



BUTTAI QUARRY



ANNUAL ENVIRONMENTAL MANAGEMENT REPORT (AEMR)

2020

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1. INTRODUCTION

1.1 Scope

This report has been prepared by Daracon Quarries in accordance with the Project Approvals section 7.1 “Annual Report Requirements of Buttai Quarry Management Plan” to record the activities and environmental monitoring undertaken within and surrounding Buttai Quarry during the period 1st January 2020 to 31st December 2020.

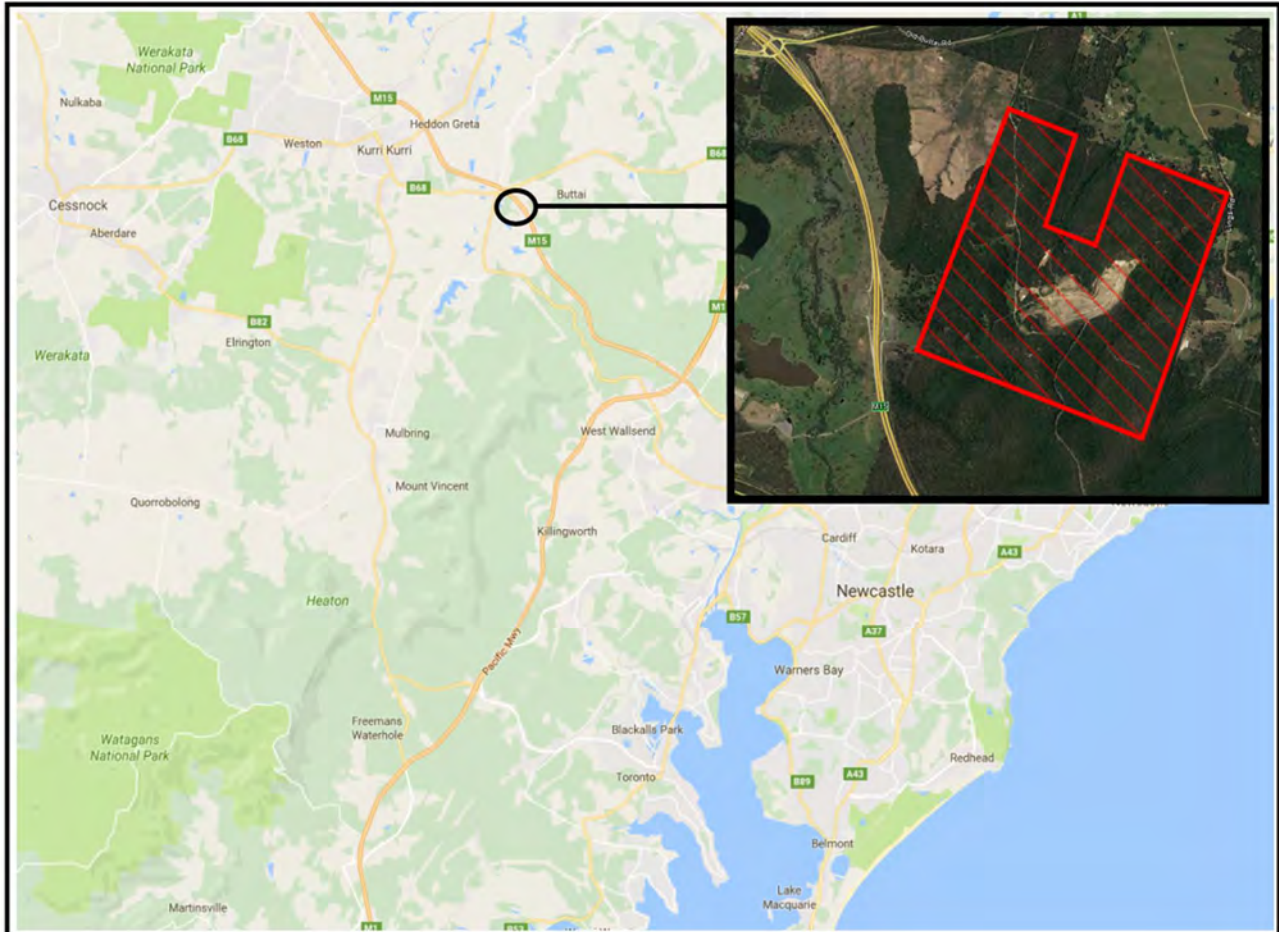


Figure 1: Quarry Location

This document provides an overview of activities and environmental monitoring that occurred within the reporting period and also activities and environmental monitoring planned for 2021. This Annual Environmental Management Report (AEMR) contains the following:

- A description of activities that were carried out in 2020 including the response to COVID-19;
- A review of the environmental monitoring results that were obtained during 2020;
- Results of the Environmental Inspections (Rubicon – formerly TREES and internal) completed during 2020;
- A description of potential measures that may be implemented throughout 2021 to improve the environmental performance of the Quarry;

1.2 Standards and Performance Measures

The owner and operator of Buttai Quarry, Daracon Quarries (Trading as Buttai Gravel Pty Ltd) operates the Quarry site in accordance with conditions of consent and licences listed in **Table 1**.

Table 1: Buttai Quarry - Consents and Licences

Approval/Licence	Issue Date
Project Approval 10286	1997
Modification of Approval	2008
Modification of Approval	2008
Modification of Approval	2010
Modification of Approval	2015
Environment Protection Licence No.12829	

Relevant conditions with Project Approval 10286 (1997) and associated modifications which nominate specific environmental criteria are as follows providing complete records of all measurements.

- *Project Approval 10286 (1997) Schedule 7 Condition 1 & 2: Operating Hours, Blasting*
- *Project Approval 10286 (1997) Schedule 17: Noise*
- *Project Approval 10286 (1997) Schedule 29: Air Quality*
- *Project Approval 10286 (1997) Schedule 35: Water Quality*
- *Project Approval 10286 (1997) Schedule 39: Blasting*
- *Project Approval 10286 (1997) Schedule 43: Rehabilitation*
- *Project Approval 10286 (1997) Schedule 65: Waste and Effluent*

In addition to the specific environmental criteria, the following conditions within Project Approval 10286 specifically request further information be included in each AEMR.

- *Section 6.12.2 of Buttai Quarry Management Plan: Product Transport*

1.3 Site Management And Responsibilities

Mr Paul Walker continues to undertake the role of overall Daracon Quarries Manager. Mr Geoff Reeves is now the Quarry Manager with Mr Daniel Smith assisting with the operation of Buttai Quarry as required. Mr Luke Robinson (Systems Manager) continues to provide direction and assistance to all staff regarding the various site safety, environmental and quality systems. Other companies involved with quarry related documentation and monitoring include:

- VGT Environmental Compliance Solutions and Laboratories;
- Spectrum Acoustics;
- Rubicon Enviro Pty Ltd (external environmental consultant - formerly TREES);

1.4 Document Preparation

The following information and data for this report has been drawn from documents commissioned or held by Daracon within the various Buttai Quarry Environmental Monitoring Folders (this document was prepared by Mr Luke Robinson and Mr Daniel Smith).

2. OPERATIONS DURING THE REPORTING PERIOD

2.1 Introduction

During 2020, the Quarry was in an operational phase. **Table 2** lists the activities that occurred at Buttai Quarry during 2020.

Table 2: Summary of operations during the reporting period

January 2020	Production and sale of various road base and construction materials;
February 2020	Production and sale of various road base and construction materials; Noise Monitoring;
March 2020	Production and sale of various road base and construction materials; Daracon site environmental audit and report;
April 2020	Production and sale of various road base and construction materials;

May 2020	Production and sale of various road base and construction materials; Noise Monitoring; Buttai Quarry remote CCC meeting due to COVID-19;
June 2020	Production and sale of various road base and construction materials; Rubicon environmental inspection and report;
July 2020	Production and sale of various road base and construction materials;
August 2020	Production and sale of various road base and construction materials; Noise Monitoring;
September 2020	Production and sale of various road base and construction materials; Daracon site environmental audit and report;
October 2020	Production and sale of various road base and construction materials; Buttai Quarry remote CCC meeting due to COVID-19;
November 2020	Production and sale of various road base and construction materials; Noise Monitoring;
December 2020	Production and sale of various road base and construction materials;

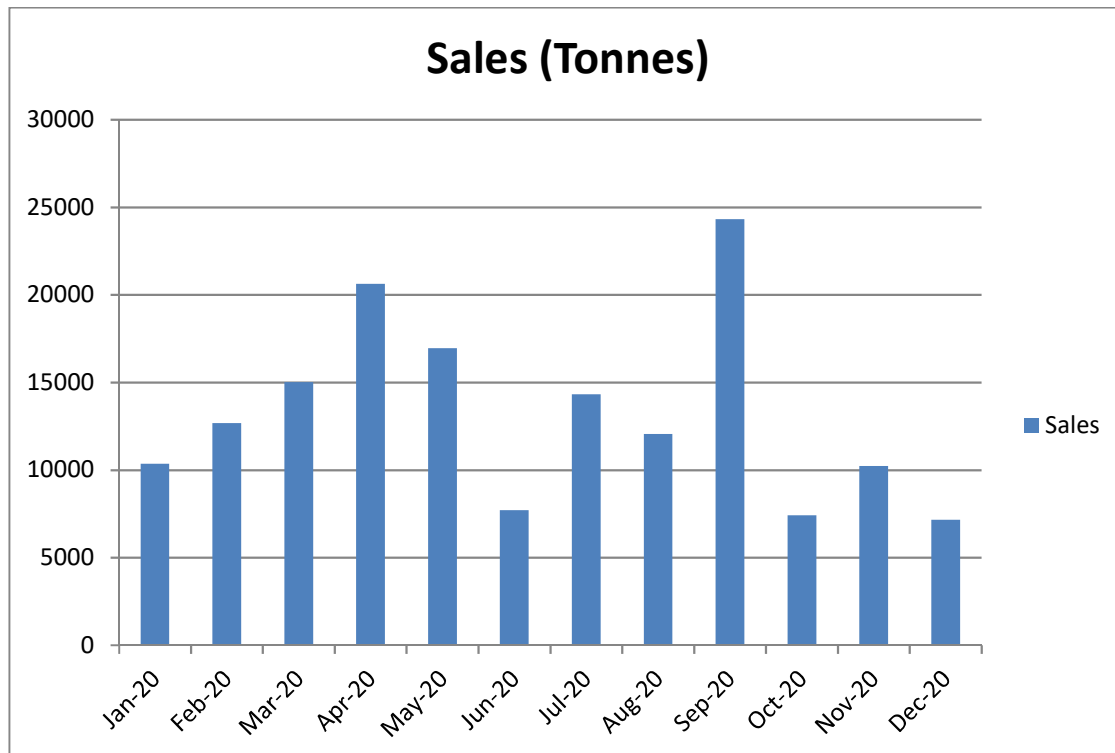
2.2 Extraction And Clearing Operations

During 2020 there was a total of 158,823 tonnes of material sold to internal and external clients for construction purposes.

The quarry footprint and extent of clearing remains unchanged from 2019.

Table 3 presents the monthly sales from Buttai Quarry during 2020 reporting period.

Table 3: Buttai Quarry Sales (tonnes)



2.3 Overburden and Soil Management

Overburden is the material that sits above the rock reserve and is typically made up of topsoil, clay and other non-rock material. For Buttai quarry, the overburden is separated and stockpiled into specific areas at the top of the quarry. This material may be sold for various purposes within the civil construction industry as required. Soil and water is managed as per Daracon environmental management plans and procedures. Please refer to Section 2.7 Water Management.

2.4 Processing Operations

Processing of material occurs in two stages at Buttai Quarry;

Stage 1 - Drilling and Blasting

Drilling and blasting are critical aspects of the quarrying process. Daracon engage an appropriately qualified subcontractor who's specifically trained in blasting to undertake this activity. The blasting contractor drill holes into the rock, place explosives and stemming material inside, install and operate the blast monitors and then detonate the shot to provide the smallest release of energy necessary to achieve the desired result.

Stage 2 – Material Processing and Stockpiling

The material generated from the drill and blast operation is then processed through a crushing plant. The specialised quarry equipment used to crush the materials will depend on the size of the rock being crushed and the final product required (size, shape and various other properties). The crushed material is then separated by the use of screens and stored in product stockpiles, such as road base, fill or specific client materials.

2.5 Waste Management

The following non-production wastes were produced at the Quarry during the reporting period:

- General Waste – The site contains an onsite waste bin which is serviced and appropriately disposed regularly by Cleanaway;
- Scrap Steel – The site contains a scrap steel bin which is sent to a licensed recycling facility as required;

- Recyclables – The site recycles and / reuses materials where practical (this obviously excludes any materials proposed for the Resource Recovery facility currently the subject of a Development Application);
- Waste Oil, Oil Filters and Grease – All grease and filters are removed from site by service fitters and taken to licensed collection points;
- Batteries – Batteries are removed by field service fitters who take batteries to licensed collection points;

2.6 Site Infrastructure And Services

No changes were made to the main office, lunch room and overall site facilities during the reporting period. No additional infrastructure or services were added during the reporting period.

2.7 Water Management

The site water is managed by utilising the various Daracon site procedures. The quarry currently has 5 dams to manage water runoff off during rain events. The water collected in the dams is then re-used for dust control (via a site watercart) or for production purposes as required. The various Daracon water management procedures are contained within the Integrated Facility Management Plan (IFMP) for the site as whole. These records are maintained on site and within the Daracon Management System.

2.8 Bushfire Management

Lantana removal and weed eradication from the quarry site occurred intermittently on a campaign basis during the reporting period. Additionally, and in consultation with the local Rural Fire Service (RFS), a controlled hazard reduction burn occurred during October 2020 with more burns currently being discussed for the future, the timing of which is yet to be confirmed.

Additionally, a substantial amount of fire trail maintenance occurred during the reporting period along boundary lines (utilising a dozer) whilst the quarry supervisor continues to liaise with the local RFS representatives and community members regarding potential bushfire mitigation and general access matters for the quarry and surrounding areas as required.

2.9 Hazardous Materials Management

Hazardous materials within the Quarry site are appropriately managed with diesel fuel, oil and greases stored in above ground bunded storage containers. Machinery is fuelled daily via mobile a fuel truck which minimises the quantity of fuel stored on site.

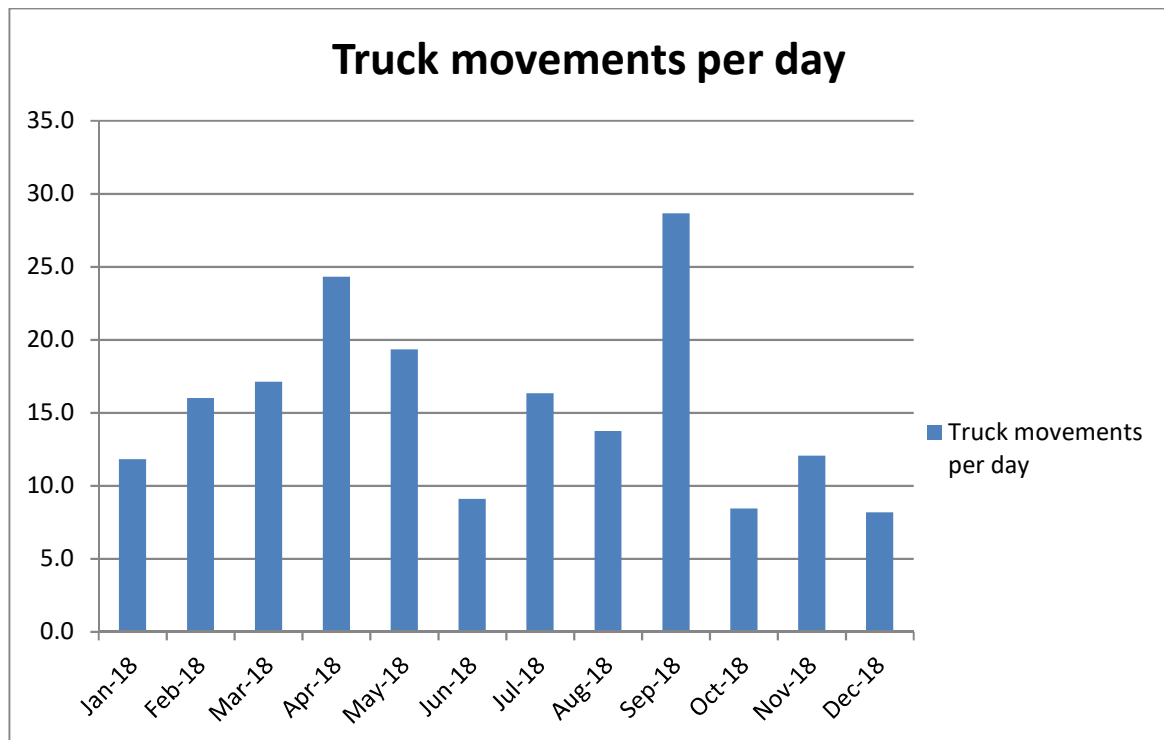
Aerosols and weed poison are stored within the designated hazardous materials cabinets within the bunded storage areas.

2.10 Product Transportation

During this reporting period the Quarry was operational and materials were exported exclusively by road transport.

Table 4 presents the average daily truck movements from Buttai Quarry during 2020 reporting period.

Table 4: Buttai Quarry Truck movements per day



2.11 Rehabilitation

Daracon continued to inspect and maintain the rehabilitation work completed on benches 2 and 3 as well as the additional areas on site. Despite the exceptionally dry conditions experienced during the early part of 2020, the rehabilitation work is progressing well as shown in the various inspections, reports and images attached.

A rehabilitation report was prepared by Umwelt which is included in Appendix 4 of this document and the following information is provided as an update against the approved "Rehabilitation Plan":

- Rehabilitation is ongoing to the exposed benches along the quarry face of Lots 75 and 76. This is being regularly inspected and maintained appropriately;
- Blasting of the various quarry finished faces are being shaped in accordance with the "Rehabilitation Plan";
- The majority of the quarry floor located within Lots 75 and 76 is still used for operational purposes and has not been rehabilitated as yet;
- Rehabilitation of the eastern section of lot 76 is ongoing and progressing satisfactorily;
- Rehabilitation of the western section of lot 76 is ongoing and progressing satisfactorily;
- The various rehabilitation areas are inspected and reported regularly;
- Ongoing maintenance will occur as required to selectively replace vegetation that may not have survived;

3. COMMUNITY RELATIONS

3.1 Surrounding Communities

Table 5 indicates the residences surrounding the quarry.

Table 5: Adjacent residences

Adjacent Residences
45 Old Buttai Road, Buttai NSW 2323
191 Lings Road, Buttai, NSW 2323
212 Lings Road, Buttai, NSW 2323
160 Lings Road, Buttai, NSW 2323
268 Lings Road, Buttai, NSW 2323
269 Lings Road, Buttai, NSW 2323
Buttai Creek, Buttai, NSW 2323
281 Lings Road, Buttai, NSW 2323
251 Browns Road, Black Hill, NSW 2323
225 Browns Road, Black Hill, NSW 2323
25 Old Buttai Road, Buttai, NSW 2323

3.2 Community Consultative Committee Meetings

Firstly, it's worth noting that due to the presence of COVID-19 and subsequent restrictions imposed by the government, all Community Consultative Committee (CCC) meetings that occurred during 2020 were undertaken remotely without a face to face interaction. Additionally, there was no site visit completed in 2020 for the same reason.

Regardless of the COVID-19 limitations, the Buttai Quarry CCC held two meetings during 2020 with the first on the 28th May 2020 and the second on the 22nd October 2020. The meeting minutes are attached in Appendix 2.

3.3 Environmental Complaints

There were no complaints received during the 2020 annual reporting period.

Additionally, the previous enquiry / complaint received in 2019 regarding the presence of cracking in their pool and the potential that blasting activities associated with the quarry operations may have contributed to this is now effectively closed as we've not heard anything further from the resident regarding this matter.

3.4 Community Involvement

As mentioned above, face to face contact with community members was discouraged during 2020 as a result of COVID-19. The proposed Buttai Resource Recovery Facility (RRF) was however discussed at length remotely during 2020 and the RRF proposal is currently ongoing with Cessnock City Council and Transport for NSW working through a number of actions in late 2020 in order to progress the matter.

4. ENVIRONMENTAL MONITORING

4.1 Water Quality

4.1.1 Introduction

Buttai Quarry operates under an approved Site Water Management Plan. The purpose of this plan is to ensure that Buttai Quarry does not pollute any waters, in accordance with Environmental Protection Licence No. 12829.

4.1.2 Conclusion

During the reporting period, no water was discharged from site.

4.2 Noise and Blasting

4.2.1 Introduction

Buttai Quarry operates under approved Noise Monitoring and Blast Monitoring programs. These programs outline the measures which mitigate the environmental effects of noise and blasting on our nearest neighbours. It proposes noise monitoring programs to assess and report the levels of likely impact so as to comply with the Project Approval. It also provides a mechanism whereby any noise or blasting complaints can be managed effectively.

4.2.2 Blast Criteria

Table 6 shows the blasting criteria to be met.

Table 6: Blasting Criteria

<i>Airblast overpressure level (dB(Lin Peak))</i>	<i>Allowable exceedance</i>
115	<i>5% of the total number of blasts over a period of 12 months</i>
120	<i>0%</i>
<i>Peak Particle Velocity (mm/s)</i>	<i>Allowable exceedance</i>
5	<i>5% of the total number of blasts over a period of 12 months</i>
10	<i>0%</i>

4.2.3 Blast Monitoring Locations

The Blast Monitoring program requires monitoring to take place at specified locations as shown in **Figure 2**.

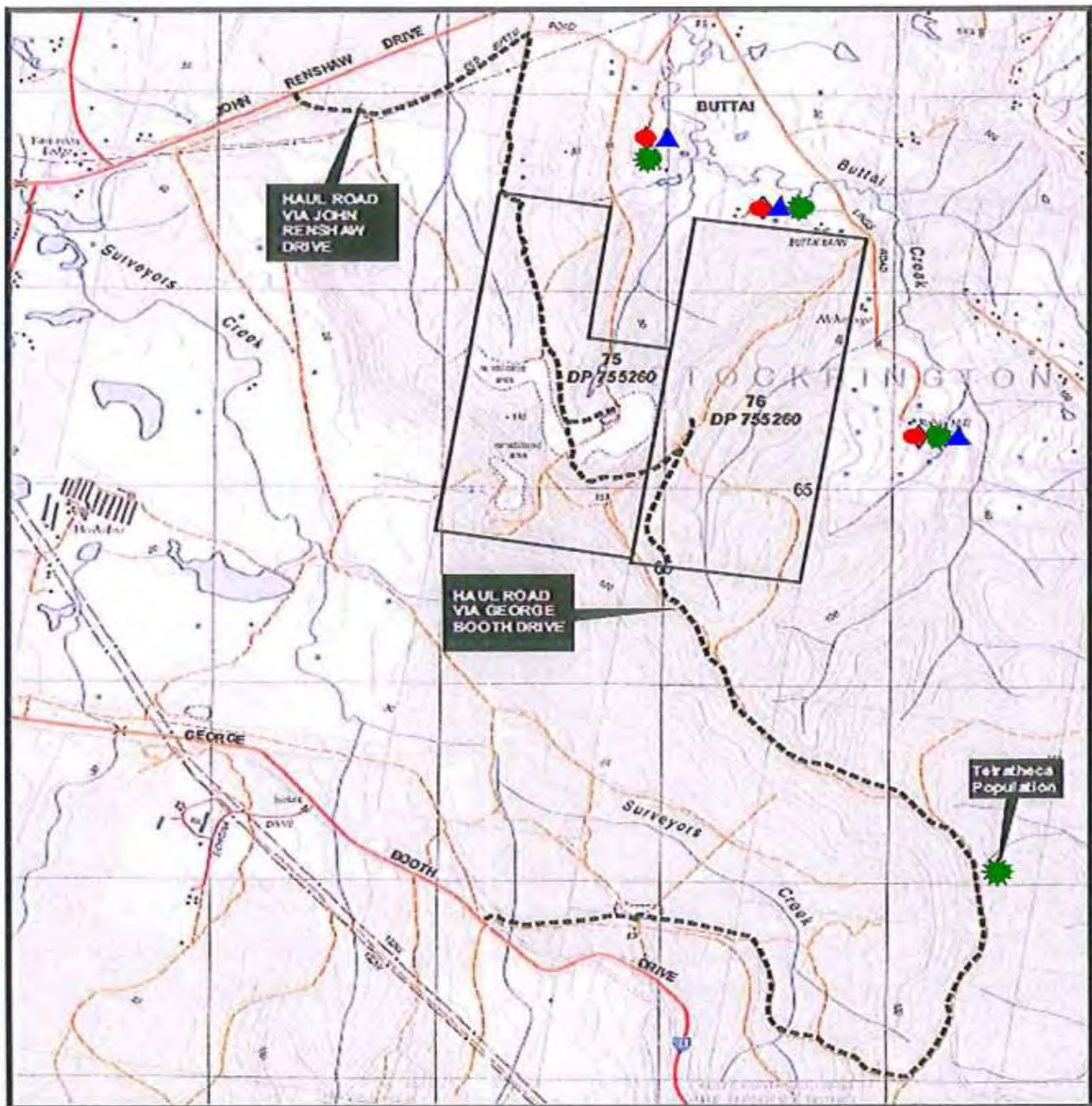


Figure 2: Blast Monitoring Locations

4.2.4 Blasting Monitoring Results

During the reporting period there were a total of 5 blasts undertaken at Buttai Quarry. The monitoring results are shown below in Table 7.

4.2.5 Analysis of Blast Results

The blast results in **table 7** indicate that all blast monitoring results are below the specified criteria as described in section 4.2.2.

Table 7: Blast Monitoring Results

Date	Time	Blast No.	Norma Brookes		Lings Rd		Buttai Barn	
			PPV mm/s	O/pressure dBL	PPV mm/s	O/pressure dBL	PPV mm/s	O/pressure dBL
21/02/2020	12:49	P_088	No trigger	No trigger	0.8	110.3	0.79	100.9
5/05/2020	13:03	P_089	1.11	107.8	No trigger	No trigger	No trigger	No trigger
18/06/2020	12:56	P_090	0.58	109.8	No trigger	No trigger	No trigger	No trigger
8/10/2020	12:32	P_091	1.51	105.1	No trigger	No trigger	No trigger	No trigger
3/12/2020	12:22	P_092	No trigger	No trigger	0.74	100	No trigger	No trigger

4.2.6 Noise Criteria

To meet the relevant noise criteria applicable to quarry operations as detailed in conditions of consent (under neutral conditions when measures within a radius of 30 metres);

- LA 10 (15 minute) of 38 dBA (Daytime)
- LA 10 (15 minute) of 32 dBA (Night time)
- Laeq (1 hour) 50 dBA – noise of traffic associated with the quarry operations

The Noise Monitoring Program calls for quarterly attended noise monitoring to take place at specified noise monitoring locations as shown in **Figure 3**.

4.2.7 Noise Monitoring Locations

Noise measurement locations for the attended noise survey are listed below and shown in the accompanying figure:

Location 1: Brooks, 45 Old Buttai Road

Location 2: Maddison (Buttai Barn), 160 Lings Road

Location 3: Bishop, 281 Lings Road

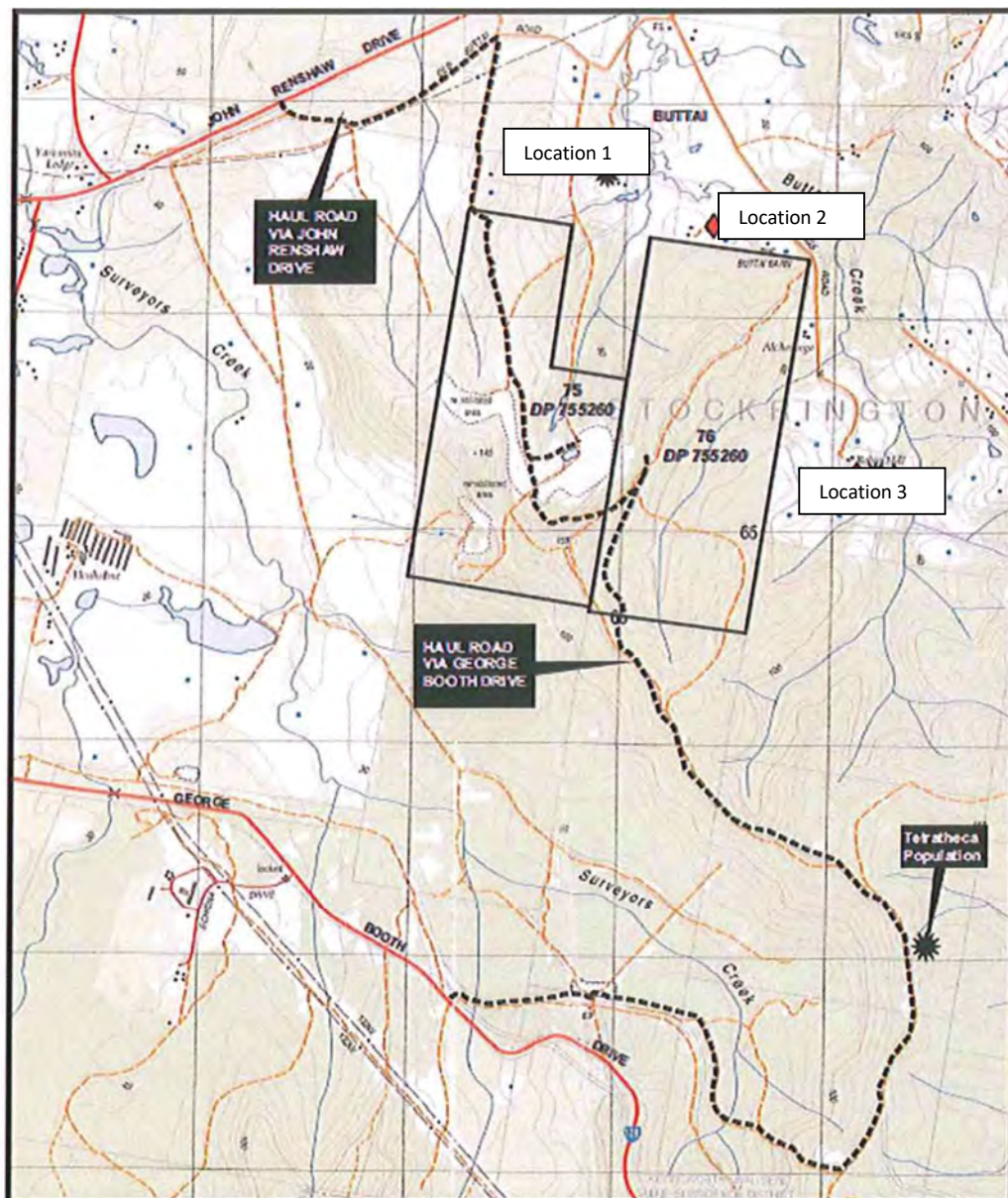


Figure 3: Noise Monitoring Locations

4.2.8 Noise Monitoring Results

During the reporting period there were a total of 4 noise monitoring assessments undertaken at Buttai Quarry. The results are shown below in **table 8**.

4.2.9 Analysis of Noise Results

The noise results in **table 8** indicate that all noise monitoring results are below the specified criteria as described in section 4.2.6.

Table 8: Buttai Quarry Noise Monitoring

Buttai Quarry (BQ) Noise Monitoring

	Location	Time	dB(A)	Wind Speed and Direction	Identified Noise Sources
27-Feb-20	1	10:00 am	37	2.5 m/s SW	Birds & insects (36), traffic (28), BQ inaudible (<20)
	2	10:26 am	36	2.5 m/s SW	Birds & insects (36), BQ inaudible (<20)
	3	10:48 am	38	2.5 m/s SW	Birds & insects (38), traffic (25), BQ inaudible (<20)
29-May-20	1	9:45 am	46	0.5 m/s ENE	Birds (45), traffic (38), BQ inaudible (<20)
	2	10:10 am	41	0.5 m/s SW	Birds (40), traffic (33), BQ inaudible (<20)
	3	10:35 am	50	1.0 m/s SW	Birds (50), traffic (25), BQ barely audible (20)
26-Aug-20	1	11:10 am	42	1.5 m/s N	Birds (42), traffic (32), BQ inaudible (<20)
	2	11:58 am	38	1.5 m/s N	Birds (38), traffic (28), BQ inaudible (<20)
	3	11:35 am	36	1.5 m/s N	Birds (35), traffic (28), BQ inaudible (<20)
26-Nov-20	1	10:30 am	48	1.5 m/s NW	Birds & insects (47), traffic (40), BQ inaudible (<20)
	2	11:15 am	48	2 m/s NW	Birds & insects (48), traffic (35), BQ inaudible (<20)
	3	10:55 am	46	2 m/s NW	Birds & insects (46), BQ occasionally audible (<20)

4.3 Air Quality

4.3.1 Introduction

Buttai Quarry operates under an approved Air Quality Management Plan. The objectives of this plan are to comply with all statutory requirements, minimise air quality impacts on surrounding residents and properties, maintain reasonable levels of amenity for surrounding residents and to keep the local community and regulators informed. It also allows Buttai Quarry to respond quickly and effectively to issues and complaints, to ensure that air quality is measured according to best practice and the results are presented in a timely and transparent manner to stakeholders.

4.3.2 Air Quality Monitoring Locations and Frequency

The current air quality monitoring network consists of five dust deposition gauges, (see **Figure 4**).

The location of the air quality monitoring equipment (primarily to the North-East and East of the Quarry) was chosen due to the location of the adjacent private residences.

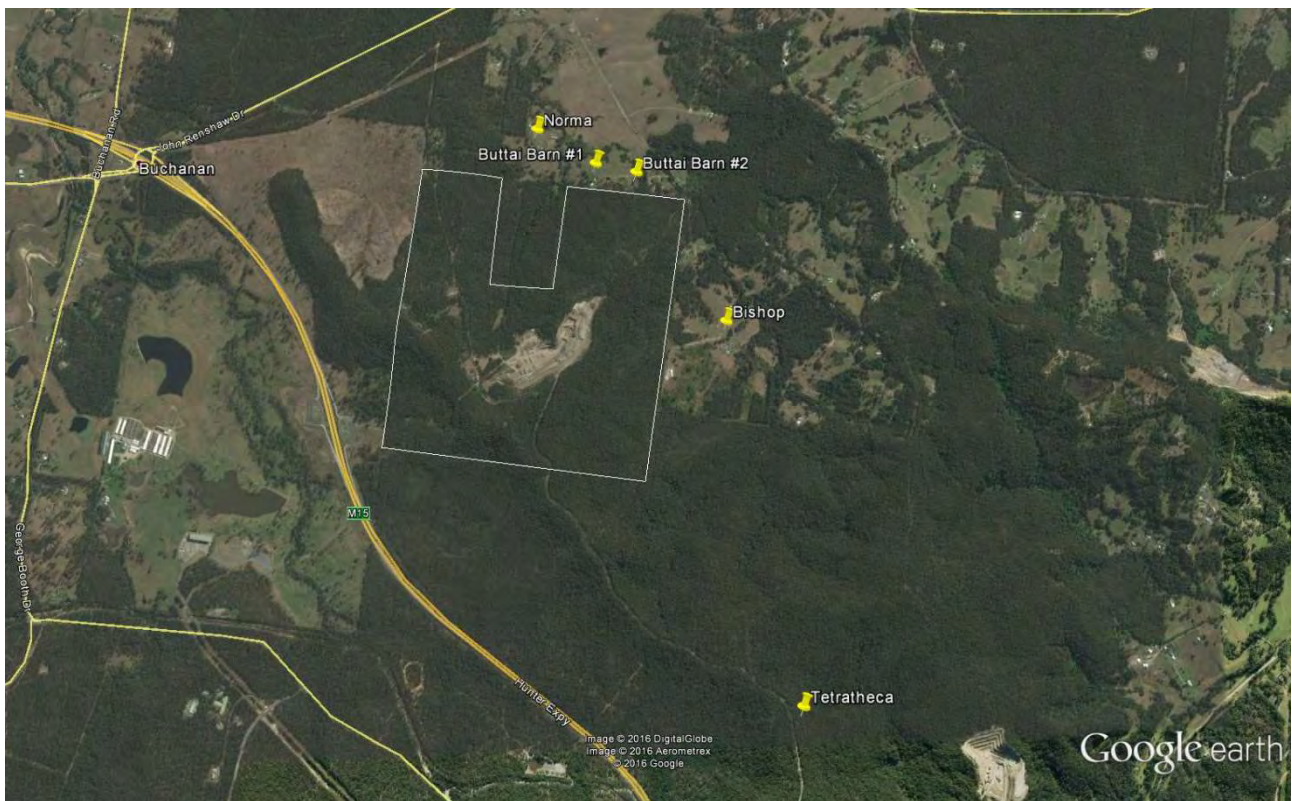


Figure 4: Air Quality Monitoring

4.3.3 Air Quality Criteria

The air quality criteria for the quarry is provided in the below table.

Table 9: Air Quality Criteria

Parameter	Frequency	Locations	Limit/Guideline	Sampling Method
Deposited dust	Monthly.	DG-1 located at Tetratheca DG-2 located at Norma DG-3 located at Buttai Barn DG-4 located at Bishop DG-5 located at Buttai Barn #2	Deposition Rate* Maximum total deposited dust level: 4 g/m ² .month. (Annual Average)	AM-19 AS3580.10.1 – 2003
Visible air pollution	Weekly. In response to any visible emissions complaint.	Weekly site inspection. At the location of any reported emission.	Daracon shall ensure any visible air pollution generated by the project is assessed regularly, and that quarrying operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately-owned land	No required sampling methodology. Actions required if visual impact is suspected or confirmed is located in the quarry management plan.

4.3.4 Air Quality Monitoring Results

The following information presents the results and a breakdown of the deposited dust monitoring program.

Table 10: Dust Deposition Gauge Results

		D1 - Tetratheca	D2 – Norma	D3 - Buttai Barn	D4 - Bishop	D5 - Buttai Barn #2
20/12/19 to 17/01/20	Insoluble Solids	2.7	2.2	5.3	2.1	3
	Ash*	1.7	1.6	3	1.6	1.8
	Combustible Matter**	1	0.6	2.3	0.5	1.2
17/01/20 to 14/02/20	Insoluble Solids	0.9	3.3	2.7	2	2.2
	Ash*	0.5	2.5	1.7	1.3	1.6
	Combustible Matter**	0.4	0.8	1	0.7	0.6
14/02/20 to 13/03/20	Insoluble Solids	4.1	1.3	1.2	1.6	1.1
	Ash*	0.8	0.7	0.7	0.9	0.7
	Combustible Matter**	3.3	0.6	0.5	0.7	0.4
13/03/20 to 09/04/20	Insoluble Solids	1.3	1.4	3.1	1.4	0.4
	Ash*	0.3	0.4	1.5	0.5	0.3
	Combustible Matter**	1	1	0.6	0.9	0.1
09/04/20 to 08/05/20	Insoluble Solids	1	0.8	4.2	1.3	0.6
	Ash*	0.6	0.7	1.3	0.6	0.4
	Combustible Matter**	0.4	0.1	0.9	0.7	0.2
08/05/20 to 05/06/20	Insoluble Solids	0.4	0.7	1.1	0.9	0.7
	Ash*	0.2	0.4	0.7	0.2	0.5
	Combustible Matter**	0.2	0.3	0.4	0.7	0.2
05/06/20 to 03/07/20	Insoluble Solids	0.5	1.3	1.7	1.3	0.4
	Ash*	0.2	0.8	0.9	0.4	0.2
	Combustible Matter**	0.3	0.5	0.8	0.9	0.2
03/07/20 to 31/07/20	Insoluble Solids	0.2	0.6	1.3	0.5	0.2
	Ash*	0	0.4	0.8	0.2	0
	Combustible Matter**	0.2	0.2	0.5	0.3	0.2
31/07/20 to 28/08/20	Insoluble Solids	0.4	0.7	4	0.7	0.2
	Ash*	0.3	0.6	1.6	0.5	0.2
	Combustible Matter**	0.1	0.1	2.4	0.2	0
28/08/20 to 25/09/20	Insoluble Solids	2.2	1	1.9	0.5	0.3
	Ash*	0.7	0.6	1.1	0.4	0.2
	Combustible Matter**	1.5	0.4	0.8	0.1	0.1
25/09/20 to 23/10/20	Insoluble Solids	2.7	0.8	2.2	1	0.8
	Ash*	0.6	0.5	1.5	0.5	0.5
	Combustible Matter**	2.1	0.3	0.7	0.5	0.3
23/10/20 to 20/11/20	Insoluble Solids	1	1.2	4.2	0.7	3.9
	Ash*	0.4	0.5	1.3	0.2	1.9
	Combustible Matter**	0.6	0.7	0.9	0.5	2
20/11/20 to 18/12/20	Insoluble Solids	1.5	1.5	3.4	1.5	0.9
	Ash*	0.7	1	1	1	0.7
	Combustible Matter**	0.8	0.5	2.4	0.5	0.2

Definition

Insoluble solids - This is the matter that does not dissolve in water and is the total of Ash and Combustible matter in the gauge.

Ash* - This is the matter that remains after the sample has been combusted in the laboratory (non organic).

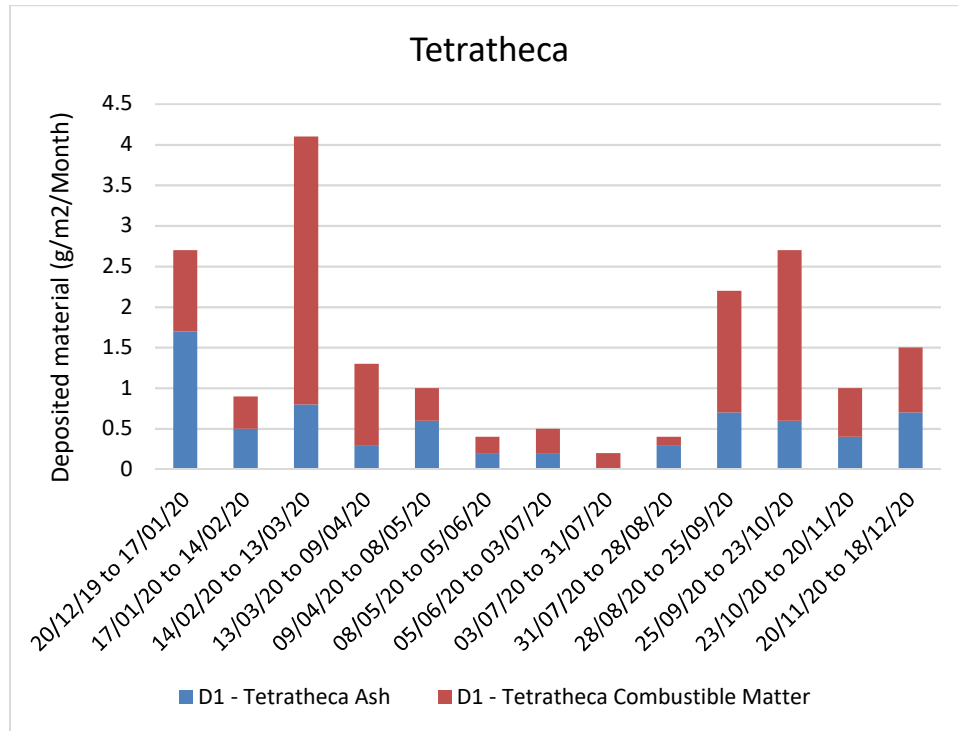
Combustible Matter** - This is the material making up the insoluble solids that has been combusted and is not attributable to quarrying as it is primarily organic matter.

Table 11: Summary of Dust Deposition Gauge Results

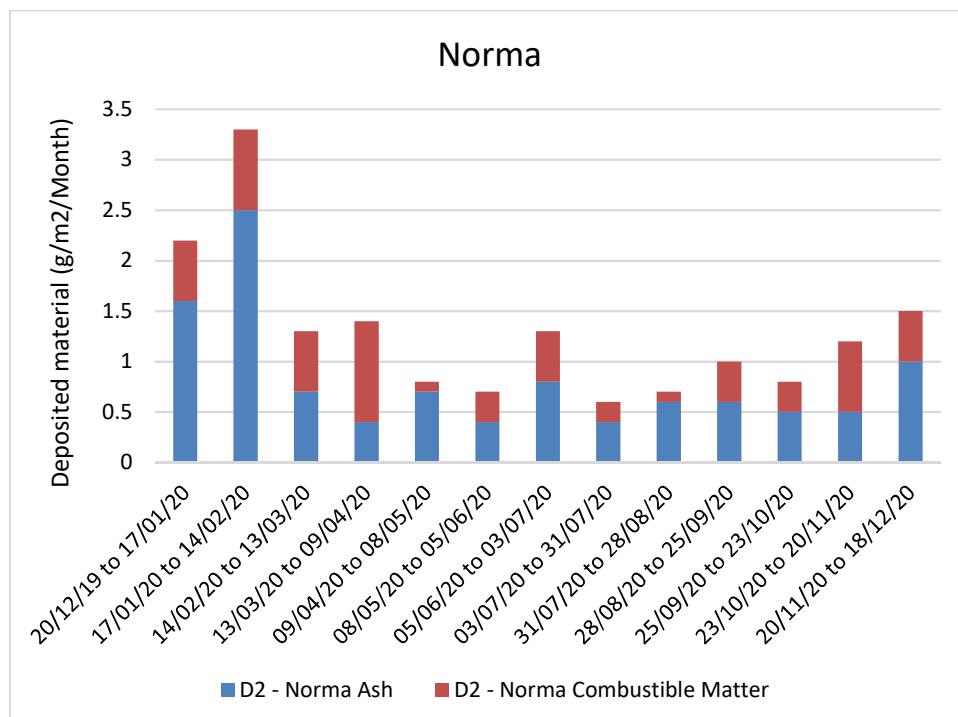
	D1 - Tetratheca	D2 - Norma	D3 - Buttai Barn	D4 - Bishop	D5 - Buttai Barn #2
20/12/19 to 17/01/20	2.7	2.2	5.3	2.1	3
17/01/20 to 14/02/20	0.9	3.3	2.7	2	2.2
14/02/20 to 13/03/20	4.1	1.3	1.2	1.6	1.1
13/03/20 to 09/04/20	1.3	1.4	3.1	1.4	0.4
09/04/20 to 08/05/20	1	0.8	4.2	1.3	0.6
08/05/20 to 05/06/20	0.4	0.7	1.1	0.9	0.7
05/06/20 to 03/07/20	0.5	1.3	1.7	1.3	0.4
03/07/20 to 31/07/20	0.2	0.6	1.3	0.5	0.2
31/07/20 to 28/08/20	0.4	0.7	4	0.7	0.2
28/08/20 to 25/09/20	2.2	1	1.9	0.5	0.3
25/09/20 to 23/10/20	2.7	0.8	2.2	1	0.8
23/10/20 to 20/11/20	1	1.2	4.2	0.7	3.9
20/11/20 to 18/12/20	1.5	1.5	3.4	1.5	0.9
Annual Average	1.5	1.3	2.8	1.2	1.1

4.3.5 Depositional Dust Gauge Graphs

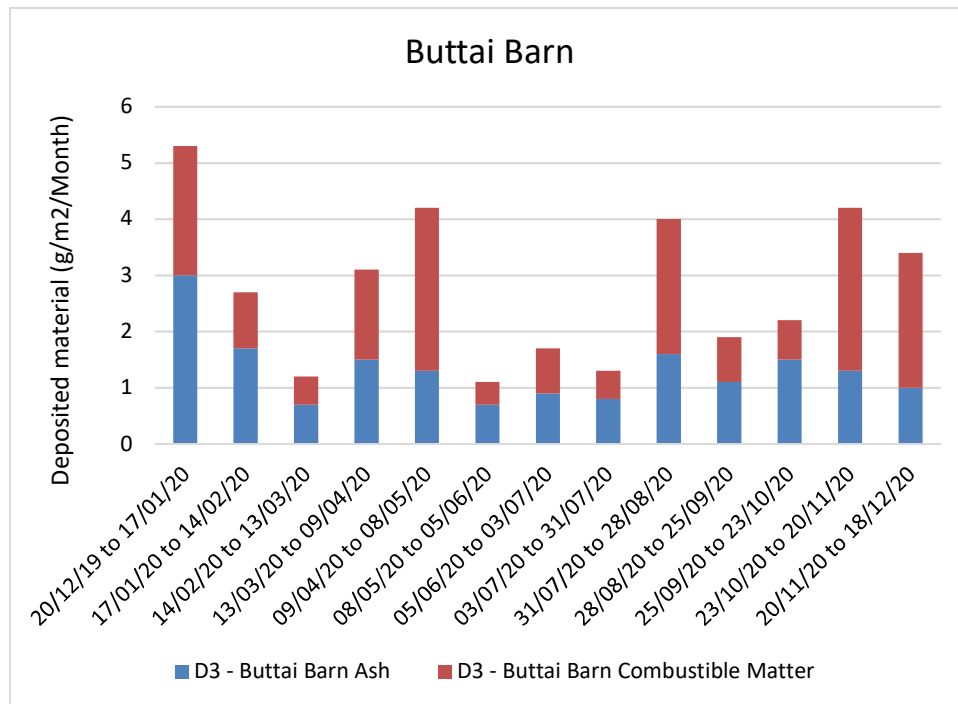
4.3.5.1 Tetratheca



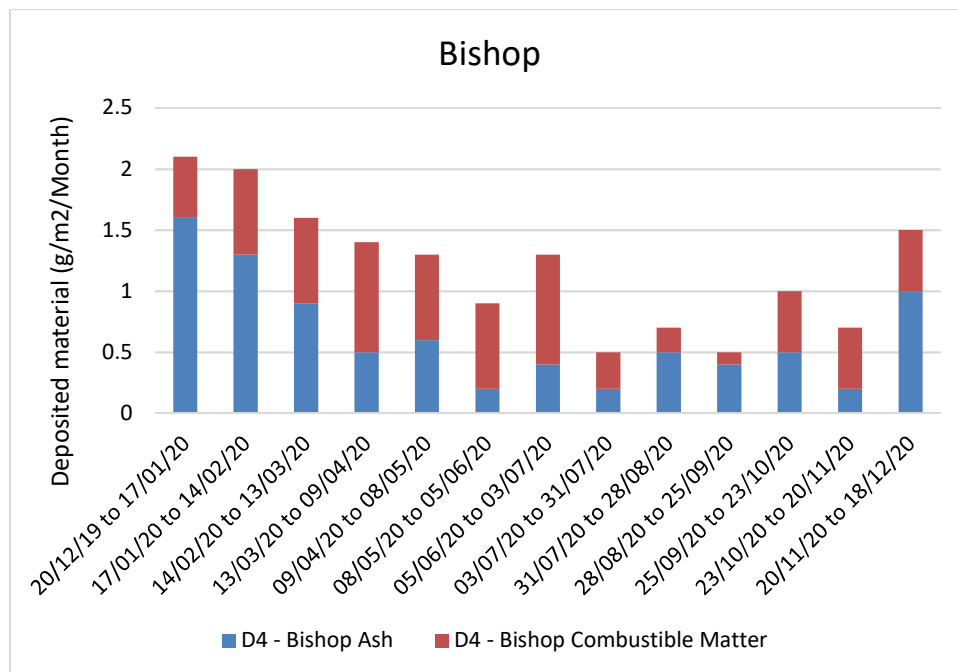
4.3.5.2 Norma



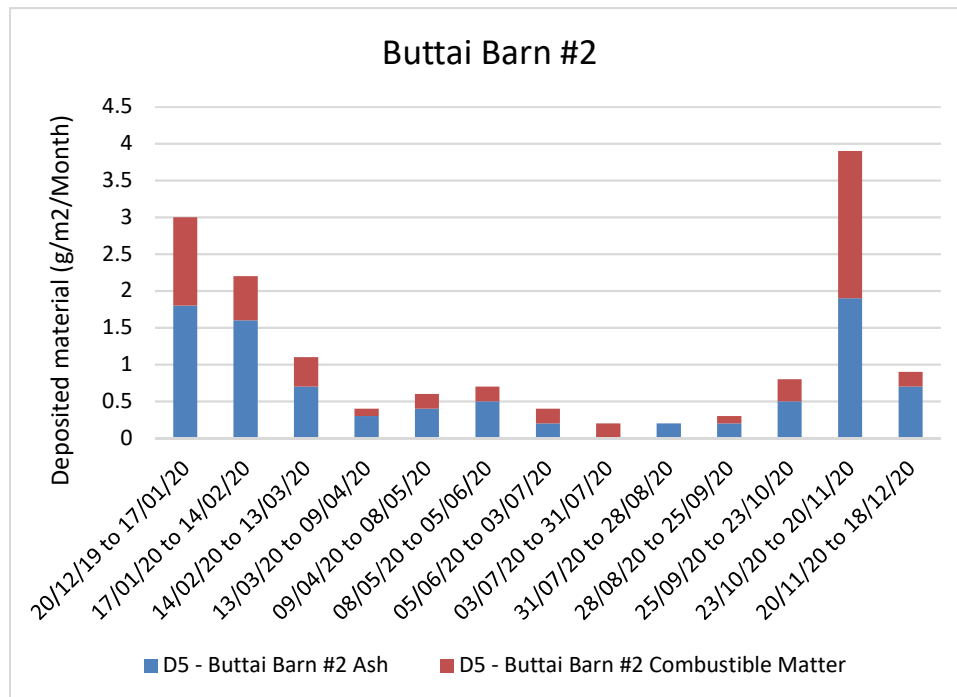
4.3.5.3 Buttai Barn



4.3.5.4 Bishop



4.3.5.5 Buttai Barn #2



4.3.6 Air Quality Discussion

As shown in the tables and graphs above and based on the **annual average** criterion, all of the Dust Deposition Gauge (DDG) monitoring results were well below 4g/m²/month annual average criterion.

As shown in Tables 10 and 11, we received a single elevated DDG result at “Tetratheca” between 14/02/20 to 13/03/20 as well as a number of elevated DDG results at “Buttai Barn” during the reporting period. We discuss the details of these below:

- Tetratheca DDG result between 14/02/20 to 13/03/20:
 - The annual average for “Tetratheca” is very low and well below the annual average criterion;
 - The DDG result obtained contains 80% combustible material which is not attributable to quarrying as it’s primarily organic matter;
 - The quarry has not used the southern haul route for many years and we note that NPWS encountered ongoing issues with trespassing in this area during 2020;
- Buttai Barn various dates:
 - Firstly, it’s worth noting again that following various high DDG results received at “Buttai Barn” during 2015, a second dust gauge at Buttai Barn (“Buttai Barn #2”) was installed in August 2015. We’ve continued to monitor both “Buttai Barn” and “Buttai Barn #2” continuously since that time;
 - The annual average for “Buttai Barn” is low and below the annual average criterion;
 - Substantial evidence of ground disturbance activities occurring adjacent to Buttai Barn #2 DDG (non-quarry related) when the new owners were undertaking earthworks on site;
 - It appears that the new land owner has also undertaken some additional vegetation removal for reasons only known to them;

- For the period January 2020 to December 2020, the quarry was abnormally quiet from a production and sales perspective which was in part influenced by the impact of COVID-19;
- The corresponding DDG results for “Buttai Barn #2” were all compliant and below the relevant criterion;

Once again, we'll continue to report all DDG results (including the elevated results obtained at “Buttai Barn” etc), with additional investigations completed for ongoing or unexpected outcomes.

5. COMPLIANCE ASSESSMENT

5.1 Environmental Protection Licence

Daracon hold Environmental protection Licence 12829 for a 'land based' extractive industry. The licence has an anniversary date of 29th June. The annual return covering the reporting period identified no non-compliances with the conditions of the licence.

5.2 Environmental Inspections

Daracon continued to utilise the previous TREES soils conservation representative (Andrew Littlewood) who now operates under the banner of Rubicon Enviro Pty Ltd to undertake an inspection of the quarry annually. Daracon also undertakes regular internal environmental audits of the site. The various reports are attached in Appendix 1 of this document.

All minor deficiencies identified as part of the various inspections were promptly rectified or are ongoing.

5.3 Regulatory Authorities involvement

Daracon had one inspection by the Resource Regulator during the reporting period with no significant issues identified.

Daracon had one inspection by the EPA during the reporting period with no significant issues identified.

Daracon was contacted by the Local Land Services (LLS) representative during the reporting period and asked to assist with a local dog baiting program. Daracon engaged the services of Hunter Land Management (HLM) and a dog baiting program was completed during November 2020. As a result of the program we obtained evidence of two foxes and four wild dogs taking baits during this time. Following the completion of the dog baiting program, a final report was prepared by HLM which is included in Appendix 5 of this document.

6. ACTIVITIES PROPOSED DURING THE NEXT REPORTING PERIOD

6.1 Introduction

The following section provides a brief summary of operational & non-operational activities planned throughout the 2021 reporting period. **Table 12** provides a summary of the proposed quarry activities.

Table 12: Proposed Activities for 2020

January - December 2021	<ul style="list-style-type: none">• Ongoing review of various Management Plans;• Regular site Inspections;• Noise Monitoring;• Blast Monitoring;• Dust Monitoring;• Continuation of quarrying operations;• Ongoing rehabilitation of non-operational quarry areas where available;• Ongoing CCC involvement;• Recycling facility proposal process ongoing;
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6.2 Extraction Operations

At this stage, it's envisaged that extraction activities will remain the same for the 2021 period.

6.3 Processing

At this stage, it's envisaged that the Quarry processing operations will remain the same for the 2021 period.

6.4 Overburden And Silt Management

Current controls for overburden and soil management to remain in place and monitored.

6.5 Waste Management

Current controls for waste management to remain in place and monitored.

6.6 Site Infrastructure And Services

No changes are proposed to be made to the existing site infrastructure and services subject to the approval of the Resource Recovery Facility.

6.7 Water Management

It is expected that no changes will be made and the current water management practices will remain in place and continued to be monitored.

6.8 Bushfire Management

Bush fire management practices will remain in place and be continually monitored as noted above.

6.9 Hazardous Materials Management

There will be no importation or disposing of hazardous materials on site.

6.10 Product Transportation

It is expected that no changes will be made to product transportation subject to the approval of the Resource Recovery Facility.

6.11 Rehabilitation

The quarry will continue to rehabilitate the finished benches and maintain the bench planting as outlined in the rehabilitation report. Further lantana removal and weed eradication will take place during 2021.


7. REFERENCES

1. ANZECC (2000) – Australian and New Zealand Guidelines Fresh and Marine Water Quality
2. DEC (2007) Approved Methods for Sampling of Air Pollutants in New South Wales



3. DECCW (2007) Methods for the Sampling and Analysis of Air Pollutants in New South Wales
4. EPA (2000) New South Wales Industrial Noise Policy



8. APPENDICES*Appendix 1 Environmental Inspection Reports*


ENVIRONMENTAL INSPECTION REPORT



WORKPLACE: Buttai Quarry LOCATION: Buttai WORKS UNDERTAKEN BY: Daracon <input checked="" type="checkbox"/> Subcontractor <input type="checkbox"/> Subcontractor name:		DATE OF INSPECTION: 17/03/20 ATTENDEES: Luke Robinson		WEATHER CONDITIONS: <div style="display: flex; justify-content: space-around; align-items: center;"> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div> Rain (mm): Moderate rainfall recently Other:		OVERALL STATUS <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; background-color: red; border-radius: 50%; margin-right: 5px;"></div> <input type="checkbox"/> High </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <div style="width: 15px; height: 15px; background-color: orange; border-radius: 50%; margin-right: 5px;"></div> <input type="checkbox"/> Medium </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: green; border-radius: 50%; margin-right: 5px;"></div> <input checked="" type="checkbox"/> Low </div>
No.	Location (Area / description)	Issue / Comment	Recommended priority	Action	Close out date	
1	Buttai Quarry		N/A	Nil – At the time of inspection, there was no evidence of dust generation on site. The water cart was available to be used on unsealed haulage paths if required however recent rain meant that it was not being used at the time of inspection – Positive observation.	N/A	


2	Access off Old Buttai Road and gate	 	N/A	Nil – The bitumen sealed sections of the access road are well maintained reducing the risk of erosion and dust generation. Appropriate signage is also present and visible - Positive observations.	N/A
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3	Sediment controls along the western boundary of Lot 75 (near main access gate)		Low	A few small sections of sediment fence require maintenance along the western boundary adjacent to the main access gate.	Repaired ✓ 23/3/20
4	The rock lined drainage channel adjacent to the main access gate		N/A	Nil – The rock lined drainage channel adjacent to the main access gate was effective and well maintained - Positive observation.	N/A


5	Chemical storage container		N/A	Nil – The chemical storage container was appropriately secured and sign posted - Positive observation.	N/A
6	Access road to Dam #4		Low	A few small sections of sediment fence require maintenance along the access road down to Dam #4.	Repaired ✓ B 23/3/20

7	Dam #4 and associated water transfer piping		N/A	Nil – The water levels in Dam #4 are carefully managed to ensure there is enough water available for the site to operate effectively whilst also ensuring that water discharges from Dam #4 are curtailed – Positive observation.	N/A
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8	The lower western edge of the quarry pit "Lot 76" area		N/A	Nil - At the time of inspection, the sediment fence was operating effectively - Positive observation.	N/A
9	Stockpile on the eastern side of the quarry pit "Lot 76" area		Low	A few small sections of sediment fence require maintenance along the eastern side of "Lot 76".	Repaired L 23/3/20

10	Rehab' planting on the upper western edge of the quarry pit "Lot 76" area		N/A	Nil – The revegetation work previously completed in this area is progressing well – Positive observation.	N/A
11	Rehab' planting on the eastern side of the quarry pit "Lot 76" area		N/A	Nil – The revegetation work previously completed in this area is progressing well – Positive observation.	N/A

12	Bench #2 rehab' work		N/A	Nil – Bench #2 rehabilitation continues to progress and evolve with the older species selectively dying off and being replaced with natural regeneration over time – Positive observation.	N/A
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13	Bench #3 rehab' work		N/A	<p>Nil – Ongoing inspection and maintenance of the rehabilitation planting is continuing along Bench #3. An additional 9 mature plants were installed in early March 2020 with ongoing watering currently occurring – Positive observations.</p>	N/A
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14	New gate installed for improved Rural Fire Service (RFS) access at top of quarry		N/A	Nil – As part of the ongoing consultation with the RFS, it was agreed that we would install an additional gate at the top of the quarry to improve access to this part of the site – Positive observation.	N/A
15	Panoramic image of the quarry				

16	Summary	<p>Generally speaking, the site is kept neat and tidy with all areas being well maintained. A number of minor actions arising from this inspection are:</p> <ul style="list-style-type: none"> • A few small sections of sediment fence require maintenance along the western boundary adjacent to the main access gate; • A few small sections of sediment fence require maintenance along the access road down to Dam #4; • A few small sections of sediment fence require maintenance along the eastern side of "Lot 76" (below overburden stockpile); 			
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Issued by: L.Robinson

Issued to: G.Reeves

Copy to: D.Smith

Actions Checked:

Key
Recommended Priority for Completion of Actions

Immediate To be addressed straight away

High Within 24hrs*




Medium Within 3 working days*

Low Within 5 working days*

N/A No work required




*To be completed sooner if adverse weather conditions are predicated

Inspection Report – Daracon Group

CLIENT	Daracon Group	REPORT DATE	12 th June 2020	REPORT NO.	4	REPORT TO:	Luke Robinson, Jason Gorton – Daracon Group
PROJECT	Buttai Quarry	INSPECTION DATE	11 th June 2020	ATTENDEES:	Luke Robinson – Daracon Group, Andrew Littlewood – Rubicon Enviro		
WEATHER	Overcast, Cool, Light winds	COMMENT	The quarry areas were inspected with no significant issues with drainage or erosion and sediment control noted. No significant maintenance issues were identified with exception of the ongoing weed suppression program.				
ISSUE NO.	LOCATION	ISSUE/MATTER	RECOMMENDATION/COMMENT		PHOTOGRAPH		
1.	Lower sediment basin and water cart loading area	The access road, standpipe and lower control dam was inspected. The roadside verge controls remain in good condition, and the loading area controls in the area are well-established and maintained.	Continue to monitor, desilt and repair controls as required.				
2.	Lower sediment basin and water cart loading area	The sediment basin spillway is stable, vegetated with no indication of any spill events since the previous inspection.	Continue to implement effective water transfer and dam storage management measures.				
3.	Quarry floor	A series of additional control sumps and drains have been formed to maintain the diversion of runoff to the central dam.	Continue to implement, alter or upgrade diversions and other control structures in response to changes in conditions or operations.				




Inspection Report – Daracon Group

PROJECT:	Buttai Quarry	INSPECTION REPORT NO.	4	REPORT DATE	12 th June 2020
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ISSUE NO.	LOCATION	ISSUE/MATTER	RECOMMENDATION/COMMENT	PHOTOGRAPH
4.	Revegetation on the control bund near the north-western highwall.	The revegetated area on the control bund near the north-western highwall was inspected. The vegetation structure is now well-established with a wide variety of native species that are growing vigorously.	The vegetation in the area has good canopy cover and surface cover, with minimal weed present. No actions required beyond targeted, periodic weed suppression	
5.	Western Ramp	An access ramp has been established above the north-west high wall. A series of scribed mitre drains have been provided to drain runoff from the ramp to the adjacent vegetation.	Continue to implement drainage measures to reduce flows to control dams, minimise erosion in drainage lines and improve runoff water quality.	
6.	North-western benches.	The benches formed during the north-west extension of workings have native vegetation vigorously establishing in the area.	No actions required beyond targeted, periodic weed suppression	




Inspection Report – Daracon Group

PROJECT:	Buttai Quarry	INSPECTION REPORT NO.	4	REPORT DATE	12 th June 2020
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ISSUE NO.	LOCATION	ISSUE/MATTER	RECOMMENDATION/COMMENT	PHOTOGRAPH
7.	Eastern control bund	The control bund above the eastern highwall area was inspected. The majority of the area is vegetated however, an operational stockpile of general fill has establishing weed outbreaks.	As discussed, we recommend this area is scheduled for treatment during the next round of targeted, periodic weed suppression.	
8.	Southern control bund	The control bund above the southern highwall area was inspected.	The southern section has well-established natives and low weed occurrence. No actions required.	
9.	Revegetation on the southern highwall benches.	The southern highwall benches were inspected. The native species on Benches 1 & 2 are continuing to establish, and additional tube stock plantings have been planted on Bench 3.	The area was recommended for targeted, periodic weed suppression.	

Inspection Report – Daracon Group








PROJECT:	Buttai Quarry	INSPECTION REPORT NO.	4	REPORT DATE	12 th June 2020
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ISSUE NO.	LOCATION	ISSUE/MATTER	RECOMMENDATION/COMMENT	PHOTOGRAPH
10.	Sediment traps on the main access road.	As noted on previous inspections, a series of well-maintained sediment traps control run-off from the main access road.	As discussed, the traps should continue to be monitored and be desilted and reinstated as required.	
11.	Drainage structures on the western boundary at Main Gate.	The rock lined drainage system, sediment sumps and rock diffuser were inspected. The structures remain in good condition and are functioning correctly.	No actions required.	
12.	Western boundary downslope from sealed access road.	As noted on previous inspections, a series of sediment fence controls have been established along the western boundary and mid-slope below the sealed access road.	The stands of sediment fence were inspected and continue to be in good condition and are well maintained.	


Report by: Andrew Littlewood – Senior Soil Conservationist & CPESC No. 5988



Signed : 



ENVIRONMENTAL INSPECTION REPORT



WORKPLACE: Buttai Quarry LOCATION: Buttai WORKS UNDERTAKEN BY: Daracon <input checked="" type="checkbox"/> Subcontractor <input type="checkbox"/> Subcontractor name:		DATE OF INSPECTION: 24/09/20 ATTENDEES: Luke Robinson		WEATHER CONDITIONS: <div style="display: flex; justify-content: space-around; align-items: center;">       </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div> Rain (mm): Intermittent rainfall recently Other:		OVERALL STATUS <div style="display: flex; align-items: center; margin-bottom: 5px;"> <input type="checkbox"/> High </div> <div style="display: flex; align-items: center; margin-bottom: 5px;"> <input type="checkbox"/> Medium </div> <div style="display: flex; align-items: center;"> <input checked="" type="checkbox"/> Low </div>
No.	Location (Area / description)	Issue / Comment	Recommended priority	Action	Close out date	
1	Buttai Quarry		N/A	Nil – At the time of inspection, there was no evidence of dust generation on site. A number of alarmed security cameras are located in strategic locations on site to deter trespassing – Positive observations.	N/A	


2	Access off Old Buttai Road and gate	 	N/A	<p>Nil – Appropriate signage is present and visible at the main entry. Additionally, the bitumen sealed sections of the access road are well maintained reducing the risk of erosion and dust generation.</p> <p>- Positive observations.</p>	N/A
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3	Unused access off George Booth Dve	 	High	<p>A recent instance of trespassing occurred with the security camera and alarm being activated at the top of the quarry. Police were notified and attended sometime later with no people found on site. Daracon gate was resecured and locks replaced. Subsequent inspection of the access road to George Booth Dve showed substantial evidence of illegal access and dumping.</p>	<p>NPWS were notified of the illegal access and dumping and we were informed that NPWS currently have covert cameras installed in this area and have recently been issuing fines.</p>
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4	Dam #4		N/A	Nil –Dam #4 is carefully managed to ensure there is enough water available for the site to operate effectively whilst also ensuring that water does not discharge from Dam #4 – Positive observations.	N/A
5	Dam #1 and Dam #2		N/A	Nil – Dam #1 and Dam #2 are primarily used for operational purposes (pugmills and crushing equipment) with the water levels managed appropriately - Positive observation.	N/A

6	Stockpile and crushing areas	 	N/A	Nil – Both the stockpile and crushing areas were tidy with no evidence of dust generation at the time of inspection – Positive observations.	N/A
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7	Sediment basin adjacent to main entrance		N/A	Nil - At the time of inspection, the sediment basin and fence was operating effectively at this location - Positive observation.	N/A
8	Rehab' planting on the upper western edge of the quarry pit "Lot 76" area		N/A	Nil – The revegetation work previously completed in this area is progressing well – Positive observation.	N/A

9	Bench #2 rehab' work		N/A	Nil – As before, Bench #2 rehabilitation continues to progress and evolve with the older species selectively dying off and being replaced with natural regeneration over time – Positive observation.	N/A
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10	Bench #3 rehab' work		N/A	<p>Nil – Ongoing inspection and maintenance of the rehabilitation planting is continuing along Bench #3. The additional mature planting that occurred in early March 2020 survived through the winter period albeit with minimal growth due to the cooler temperatures – Positive observations.</p>	N/A
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11	New gate installed for improved Rural Fire Service (RFS) access at top of quarry		N/A	Nil – The additional gate installed at the top of the quarry to improve RFS access to this part of the site is still functional and available if required – Positive observation.	N/A
12	Panoramic image of the quarry				

13	Summary	Overall, the site is kept neat and tidy with all areas being well maintained. The issue of illegal access and dumping along the George Booth Dve access has been raised with NPWS who are currently undertaking covert surveillance in this area.			
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Issued by: L.Robinson**Issued to:** G.Reeves**Copy to:** D.Smith**Actions Checked:****Key
Recommended Priority for Completion of Actions**

Immediate To be addressed straight away

High Within 24hrs*

Medium Within 3 working days*

Low Within 5 working days*

N/A No work required

*To be completed sooner if adverse weather conditions are predicated

Buttai quarry
Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	24-01-20		Inspected by:	Geoff Reeves	
SEDIMENT CONTROLS	Yes	No	Comments/ Action		
Sediment fences installed and maintained	✓				
Site checked for erosion	✓				
Stockpiles located and maintained correctly	✓				
Tree clearance restricted to required area	✓				
WATER QUALITY AND QUANTITY	YES	NO			
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)	✓				
Fuel or oil spills reported and cleaned up			No spills		
Fuels\ Chemicals stored in bunded areas	✓				
AIR QUALITY	YES	NO			
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)	✓				
On site dust suppression undertaken as required	✓				
All loads covered entering and leaving site.	✓				
Vegetation burnt on site		✓			
NOISE	YES	NO			
Operating only during hours of operation	✓				
Have there been any noise complaints received nearby residents?		✓			
Noise monitoring of new plant and equipment. (Initially and then every 12 months)	✓				
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)	✓				
BLAST MANAGEMENT	YES	NO			
Blast notification checklist completed for each blast undertaken during the month.	✓				
Blast record form completed for each blast undertaken for the month	✓		No blasting for Jan.		

[illegible]

Buttai quarry

Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	28-02-20	Inspected by:	Geoff Reeves
SEDIMENT CONTROLS		Yes	No
Sediment fences installed and maintained		✓	
Site checked for erosion		✓	
Stockpiles located and maintained correctly		✓	
Tree clearance restricted to required area		✓	
WATER QUALITY AND QUANTITY		YES	NO
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)		✓	
Fuel or oil spills reported and cleaned up		N/A	No spills
Fuels\ Chemicals stored in bunded areas		✓	
AIR QUALITY		YES	NO
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)		✓	
On site dust suppression undertaken as required		✓	
All loads covered entering and leaving site.		✓	
Vegetation burnt on site			✓
NOISE		YES	NO
Operating only during hours of operation		✓	
Have there been any noise complaints received nearby residents?			✓
Noise monitoring of new plant and equipment. (Initially and then every 12 months)		✓	
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)		✓	
BLAST MANAGEMENT		YES	NO
Blast notification checklist completed for each blast undertaken during the month.		✓	
Blast record form completed for each blast undertaken for the month		✓	

[illegible]

Buttai quarry
Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	27-03-20		Inspected by:	Geoff Reeves	
SEDIMENT CONTROLS	Yes	No	Comments/ Action		
Sediment fences installed and maintained	✓				
Site checked for erosion	✓		L3 W batter		
Stockpiles located and maintained correctly	✓				
Tree clearance restricted to required area	✓				
WATER QUALITY AND QUANTITY	YES	NO			
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)	✓				
Fuel or oil spills reported and cleaned up			No spills		
Fuels\ Chemicals stored in bunded areas	✓				
AIR QUALITY	YES	NO			
Continuous dust deposition monitoring Under taken. (Collected for anaylsis every 28 days.)	✓				
On site dust suppression undertaken as required	✓				
All loads covered entering and leaving site.	✓				
Vegetation burnt on site		✓			
NOISE	YES	NO			
Operating only during hours of operation	✓				
Have there been any noise complaints received nearby residents?		✓			
Noise monitoring of new plant and equipment. (Initially and then every 12 months)	✓				
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)	✓				
BLAST MANAGEMENT	YES	NO			
Blast notification checklist completed for each blast undertaken during the month.	✓				
Blast record form completed for each blast undertaken for the month	✓				

[illegible]

Buttai quarry
Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	01-05-20		Inspected by:	Geoff Reeves	
SEDIMENT CONTROLS			Yes	No	Comments/ Action
Sediment fences installed and maintained			✓		
Site checked for erosion			✓		Some repairs needed L3W. Need little digger
Stockpiles located and maintained correctly			✓		
Tree clearance restricted to required area			✓		
WATER QUALITY AND QUANTITY			YES	NO	
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)			✓		
Fuel or oil spills reported and cleaned up			N/A		No spills
Fuels\ Chemicals stored in bunded areas			✓		
AIR QUALITY			YES	NO	
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)			✓		
On site dust suppression undertaken as required			✓		
All loads covered entering and leaving site.			✓		
Vegetation burnt on site				✓	
NOISE			YES	NO	
Operating only during hours of operation			✓		
Have there been any noise complaints received nearby residents?				✓	
Noise monitoring of new plant and equipment. (Initially and then every 12 months)			✓		
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)			✓		
BLAST MANAGEMENT			YES	NO	
Blast notification checklist completed for each blast undertaken during the month.			✓		
Blast record form completed for each blast undertaken for the month			✓		No blasting in April

[illegible]

Buttai quarry
Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	29-05-20		Inspected by:	Geoff Reeves	
SEDIMENT CONTROLS			Yes	No	Comments/ Action
Sediment fences installed and maintained			✓		
Site checked for erosion			✓		ok
Stockpiles located and maintained correctly			✓		
Tree clearance restricted to required area			✓		
WATER QUALITY AND QUANTITY			YES	NO	
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)			✓		
Fuel or oil spills reported and cleaned up			N/A		No spills
Fuels\ Chemicals stored in bunded areas			✓		
AIR QUALITY			YES	NO	
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)			✓		Completed by VGT
On site dust suppression undertaken as required			✓		
All loads covered entering and leaving site.			✓		
Vegetation burnt on site				✓	
NOISE			YES	NO	
Operating only during hours of operation			✓		
Have there been any noise complaints received nearby residents?				✓	
Noise monitoring of new plant and equipment. (Initially and then every 12 months)			✓		
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)			✓		
BLAST MANAGEMENT			YES	NO	
Blast notification checklist completed for each blast undertaken during the month.			✓		
Blast record form completed for each blast undertaken for the month			✓		

[illegible]

Buttai quarry
Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	26/06/2020	Inspected by:		Geoff Reeves
SEDIMENT CONTROLS	Yes	No	Comments/ Action	
Sediment fences installed and maintained	✓			
Site checked for erosion	✓			
Stockpiles located and maintained correctly	✓			
Tree clearance restricted to required area	✓			
WATER QUALITY AND QUANTITY	YES	NO		
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)	✓			
Fuel or oil spills reported and cleaned up	N/A		No spills.	
Fuels\ Chemicals stored in bunded areas	✓			
AIR QUALITY	YES	NO		
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)	✓		VGT 5-6-20	
On site dust suppression undertaken as required	✓			
All loads covered entering and leaving site.	✓			
Vegetation burnt on site		✓		
NOISE	YES	NO		
Operating only during hours of operation	✓			
Have there been any noise complaints received nearby residents?		✓		
Noise monitoring of new plant and equipment. (Initially and then every 12 months)	✓			
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)	✓			
BLAST MANAGEMENT	YES	NO		
Blast notification checklist completed for each blast undertaken during the month.	✓			
Blast record form completed for each blast undertaken for the month	✓			

[illegible]

Buttai quarry

Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	31/07/2020	Inspected by:	Geoff Reeves
SEDIMENT CONTROLS	Yes	No	Comments/ Action
Sediment fences installed and maintained	✓		
Site checked for erosion	✓		
Stockpiles located and maintained correctly	✓		
Tree clearance restricted to required area	✓		
WATER QUALITY AND QUANTITY	YES	NO	
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)	✓		
Fuel or oil spills reported and cleaned up			No Spills
Fuels\ Chemicals stored in bunded areas	✓		
AIR QUALITY	YES	NO	
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)	✓		
On site dust suppression undertaken as required	✓		
All loads covered entering and leaving site.	✓		
Vegetation burnt on site		✓	
NOISE	YES	NO	
Operating only during hours of operation	✓		
Have there been any noise complaints received nearby residents?		✓	
Noise monitoring of new plant and equipment. (Initially and then every 12 months)	✓		
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)	✓		
BLAST MANAGEMENT	YES	NO	
Blast notification checklist completed for each blast undertaken during the month.	✓		
Blast record form completed for each blast undertaken for the month	✓		

[illegible]

Buttai quarry
Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	28/08/2020	Inspected by:		Geoff Reeves
SEDIMENT CONTROLS		Yes	No	Comments/ Action
Sediment fences installed and maintained		✓		
Site checked for erosion		✓		
Stockpiles located and maintained correctly		✓		
Tree clearance restricted to required area		✓		
WATER QUALITY AND QUANTITY		YES	NO	
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)		✓		
Fuel or oil spills reported and cleaned up		N/A		No spills
Fuels\ Chemicals stored in bunded areas		✓		
AIR QUALITY		YES	NO	
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)		✓		
On site dust suppression undertaken as required		✓		
All loads covered entering and leaving site.		✓		
Vegetation burnt on site			✓	
NOISE		YES	NO	
Operating only during hours of operation		✓		
Have there been any noise complaints received nearby residents?			✓	
Noise monitoring of new plant and equipment. (Initially and then every 12 months)		✓		
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)		✓		
BLAST MANAGEMENT		YES	NO	
Blast notification checklist completed for each blast undertaken during the month.		✓		
Blast record form completed for each blast undertaken for the month		✓		

[illegible]

Buttai quarry
Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011),

This checklist is to be completed monthly by the operations manager, Darocon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	25-09-20		Inspected by:	Geoff Reeves	
SEDIMENT CONTROLS		Yes	No	Comments/ Action	
Sediment fences installed and maintained		✓			
Site checked for erosion		✓			
Stockpiles located and maintained correctly		✓			
Tree clearance restricted to required area		✓			
WATER QUALITY AND QUANTITY		YES	NO		
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)		✓			
Fuel or oil spills reported and cleaned up		N/A		No spills.	
Fuels\ Chemicals stored in bunded areas		✓			
AIR QUALITY		YES	NO		
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)		✓			
On site dust suppression undertaken as required		✓			
All loads covered entering and leaving site.		✓			
Vegetation burnt on site		N/A	✓		
NOISE		YES	NO		
Operating only during hours of operation		✓			
Have there been any noise complaints received nearby residents?			✓		
Noise monitoring of new plant and equipment. (Initially and then every 12 months)		✓			
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)		✓			
BLAST MANAGEMENT		YES	NO		
Blast notification checklist completed for each blast undertaken during the month.		✓			
Blast record form completed for each blast undertaken for the month		✓			

Buttai quarry **Monthly site condition checklist**

(Extract from Buttai quarry management plan February 2011).

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	30-10-20	Inspected by:		Geoff Reeves
SEDIMENT CONTROLS	Yes	No	Comments/ Action	
Sediment fences installed and maintained	✓			
Site checked for erosion	✓			
Stockpiles located and maintained correctly	✓			
Tree clearance restricted to required area	✓			
WATER QUALITY AND QUANTITY	YES	NO		
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)	✓			
Fuel or oil spills reported and cleaned up	N/A		No spills	
Fuels\ Chemicals stored in bunded areas	✓			
AIR QUALITY	YES	NO		
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)	✓			
On site dust suppression undertaken as required	✓			
All loads covered entering and leaving site.	✓			
Vegetation burnt on site	✓		RFS burn off - OK	
NOISE	YES	NO		
Operating only during hours of operation	✓			
Have there been any noise complaints received nearby residents?		✓		
Noise monitoring of new plant and equipment. (Initially and then every 12 months)	✓			
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)	✓			
BLAST MANAGEMENT	YES	NO		
Blast notification checklist completed for each blast undertaken during the month.	✓			
Blast record form completed for each blast undertaken for the month	✓			

[illegible]

Buttai quarry Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	27-11-20	Inspected by:	Geoff Reeves	
SEDIMENT CONTROLS	Yes	No	Comments/ Action	
Sediment fences installed and maintained	✓			
Site checked for erosion	✓			
Stockpiles located and maintained correctly	✓			
Tree clearance restricted to required area	✓			
WATER QUALITY AND QUANTITY	YES	NO		
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)	✓			
Fuel or oil spills reported and cleaned up			No spills	
Fuels\ Chemicals stored in bunded areas	✓			
AIR QUALITY	YES	NO		
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)	✓			
On site dust suppression undertaken as required	✓			
All loads covered entering and leaving site.	✓			
Vegetation burnt on site		✓		
NOISE	YES	NO		
Operating only during hours of operation	✓			
Have there been any noise complaints received nearby residents?		✓		
Noise monitoring of new plant and equipment. (Initially and then every 12 months)	✓			
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)	✓			
BLAST MANAGEMENT	YES	NO		
Blast notification checklist completed for each blast undertaken during the month.	✓			
Blast record form completed for each blast undertaken for the month	✓			

[illegible]

Buttai quarry

Monthly site condition checklist

(Extract from Buttai quarry management plan February 2011)

This checklist is to be completed monthly by the operations manager, Daracon quarry.

Completed checklists are to be retained and included in the annual report to council

Date of inspection:	23-12-20	Inspected by:	Geoff Reeves	
SEDIMENT CONTROLS		Yes	No	Comments/ Action
Sediment fences installed and maintained		✓		
Site checked for erosion		✓		
Stockpiles located and maintained correctly		✓		
Tree clearance restricted to required area		✓		
WATER QUALITY AND QUANTITY		YES	NO	
Drainage and sediment controls in place and in good order. (Including water storages, pumps and pipes.)		✓		
Fuel or oil spills reported and cleaned up		N/A		No spills
Fuels\ Chemicals stored in bunded areas		✓		
AIR QUALITY		YES	NO	
Continuous dust deposition monitoring Under taken. (Collected for analysis every 28 days.)		✓		
On site dust suppression undertaken as required		✓		
All loads covered entering and leaving site.		✓		
Vegetation burnt on site		✓		
NOISE		YES	NO	
Operating only during hours of operation		✓		
Have there been any noise complaints received nearby residents?			✓	
Noise monitoring of new plant and equipment. (Initially and then every 12 months)		✓		
Ambient noise monitoring at nearby residents. (Frequency: 12 monthly)		✓		
BLAST MANAGEMENT		YES	NO	
Blast notification checklist completed for each blast undertaken during the month.		✓		
Blast record form completed for each blast undertaken for the month		✓		

[illegible]

Appendix 2 2020 Community Consultative Committee Meeting Minutes

BUTTAI QUARRY COMMUNITY CONSULTATIVE COMMITTEE

MEETING NOTES

9:00am Thursday 28th May 2020
Online Zoom Meeting

Attendees:

Shay Riley-Lewis	Independent Chairperson (PEP Consulting)
Richard Forbes	Cessnock City Council
Janet Murray	Community Representative
Terry Lewin	Community Representative
Colin East	Community Representative
Daniel Smith	Daracon
John Cannon	Daracon
Luke Robinson	Daracon
Clr Darrin Grey	Cessnock City Council

1. Welcome and introductions

2. Apologies

Nil.

3. Confirmation of Previous Minutes held on 14th November 2019

All attendees agreed the minutes were an accurate record and were approved.

4. Issues Arising from Previous Minutes:

- a) DS to upload Daracon presentation to CCC drop box.
COMPLETE.
- b) RF to discuss the consent status with Rod Sandall and Kerry Porter of Cessnock City Council.
 - RF proposes a GIPA.
 - Previous GIPA was over 10 year ago.
 - TL provided chronology on consents and modification and LEC decision has been uploaded to the drop box.
 - Daracon are happy to participate in the GIPA process as discussed in the meeting.

ACTION : SRL to make formal GIPPA to request historical consents. Request waiving of fees for the community group.

- c) SRL to contact Anna Cronin of Crown Lands to request a map of Crown Land and status of divestment.

SRL read email advice from Crown Land ([Attachment 2](#)).

JM: Happy that Daracon will be notified as adjoining landowner if Ridge Rd is proposed to be sold. Mindaribba LALC own a portion of land adjoining Ridge Rd.

ACTION: SRL obtain further confirmation that adjoining neighbours will definitely be notified of any proposed divestment of crown land.

LR: South of George Booth Dr is National Parks and Wildlife Service (NPWS) owned. Fire management access off Lings Rd is managed by Daracon in consultation with Rural Fire Service (RFS).

- d) JC to provide wind modelling results and provide all wind scenarios to CCC.

JM: EIS appeared to only show NW wind. This is not representative of actual noise.

LR: The EPA mandate strict air quality and noise modelling criteria and methods that must be followed. Both Umwelt and their sub-consultants are aware of the criteria and the methodologies used to ensure compliance are contained within the relevant exhibited documents.

ACTION: Daracon to confirm meteorological assessment methodology.

- e) DS to upload Daracon presentation to CCC drop box.

COMPLETE.

- f) RF to request the CCC receive a copy of any Draft Conditions of Consent (CoC) to enable comment prior to finalising.

No draft CoC Resource Facility available yet.

RF: Minor elements are outstanding. Briefing Hunter Central Coast Planning Panel (HCCRPP) next week (Wednesday).

ACTION: RF send SRL link to HCCRPP to know when it is going up for determination.

ACTION: RF and LR to notify SRL when assessment documents ready and meeting date.

JM: CCC want to see CoC before they are formalized to enable community to discuss and flag any community concerns before it goes to the panel.

TL: Critical in this situation since it does not alter the quarry conditions.

LR: The recycling facility application does have to consider cumulative impacts of the quarry and facility.

ACTION: RF to provide draft CoC

ACTION: SRL to follow up RF Thursday

ACTION: SRL to set up Zoom to discuss draft CoC when available

- g) TL to discuss the ongoing requirements with the Richmond Vale Rail Trail Committee and advise any comments related to any RRF approval.

\$75k has been received for the environmental assessment. The rail and road will be side by side. Daracon to cease using south haul route except for emergencies.

TL: Who will manage the threatened ecological community (TEC), fire, safety etc when the rail trail changes access, adjoining ownership and use. Old Buttai Rd will be tarred so there will be no need to use the south haul road.

LR: Daracon are not planning to use south haul road. Daracon are currently liaising with NPWS regarding access and maintenance, but not yet not resolved.

DG: Adjoining landowners will be consulted as part of Review of Environmental Factors (REF) being prepared by GHD for Cessnock City Council.

ACTION: Daracon to keep CCC up to date on Rail Trail.

ACTION: DG to ensure Daracon and CCC is consulted as part of the process of rail trail.

ACTION: DG to enquire if GHD can engage with/present to CCC regarding the rail trail.

JM: South Haul Rd has had street racing. The bottom gate looked open recently. GHD need to be aware that street racing and trespassers are common in this area. Recreation area must consider the safety of visitors.

LR: Daracon have considered how to mitigate inappropriate use of Old Buttai Rd once tarred.

JM: May need another speed hump.

- h) DS to contact Essential Energy again and request the site be added to the maintenance schedule.

DS has contacted Essential Energy and formal application made. No response to date.

JM: Letter received that Essential Energy are in the area now and will advise if any vegetation needs to be removed from properties.

ACTION: DS to follow up Essential Energy

- i) JC to remind sub-contractors not to speed.

COMPLETE.

Please advise Daracon if any speeding drivers.

- j) Daracon to contact Rural Fire Service (RFS) to ensure they are aware of the quarry's water truck capability and on-site location of pumps etc.

Geoff met with RFS and gave them maps and installed a new access gate at the top of the quarry to assist with RFS access to the site and surrounding bushland.

5. Planned activities and Status of Recycling Facility application

Daracon presentation provided in [Attachment 1](#).

Dust

JM: Dust mg/m²/month what is the limit?

LR: Annual average is the criteria – 4mg/m²

Blasting

Daracon met with the previous complainant.

JM: Two blasts didn't trigger any of the monitors. Why can't you do this every time?

DS: Some blasts are smaller to target certain types of rocks and don't trigger the monitors.

ACTION: DS to advise more detail of blast schedule

Rehabilitation

CE: Why change the rehabilitation consultant to Umwelt?

LR: Judy has retired and was lead of the former company.

CE: Has the sinkhole at end of bench reported in the 2018 Annual Report been repaired?

LR: Difficult to access it without damaging the sinkhole. It was not visible at the time of the inspection.

CE: How many trees planted?

LR: 12 mature trees were planted.

CE: Acacias have a limited life – is there planning to backfill the planned die-out?

LR: Yes, the landscape plan accounts for the die-off.

6. Other items

a) Fire Breaks

Geoff spoke with Norma and is meeting her tomorrow to ensure access is permitted to help maintain fire break at her boundary.

ACTION: Add JM email to notes ([Attachment 3](#))

b) Illegal dumping

LR met with Greg Lamb (Bloomfield). Will include powerlines within their inspection rounds. Their lease responsibility.

Looked at mitigating access but it is difficult since the powerlines need to remain accessible for utility authorities.

LR spoke with RF. Contacted Jason Robbs (RID – EPA Hotline) to obtain RID signs.

JM: Dumping occurring due to waste management centers being closed during COVID 19 pandemic. Ausgrid now use helicopters so doesn't always need vehicle access.

. Unauthorised access tracks to the powerline easement appears to have increased recently leading to further instances of illegal dumping.

ACTION LR to check with GR if ok with adding rocks to block that track.

Bloomfield acquired some additional properties fronting John Renshaw Drive. Ashtonfield Management Group still own portion.

c) Annual report

TL: Thank you to Daracon for their openness at the site inspection. The fire support is also appreciated.

ACTION: Full Dropbox link to be provided to the CCC with all meeting note emails.

7. Next Meeting

9-11am Thursday 22nd October 2020

Kurri Kurri Community Centre

Lang Street, Kurri Kurri

or

Online Zoom meeting

Close: 10.45am

Attachments

1 – Daracon presentation

2 – Crown lands email

3 – Email enquiry regarding fire access

BUTTAI QUARRY COMMUNITY CONSULTATIVE COMMITTEE

MEETING NOTES

9:00am Thursday 22nd October 2020
Online Zoom Meeting

Attendees:

Shay Riley-Lewis	Independent Chairperson (PEP Consulting)
Richard Forbes	Cessnock City Council
Janet Murray	Community Representative
Terry Lewin	Community Representative
Colin East	Community Representative
Daniel Smith	Daracon
John Cannon	Daracon
Luke Robinson	Daracon
Clr Darrin Grey	Cessnock City Council

1. Welcome and introductions

2. Apologies

Nil.

3. Confirmation of Previous Minutes held on 28th May 2020

All attendees agreed the minutes were an accurate record and were approved.

4. Issues Arising from Previous Minutes:

- a) SRL to make formal GIPA to request historical consents. Request waiving of fees for the community group.

Application has been lodged. RF advised he has been working with the GIPA team to collect the previous consents. Consents will be provided electronically.

ACTION: SRL to upload all provided GIPA information to the CCC dropbox.

[Post meeting note: These have now been received and uploaded to the drop box under folder: CCC GIPA documents November 2020]

- b) SRL obtain further confirmation that adjoining neighbours will definitely be notified of any proposed divestment of crown land.

SRL attempted contact with Crown Lands without success.

JM provided the CCC with a map received by a local resident from Crown Lands that shows existing property ownership and future proposed Crown road closures.

JM: Crown roads needed for fire access.

TL and CE: The Crown land map appears outdated showing the former Coal and Allied owned land and the old alignment of the through road.

ACTION: RF to contact Crown lands to confirm the status of roads identified for proposed closure.

ACTION: SRL attach map to CCC meeting notes ([Attachment 2](#)).

ACTION: SRL obtain further confirmation from Crown land regarding the process of neighbour notification for the proposed divestment of crown land and roads.

[Post meeting note: Email response from Crown Lands received and provided as [Attachment 3](#)]

c) Daracon to confirm meteorological assessment methodology.

Section 6.1 of the Air Quality Assessment Report prepared for the Recycling Facility development application (DS) contains the assessment methodology.

ACTION: LR to upload all Recycling Facility DA reports.

d) RF send SRL link to HCCRPP to know when it is going up for determination.

TL provided link: <https://www.planningportal.nsw.gov.au/planning-panel>

e) RF and LR to notify SRL when assessment documents ready and meeting date.

Assessment report not yet finalized and no meeting date confirmed. Transport for NSW (TfNSW) require the associated Old Buttai Rd/John Renshaw Dr intersection upgrade work must be included in the facility DA. Additional ecological impact assessment of the intersection upgrade is being prepared and will be submitted to Council for consideration with the DA.

JM: What road work is TfNSW planning?

LR: TfNSW plans to increase shoulder widths on southern side of John Renshaw Dr. Hunter Expressway east bound upgrade to extend two lane section over ridge east of Old Buttai Road intersection.

JM: Will Old Buttai Rd be left out only?

LR: Yes.

JM: Dual carriageway was always planned for John Renshaw Dr as a heavy vehicle route to the port. It should be done now.

RF: TfNSW have not provided a schedule or scope of planned upgrades.

ACTION: RF and LR to notify SRL when assessment documents ready and meeting date.

- a) RF to provide draft CoC

No draft CoC available yet.

ACTION: RF to provide draft CoC

- a) SRL to follow up RF Thursday

N/A

ACTION: SRL to set up Zoom to discuss draft CoC when available

- b) Daracon to keep CCC up to date on Rail Trail.

Ongoing.

RF: a development application has been received at Council for a 100m section of the rail trail. It is not a portion near the Buttai quarry.

- c) DG to ensure Daracon and CCC is consulted as part of the process of rail trail.

DG has contacted the Council team to advise them of the CCC interest. GHD have completed the REF and commencing consultation. REF is not on exhibition yet.

TL: The EIS for the Newcastle section of the trail was on exhibition August 2020. 150 community submissions were received. The EIS is to be determined by the Regional Planning Panel. The biodiversity assessment and concept plans were specific to the Newcastle section, however the other report covered the entire trail.

TL: Has CCC taken responsibility for the Lake Macquarie portion?

DG: A financial grant covered both the CCC and the Lake Macquarie portion.

TL: There are signs on posts advertising upcoming consultation.

LR: There is currently an action group opposing the rail trail conversion project, wanting to retain the corridor for future rail.

ACTION: DG to keep SRL posted on status of the Richmond Vale Rail trail project.

- d) DG to enquire if GHD can engage with/present to CCC regarding the rail trail.

Not complete. DG to follow up.

- e) DS to follow up Essential Energy

Essential Energy have emailed Daracon to advise that they were planning tree lopping at Norma's place in May 2020 (refer [Attachment 4](#)).

- f) DS to advise more detail of blast schedule

See item 2 below.

- g) Add JM email to notes

Complete.

- h) LR to check with GR if ok with adding rocks to block that track.

LR reiterated Daracon offer of rocks to block the access tracks however this offer has not been taken up.

LR advised illegal dumping signs are to be erected at the entrance to powerline easement access to the quarry and Old Buttai Road.

ACTION: LR to install illegal dumping signs.

- i) Full Dropbox link to be provided to the CCC with all meeting note emails

Complete.

2. Blasting notification process

Explanation of the blast triggers, different methods and impacts was provided in the presentation (refer [Attachment 1](#)).

JM: How do residents get added to blast notification list?

LR: Visit the Daracon website (<https://daracon.com.au/services/quarries>), scroll to the bottom of the page where it says "contact us" and complete the boxes to "submit an enquiry".

3. Weed control

Old Buttai Road roadside weeds need removal.

ACTION: LR to contact Bloomfield to manage weeds.

4. Other issues

- Dog baiting

JM: Have there been any wild dogs identified on the quarry cameras?

LR: No dogs spotted on the quarry's two cameras. Local Land Services (LLS) approached Daracon to undertake baiting at the quarry. Hunter Land Management contractor to undertake the baiting program. Daracon will notify residents prior to the baiting.

JM: Were Bloomfield and Yancoal asked too?

LR: Yes.

JM: A neighbor recently saw a pack of 3-4 wild dogs at their property near Buttai Barn.

JC: If dogs are seen regularly at a location, it might be appropriate to get a shooter.

JM: There is a fox problem too, often seen at my property between 2 and 4 pm most days.

LR: LR advised LLS of the fox problem who suggested baiting is the first option.

5. Planned activities and Status of Recycling Facility application

Daracon presentation provided at [Attachment 1](#).

JM: Buttai Barn hasn't have any events except for Father's Day. This may be due to tree removal and some construction onsite.

A backburn was conducted on Lot 75 over the long weekend.

- Blast design

North-east side of the quarry was recently shot blasted. The shooting direction of blasts determines if the vibration sensors are triggered. The blast design enables a reduction in the amount of explosive used which reduces the amount of vibration.

JM: The amount of anti-social behavior at the quarry has reduced, as it appears the burnouts have moved to Woodbury Quarry.

DG: The Hunter Economic Zone (HEZ) action group have been having a lot of trouble with antisocial behaviour. They have been logging all offensives where observed to help map the offenders behaviour.

LR: Locks on gates are regularly cut off. National Parks and Wildlife Service (NPWS) keep having to replace the locks.

DG: Council's Bushfire Management Committee have been advised that the Rural Fire Service (RFS) have undertaken an audit of all fire trails to identify the land tenement and priority. W546736 is the fire trail reference near the quarry.

ACTION: DG to check the status of the fire trail.

JM: Overhead powerlines did have signs on each side which have fall down.

ACTION: LR to reinstall signs.

6. Next Meeting

9-11am Thursday 18th March 2021

Kurri Kurri Community Centre

Lang Street, Kurri Kurri

or

Online Zoom meeting

Close: 10.45am

Attachments

- 1 – Daracon presentation
- 2 – Crown land road closure map
- 3 – Crown Land email
- 4 – Essential Energy email

DRAFT

Attachment 1 - Daracon presentation

DRAFT



Buttai Quarry

Community Consultative Committee Meeting
October 2020

PLEASE NOTE DUE TO THE PRESENCE OF THE
COVID-19 VIRUS AND SUBSEQUENT RESTRICTIONS
IMPOSED BY THE GOVERNMENT, THE OCTOBER 2020
COMMUNITY CONSULTATIVE COMMITTEE MEETING
OCCURRED REMOTELY WITHOUT A FACE TO FACE
INTERACTION

- Issues arising from previous meetings;
- Summary of operations;
- Overview of quarry operations:
 - Air quality;
 - Noise;
 - Flora and Fauna management;
 - Blast Management;
 - Incidents / Complaints
 - Rehabilitation;
- Planned quarry activities for 2020;
- Resource Recovery Facility update;

- SRL to make formal GIPA to request historical consents. Request waiving of fees for the community group;
- SRL obtain further confirmation that adjoining neighbours will definitely be notified of any proposed divestment of crown land;
- Daracon to confirm meteorological assessment methodology for Resource Recovery Facility (RRF);
- RF send SRL link to HCCRPP to know when the RRF is going up for determination;
- RF and LR to notify SRL when assessment documents ready and meeting date for RRF;
- RF to provide draft Conditions of Consent (CoC) for RRF;

- SRL to follow up RF Thursday;
- SRL to set up Zoom to discuss draft CoC for RRF when available ;
- Daracon to keep CCC up to date on Rail Trail;
- DG to ensure Daracon and CCC is consulted as part of the process of rail trail;
- DG to enquire if GHD can engage with/present to CCC regarding the rail trail;
- DS to follow up Essential Energy;

- DS to advise more detail of blast schedule;
- Add JM email to notes;
- LR to check with GR if ok with adding rocks to block that track;
- Full Dropbox link to be provided to the CCC with all meeting note emails;

- Quarrying continuing in Lot 76;
- Crushing and stockpiling of quarried materials continuing;
- The quarry continues to provide various construction materials for the local industry and government sector;
- 2019 was a relatively slow year from a quarrying and sales perspective with 2020 looking similar primarily due to COVID;
- A total of 4 blasts have been conducted during 2020 so far;

- The Resource Regulator (previously Department of Primary Industries) has undertaken 1 inspection during 2020 so far;
 - COVID, electrical and subsidence management compliance;
- 2 Internal Environmental Audits have been completed during 2020 so far with another scheduled later in the year;
- 1 Rubicon external Environmental Audit conducted in June 2020;
- Ongoing liaison with Jason Robbs regarding additional RID signage – **Location to be confirmed**;

- **Air quality**
 - Assessed against NSW EPA Annual Average Criterion (4 g/m²/month) for Dust Deposition Gauges (DDG);
 - All **annual average** results were below the 4 g/m²/month threshold including “Buttai Barn” for 2020 so far;
 - We continue to report intermittent elevated results obtained at “Buttai Barn” however, once again they appear to be erroneous and inconsistent with the adjacent DDG monitors;

Overview of quarry operations



Air quality monitoring results

	D1 - Tetratheca	D2 - Norma	D3 - Buttai Barn	D4 - Bishop	D5 - Buttai Barn #2
20/12/19 to 17/01/20	2.7	2.2	5.3	2.1	3
17/01/20 to 14/02/20	0.9	3.3	2.7	2	2.2
14/02/20 to 13/03/20	4.1	1.3	1.2	1.6	1.1
13/03/20 to 09/04/20	1.3	1.4	3.1	1.4	0.4
09/04/20 to 08/05/20	1	0.8	4.2	1.3	0.6
08/05/20 to 05/06/20	0.4	0.7	1.1	0.9	0.7
05/06/20 to 03/07/20	0.5	1.3	1.7	1.3	0.4
03/07/20 to 31/07/20	0.2	0.6	1.3	0.5	0.2
31/07/20 to 28/08/20	0.4	0.7	4	0.7	0.2
Average	1.3	1.4	2.7	1.3	1.0

- **Noise**

- Noise monitoring is undertaken by Spectrum Acoustics who have conducted 3 monitoring sessions during 2020 so far with one scheduled for later in the year. This is in accordance with the noise management plan;
- The 9 results obtained so far were within the specified limits;

Overview of quarry operations

Noise monitoring results

	Buttai Quarry (BQ) Noise Monitoring				
	Location	Time	dB(A)	Wind Speed and Direction	Identified Noise Sources
25-Feb-20	1	10:00 AM	37	2.5 m/s SW	Birds & insects (36), traffic (28), BQ inaudible (<20)
	2	10:26 AM	36	2.5 m/s SW	Birds & insects (36), BQ inaudible (<20)
	3	10:48 AM	38	2.5 m/s SW	Birds & insects (38), traffic (25), BQ inaudible (<20)
29-May-20	1	9:45 AM	46	0.5 m/s ENE	Birds (45), traffic (38), BQ inaudible (<20)
	2	10:10 AM	41	0.5 m/s SW	Birds (40), traffic (33), BQ inaudible (<20)
	3	10:35 AM	50	1.0 m/s SW	Birds (50), traffic (25), BQ barely audible (20)
26-Aug-20	1	11:10 AM	42	1.5 m/s N	Birds (42), traffic (32), BQ inaudible (<20)
	2	11:58 AM	38	1 m/s S	Birds (38), traffic (28), BQ inaudible (<20)
	3	11:35 AM	36	1 m/s S	Birds (35), traffic (28), BQ inaudible (<20)

- **Flora and Fauna including bushfire management**
 - The quarry footprint and extent of clearing did not alter during the reporting period;
 - Maintenance of fire trails and boundary lines occurred during 2020 with more planned shortly;
 - Ongoing consultation with the Rural Fire Service (RFS) continues to occur regularly;
 - The new gate installed at the top of the quarry is working to keep trespassers out whilst permitting RFS access if required;

- **Blast Management**

- 4 blasts were conducted during the reporting period with all being within the allowable limits;
- No blasting complaints received during 2020 so far;

Overview of quarry operations

Blast monitoring results

<u>Buttai Blast Monitoring Results</u>								
			Norma Brookes		Lings Rd		Buttai Barn	
Date	Time	Blast No.	PPV mm/s	O/pressure dBL	PPV mm/s	O/pressure dBL	PPV mm/s	O/pressure dBL
21/02/2020	12:49	P_088	No trigger	No trigger	0.8	110.3	0.79	100.9
5/05/2020	13:03	P_089	1.11	107.8	No trigger	No trigger	No trigger	No trigger
18/06/2020	12:56	P_090	0.58	109.8	No trigger	No trigger	No trigger	No trigger
8/10/2020	12:32	P_091	12:14	14/04/1900	No trigger	No trigger	No trigger	No trigger

- **Incidents / complaints**

- Intermittent trespassing occurs on site with the alarmed cameras deterring the intruders. This typically happens at the top of the quarry and recently included vehicles from George Booth Drive – refer photos further within this presentation;
- Following more recent trespassing matters, we contacted NPWS regarding the unlocked gate on George Booth Drive. They were aware of the issue, have installed covert cameras and been fining people for illegal dumping;
- No complaints regarding the operation of the quarry received this year so far;

- **Rehabilitation**

- Maintenance of the rehabilitation of Bench 2 and 3 has continued during 2020 with much needed rain received assisting this process;
- Maintenance of various other rehabilitated areas is also currently ongoing;
- Refer to the various images for evidence of rehabilitation progress;

In lieu of a site inspection due to COVID restrictions, please see a number of images taken on site in September 2020



Overview of quarry operations - Images

DARACON
Group



Overview of quarry operations - Images

DARACON
Group



Overview of quarry operations - Images

DARACON
Group

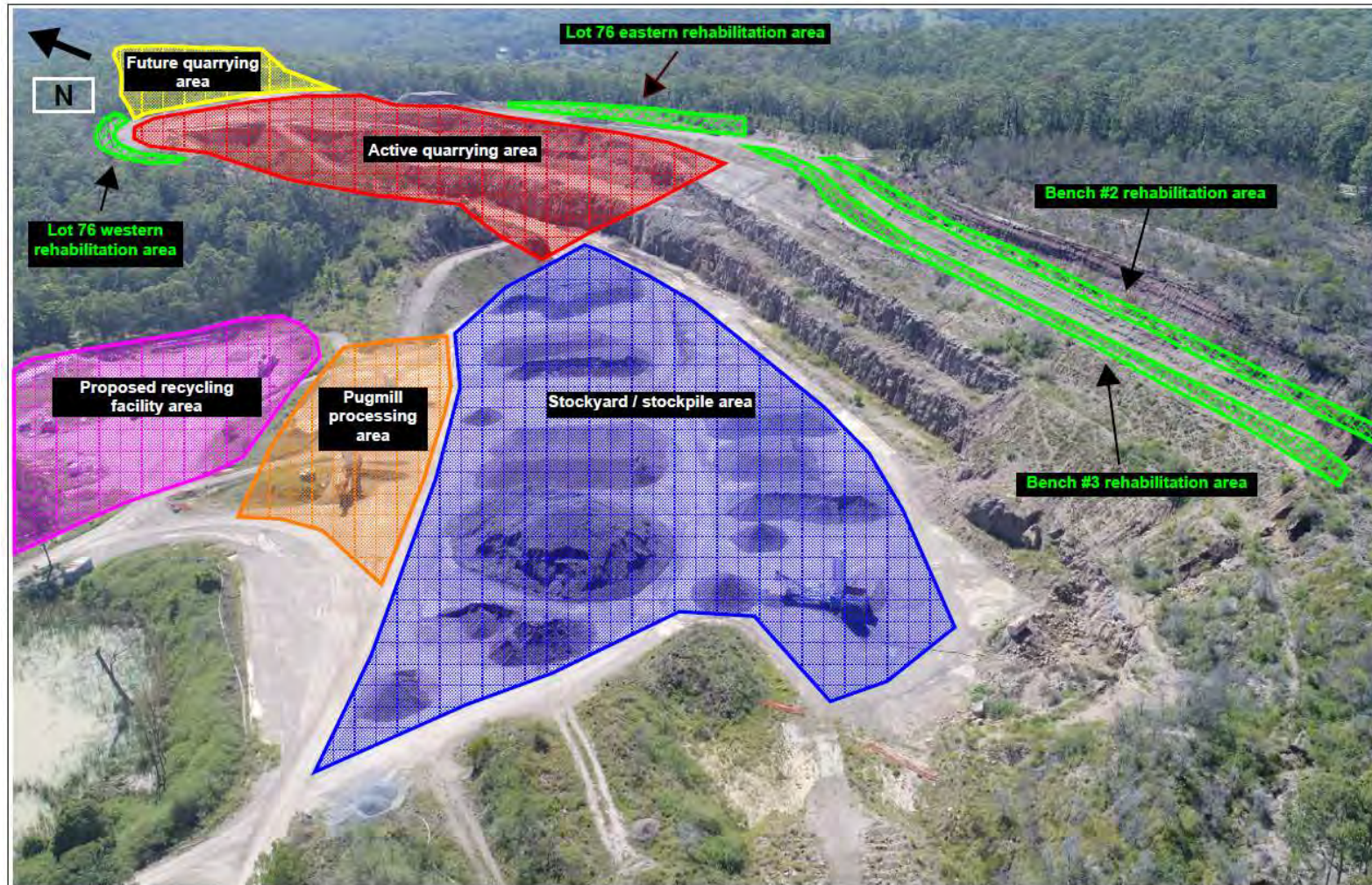


Overview of quarry operations - Images

DARACON
Group



Overview of quarry operations



- Further extraction and sale of quarried materials;
- Continuation of dust, noise and blast monitoring;
- Continued planting of benches and maintenance of rehabilitation work as required;
- Progression of the Resource Recovery Facility (RRF) proposal;

- Following the exhibition of the The Environmental Impact Statement (EIS) for the Resource Recovery Facility (RRF) in September and November 2019 we've continued to work through the various enquiries raised by all regulatory authorities including TfNSW (RMS);
- At this stage it's our understanding the only outstanding matter relates to TfNSW response to Cessnock City Council regarding the proposed upgrade of John Renshaw Drive (JRD) and the modification of the intersection with Old Buttai Road (OBR) – Daracon have agreed to pay TfNSW to complete this work concurrently with the planned upgrade of JRD;

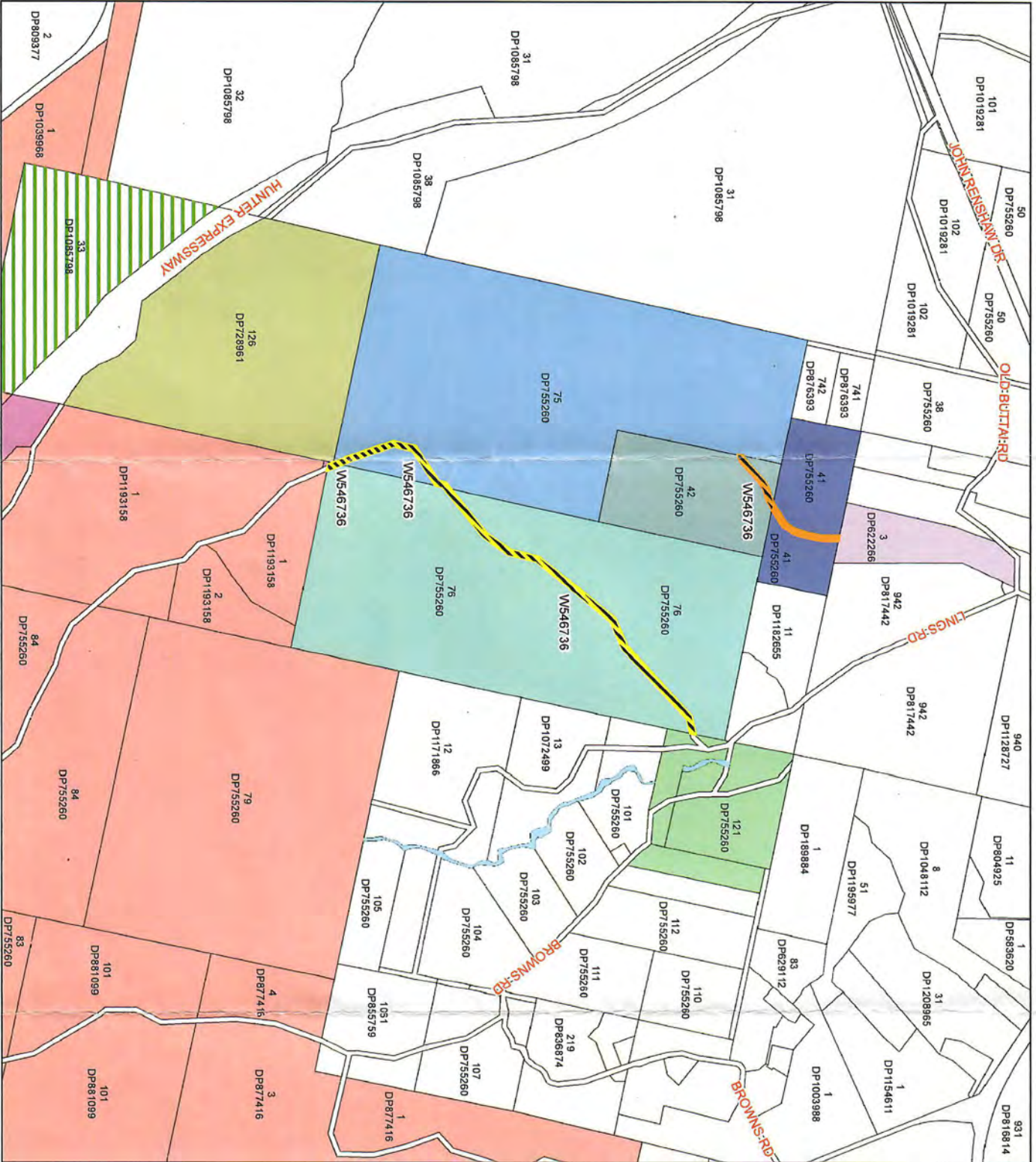
- In summary, TfNSW plan to undertake the following work associated with the OBR / JRD intersection upgrade:
 - Slight widening the existing pavement to the north side of JRD;
 - Channelised right turn into OBR from JRD for east bound traffic;
 - The current merge for east bound traffic will extend east a few hundred metres beyond the existing crest in JRD and past intersection of OBR;

Further questions?

Attachment 2 – Crown land road closure map

DRAFT

Proposed Closure of Public Roads
Cluster 579915



LGA: CESSNOCK
LOCALITY: BUTTAI
PARISH: STOCKRINGTON
COUNTY: NORTHUMBERLAND

Legend

- MINDARIBBA LALC
- RTA OF NEW SOUTH WALES
- COUNTY PROPERTY HOLDINGS PTY LTD
- COAL & ALLIED OPERATIONS PTY LTD
- MAXIMO PEREZ
- DAROMIN ENGINEERING PTY. LTD
- JEFFREY ROY FLETCHER
- NORMA ELAINE BROOKS
- COUNTY PROPERTY HOLDINGS PTY LTD
- CROWN ROADS UNDER APPLICATION & PROPOSED FOR CLOSURE
- COUNCIL ROADS UNDER APPLICATION & PROPOSED FOR CLOSURE
- CROWN ROADS NO APPLICATION & PROPOSED FOR CLOSURE
- CROWN LAND

Disclaimer: The information contained in this map has been provided in good faith. Whilst all effort has been made to ensure the accuracy and completeness of this information, the data providers take no responsibility for errors or omissions nor any loss or damage that may result from the use of this information.

Attachment 3 – Crown Land email

DRAFT

From: Michelle Read michelle.read@crownland.nsw.gov.au
Subject: RE: Crown Lands Purchase
Date: 27 October 2020 at 9:28 am
To: Shay Riley-Lewis shay@pepconsulting.com.au

MR

Hi Shay

I've had a look at this particular case, and the proposal related solely to the closure and disposal of Crown roads. Crown roads are different to Crown land and managed under the provisions of the *Roads Act 1993* – Crown land is managed under the provisions of the *Crown Land Management Act, 2016* and are usually reserved for a particular purpose – these reserves are generally not available for sale.

The department has been encouraging adjoining owners to apply to close and purchase unnecessary Crown or Council roads for a number of years. These are roads that are generally not formed and don't provide any access benefits to other landholders or agencies. The process prior to closure is quite stringent and involves notifications to any affected adjoining owners, advertising in local newspapers and on the department's website and notifications to a number of government agencies and other relevant stakeholders. These can include local governments, Rural Fire Services, National Parks and Wildlife, Fisheries, and energy providers. Adjoining owners and other stakeholders are given a period of time to lodge submissions regarding the proposed closures and these submissions are fully considered before any decisions regarding the roads are made.

In this case, it appears that both Cessnock Council, NPWS and the RFS both lodged objections to the closure of the roads through Lots 75 and 76 that were identified as being necessary for fire trails and access, so these roads remain open. Also, in cases where the department is considering closing an unformed Council road, the consent of the relevant Council is required – in this case, consent was not provided.

I've attached a link to the our Roads page which has some further information on the processes involved – <https://www.industry.nsw.gov.au/lands/access/roads>

Hope this is of some help – let me know if anything further is required.

Thanks

Michelle Read

Group Leader Property Management - Tamworth

Crown Lands | NSW Department of Planning, Industry and Environment |

T : 6763 3013 | **E** : tamworth.crownlands@crownland.nsw.gov.au

Level 2 | Noel Park House | 155-157 Marius Street | TAMWORTH NSW 2340

P O Box 2185 | DANGAR NSW 2309

www.dpie.nsw.gov.au

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically

From: Shay Riley-Lewis <shay@pepconsulting.com.au>

Sent: Thursday, 22 October 2020 4:04 PM

To: Michelle Read <michelle.read@crownland.nsw.gov.au>

Subject: Fwd: Crown Lands Purchase

Hi Michelle

Below is the map referring to Crown road closures.

As discussed, the community query was regarding the process for purchase/divestment/ transfer of Crown Land (roads, TSR, fire trails).

Is there a process whereby adjoining neighbours are notified when a portion of crown land is offered/planned for change of ownership? The key concern is the loss of existing fire trails to private ownership without notice.

thanks.

Shay Riley-Lewis
Director
PEP Consulting
B.Env.Sc., GDURP, MPIA, CPP
PO Box 161
Carrington NSW 2294
M: 0402 302537
E: shay@pepconsulting.com.au
W: www.pepconsulting.com.au



Begin forwarded message:

From: "Janet Murray" <jemurray310@gmail.com>
Subject: Crown Lands Purchase
Date: 22 October 2020 at 8:46:07 am AEDT
To: "Shay Riley-Lewis" <shay@pepconsulting.com.au>
Reply-To: "Janet Murray" <jemurray310@gmail.com>

Hi Shay,

Not sure if I sent this to you before - my neighbour came across it recently. It is the map that was attached to the letter she received about purchasing the Crown Land road on her place - Lot 41.

It shows the ridge road through Lot 76 as a "Council road under application and proposed for closure", which is true, as a result of the quarry. I don't know that anyone knew it was a "Council" road - I think we all assumed it was a "Crown" road. It doesn't show any rerouted road to allow access, even though I believe that exists.

Janet



Virus-free. www.avast.com



This message is intended for the addressee named and may contain confidential information. If you are not the intended recipient, please delete it and notify the sender. Views expressed in this message are those of the individual sender, and are not necessarily the views of their organisation.

Attachment 4 – Essential Energy email

DRAFT

From: Daniel Smith Daniel.Smith@daracon.com.au
Subject: FW: Your tree trimming report - 5100193101
Date: 1 June 2020 at 9:54 am
To: Luke Robinson Luke.Robinson@daracon.com.au

DS

FYI – Additional detail for Buttai CCC.

From: noreply@ausgrid.com.au <noreply@ausgrid.com.au>
Sent: Monday, 1 June 2020 9:37 AM
To: Daniel Smith <Daniel.Smith@daracon.com.au>
Subject: Your tree trimming report - 5100193101

Crews have visited the location of your report. We trim trees growing near the electricity network to keep the power supply reliable and safe.

If trees were within safety clearances at the time of inspection, we'll arrange for it to be trimmed.

Thank you for reporting it to us.

We apologise if clippings were left behind longer than two days. We cleared them up during the inspection.

Thank you for reporting it to us.

If you have any questions, please contact us on 13 13 65 between 9.00am to 4.30pm Monday to Friday (Excluding Public Holidays)

Your reference number is 5100193101 for the report made on 20.05.2020 at 13:49:42.

Please do not reply to this email.

This e-mail may contain confidential or privileged information.

If you have received it in error, please notify the sender immediately via return e-mail and then delete the original e-mail.

If you are the intended recipient, please note the change of sender email address to @ausgrid.com.au.

Ausgrid has collected your business contact details for dealing with you in your business capacity. More information about how we handle your personal information, including your right of access is contained at <http://www.ausgrid.com.au/>

Appendix 3 2020 Community Complaints Register

2020 Complaint Register

<i>Date received</i>	<i>Complaint was received regarding?</i>	<i>Complaint was received from?</i>	<i>Buttai Gravel response</i>	<i>Buttai Gravel action following complaint</i>	<i>Closed out (Y/N)</i>
<i>NIL</i>					

Appendix 4 Vegetation Report

Our Ref: 21152/R01/RP/AW

3 February 2021

Daniel Smith
Technical Supervisor
Daracon Group
20 Kullara Close | PO Box 401
Beresfield NSW 2322

Dear Daniel

Re: 2020 Vegetation Monitoring of Buttai Quarry Rehabilitation Areas

Umwelt (Australia) Pty Limited (Umwelt) was commissioned by Daracon Group (Daracon) to undertake the 2020 annual monitoring for the rehabilitation areas at Buttai Quarry, John Renshaw Drive, Buchanan. The rehabilitation areas adjoin high-quality remnant vegetation. Four areas were subject to monitoring in this monitoring event. All sites have been monitored previously. At all sites, planted vegetation appeared in good health with some individuals in bud and fruiting. Some mistletoe was present on mature eucalypts. Additional planting on Bench #3 has been largely successful.

1.0 Methods

The site inspection was undertaken over one day and involved visual walkover inspection of the plantings within the Bench #2 and Bench #3 rehabilitation areas and Lot 76 eastern rehabilitation area and Lot 76 western rehabilitation area. Data was collected in accordance with the 2018 Buttai Quarry Vegetation Report (Jones 2018) and as per the 2019 monitoring report (Umwelt 2020). An individual was classified as failed if there was no presence of green foliage. Data recorded for each planting included:

- common name and scientific name
- age class, height range and growth form
- health, and
- ecological value/amenity value.

Notes on groundcover establishment were also recorded. Photographs were taken of any ecological features of significance.

1.1 Limitations

Care was taken to distinguish between planted individuals and natural regeneration. However, where planting guards had been removed or at the edge of the unmarked rehabilitation areas it became difficult to distinguish between the two, particularly where the rehabilitated areas adjoin naturally regenerating remnant vegetation.

2.0 Results

2.1 Bench #2

The rehabilitation of Bench #2 appears to be in good health. Canopy and shrub species do not appear to be experiencing stress with a number of grey gums (*Eucalyptus punctata*) currently in bud. Mistletoe was present and fruiting on an older spotted gum (*Corymbia maculata*) individual. Many wattles (*Acacia* spp.) were in flower and second-generation individuals were successfully establishing. The groundcover appeared patchy and dominated by exotic grasses with areas of bare ground common. However native legumes such as rusty tick-trefoil (*Desmodium rhytidophyllum*) were establishing on this bench. Lantana (*Lantana camara*) was recorded in one small area on this bench. In total 264 individuals of trees, shrubs and climbers were recorded; this number has increased since the previous year's monitoring (a total of 230 individuals) and is closer to the numbers recorded in 2018 (281 individuals). This is likely due to the increased number of second-generation wattles (*Acacia* spp.).

2.2 Bench #3

The rehabilitation on Bench #3 appeared in moderate to good health. After the dieback of trees and shrubs observed during the 2019 monitoring, new tubes were planted in 2020 and a high proportion of these have survived. The groundcover appeared patchy, dominated by exotic grasses with areas of bare ground common. Castor oil plant (*Ricinus communis*) was noted on this bench. In total 147 living individuals of trees, shrubs and climbers were recorded; this number is the same as the number recorded in the previous year's monitoring with some fluctuation of species composition.

2.3 Lot 76 East

Lot 76 East has had no planting events and thus all individuals counted were considered to be natural regeneration from the adjoining remnant vegetation. The vegetation appeared in good condition with no dieback or plant failure observed. Many wattles (*Acacia* spp.) were in flower and a number of second-generation individuals were observed. The ground cover was dominated by native vines and legumes, with several exotic species observed. Pampas grass (*Cortaderia selloana*) was observed in this area. A total of 387 individuals of trees, shrubs and climbers were recorded within the survey area, which was a 9% increase from last year. The bulk of this is explained by the vast coverage of *Hardenbergia violacea* and *Kennedia rubicunda*.

2.4 Lot 76 West

Lot 76 West has had no planting events and thus all individuals counted were considered to be natural regeneration from the adjoining remnant vegetation. The vegetation appeared in good condition with no dieback or plant failure observed. Stem density of spotted gum (*Corymbia maculata*) and grey gum (*Eucalyptus punctata*) were very dense in this survey area. Many wattles (*Acacia* spp.) were in flower and many second-generation individuals were observed. The groundcover was dominated by bare ground and exotic grass species, with limited legumes present. A total of 371 individuals were recorded within the survey area, which is a 47% increase since 2019. Many young spotted gums (*Corymbia maculata*) and sickle wattle (*Acacia falcata*) are likely driving this increase. A silvereye (*Zosterops lateralis*) nest and a number of individuals of this species were noted in this rehabilitated area, which is a positive sign of native species utilising the rehabilitated areas for breeding.

3.0 Conclusion and Future Management Recommendations

The rehabilitation occurring at Buttai Quarry appears to be largely in good health and in a better condition than in 2019 when the area was drought affected. The extra plantings in Bench #2 appear to have a high survival rate, though will likely have a slow growth rate due to the exposed conditions of the bench. Regeneration was most prevalent in Lot 76 East and Lot 76 West and this is likely due to the natural stripped topsoil that was spread on the rehabilitated areas.

Future management recommendations include:

- Continued monitoring of all rehabilitation areas.
- Some occurrences of lantana (*Lantana camara*) were recorded on Bench #2, castor oil plant (*Ricinus communis*) on Bench #3 and pampas grass (*Cortaderia selloana*) on Lot 76 East. It is recommended that these small infestations are controlled while they are small.
- Stripped topsoil should be used on future rehabilitation areas, where possible. The existing rehabilitation areas that have used this method have retained much more native and diverse understoreys than the areas that have not had natural topsoil spread.

We trust this information meets with your current requirements. Please do not hesitate to contact the undersigned on 0436 626 231 should you require clarification or further information.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Amber Wilson'.

Amber Wilson
Ecologist

References

Jones, J. (2018) Vegetation Report. Prepared for Buttai Gravel Pty Ltd, October 2018.

Umwelt (2020) Vegetation Monitoring of Buttai Quarry Rehabilitation Areas. Prepared for Buttai Gravel Pty Ltd, January 2020.

Appendix 5 Dog baiting Report



Vertebrate Pest Control Report

Daracon Buttai Quarry

December 2020

This report was produced for Luke Robinson of Daracon in December 2020 to outline the results of a Spring 2020 Vertebrate Pest Control Program (1080 Wild Dog and Fox Baiting) conducted at Daracon Buttai Quarry and to also provide recommendations for future works.

SUBMITTED TO	DATE	REVISION
Luke Robinson	08/12/2020	Draft V1

This document can only be considered as having permission for final distribution if an original signature of an authorised representative of Hunter Land Management Pty Ltd is found below:



08/12/2020

SIGNATURE

DATE

Daniel Lewer (Director – Principal Consultant) – HLM



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W. www.hlmaus.com.au

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1. Introduction

A Vertebrate Pest Control Program was undertaken in November 2020 by HLM on behalf of Daracon at their Buttai Quarry. Program included a 1080 baiting program to align with local neighbours.

2. Baiting

2.1 Methodology

A total of 10 bait stations were used to present the 1080 baits. Each station consisted of a small dirt/sand mound where the processed meat injected with Sodium monofluoroacetate (1080 poison) was placed inside. The meat bait is tethered using a bamboo skewer to hold the bait in place. The skewer acts as an indicator as to whether the bait has been tampered with or taken. This ground baiting method aligns with the Code of Practice and Standard Operation Procedures – Ground Baiting of Wild Dogs and Foxes with 1080 – produced by NSW DPI.

Each station was checked weekly for three weeks and taken baits replaced. The remaining baits are buried onsite at a depth not less than 500mm away from all water courses (as per the Pesticide Control Order 2008).

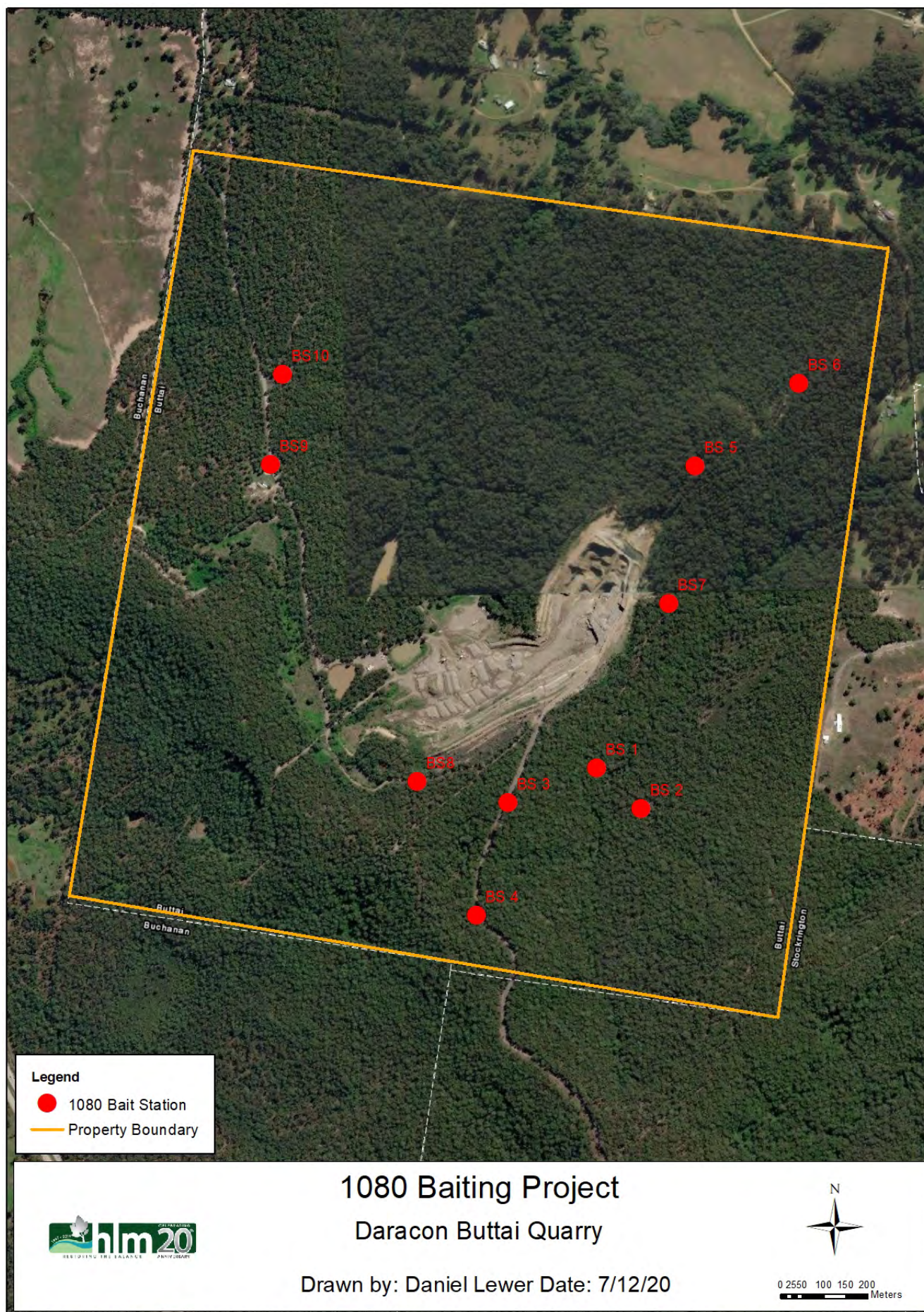
2.2 Results

All baits were laid on the 06/11/2020 and untaken baits removed on 27/11/2020. Detailed results, which correspond to the Map 1, can be found in the table below.

Name	Date Laid	Check 1 Date	Check 1 Species	Check 2 Date	Check 2 Species	Check 3 and Remove Date	Check 3 Species
BS1	06/11/20	13/11/20	No Sign	20/11/20	No Sign	27/11/20	No Sign
BS2	06/11/20	13/11/20	No Sign	20/11/20	No Sign	27/11/20	Wild Dog
BS3	06/11/20	13/11/20	No Sign	20/11/20	No Sign	27/11/20	No Sign
BS4	06/11/20	13/11/20	No Sign	20/11/20	No Sign	27/11/20	No Sign
BS5	06/11/20	13/11/20	Wild Dog	20/11/20	No Sign	27/11/20	Wild Dog
BS6	06/11/20	13/11/20	No Sign	20/11/20	No Sign	27/11/20	Fox
BS7	06/11/20	13/11/20	No Sign	20/11/20	No Sign	27/11/20	No Sign
BS8	06/11/20	13/11/20	Wild Dog	20/11/20	No Sign	27/11/20	No Sign
BS9	06/11/20	13/11/20	No Sign	20/11/20	No Sign	27/11/20	No Sign
BS10	06/11/20	13/11/20	Fox	20/11/20	No Sign	27/11/20	Fox
Check Total			2 Wild Dogs 1 Fox		No Takes		2 Wild Dogs 1 Fox
2 Foxes 4 Wild Dogs							

2.3 Baiting Trends

- A total of 30 baits were presented at 10 stations with 2 takes being from Foxes and 4 takes from Wild Dogs based on animal sign left on mound and surrounding area. All baits that remained untaken at the conclusion of the project and were buried onsite.
- All of the poisonous baits were consumed by foxes or wild dogs with no takes by any other species. No non-target species such as Goannas or Eagles were recorded as taking baits.



3. Sighting Reporting Form

A continual and vital method of practical vertebrate pest control/monitoring is the use of sighting recording. With HLM unable to be onsite every day to monitor vertebrate pests on site, monitoring can be conducted with the use of sighting sheets. These sighting sheets are now online and available at <http://www.hunterlandmanagement.com.au/pest-control/> which employees and contractors of Daracon Buttai Quarry can locate and report of vertebrate pests within the area. These sighting sheets are then forwarded to HLM for strategic analysis and evaluation of upcoming control programs. This observation technique has enabled areas to be targeted for control as well to highlight active areas of these pests.

4. Recommendations

- Consider programming a Quarterly (every three months) Pest Control program of 1080 baiting and/or Canid Ejectors; (approximate cost \$2000 per program)
- Consider the possibility of use of soft jaw and cage trapping program over a three-week period targeting Foxes and Wild Dogs in Autumn 2020 (approximate \$1500 per program)
- Participate in any region wide baiting programs.

Appendix 6 Images of Quarry

Panoramic image of Buttai Quarry – March 2020



Panoramic image of Buttai Quarry - September 2020



Rehabilitation images of the quarry (Lings Rd and quarry site) – January 2020

Rehabilitation images of the quarry (Lings Rd and quarry site) – September 2020

Buttai Quarry Bench #3 rehabilitation – March 2020***Buttai Quarry Bench #3 rehabilitation – September 2020***

Buttai Quarry stockpile area – September 2020***Buttai Quarry operational pit area – September 2020***

Aerial photograph of Buttai Quarry – September 2020

Aerial photograph of Buttai Quarry – December 2019

Aerial photograph of Buttai Quarry – December 2018

Aerial photograph of Buttai Quarry – December 2017

Aerial photograph of Buttai Quarry – January 2017

Aerial photograph of Buttai Quarry – November 2015

Aerial photograph of Buttai Quarry – September 2014

Appendix 7 *Annotated quarry layout image*

