockpile management	7 am to 4 pm Saturdays, and	Maintenance of plant and equipment	At no time on Sundays or public holidays.	Site observations, pers. Comm Matt Kelly. TQ Noise Management Plan Blasting records supplied. Vehicle Movement Records. Site signage.	Observations at the time of the audit indicate that site operating hours are directed and complied with.	Compliant	
Activity	Permissible Hours																						
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Stockpile management	7 am to 4 pm Saturdays, and																						
Maintenance of plant and equipment	At no time on Sundays or public holidays.																						
2	The Applicant shall ensure that no more than 6 laden trucks per hour are dispatched from the site between 6 pm to 10 pm, Monday to Friday.	Pers. Comm Matt Kelly, Vehicle movement data hour-by-hour. Sales data 2022 (excel Workbook) Jan, Feb, March, April, May. Loader capacity.	Average movements less than 100 per month six days per week. Only one loader available on site for loading. Figures indicate less than 6 loads/hr.	Compliant																			
3	The following activities may be carried out on the site outside the hours specified in Table 1: (a) delivery or dispatch of materials as requested by Police or other authorities; and	Pers. Comm Matt Kelly,	None required out of hours deliveries over the audit period required.	Not triggered																			
	(b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm. In such circumstances, the Applicant shall notify the Secretary and affected residents prior to undertaking the activities, or as soon as is practical thereafter.	Pers. Comm Matt Kelly,	No audible out of hours work required.	Not triggered																			
	The Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land. <table border="1" style="width: 100%; border-collapse: collapse;"> <caption>Table 2: Noise criteria dB(A)</caption> <thead> <tr> <th>Receiver</th> <th>Day dB(A) (L_{Aeq15 min})</th> <th>Evening dB(A) (L_{Aeq15 min})</th> </tr> </thead> <tbody> <tr> <td>R3, R4, R13, R15, R16, R17, R18, R20</td> <td>38</td> <td>35</td> </tr> <tr> <td>All other residences</td> <td>37</td> <td>35</td> </tr> </tbody> </table> <small>Note: Receiver locations are shown on the figure in Appendix 4.</small>	Receiver	Day dB(A) (L _{Aeq15 min})	Evening dB(A) (L _{Aeq15 min})	R3, R4, R13, R15, R16, R17, R18, R20	38	35	All other residences	37	35	TQ Annual Review 2019, 2020 and 2021. MAC Quarterly Noise reports 2019 to 2021, Ch4 Results and Ch5 Discussion	All sensitive receivers except R10/NM4 are consistently below the exceedance criteria. R10/NM4 experiences some intermittent periods where the noise contribution from the quarry is above the exceedance criteria by several dB(A).	Compliant										
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4	<p>Noise generated by the development is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Appendix 5 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.</p> <p>However, the noise criteria in Table 2 do not apply if the Applicant has an agreement with the relevant landowner to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.</p> <p>In the event that the studio outbuilding, certified as Complying Development under the provisions of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 by Techton Building Services on 16 April 2015, is constructed on Lot 3 DP 703181, the Applicant shall ensure that the noise generated by the development does not exceed a criterion of 55 dB(A) Leq (period) when measured external to the façade of the</p>	<p>TQ Annual Review 2019, 2020 and 2021. MAC Quarterly Noise reports 2019 to 2021, Ch4 Results and Ch5 Discussion</p>	<p>Noise monitoring by Muller Acoustic Consulting Pty Ltd, appears to be in accordance with the NSW EPA Noise Policy for Industry 2017. No noise agreements were available at the time of the audit for non-associated landowners. The monitoring reports indicated that the quarry's contribution to noise at the facade of the studio outbuilding on Lot3 DP703181 (NM4) did not exceed 55dB(A).</p>	Compliant														
5	<p>The Applicant shall:</p> <p>(a) implement best practice management to minimise the operational and road transportation noise of the development;</p> <p>(b) minimise the noise impacts of the development during meteorological conditions when the noise criteria in this consent do not apply (see Appendix 5);</p> <p>(c) carry out noise monitoring (at least every 3 months) to determine whether the development is complying with the relevant conditions of this consent; and</p> <p>(d) regularly assess noise monitoring data and modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent, to the satisfaction of the Secretary.</p> <p>Note: Required frequency of noise monitoring may be reduced if approved by the Secretary.</p>	<p>Shed over primary and secondary crushers observed during audit. Regular noise monitoring. No plant warmed up outside of approved hours (pre-start checks). 2-way radios used on site. Access road Stokers Lane sealed for full length and in good condition.</p> <p>Shed over primary and secondary crushers observed during audit. Regular noise monitoring. No plant warmed up outside of approved hours (pre-start checks). 2-way radios used on site. Access road Stokers Lane sealed for full length and in good condition.</p> <p>TQ Annual Review 2019, 2020 and 2021. MAC Quarterly Noise reports 2019 to 2021</p> <p>TQ Annual Review 2019, 2020 and 2021. MAC Quarterly Noise reports 2019 to 2021</p>	<p>Site barely audible from the access road above background noise at the time of the audit. Plant well maintained to avoid excess noise.</p> <p>Site barely audible from the access road above background noise at the time of the audit. Plant well maintained to avoid excess noise.</p> <p>Quarterly noise reports cited for Teven Quarry</p> <p>All sensitive receivers except R10/NM4 are consistently below the exceedance criteria. R10/NM4 experiences some intermittent periods where the noise contribution from the quarry is above the exceedance criteria by several dB(A).</p>	Compliant														
6	<p>The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with EPA;</p> <p>(b) be submitted to the Secretary within 6 months of the date of this consent, unless otherwise agreed by the Secretary;</p> <p>(c) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> compliance with the noise criteria in this consent; best practice management is being employed; and the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 5); <p>(d) describe the proposed noise management system; and</p> <p>(e) include a monitoring program to be implemented to measure noise from the development against the noise criteria in Table 2, and which evaluates and reports on the effectiveness of the noise management system on site.</p>	<p>TQ Noise Management Plan April 2021</p> <p>TQ Noise Management Plan April 2021</p> <p>TQ Noise Management Plan April 2021</p> <p>TQ Noise Management Plan April 2021</p>	<p>Chapter 2 summarises the consultation for the preparation of the Noise Management Plan (TQNMP). Appendix A contains correspondence between Teven Quarry and Both the EPA and DPE. At this stage the TQNMP is yet to be approved by DPE and as such the previous plan is still in effect.</p> <p>This outside the audit period for the current audit.</p> <p>Chapter 7 Table 9 of the TQNMP describes the mitigation measure to control noise from the quarry operations. The measures are relevant and effective.</p> <p>The TQNMP describes the noise management system.</p> <p>TQNMP Chapter 8 describes the noise monitoring requirements for the quarry. Chapter 9 describes the reporting of monitoring.</p>	Compliant	Update and 2021 TQNMP and submit for DPE approval.													
BLASTING																		
7	<p>The Applicant shall ensure that blasting on site does not cause any exceedance of the criteria in Table 3.</p> <p>However, these criteria do not apply if the Applicant has a written agreement with the relevant owner to exceed the limits in Table 3, and the Applicant has advised the Department in writing of the terms of this agreement.</p> <p>Table 3: Blasting criteria</p> <table border="1" data-bbox="254 1300 730 1386"> <thead> <tr> <th>Receiver</th> <th>Airblast overpressure (dB(Lin Peak))</th> <th>Ground vibration (mm/s)</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td></td> <td>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td>Any residence on privately-owned land</td> <td>115</td> <td>5</td> <td>5% of the total number of blasts over a period of 12 months</td> </tr> </tbody> </table>	Receiver	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance		120	10	0%	Any residence on privately-owned land	115	5	5% of the total number of blasts over a period of 12 months	<p>TQ Annual Review 2019, 2020 and 2021. Blast Monitoring Results reported to The EPA 2019, 2020, 2021</p>	<p>Monitoring results reviewed indicate no exceedance of the Airblast overpressure or ground vibration criteria at private residences.</p>	Compliant		
Receiver	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance															
	120	10	0%															
Any residence on privately-owned land	115	5	5% of the total number of blasts over a period of 12 months															

8	The Applicant may carry out a maximum of 2 blasts per calendar month, unless an additional blast is required following a blast misfire. This condition does not apply to blasts required to ensure the safety of the quarry or workers on site. Note: For the purposes of this condition a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the quarry.	TQ Annual Review 2019, 2020 and 2021. Blast Monitoring Results reported to The EPA 2019, 2020, 2021	Records indicate that 11, 12 and 10 Blast occurred in 2019, 2020 and 2021 respectively.	Compliant																	
9	During blasting operations, the Applicant shall: (a) implement best practice management to: • protect the safety of people and livestock in the areas surrounding blasting operations; • protect public or private infrastructure/property in the surrounding area from damage from blasting operations; • minimise the dust and fume emissions of blasting;	TQ Blast Management Plan 2021 Pers. Comm Matt Kelly,	Water truck used for top of shot prior to blasting to provide dust suppression. Blast guards installed prior to blast, with vibration monitoring and video surveillance. All personnel moved outside of exclusion area prior to blast.	Compliant																	
	(b) operate a suitable system to enable the local community to get up-to-date information on the proposed blasting schedule on site; and	Blast notification records for 2022 and 2021	Adjoining neighbours and phone to inform of blast schedule	Compliant																	
	(c) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.	TQ Annual Review 2019, 2020 and 2021. Blast Monitoring Results reported to The EPA 2019, 2020, 2021	Monitoring completed at two locations for each blast.	Compliant																	
10	The Applicant shall prepare and implement a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	TQ Blast Management Plan 2021	Blast Management Plan 2021 developed and has been submitted to DPE for review and approval. Some outstanding matters to be resolved by TQ prior to approval of the plan.	Not-compliant																	
	(b) describe the measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this consent;	TQ Blast Management Plan 2021	Measures to ensure compliance are described in Chapter 7. DPE have requested changes to this Chapter.	Compliant																	
	(c) include a monitoring program for evaluating and reporting on compliance with the blasting criteria in this consent;	TQ Blast Management Plan 2021	Monitoring program described in Chapter 8. DPE have requested changes to this Chapter.	Compliant																	
	(d) include community notification procedures for the blasting schedule; and	TQ Blast Management Plan 2021	Measures to ensure community notification are described in Chapter 9.	Compliant																	
	(e) include a protocol for investigating and responding to complaints.	TQ Blast Management Plan 2021	Measures to investigate and manager complaints are described in Chapter 9.	Compliant																	
AIR QUALITY																					
11	The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 4 at any residence on privately-owned land. Notes for Table 4: a. Cumulative impact (ie increase in concentrations due to the development plus background concentrations due to all other sources). b. Incremental impact (ie incremental increase in concentrations due to the development on its own, with zero allowable exceedances of the criteria over the life of the development). c. Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method. d. Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed to by the Secretary. e. "Reasonable and feasible avoidance and mitigation measures" includes, but is not limited to, the operational requirements in conditions 12 and 13 to develop and implement Table 4 air quality criteria. <table border="1"><thead><tr><th>Pollutant</th><th>Averaging Period</th><th>Criterion</th></tr></thead><tbody><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>Annual</td><td>a.d 30 µg/m³</td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>24 hour</td><td>b 50 µg/m³</td></tr><tr><td>Total suspended particulates (TSP)</td><td>Annual</td><td>a.d 90 µg/m³</td></tr><tr><td>^c Deposited dust</td><td>Annual</td><td>b 2 g/m²/month a.d 4 g/m²/month</td></tr></tbody></table>	Pollutant	Averaging Period	Criterion	Particulate matter < 10 µm (PM ₁₀)	Annual	a.d 30 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	24 hour	b 50 µg/m ³	Total suspended particulates (TSP)	Annual	a.d 90 µg/m ³	^c Deposited dust	Annual	b 2 g/m ² /month a.d 4 g/m ² /month	TQ Air Quality Management Plan 2021 Chapter 7 and 8. Air Quality Monitoring Results reported to The EPA 2019, 2020, 2021. Site observations at the time of the audit.	A range of dust avoidance and mitigation measures were observed on site including: limited blasting and cut face activity, water haul roads, cover loads on vehicles exiting the site, enclosed crushing and screening operations, automated product stockpile and loading area watering system, use of polymer additive at crushing to reduce dusts, street sweeping of access roads, active dust observations during processing and loading and dedicated on site water cart. Visible dust was not observed crossing the site boundaries during the audit. Monitoring results indicate dust levels are below the applied criteria.	Compliant		
Pollutant	Averaging Period	Criterion																			
Particulate matter < 10 µm (PM ₁₀)	Annual	a.d 30 µg/m ³																			
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^c Deposited dust	Annual	b 2 g/m ² /month a.d 4 g/m ² /month																			
12	The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 4 at any occupied residence on quarry-owned land unless: (a) the tenant has been notified of any health risks associated with such exceedances in accordance with the notification requirements under schedule 4 of this consent; and	Air Quality Management Plan 2021. Site observation	Crushing and screening takes place inside enclosed building. Water and DustCam 76 applied to material prior to crushers. Haul roads have fixed position sprinklers on timers with manual override. Wheel wash at exit.	Compliant																	
	(b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice; to the satisfaction of the Secretary.	Pers. Comm Matt Kelly,	No Tenancy terminated in the audit period.	Not triggered																	
	The Applicant shall: (a) implement best practice management to minimise the dust emissions of the development;	Air Quality Management Plan 2021. Site observation	Crushing and screening takes place inside enclosed building. Water and DustChem 76 applied to material prior to crushers. Haul roads have fixed position sprinklers on timers with manual override. Wheel wash at	Compliant																	

13	(b) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent;	Air Quality Management Plan 2021. Site observation TQ Live Environmental Monitoring	Met station in place and operating.	Compliant		
	(c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d under Table 4);	Air Quality Management Plan 2021. Site observation	Historic and current data cited.	Compliant		
	(d) monitor and report on compliance with the relevant air quality conditions in this consent; and	AR 2018-2020	Monitoring records site in the AR.	Compliant		
	(e) minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.	Site observation	Footprint of quarry and processing footprint minimised as far as safety permits. Rehabilitation not occurring at this stage.	Compliant		
14	The Applicant shall prepare and implement an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agree by the Secretary;	Air Quality Management Plan 2021. Site observation	TQAQMP submitted to DPIE for review and DPE October 2020 required alterations to the plan which have not been addressed.	Not-compliant		
	(b) describe the measures that would be implemented to ensure: • compliance with the relevant conditions of this consent; • best practice management is being employed; and • the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;	Air Quality Management Plan 2021.	Section 5, 7 and 8 describes the strategy, mitigation and monitoring measures for air quality control from the quarry activities. Appendix A addresses concerns that DPE have previously raised regarding the plan.	Compliant		
	(c) describe the proposed air quality management system;	Air Quality Management Plan 2021.	Section 7 addresses the air quality management system through listing a series of procedures to be applied on site. In appendix A DPE appears to be uncomfortable with this approach.	Compliant		
	(d) include an air quality monitoring program that: • is capable of evaluating the performance of the development; • includes a protocol for determining any exceedances of the relevant conditions of consent; • effectively supports the air quality management system; and • evaluates and reports on the adequacy of the air quality management system.	Air Quality Management Plan 2021.	Section 8 describes air quality monitoring for the site and subsequent. Section 9 describes reporting and additional investigations if exceedances detected. In appendix A DPE appears to be uncomfortable with this approach. TQ have clarified the approach to determining the impact at adjoining residences in the event of an exceedance.	Compliant		
15	For the life of the development, the Applicant shall ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline.	Site observations	Rambolt real-time weather data display for the site observed in the main office. Monthly spreadsheet provided summarising observation.	Compliant		
16	The Applicant shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.	Site observations. TQ Air Quality Management Plan 2021	TQ AQMP addresses measures for reducing GHG emissions. Vehicle haul routes are direct, vehicles are switched off when not in operation, plant and vehicles are well maintained and related activities are kept in close proximity.	Compliant		
SOIL AND WATER						
	Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater.			Not triggered		
17	The Applicant shall ensure that it has sufficient water for all stages of the development and, if necessary, adjust the scale of operations under the consent to match its available water supply, to the satisfaction of the Secretary.	Site observation AR 2018-2020	Water used on site for quarry operations derived from rainfall within the quarry and processing areas.	Compliant		
18	The Applicant shall comply with the discharge limits in any EPL, or with section 120 of the POEO Act.	TQ Annual Review 2019, 2020 and 2021	Water discharges are in compliance with the EPL.	Compliant		
19	In the event that groundwater in excess of negligible quantities is intersected during extraction activities, the Applicant shall undertake a hydrogeological investigation, in consultation with NOW, to the satisfaction of the Secretary. The investigation must report on groundwater sources, levels, yield and quality; identify any risks to groundwater users or groundwater dependent ecosystems and propose recommended management measures.	TQ Annual Review 2019, 2020 and 2021. Site Observations	Groundwater has not been intersected within the pit at this stage. The quarry floor level is above the water table. A limited amount of water was observed in the sump which was being used in the process for dust suppression	Not triggered		
	The Applicant must implement reasonable and feasible management measures to the satisfaction of the Secretary					
	The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared by suitably qualified and experienced person/s approved by the Secretary;	TQ Water Quality Management Plan March 2022 (TQWMP). Appendix A	Holcim have prepared the TQMP and are implementing the plan. The plan has been prepared in consultation with DPE and other agencies. At the time of the audit evidence was not available to demonstrate DPE approval of the plan. It appears at this stage that consultation with DPE regarding the plan is ongoing.	Compliant		
	(b) be prepared in consultation with the EPA and NOW;	TQ Water Quality Management Plan March 2022 (TQWMP). Appendix A	Holcim have prepared the TQMP in consultation with the EPA and NOW (now NRAR).	Compliant		
	(c) be submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	TQ Water Quality Management Plan March 2022 (TQWMP). Appendix A Jandra Quarry Independent Environment Audit 2016.	The current TQWMP is the second version of the plan following the issuing of consent. This plan is currently in development and being reviewed by DPE. The results of the previous audit indicate that the previous plan was submitted within the required time period.	Compliant		

20	<p>(d) include a:</p> <p>(i) Site Water Balance that includes:</p> <ul style="list-style-type: none"> • details of: <ul style="list-style-type: none"> o sources and security of water supply; o water use and management on site; o any off-site water transfers; o reporting procedures; and o measures that would be implemented to minimise clean water use on site; and (ii) Surface Water Management Plan, that includes: <ul style="list-style-type: none"> • detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the development; • a detailed description of the surface water management system on site including the: <ul style="list-style-type: none"> o clean water diversion system; o erosion and sediment controls; o dirty water management system; and o water storages; and • a program to monitor and report on: <ul style="list-style-type: none"> o any surface water discharges; o the effectiveness of the water management system; and 	TQ Water Quality Management Plan March 2022 (TQWMP). Appendix A	<p>The current TQWMP includes Site Water Balance a water balance in section 5. It looks at rainfall received by the site compared to water losses/use at the site. In general there is a need to discharge water from the site in wet conditions.</p> <p>Water discharged to the site enters an irrigation supply channel. Water quality information for the channel was not incorporated in the plan. A summary of water quality results is provided at Section 4 table 8, for water discharged from the site. Figure two describes dirty water drainage and management paths. Section 7 describes water management processes for the site. In summary the topography/quarry footprint controls clean water movement off the site and dirty water movement on the site. Sediment ponds are used to capture, store, reuse, and treat dirty water. These ponds appear to have sufficient capacity. Excess water is treated tested and discharged from the site when rainfall exceeds losses.</p>	Compliant		
TRANSPORT						
21	All heavy vehicles leaving and entering the site shall travel via Teven Road between Stokers Lane and the Bruxner Highway, except:	Site observation TQ Annual Reviews 2019-2021. Aerial photos.	Primary option available for heavy vehicle movements delivers the majority of deliveries to and from the site. Secondary options (largely north) are minimal markets and minimal supplier options.	Compliant		
	(a) when making local deliveries;	Site observation TQ Annual Reviews 2019-2021 Aerial photos.	Primary option available for heavy vehicle movements delivers the majority of deliveries to and from the site. Secondary options (largely north) are minimal markets and minimal supplier options.	Compliant		
	(b) when transport via the Bruxner Highway is affected due to road closures; or	Site observation TQ Annual Reviews 2019-2021 Aerial photos.	Primary option available for heavy vehicle movements delivers the majority of deliveries to and from the site. Secondary options (largely north) are minimal markets and minimal supplier options.	Compliant		
22	(c) in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.	Site observation TQ Annual Reviews 2019-2021 Aerial photos.	Primary option available for heavy vehicle movements delivers the majority of deliveries to and from the site. Secondary options (largely north) are minimal markets and minimal supplier options.	Compliant		
	The Applicant shall provide and/or maintain:	Rates letter for payment.	Council complete all works on Teven Road. Holcim make payments to BSC for all road works relative to the tonnage exported from site.	Compliant		
	(a) centre-line markings on Teven Road between Stokers Lane and Bruxner Highway;	As above	As above	Compliant		
	(b) a guard-rail on Teven Road at its intersection with Stokers Lane;	As above	As above	Compliant		
23	(c) reflectors on the guard-rail fencing at the intersections of Stokers Lane and Wellers Road with Teven Road; and	As above	As above	Compliant		
	(d) intersection and truck warning signage on Teven Road near its intersection with Stokers Lane, to the satisfaction of Council.	Rates letter for payment.	Council complete all works on Teven Road. Holcim make payments to BSC for all road works relative to the tonnage exported from site.	Compliant		
24	Works on Teven Road or Stokers Lane must not take place unless the Applicant has the prior approval of Council.	Rates letter for payment.	Council complete all works on Teven Road. Holcim make payments to BSC for all road works relative to the tonnage exported from site.	Compliant		
23	The Applicant shall keep accurate records of all laden truck movements to and from the site (hourly, daily, weekly, monthly and annually) and publish a summary of records on its website every 6 months.	Teven Daily Sails Sheet, 2018-2021	Daily sales records are known in advance to a large extent. Traffic numbers and customer movement expectations are managed so that movement numbers are not exceeded.	Compliant		
24	The Applicant shall ensure that:	Site Observation	Site trucks clear labelled with Holcim on the vehicle and a plant item number.	Compliant		
	(a) all company owned trucks associated with the quarry have appropriate signage, so they be easily identified by road users;	Site Observation	Trucks observed covering loads prior to arrival and departure.	Compliant		
	(b) all laden trucks entering or exiting the site have their loads covered;	Site Observation Drivers Code of Conduct Site Induction	Code of conduct and site inductions advise drivers to cover loads.	Compliant		
	(c) all laden trucks existing the site are cleaned of materials that may fall on the road, before leaving the site; and	Site Observation Drivers Code of Conduct Site Induction	Truck bodies limit spilled material traveling off site. Code of conduct and site inductions advise drivers to clean trucks prior to departure.	Compliant		
25	(d) no trucks queue at the entrance to the quarry before 6.45 am.	Drivers Code of Conduct Site Induction Incident register.	No Incidents recorded of trucks waiting at the site.	Compliant		
25	25. The Applicant shall prepare and implement a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:	Teven Quarry Transport Management Plan April 2021 (TQTMP)	Appendix A provides information regarding consultation for the plan preparation. Correspondence citing DPE/Holcim discussions indicate that Council and RMS consultation was largely futile. The plan has been prepared in consultation with DPE, Holcim progressively addressing issues raised by DPE.	Compliant		
	(a) be prepared in consultation with RMS and Council and submitted to the Secretary for approval within 6 months of the date of this consent, unless otherwise agreed by the Secretary;	Teven Quarry Transport Management Plan April 2021 (TQTMP)	Figure three, section 4.1, 5 and 6.3 of the TQTMP provides a clear indication of the primary and secondary transport routes and when to use same.	Compliant		
	(b) provide a clear description of the primary and secondary transport routes and the circumstances during which the secondary transport route is to be utilised;	Teven Quarry Transport Management Plan April 2021 (TQTMP). Site entry and induction information.	Table seven and Appendix C provide the drivers code of conduct.	Compliant		
	(c) include a Drivers' Code of Conduct that details the safe and quiet driving practices that must be used by drivers transporting products to and from the quarry, particular having regard to school bus routes and the location of residential properties; and	Teven Quarry Transport Management Plan April 2021 (TQTMP)	Section 7 of the TQTMP address monitoring and management of non-compliance with the CoC.	Compliant		
25	(d) describe the measures that would be put in place to ensure compliance with the Drivers' Code of Conduct.	Teven Quarry Transport Management Plan April 2021 (TQTMP)	Section 7 of the TQTMP address monitoring and management of non-compliance with the CoC.	Compliant		
ABORIGINAL HERITAGE						

26	If any item or object of Aboriginal heritage significance is identified on site, the Applicant shall ensure that: (a) all work in the immediate vicinity of the suspected Aboriginal item or object ceases immediately;	Pers. Comm Matt Kelly,	No Items of heritage have been identified on-site during the audit period.	Not triggered											
	(b) a 10 m buffer area around the suspected item or object is cordoned off with high visibility flagging tape, or the like; and	Pers. Comm Matt Kelly,	No Items of heritage have been identified on-site during the audit period.	Not triggered											
	(c) the OEH is contacted immediately. Work in the vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the National Parks and Wildlife Act 1974.	Pers. Comm Matt Kelly,	No Items of heritage have been identified on-site during the audit period.	Not triggered											
BIODIVERSITY AND REHABILITATION															
27	The Applicant shall rehabilitate the site to the satisfaction of the Secretary. This rehabilitation must be generally consistent with the rehabilitation strategy in the EIS and the conceptual final landform in Appendix 2, and must comply with the objectives in Table 5. <i>Table 5: Biodiversity and Rehabilitation objectives</i>	Pers. Comm Matt Kelly,	Site rehab yet to commence.	Not triggered											
	<table border="1"> <thead> <tr> <th>Feature</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Site (as a whole)</td> <td> <ul style="list-style-type: none"> Safe, stable and non-polluting Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and designed to minimise the visual impacts of the development when viewed from surrounding land Restored with native, endemic vegetation </td> </tr> <tr> <td>Surface Infrastructure</td> <td>Decommissioned and removed, unless the Secretary agrees otherwise</td> </tr> <tr> <td>Quarry Benches</td> <td>Landscaped and vegetated using native tree and understorey species</td> </tr> <tr> <td>Quarry Pit Floor</td> <td>Landscaped and revegetated using native tree and understorey species, above the final anticipated void water level</td> </tr> </tbody> </table>	Feature	Objective	Site (as a whole)	<ul style="list-style-type: none"> Safe, stable and non-polluting Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and designed to minimise the visual impacts of the development when viewed from surrounding land Restored with native, endemic vegetation 	Surface Infrastructure	Decommissioned and removed, unless the Secretary agrees otherwise	Quarry Benches	Landscaped and vegetated using native tree and understorey species	Quarry Pit Floor	Landscaped and revegetated using native tree and understorey species, above the final anticipated void water level				
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28	The Applicant shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation. Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future.	Pers. Comm Matt Kelly. Site observations	Whole site currently being used.	Not triggered											
	The Applicant shall prepare and implement a Biodiversity and Rehabilitation Management Plan for the site to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with OEH, and be submitted to the Secretary for approval within 6 months of the date of this consent, unless the Secretary agrees otherwise;	Biodiversity and Rehabilitation Management Plan Nov 2021 (BRMP). Previous Audit Findings GHD 2020.	BRMP was available on the TQ website at the time of the audit. The previous version of the plan was compliant in the last audit. The August 2020 BRMP was submitted to DPE in August 2020 and DPE provided comments on 7/10/2020. Holcim submitted the updated document to BCD (Now BCS) on 4/2/2021. BCD provided feedback on the BRMP on the 9/3/2021. Holcim addressed BCS and DPE comments in appendix A of the BRMP. At the time of the audit no evidence could be found that the current version of the BRMP was approved by DPE.	Not-compliant	Request final approval from DPE to the BRMP										
	(b) provide details of the conceptual final landform and associated land uses for the site;	BRMP 2021	Potential final land use, native ecosystem, is addressed in section 7.3 of the BRMP. The Landform is described in section 9 and Table 14 and Figures 6 & 7.	Compliant											
	(c) describe how the management of biodiversity would be integrated with the overall rehabilitation of the site;	BRMP 2021	BRMP indicates that native ecosystems would be encouraged on the site through the removal of built structures and the use of native vegetation on cut benches.	Compliant											
	(d) include detailed performance and completion criteria for evaluating the performance of the biodiversity management measures and rehabilitation of the site, including triggers for any necessary remedial action;	BRMP 2021	Performance criteria are explained and detailed in Section 11 and table 16 of the BRMP.	Compliant											
	(e) describe the short, medium and long-term measures that would be implemented to: • protect and enhance the remnant vegetation and habitat on the site; • ensure compliance with the biodiversity and rehabilitation objectives, and the progressive rehabilitation obligations in this consent;	BRMP 2021	The BRMP describes short, medium and long-term measures in Section 10 and table 15.	Compliant											

29	(f) include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3 year period following initial approval of the plan) including the procedures to be implemented for: <ul style="list-style-type: none"> maximising the salvage of environmental resources within the approved disturbance area, including tree hollows, vegetative and soil resources, for beneficial reuse in site; restoring and enhancing the quality of native vegetation and fauna habitat on site through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features; protecting vegetation and fauna habitat outside the approved disturbance area on-site; minimising the impacts on native fauna, including undertaking pre-clearance surveys; establishing vegetation screening to minimise the visual impacts of the site on surrounding receivers; ensuring minimal environmental consequences for threatened species, populations and habitats; collecting and propagating seed; controlling weeds and feral pests; controlling erosion; controlling access; and managing bushfire risk; 	Wordle 530 5/6	The BRMP describes management measures to minimise clearing impacts associated with the quarry in Section 10 and table 15.	Compliant		
	(g) include a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria;	BRMP 2021	Performance criteria are explained and detailed in Section 11 and table 16 of the BRMP.	Compliant		
	(h) identify the potential risks to the successful implementation of the plan and include a description of the contingency measures that would be implemented to mitigate these risks; and	BRMP 2021	The BRMP list the risk to implementation and controls in section 11.3.	Compliant		
	(i) include details of who would be responsible for monitoring, reviewing, and implementing the plan.	BRMP 2021	The BRMP discusses roles and responsibilities in section 14 and monitoring and review in section 12.	Compliant		
30	Within 6 months of the approval of the Biodiversity and Rehabilitation Management Plan, the Applicant shall lodge a Conservation and Rehabilitation Bond with the Department to ensure that the management of biodiversity and the rehabilitation of the site are implemented in accordance with the performance and completion criteria set out in the Biodiversity and Rehabilitation Management Plan. The sum of the bond shall be determined by: (a) calculating the cost of rehabilitating the site taking into account the likely surface	Previous Audit Findings GHD 2020. BRMP Appendix 1	Appendix 1 DPE comments indicate that a rehabilitation bond had been paid to the department in 2017.	Compliant		
	(b) employing a suitably qualified quantity surveyor or other expert to verify the calculated costs, to the satisfaction of the Secretary. Note: If the rehabilitation of the site is completed to the satisfaction of the Secretary, then the Secretary will release the bond. If the rehabilitation of the site is not completed to the satisfaction of the Secretary, then the Secretary will call in all or part of the bond, and arrange for the completion of the relevant works.	Previous Audit Findings GHD 2020. BRMP Appendix 1	Appendix 1 DPE comments indicate that a rehabilitation bond had been paid to the department in 2017.	Compliant		
31	Within 3 months of each Independent Environmental Audit (see condition 8 of Schedule 5), the Applicant shall review, and if necessary revise, the sum of the Conservation and Rehabilitation Bond to the satisfaction of the Secretary. This review must consider the: (a) effects of inflation;	TQ Annual Reviews 2019, 2020, 2021	Chapter 8.1 of the 2021 annual reviews states that Rehabilitation Bonds was reviewed in 2021 and provided to DPE. DPE correspondence 25 November 2021 confirmed DPE satisfaction with the bond. It is noted that aerial photography indicates minimal additional clearing after 2017. DPE visited the quarry in June 2021 to inspect the rehabilitation. No further actions were required by DPE.	Compliant		
	(b) likely cost of rehabilitating the site (taking into account the likely surface disturbance over the next 3 years of the development); and	TQ Annual Reviews 2019, 2020, 2021	As above	Compliant		
	(c) performance of the implementation of the rehabilitation of the site to date.	Site observations	Some minor plantings for screening of the site are successful but major rehabilitation is yet to occur.	Not triggered		
VISUAL IMPACTS						
32	The Applicant shall implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development to the satisfaction of the Secretary.	Site Observations	Lighting on site mostly restricted to downward facing fluorescent lighting. No lighting on high points.	Compliant		
WASTE						
33	The Applicant shall: (a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council;	Site observations	On site sewage is regulated by the Local government Act. The system was installed prior to 2017 when council updated its OSSM policy. The system is in low risk setting with a small number of non residential users and an adequate effluent disposal area. At the time of the audit an approval to operate the system from BSC was not available.	Not-compliant	Seek approval to operate the system from BSC.	
	(b) minimise the waste generated by the development;	Site Observations TQ Annual Reviews 2019, 2020, 2021	Most waste are reprocessed to form products or recycled. Cleared vegetation => habitat and eroded control. Overburden => road base. Fines => roadbase and shotfire stemming. Septic is pumped out and transpired. Office waste is recycled or goes to putrescible landfill. Waste oil=> recycled. Steel Waste recycled.	Compliant		
	(c) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and	Site Observations TQ Annual Reviews 2019, 2020, 2021	All wastes stored undercover	Compliant		

	(d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	TQ Annual Reviews 2019, 2020, 2021	Section 9.2 reports on the management of wastes.	Compliant		
LIQUID STORAGE						
34	The Applicant shall ensure that all liquid tanks and similar storage facilities (other than for water) are protected by appropriate bunding, which must exceed 110% of the stored volume of the liquid.	Site Observations	Fuels and oils are double banded. And above 110% storage.	Compliant		
DANGEROUS GOODS						
35	The Applicant shall ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.	SDS Manifest, Chem Alert system, SSDS Register Site Observations Liquid Fuel and Chemical Transfer procedure	Chems identified and recorded. Fuels, compressed gasses and oils are stored in covered, and locked and bund structures. Liquid Fuel and Chemical Transfer procedure sited for Teven Quarry.	Compliant		
BUSHFIRE						
36	The Applicant shall: (a) ensure that the development is suitably equipped to respond to any fires on site; and	Site observations. RFS Web site	Cited Water truck and numerous signed hand held extinguishers. RFS phone numbers displayed in the lunchroom/office.	Compliant		
	(b) assist the NSW Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.	Pers. Comm Matt Kelly. Review of aerial photography.	No fire adjacent the site during the audit period.	Not triggered		
Schedule 4 - Additional Procedures						
NOTIFICATION OF LANDOWNERS						
1	As soon as practicable after obtaining monitoring results showing: (a) an exceedance of any relevant criteria in Schedule 3, the Applicant shall notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020, 2021.	Landowner notification not required, minor exceedance only.	Not triggered		
	(b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant shall send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privately-owned).	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020, 2021.	Minor exceedance of PM10 criteria associated with Fires in the reporting period.	Not triggered		
2	If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.	Pers. Comm Matt Kelly.	No request in the last three years are known to management.	Not triggered		
3	If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant shall: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the development is complying with the relevant criteria in Schedule 3; and • if the development is not complying with these criteria then identify measures that could be implemented to ensure compliance with the relevant criteria; and give the Secretary and landowner a copy of the independent review.	Pers Com Matt Kelly	No request in the last three years are known to management.	Not triggered		
Schedule 5 - Environmental Management, Reporting and Auditing						
1	The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must: (a) be submitted to the Secretary for approval within 6 months of the date of this consent;	TQ Environmental Management Strategy April 2021 Update (TQEMS). Independent Environmental Audit 2020.	The 2020 IEA by GHD found that the original EMS was submitted. Section 2.2 of the EMS 2021 states that an updated EMS was submitted to DPE in August 2020 and Holcim received comments in October 2020. DPE's comments were addressed and the response to DPE comments are in Appendix A of the EMS. No evidence of DPE approval of the EMS is provided in its current form.	Not-compliant	Submit updated EMS for DPE Approval and append approval to Appendix A of the EMS when obtained.	
	(b) provide the strategic framework for the environmental management of the development;	TQ Environmental Management Strategy April 2021 Update (TQEMS).	Provided in section 4 and noted as adequate by DPE in Oct 2020.	Compliant		
	(c) identify the statutory approvals that apply to the development;	TQ Environmental Management Strategy April 2021 Update (TQEMS).	Provided in Section 3/Table 2 and noted as adequate by DPE in Oct 2020.	Compliant		
	(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	TQ Environmental Management Strategy April 2021 Update (TQEMS).	Provided in section 6.1 and noted as adequate by DPE in Oct 2020.	Compliant		
	(e) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the development; • receive, record, handle and respond to complaints; • resolve any disputes that may arise during the course of the development; • respond to any non-compliance; • respond to emergencies; and	TQ Environmental Management Strategy April 2021 Update (TQEMS).	Provided in section 6.3.2, 7.3 and 6.4 and noted as adequate by DPE in Oct 2020.	Compliant		
	(f) include: • copies of any strategies, plans and programs approved under the conditions of this consent; and • a clear plan depicting all the monitoring to be carried out under the conditions of this consent.	TQ Environmental Management Strategy April 2021 Update (TQEMS).	Provided in section 5.2, 7.1 and figure 3.	Compliant		

2	The Applicant shall ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data;	TQ Blast Management Plan (Sept 21). TQ Transport Management Plan (April 2021). TQ Air Quality Management Plan (May 2022). TQ Biodiversity & Rehabilitation Management Plan (Nov 21). TQ Noise Management Plan (April 2021). TQ Water Management Plan (March 2022).	The Management plans have generally been prepared in accordance with the conditions of consent and in consultation with DPE and relevant agencies. The plans provide: * Baseline data where available * Relevant legislative requirements, limits, performance measures and specific indicators * Management measures relevant to the quarry and surrounds * Monitoring programs and report requirements * Contingency Provisions * Incident, complaint, non-conformance and exceedance management procedures and measures. * Periodic review and improvement protocols	Compliant	
	(b) a description of: • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; and • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	As above	As above	Compliant	
	(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	As above	As above	Compliant	
	(d) a program to monitor and report on the: • impacts and environmental performance of the development; and • effectiveness of any management measures (see (c) above);	As above	As above	Compliant	
	(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	As above	As above	Compliant	
	(f) a program to investigate and implement ways to improve the environmental performance of the development over time;	As above	As above	Compliant	
	(g) a protocol for managing and reporting any: • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and	As above	As above	Compliant	
	(h) a protocol for periodic review of the plan. Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.	As above	As above	Compliant	
3	The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	Noted	Compliant	
	Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity: (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur;	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	Four minor exceedances were recorded in 2019 and two in 2020. Each exceedance was investigated and measures put in place to minimise future occurrences.	Compliant	
	(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021. Site observations.	Dust jars replaced following vandalism, polymer added to crushing process to reduce dust emissions, altered processes to account for bushfire impacts on monitoring. Reporting of exceedances as required.	Compliant	
(c) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	Non-required.	Not triggered		
4	By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must: (a) describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	Annual reviews prepared and submitted to DPE. Annual review for 2021 not available at the time of the audit.	Not-compliant	Prepare annual review and submit.
	(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the: • relevant statutory requirements, limits or performance measures/criteria; • requirements of any plan or program required under this consent; • the monitoring results of previous years; and • the relevant predictions in the FIS;	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	Annual reviews prepared provide a review of monitoring and complaints for the quarry.	Compliant	
	(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	The annuals reviews cited describe no-compliance and exceedances and actions taken or proposed to be taken to manage same.	Compliant	
	(d) identify any trends in the monitoring data over the life of the development;	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	Trends are described in Table 21 Section 6.8.	Compliant	

	(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	Predicted impacts exceedances are summarised in Table 21.	Compliant		
	(f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.	Pers. Comm Matt Kelly. TQ Annual Reviews 2019, 2020 and 2021.	Actions and measures Implemented are summarised in Table 21.	Compliant		
5	Within 3 months of the submission of an: (a) annual review under condition 4 above; (b) incident report under condition 6 below; (c) audit report under condition 8 below; and (d) any modifications to this consent, the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary. Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.	Audit Action Plan 2019 EMS and Management Plans	Plans being updated based on previous audit.	Compliant		
6	If directed by the Secretary, the Applicant shall establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. Any such CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments (Department of Planning, 2007, or its latest version). Notes: • The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent. • In accordance with the guidelines, the Committee should comprise an independent chair and appropriate representation from the Applicant, Council and the local community.	Pers. Comm Matt Kelly.	The Secretary has not directed the Applicant to establish a Community Consultative Committee (CCC) for the development.	Not triggered		
REPORTING						
7	The Applicant shall immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Incident Reporting system used onsite called iCARW. Prior to 2021 system called INX. No incidents causing material harm or reaching limits occurred during reporting period.	No incidents causing material harm or reaching limits occurred during reporting period.	Compliant		
8	The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	Annual Reviews uploaded to Holcim website	The annual review for 2021 has not been submitted or displayed in a timely fashion.	Not-compliant	Provide completed 2021 Annual review on the Quarry Website.	
INDEPENDENT ENVIRONMENTAL AUDIT						
9	Within a year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies;	DPE Correspondence Approval of Auditor July 2022	DPE approved NGH as the IEA Auditors three weeks prior to the 15 July 2022. Holcim Engaged NGH thereafter.	Compliant		
		NGH Correspondence with Agencies and Council dated 29 July 2022	NGH wrote to Ballina Shire Council, DPE, BCS, Crown Lands, NSW EPA requesting input to the Audit. NGH Received responses from the EPA and BCS.	Compliant		
	(c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL or necessary water licences for the development (including any assessment, strategy, plan or program required under these approvals);	This Audit	This audit has considered compliance with the requirements of the consent and the EPL for the activity. No water extraction license exists.	Compliant		
	(d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and	This Audit	This audit has examined the adequacy of the strategy, plans and programs required by the consent.	Compliant		
	(e) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, strategy plan or program required under the abovementioned approvals. Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.	This Audit	This audit has made recommendations to address non-compliances.	Compliant		
10	Within 6 weeks of the completion of this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the report.	Noted		Not triggered		
ACCESS TO INFORMATION						

11	<p>Within 6 months of the date of this consent, the Applicant shall:</p> <p>(a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> the documents listed in condition 2 of Schedule 2; current statutory approvals for the development; all approved strategies, plans and programs required under the conditions of this consent; a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; a complaints register, updated monthly; the annual reviews of the development; any independent environmental audit, and the Applicant's response to the recommendations in any audit; minutes of CCC meetings; <p>(b) keep this information up-to-date, to the satisfaction of the Secretary.</p>	<p>https://www.holcim.com.au/about-us/community-link/teven-quarry-teven-ballina-nsw</p>	<p>Reference to The Teven Quarry Website provides access to:</p> <ul style="list-style-type: none"> The Consent and the EPL (#3293) April 2021, EIS and Statement of Commitments. The EMS, AQMP, BRMP, BMP, NMP, TMP, WMP Truck Movement Data, EPL Monitoring Data Complaint register Previous Audits and Audit Plans PIRMP Contact details for the Teven Quarry Manager 	Compliant													
<p>Environment Protection Licence - EPL 3293</p>																	
<p>Administrative Conditions</p>																	
A1.1	<p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table border="1" data-bbox="262 609 779 673"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Extractive activities</td> <td>Extractive activities</td> <td>> 100000 - 500000 T annually extracted or processed</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Extractive activities	Extractive activities	> 100000 - 500000 T annually extracted or processed	<p>Site observations Aerial imagery observations</p> <p>Production quantity records sighted</p>	EXTRACTION LIMITS NOT EXCEEDED.	Compliant							
Scheduled Activity	Fee Based Activity	Scale															
Extractive activities	Extractive activities	> 100000 - 500000 T annually extracted or processed															
A1.2	<p>Notwithstanding the maximum scale at condition A1.1, the maximum scale of extractive activity authorised under this licence must not exceed the extraction limit approved by the development consent granted under the Environmental Planning and Assessment Act 1979 for the premises specified in condition A2.</p>	<p>Site observations Aerial imagery observations</p> <p>Production quantity records sighted</p>	Limits not exceeded.	Compliant													
A2.1	<p>The licence applies to the following premises:</p> <table border="1" data-bbox="262 797 716 919"> <thead> <tr> <th>Premises Details</th> </tr> </thead> <tbody> <tr> <td>TEVEN QUARRY - HOLCIM (AUSTRALIA) PTY LTD</td> </tr> <tr> <td>STOKERS LANE</td> </tr> <tr> <td>TEVEN</td> </tr> <tr> <td>NSW 2478</td> </tr> <tr> <td>LOT 1 DP 732288, LOT 2 DP 732288, LOT 3 DP 732288</td> </tr> </tbody> </table>	Premises Details	TEVEN QUARRY - HOLCIM (AUSTRALIA) PTY LTD	STOKERS LANE	TEVEN	NSW 2478	LOT 1 DP 732288, LOT 2 DP 732288, LOT 3 DP 732288	<p>Site observations Aerial imagery observations</p>	Activity constrained to lots 1-3.	Compliant							
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NSW 2478																	
LOT 1 DP 732288, LOT 2 DP 732288, LOT 3 DP 732288																	
A3.1	<p>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to:</p> <p>a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and</p> <p>b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	<p>Site observations Aerial imagery observations</p>	Activities generally in accordance with the consent.	Compliant													
<p>DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND</p>																	
P1.1	<p>The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.</p>	Noted		Compliant													
P1.2	<p>The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.</p> <table border="1" data-bbox="262 1252 768 1382"> <thead> <tr> <th colspan="4">Water and land</th> </tr> <tr> <th>EPA Identification no.</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Wet weather discharge Water quality monitoring</td> <td>Wet weather discharge Water quality monitoring</td> <td>Discharge occurs via overflow or pumping from the Main Dam, via an underground pipe to the site settling drain. The settling drain (concrete drain, 220m in length) runs along the eastern edge of the site before discharging at the point detailed in Figure</td> </tr> </tbody> </table>	Water and land				EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	1	Wet weather discharge Water quality monitoring	Wet weather discharge Water quality monitoring	Discharge occurs via overflow or pumping from the Main Dam, via an underground pipe to the site settling drain. The settling drain (concrete drain, 220m in length) runs along the eastern edge of the site before discharging at the point detailed in Figure	<p>Site observations Aerial imagery observations</p>	Observations on site of the discharge location demonstrate compliance with P1.1	Compliant	
Water and land																	
EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description														
1	Wet weather discharge Water quality monitoring	Wet weather discharge Water quality monitoring	Discharge occurs via overflow or pumping from the Main Dam, via an underground pipe to the site settling drain. The settling drain (concrete drain, 220m in length) runs along the eastern edge of the site before discharging at the point detailed in Figure														

<p>P1.3</p>	<p>The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.</p> <table border="1" data-bbox="254 196 789 280"> <thead> <tr> <th colspan="3">Noise/Weather</th> </tr> <tr> <th>EPA Identification no.</th> <th>Type of monitoring point</th> <th>Location description</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Noise monitoring</td> <td>168 Wellers Road</td> </tr> </tbody> </table>	Noise/Weather			EPA Identification no.	Type of monitoring point	Location description	2	Noise monitoring	168 Wellers Road	<p>AR noise monitoring reports. 2018-2021</p>	<p>Site two monitored.</p>	<p>Compliant</p>																												
Noise/Weather																																									
EPA Identification no.	Type of monitoring point	Location description																																							
2	Noise monitoring	168 Wellers Road																																							
<p>LIMIT CONDITIONS</p>																																									
<p>L1.1</p>	<p>Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.</p>	<p>Noted</p>		<p>Not triggered</p>																																					
<p>L1.2</p>	<p>Rainfall runoff from all disturbed areas of the premises arising from up to 82.5mm (up to five day event duration) must, prior to discharge from the premises, be captured and treated to the standard set out in condition L2 below.</p>	<p>Site Observations. TQ Water Management Plan Aerial Photography</p>	<p>Calculations based on the are disturbed and the design event and Table 11 of the TQWMP indicate that about 15 ML of storage is required on site. At the time of the audit it was clear that the shape of the quarry</p>	<p>Compliant</p>																																					
<p>L2.1</p>	<p>For each monitoring/discharge point or utilisation area specified in the table\ (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.</p>	<p>TQ Annual Reviews 2019, 2020 and 2021. EPL monitoring Data 2019 to 2022.</p>	<p>Water quality results are within the limits specified below.</p>	<p>Compliant</p>																																					
<p>L2.2</p>	<p>Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.</p>	<p>TQ Annual Reviews 2019, 2020 and 2021. EPL monitoring Data 2019 to 2022.</p>	<p>pH results are within the specified range</p>	<p>Compliant</p>																																					
<p>L2.3</p>	<p>To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\.</p>	<p>Noted.</p>		<p>Not triggered</p>																																					
<p>L2.4</p>	<p>Water and/or Land Concentration Limits</p> <table border="1" data-bbox="254 605 789 768"> <thead> <tr> <th colspan="7">POINT 1</th> </tr> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>50 percentile concentration limit</th> <th>90 percentile concentration limit</th> <th>3DGM concentration limit</th> <th>100 percentile concentration limit</th> <th></th> </tr> </thead> <tbody> <tr> <td>Oil and Grease</td> <td>Visible</td> <td></td> <td></td> <td></td> <td></td> <td>nil</td> </tr> <tr> <td>pH</td> <td>pH</td> <td></td> <td></td> <td></td> <td></td> <td>6.5-8.5</td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td></td> <td></td> <td></td> <td></td> <td>50</td> </tr> </tbody> </table>	POINT 1							Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit		Oil and Grease	Visible					nil	pH	pH					6.5-8.5	Total suspended solids	milligrams per litre					50	<p>Record of lab results</p>	<p>Record of lab results cited, parameters tested are appropriate.</p>	<p>Compliant</p>		
POINT 1																																									
Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit																																				
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pH	pH					6.5-8.5																																			
Total suspended solids	milligrams per litre					50																																			
<p>L2.5</p>	<p>The concentration limits in the table do not apply to any discharge from the sediment pond(s) solely arising from a rainfall event exceeding 82.5 mm (the 90 percentile 5 day rain event) in total falling over any consecutive five day period.</p>	<p>Noted</p>		<p>Not triggered</p>																																					
<p>L2.6</p>	<p>If the licensee uses turbidity (NTU) in place of TSS to determine compliance with Condition L2.4, the licensee must develop a statistical correlation which identifies the relationship between NTU and TSS for water quality in the sediment basin/s in order to determine the NTU equivalent of 50 mg/L TSS before its use.</p>	<p>Pers. Comm Matt Kelly. EPL pollution monitoring data 2019, 2020, 2021.</p>	<p>TSS is not used for water testing.</p>	<p>Not triggered</p>																																					
<p>L2.7</p>	<p>The licensee must provide the EPA with a copy of the statistical correlation assessment methodology and results before using NTU in place of TSS.</p>	<p>Pers. Comm Matt Kelly. EPL pollution monitoring data 2019, 2020, 2021.</p>	<p>TSS is not used for water testing.</p>	<p>Not triggered</p>																																					
<p>L2.8</p>	<p>The licensee must develop and implement a method to enable the ongoing verification of the relationship between NTU and TSS.</p>	<p>Pers. Comm Matt Kelly. EPL pollution monitoring data 2019, 2020, 2021.</p>	<p>TSS is not used for water testing.</p>	<p>Not triggered</p>																																					
<p>L2.9</p>	<p>The licensee must provide the EPA with any amendments the licensee makes to the statistical correlation as a result of the ongoing verification required by Condition L2.8 before using the revised statistical correlation.</p>	<p>Pers. Comm Matt Kelly. EPL pollution monitoring data 2019, 2020, 2021.</p>	<p>TSS is not used for water testing.</p>	<p>Not triggered</p>																																					
<p>L2.10</p>	<p>Controlled discharges from any sediment basins must not exceed a 100th percentile limit for Total Suspended Solids concentration of 50mg/L. All discharges are to fall within the pH range of between 6.5 and 8.5. There is to be no visible oils and greases in any controlled discharges from sediment basins.</p>	<p>Pers. Comm Matt Kelly. EPL pollution monitoring data 2019, 2020, 2021.</p>	<p>No Exceedances</p>	<p>Compliant</p>																																					
<p>L3.1</p>	<p>The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.</p>	<p>Site observations Pers Com Matt Kelly</p>	<p>No waste apart from permitted waste observed or allowed on site.</p>	<p>Compliant</p>																																					
<p>L3.2</p>	<p>The licensee must not cause, permit or allow any waste to be received at the premises, except the waste expressly referred to in the paragraph below titled "Wastes" and meeting definition, as below: Wastes General or specific exempted waste: Waste that meets the all the conditions of a resource recovery exemption.</p>	<p>Site observations Pers Com Matt Kelly</p>	<p>No waste apart from permitted waste observed or allowed on site.</p>	<p>Compliant</p>																																					
<p>L4.1</p>	<p>Noise from the premises is to be measured at 168 Wellers Road, TEVEN, (Receiver no 2 in the Teven Quarry Project Development Consent of 15 July 2015) to determine compliance with this condition.</p>	<p>Quarterly Noise Monitoring Reports MAC 2019-2021. TQ Annual Reviews 2019-2021.</p>	<p>Monitoring is occurring at five locations including 168 Wellers Road, TEVEN</p>	<p>Compliant</p>																																					

L4.2	<p>Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.</p> <p>Note: Noise sensitive locations means buildings used as a residence, hospital, school, childcare centre, places of public worship and nursing homes. A noise sensitive location includes the land within 30m of the building.</p> <p>POINT 2</p> <table border="1" data-bbox="289 316 768 386"> <thead> <tr> <th>Time period</th> <th>Measurement parameter</th> <th>Measurement frequency</th> <th>Noise level dB(A)</th> </tr> </thead> <tbody> <tr> <td>Day</td> <td>Day-LAeq (15 minute)</td> <td>Yearly</td> <td>37</td> </tr> <tr> <td>Evening</td> <td>Evening-LAeq (15 minute) (6pm-10pm Mon-Sun)</td> <td>Yearly</td> <td>35</td> </tr> </tbody> </table>	Time period	Measurement parameter	Measurement frequency	Noise level dB(A)	Day	Day-LAeq (15 minute)	Yearly	37	Evening	Evening-LAeq (15 minute) (6pm-10pm Mon-Sun)	Yearly	35	<p>Quarterly Noise Monitoring Reports MAC 2019-2021. TQ Annual Reviews 2019-2021.</p>	<p>The noise monitoring reports indicate that noise levels at the receivers are routinely above the specified limit but that the quarry is responsible for negligible contributions. The main noise sources are recorded as traffic, insects, birds, aircraft and other environmental noise sources.</p>	Compliant		
Time period	Measurement parameter	Measurement frequency	Noise level dB(A)															
Day	Day-LAeq (15 minute)	Yearly	37															
Evening	Evening-LAeq (15 minute) (6pm-10pm Mon-Sun)	Yearly	35															
L4.3	<p>The noise limits set out in the Noise Limits table apply under all meteorological conditions except for the following: a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or b) Temperature inversion conditions up to 3°C/100m and wind speeds greater than 2 metres/second at 10 metres above ground level; or c) Temperature inversion conditions greater than 3°C/100m.</p>	<p>Quarterly Noise Monitoring Reports MAC 2019-2021. TQ Annual Reviews 2019-2021.</p>	Noted.	Compliant														
L5.1	<p>Blasting operations at the premises may only take place between 10:00 to 15:00 Monday to Friday. (Where a blast failure has occurred or there are compelling safety reasons, the EPA may permit a blast to occur outside the above hours. The licensee must provide prior written notice of any such blast to the EPA by contacting 131 555.)</p>	<p>Maxam Blast Report June 2021. Maxam Blast Report August 2021. Holcim Shot Firing Record sheet August 2021.</p>	Shots fired between 10am and 3pm.	Compliant														
L5.2	<p>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 any point within 1 metre of any affected residential property or other sensitive noise location.</p>	<p>TQ Annual Reviews 2019-2021. TQ EPL Data Sheet 2019-2020. Maxam Blast Report June 2021. Maxam Blast Report August 2021.</p>	Airblast overpressure did not exceed 115dB at adjacent residences.	Compliant														
L5.3	<p>The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: a) 5 mm/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 any point within 1 metre of any affected residential property or other sensitive noise location.</p>	<p>TQ Annual Reviews 2019-2021. TQ EPL Data Sheet 2019-2020. Maxam Blast Report June 2021. Maxam Blast Report August 2021.</p>	Ground vibration PPV was not above 5mm/S for any blasting.	Compliant														
L5.4	<p>All sensitive receivers are to be given at least 24 hours notice when blasting is to be undertaken.</p>	<p>Holcim TQ Notification records sheets for 2021 and 2019.</p>	Notifications made by phone and txt.	Compliant														
L5.5	<p>To determine compliance with condition(s) L4.2 and L4.3: a) Airblast overpressure level and ground vibration peak particle velocity must be measured at the 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 airblast overpressure level and/or ground vibration peak particle velocity for all blasts carried out in or on the premises; and b) Instrumentation used to measure the airblast overpressure level and ground vibration peak particle velocity must meet the requirements of the current Australian Standard.</p>	<p>TQ Annual Reviews 2019-2021. TQ EPL Data Sheet 2019-2020. Maxam Blast Report June 2021. Maxam Blast Report August 2021. TQ Blast Management Plan 2021.</p>	Monitoring is completed at the residence on Wellers Road and at the site entrance on Stokers Lane. The residence is 350 m from the quarry face.	Compliant														
L5.6	<p>The licensee must report any exceedance of the licence blasting limits to the EPA within 24 hours of the exceedance becoming known to the licensee or to one of the licensee's employees or agents.</p>	<p>Maxam Blast Report June 2021. Maxam Blast Report August 2021. TQ Blast Management Plan 2021. Pers com Matt Kelly</p>	Vibration and Airblast overpressure monitoring are supplied by the blasting contractor and reported to Holcim. Their equipment meets the requirements of the current Australian Standard.	Compliant														
L5.6	<p>The licensee must report any exceedance of the licence blasting limits to the EPA within 24 hours of the exceedance becoming known to the licensee or to one of the licensee's employees or agents.</p>	<p>TQ Annual Reviews 2019-2021. TQ EPL Data Sheet 2019-2020.</p>	No exceedances have occurred.	Not triggered														
L6.1	<p>Activities covered by this licence must only be carried out between the hours of 7.00 am to 6 pm Monday to Friday, and 7.00 am to 4 pm Saturday, and at no time on Sundays and Public Holidays. In addition Loading and Dispatching, Stockpile management and Maintenance of plant and equipment must only be carried out between the hours of 7.00 am to 10 pm Monday to Friday, and 7.00 am to 4 pm Saturday, and at no time on Sundays and Public Holidays.</p>	<p>Site observations, pers. Comm Matt Kelly. TQ Noise Management Plan Blasting records supplied. Vehicle Movement Records. Site signage.</p>	Observations at the time of the audit indicate that site operating hours are directed and complied with.	Compliant														
L6.2	<p>This condition does not apply to the delivery of material outside the hours of operation permitted by condition L5.1, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification must be provided to the EPA and affected residents as soon as possible or within a reasonable period in the case of emergency.</p>	<p>Site observations, pers. Comm Matt Kelly. TQ Noise Management Plan</p>	No deliveries required out of hours.	Not triggered														

OPERATING CONDITIONS

O1.1	Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	Site observations	Site was kept in an orderly and competent manner. Handling and movement minimised to prevent dust and noise and reduce fuel consumption. Access to the site sealed and well maintained.	Compliant		
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.	Site observations at the time of the audit including: crushing and screening plant, dust suppression system, water cart WT04, oil and fuel storage, water recycling, Cat Excavators(x2) at Face, 980G loader, delivery trucks (x2). 980G Loader Maintenance Records incl. Inspection Checklist Loader 16/6/2022, 9/5/2022, prestart check 28/1/2022 Cat 345D Maintenance Records incl. Inspection Checklist Loader 17/2/2022, 20/1/2022, 28/1/2022	Crushing and screening plants housed and shielded, dust suppression(Dust Chem 76) in place and active. Noise audible but not excessive, no indication of seized bearings or broken steel work. Trucks loader and excavators largely smoke free and with exhaust muffled.	Compliant		
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Site observations	Fine materials used to blend with products and salt to prevent a build up or stockpiling of fine material..	Compliant		
O3.2	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Site observations	Fixed position sprinklers and water cart used to minimise dust.	Compliant		
O3.3	Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.	Site Observation Drivers Code of Conduct Site Induction	Trucks observed covering loads prior to arrival and departure. Code of conduct and site inductions advise drivers to cover loads.	Compliant		
O4.1	The licensee must maximise the diversion of run-on waters from lands upslope and around the site whilst land disturbance activities are being undertaken.	Site observations and six maps.	Shape of land, contours, and road infrastructure directs off site water away from the quarry activities.	Compliant		
O4.2	The licensee must maximise the diversion of stormwater runoff containing suspended solids to sediment basins installed on the premises.	Site observations	Roads are bunded to direct stormwater to centralised pump wells that shift water to on site storage for reuse on site.	Compliant		
O4.3	Where sediment basins are necessary, all sediment basins and associated drainage must be installed and commissioned prior to the commencement of any clearing or grubbing works within the catchment area of the sediment basin that may cause sediment to leave the site.	The basins were installed prior to the audit period.	The basins were installed prior to the audit period	Compliant		
O4.4	The licensee must ensure the design storage capacity of the sediment basins installed on the premises is reinstated within 5 days of the cessation of a rainfall event that causes runoff to occur on or from the premises.	Pers com Matt Kelly	Sediment basins do not have an official design but there capacity far exceeds the storage requirement for a five day event.	Compliant		
O4.5	The licensee must ensure that sampling point(s) for water discharged from the sediment basin(s) are provided and maintained in an appropriate condition to permit: a) the clear identification of each sediment basin and discharge point; b) the collection of representative samples of the water discharged from the sediment basin(s); and c) access to the sampling point(s) at all times by an authorised officer of the EPA.	Site observations	Discharge sampling points can be accessed for the purpose of sampling	Compliant		
O4.6	The licensee must endeavour to maximise the reuse of captured stormwater on the premises.	Site observations	All process water sourced from on site storage including sediment basins.	Compliant		
O4.7	Each sedimentation basin must have a marker (the "sedimentation basin marker") that identifies the upper level of the sediment storage zone.	Site observations	No marker observed	Not-compliant		
O4.8	Whenever the level of liquid and other material in any sedimentation basin exceeds the level indicated by the sedimentation basin marker, the licensee must take all practical measures as soon as possible to reduce the level of liquid and other material in the sedimentation basin.	Site observations	No marker observed	Not-compliant		
O4.9	The sites sediment basin(s) must be maintained and operated to ensure that: • All 5-day rainfall events up to 82.5 mm (the 90th percentile 5 day rain event) are captured. • Any discharge from the sediment basin that occurs as a result of rainfall below the 5-day total of 82.5mm must meet the limit conditions specified in condition L2.4.	Site observations Calculations of volume.	Calculations based on the are disturbed and the design event and Table 11 of the TQWMP indicate that about 15 ML of storage is required on site. At the time of the audit it was clear that the shape of the quarry floor to the south and the two on site storages had in excess of 40ML.	Compliant		
O4.10	Sediment Basins shall be treated, if required, to reduce the Total Suspended Solids level to the licenced concentration limit before being discharged to the environment. Treatment can be with gypsum or any other material that has been approved by the EPA.	Site observations Pers com Matt Kelly	Floccing not required to meet discharge limit.	Compliant		
O4.11	The level of sediment in any sedimentation basin on the premises must be maintained below the upper level indicated by the sedimentation marker.	Site observations	No Marker observed	Not-compliant		
O4.12	All liquid chemicals, fuels and oils must be stored in tanks or containers inside suitable bund(s). Bund(s) are to be designed, constructed and maintained in accordance with the current Australian Standard for the Storage and Handling of Flammable and Combustible Liquids.	Site observations	Fuels and oils stored in bunded areas with covers above	Compliant		
MONITORING AND RECORDING CONDITIONS						
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Site observation	All monitoring results easily obtained from digital records.	Compliant		
	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form;	Site observation	Records are digital and legible	Compliant		

M1.2	b) kept for at least 4 years after the monitoring or event to which they relate took place; and	Site observation	Records kept for seven years as per the record retention policy	Compliant															
	c) produced in a legible form to any authorised officer of the EPA who asks to see them.	Site observation	Records are digital and legible	Compliant															
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken;	Sample records	Date recorded	Compliant															
	b) the time(s) at which the sample was collected;	Sample records	Time not recorded	Not-compliant															
	c) the point at which the sample was taken; and	Sample records	Sample point recorded	Compliant															
	d) the name of the person who collected the sample.	Sample records	Name recorded	Compliant															
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	Noted		Not triggered															
M2.2	Water and/ or Land Monitoring Requirements <small>POINT 1</small>	Sample records	AS per the requirement	Compliant															
	<table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Oil and Grease</td> <td>milligrams per litre</td> <td>Special Frequency 1</td> <td>Visual inspection</td> </tr> <tr> <td>pH</td> <td>Special Frequency 1</td> <td>No method specified</td> <td></td> </tr> <tr> <td>Total suspended solids</td> <td>milligrams per litre</td> <td>Special Frequency 1</td> <td>Grab sample</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Oil and Grease	milligrams per litre	Special Frequency 1	Visual inspection	pH	Special Frequency 1	No method specified		Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample		
Pollutant	Units of measure	Frequency	Sampling Method																
Oil and Grease	milligrams per litre	Special Frequency 1	Visual inspection																
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Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample																
M2.3	Special Frequency 1 means sampling any discharge, whether controlled or otherwise, which has not occurred from rainfall exceeding 82.5mm over any consecutive 5 day period.	Noted		Not triggered															
M3.1	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	Sample records.	No utilisation area on site. Discharge point is monitored as required.	Compliant															
M4.1	Rainfall at the premises must be measured and recorded in millimetres per 24 hour period, at the same time each day.	Ramboll records	Daily Rainfall recorded in mm.	Compliant															
M4.2	The licensee is required to install and maintain a rainfall depth measuring device.	Ramboll records	Weather station installed that measures rainfall.	Compliant															
M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Holcim Complaint Register - Teven	Records legible	Compliant															
M5.2	The record must include details of the following: a) the date and time of the complaint;	Holcim Complaint Register - Teven	Date and time recorded	Compliant															
	b) the method by which the complaint was made;	Holcim Complaint Register - Teven	Method not recorded	Not-compliant															
	c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;	Holcim Complaint Register - Teven	More recent record included some personal details	Not-compliant															
	d) the nature of the complaint;	Holcim Complaint Register - Teven	Nature recorded	Compliant															
	e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and	Holcim Complaint Register - Teven	Action recorded	Compliant															
	f) if no action was taken by the licensee, the reasons why no action was taken.	Holcim Complaint Register - Teven	Recorded	Compliant															
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Holcim Complaint Register - Teven	Records kept for seven years as per the record retention policy	Compliant															
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Pers Com	No request in the last three years	Not triggered															
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Site Entry Signage and Website	Phone line numbers displayed and directed to onsite contact.	Compliant															
M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Site Entry Signage and Website	Phone line numbers displayed and directed to onsite contact.	Compliant															
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Site Entry Signage and Website	Phone line numbers displayed and directed to onsite contact.	Compliant															
M7.1	Noise monitoring must be carried out in accordance with Australian Standard AS 2659.1 – 1998: Guide to the use of sound measuring equipment – Portable sound level meters, and the compliance monitoring guidance provided in the Noise Policy for Industry 2017.	MAC Noise monitoring reports 2018 -2021	Reports site Australian Standard	Compliant															
M8.1	To assess compliance with the noise limits specified within this licence, the licensee must undertake operator attended noise monitoring at each specified noise monitoring point in accordance with the table below. <small>POINT 2</small>	MAC Noise monitoring reports 2018 -2021	Noise monitoring completed in accordance with the table requirements.	Compliant															
	<table border="1"> <thead> <tr> <th>Assessment period</th> <th>Minimum frequency in a reporting period</th> <th>Minimum duration within assessment period</th> <th>Minimum number of assessment period</th> </tr> </thead> <tbody> <tr> <td>Day</td> <td>Yearly</td> <td>1.5 hours</td> <td>1 operation day</td> </tr> </tbody> </table>	Assessment period	Minimum frequency in a reporting period	Minimum duration within assessment period	Minimum number of assessment period	Day	Yearly	1.5 hours	1 operation day										
Assessment period	Minimum frequency in a reporting period	Minimum duration within assessment period	Minimum number of assessment period																
Day	Yearly	1.5 hours	1 operation day																

REPORTING CONDITIONS

R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions, 4. a Statement of Compliance - Load based Fee, 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and 7. a Statement of Compliance - Environmental Management Systems and Practices. At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.	Annual Return 2021. EPA EPL portal.	Annual return cited for 2021. No infringement notices for non lodgement of returns. EPA officer noted returns have been submitted in their System.	Compliant	
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	Annual Return 2021. EPA EPL portal.	As above	Compliant	
R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.	Annual Return 2021. EPA EPL portal.	No transfer has occurred.	Not triggered	
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	Annual Return 2021. EPA EPL portal		Not triggered	
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Pers com Mat Kelly Annual returns	Returns submitted on time via Econnect	Compliant	
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Site observation	Records kept for seven years as per the record retention policy	Compliant	
R1.7	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Pers com Mat Kelly Annual returns	Returns submitted on time via Econnect and signed.	Compliant	
R1.8	The licensee must also include the following information with the Annual Return: • A statement detailing the total volume of material extracted from the quarry for the reporting period; and • The total volume of extracted material transported from the premises for the reporting period.	Pers com Mat Kelly Annual returns 2021 Annual Reviews 2019-2021	Annual Reviews are submitted with the Annual Returns via email. This includes a statement on the volumes extracted and won.	Compliant	
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Pers com Mat Kelly	Notifications not made.	Not triggered	
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred. Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Pers com Mat Kelly	Notifications not made.	Not triggered	
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Noted Record of enquiry to the epa re tree clearing on western boundary	Holcim Teven provided written report to EPA regarding tree clearing on the boundary.	Compliant	
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	Noted Record of enquiry to the epa re tree clearing on western boundary	Holcim Teven provided written report to EPA regarding tree clearing on the boundary.	Compliant	

R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	Noted Record of enquiry to the epa re tree clearing on western boundary		Compliant		
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.			Not triggered		
GENERAL CONDITIONS						
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Copy of Premises on site.	EPL printed and displayed on site.	Compliant		
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Copy of Premises on site.	EPL printed and displayed in the lunch room.	Compliant		
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Copy of Premises on site.	EPL printed and displayed in the lunch room.	Compliant		
Consultation						
NSW BCD (DPE)						
1	The audit should also review the implementation of this approved BRMP and progress on achieving its objectives.	Site observations BRMP 2021	The BRMP is being implemented on site, with some screening planting having been carried out on site. Major rehabilitation has not yet commenced on site however clearing minimisation and small-scale plantings align with the long-term objectives of the BRMP.	Compliant		

Appendix B DPE auditor approval

Holcim (Australia) Pty Ltd
Ms Shilpa Shashi
Level 8 Tower B
799 Pacific Highway
CHATSWOOD NSW 2067

22/06/2022

Dear Shilpa Shashi

**Teven Quarry (SSD-6422)
IEA Auditors Approval Request 2022**

I refer to your request (SSD-6422-PA-26) for the Secretary's approval of suitably qualified persons to prepare the Independent Environmental Audit (IEA) for the Teven Quarry.

The Department of Planning and Environment (the **department**) has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced. Consequently, I can advise that the Secretary approves the appointment of NGH Consulting to prepare the IEA for 2022.

In accordance with Schedule 5, Condition 9 of SSD-6422 (the **consent**) and the Independent Audit Post Approval Requirements, the Secretary has agreed to the following audit team:

- Natascha Arens – Lead Auditor
- Michial Sutherland

Please ensure this correspondence is appended to the Independent Audit Report.

The Independent Audit must be prepared, undertaken and finalised in accordance with the Independent Audit Post Approval Requirements. Failure to meet these requirements will require revision and resubmission.

The department reserves the right to request an alternate auditor or audit team for future audits. *Further, the department note that some of the Exemplar Global certifications for the above auditors will expire before the final audit for this project has been completed. Please note that this approval of the above audit team is conditional upon them maintaining certification as a lead or principal auditor with a relevant industry body.*

Notwithstanding the agreement for the above listed audit team for this Project, each respective project approval or consent requires a request for the agreement to the auditor or audit team be submitted to the department, for consideration of the Secretary. Each request is reviewed and

depending on the complexity of future projects, the suitability of a proposed auditor or audit team will be considered.

Should you wish to discuss the matter further, please contact Phillip Rose on (02) 6670 8657.

Yours sincerely

A handwritten signature in black ink that reads "Shelley McPhee".

Shelley McPhee
Compliance Team Leader
Compliance

As nominee of the Planning Secretary

Appendix C Agency consultation

C.1 Biodiversity and Conservation Division of DPE

22-207 - Teven Quarry Independent Environmental Audit



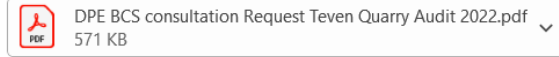
Michial Sutherland

To info@environment.nsw.gov.au

Cc Natascha Arens; Whitney Heiniger; Shilpa Shashi



Fri 29/07/2022 3:16 PM



Dear BCS

Please find attached a request for consultation regarding Teven Quarry Independent Environmental Audit 2022.

Kind Regards

Mike

MICHIAL SUTHERLAND
BUSINESS DEVELOPMENT MANAGER NQ
MEANZ



NSW · ACT · QLD · VIC
WWW.NGHCONSULTING.COM.AU



BCD Response - RE: 22-207 - Teven Quarry Independent Environmental Audit

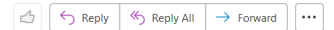
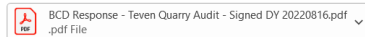


Dimitri Young

To Michial Sutherland

Cc Natascha Arens; Whitney Heiniger; Krister Waern

You replied to this message on 16/08/2022 2:59 PM.



Tue 16/08/2022 11:32 AM

Hi Mike

Our response is attached.

Please direct any future correspondence on this matter to our mailbox planning.northeast@environment.nsw.gov.au rather than Environment Line.

Cheers

D

Dimitri Young

Senior Team Leader Planning, North East Branch
Biodiversity and Conservation Division
Department of Planning and Environment



Working days Monday to Friday, 09:00am - 05:00pm

C.2 Ballina Shire Council

From: Michial Sutherland [REDACTED]
Sent: Thursday, 11 August 2022 4:30 PM
To: Stewart Lloyd [REDACTED]
Cc: Whitney Heiniger [REDACTED] Matt Kelly [REDACTED]
Subject: RE: Request for consultation

Hi Stewart,

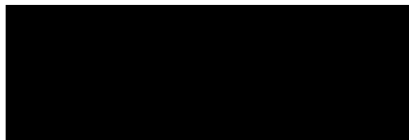
NGH are obliged by DPE Audit guidelines to consult with local government and various agencies.

If you would like the audit to focus on a particular issue(s) you can raise that matter with us.


Kind Regards






Mike

MICHIAL SUTHERLAND
BUSINESS DEVELOPMENT MANAGER NQ
MEIANZ



RE: Request for consultation

 Stewart Lloyd [REDACTED]
To: Michial Sutherland
Cc: Whitney Heiniger, Matt Kelly

  Reply  Reply All  Forward 

Tue 16/08/2022 2:26 PM

 You replied to this message on 16/08/2022 3:05 PM.

-  Approval to Operate - Renewal Letter - Parcel No 10073 - Owner ~ Property 129 Stokers Lane TEVEN.pdf .pdf File
-  ossm-approval-to-operate-ossms-renewal-2022-23.pdf .pdf File

Hi Michael,

Thank you for your enquiry.

The findings of the Teven Quarry - independent audit 2020 and independent audit action plan 2020 have been reviewed. It is noted that eighteen non compliances of the Approval SSD-6422 were observed by the independent audit.

Condition 33 Schedule 3 identifies that Holcim must liaise with Council to lodge an application to obtain the relevant approvals required for the onsite sewage treatment and disposal system and to be completed prior to June 2021.

Corrective action 10: described that Holcim Teven should obtain confirmation from EPA and Council indicating they are satisfied with the onsite sewage treatment and disposal system at the site.

An application for renewal of the Onsite Sewage Management System has not been recorded on Councils system. I have attached correspondence regarding the onsite sewage treatment system requirements for your assistance.

If you require any further information, I may be contacted on the number provided below or return email.

Regards

Stewart

Stewart Lloyd
Environmental Health Officer



C.3 Department of Planning and Environment

22-207 - Teven Quarry Independent Environmental Audit



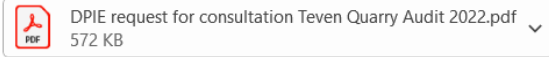
Michial Sutherland

To DPE PSVC Compliance Mailbox

Cc [Redacted] Natascha Arens; Whitney Heiniger; Shilpa Shashi



Fri 29/07/2022 12:38 PM



Hi Phillip

Please find attached a request for consultation regarding the even Quarry Independent Environmental Audit 2022.

Kind Regards

Mike

MICHIAL SUTHERLAND
BUSINESS DEVELOPMENT MANAGER NQ
MEIANZ



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C.4 NSW Crown Lands

22-207 - Teven Quarry Independent Environmental Audit



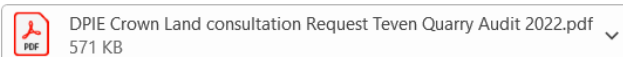
Michial Sutherland

To cl.enquiries@crownland.nsw.gov.au

Cc Natascha Arens; Whitney Heiniger; Shilpa Shashi



Fri 29/07/2022 3:02 PM



Attention: Crown Land

Please find attached a request for consultation regarding the Teven Quarry Independent Environmental Audit 2022.

Kind Regards

Mike

MICHIAL SUTHERLAND
BUSINESS DEVELOPMENT MANAGER NQ
MEIANZ



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C.5 NSW Environment Protection Authority

RE: 22-207 - Teven Quarry Independent Environmental Audit



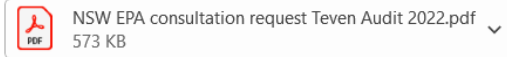
Michial Sutherland

To Info@epa.nsw.gov.au

Cc [Natascha Arens](#); [Whitney Heiniger](#); [Shilpa Shashi](#)



Fri 29/07/2022 2:41 PM



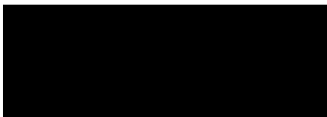
Hi Brett

Please disregard the previous email find attached an updated request for consultation regarding the even Quarry Independent Environmental Audit 2022.

Kind Regards

Mike

MICHIAL SUTHERLAND
BUSINESS DEVELOPMENT MANAGER NQ
MEIANZ



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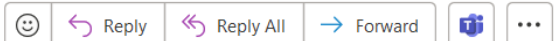
RE: 22-207 - Teven Quarry Independent Environmental Audit



Nicole Power

To [Michial Sutherland](#)

Cc [Natascha Arens](#); [Whitney Heiniger](#); [Shilpa Shashi](#)



Mon 1/08/2022 11:05 AM

Dear Mike,

Thank you for your email and letter of 29/7/2022 advising of the Independent Environmental Audit of the Teven Quarry required by its Project Approval (SSD 6422), and, providing the EPA with an opportunity to raise any relevant matters.

The EPA has reviewed its records held for EPL#3293 and has not identified any compliance issues. The EPA therefore has no matters to raise in relation to this Audit.

Kind regards,

Nicole Power
Operations Officer
Regulatory Operations
NSW Environment Protection Authority



www.epa.nsw.gov.au [@NSW_EPA](#) [EPA YouTube](#)

The EPA acknowledges the traditional custodians of the land and waters where we work. As part of the world's oldest surviving culture, we pay our respect to Aboriginal elders past, present and emerging.

Appendix D Site inspection photos



Sign at front entrance displaying site hours of operation and contact details



Enclosed crushing operations



Secure storage available for dangerous goods, unlocked at the time of audit



Washplant and wedge pit



Benching activities in the main pit



Water storage area in the main pit, able to be pumped into the primary sedimentation pond



Primary sedimentation pond with visible aquatic plant growth