



## **COOMBEFIELD QUARRY, SOUTHWELL RD, PORTLAND**

### **NOISE MANAGEMENT PLAN**

Acoustics Report A1674 NMP1a

8th September 2022

Report for:	Portland Stone Ltd Attention: Danny Nash
Issued to:	Land and Mineral Management Attention: Nick Dunn
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## **1 Introduction**

Ion Acoustics is appointed by Portland Stone Ltd (PSL) to prepare a noise management plan as part of the environmental permit application for the restoration of the existing quarry off Southwell Road, Portland, Dorset which will include a waste management facility.

This document has been prepared in support of the permit application for the restoration and has been informed by the assessment presented within Ion Acoustics report reference A1674 R01b dated 8<sup>th</sup> September 2022. This Noise Management Plan (NMP) details the following:

- The nearest noise sensitive receptor locations including the measured background sound level in the vicinity and the predicted specific noise level;
- Noise source information for all significant sources of noise associated with the operation;
- Best Available Techniques (BAT) to address / abate noise emissions; and,
- An example complaints log to inform an appropriate complaints procedure.

## **2 Site Description**

The site is an existing quarry site in a semi-rural setting between the villages of Southwell and Wakeham, on the Isle of Portland. The quarry is located between Southwell Road and Weston Street, approximately 150m from the coast at the closest point. The Isle of Portland has historically been associated with quarrying / mining of Portland Stone and the Coombe field site has been used since the 1950s to extract the material. The age of the site means many of the receptors in the area have developed around the quarry site.

There are two aspects to the proposed development: a waste management facility and the restoration / infill of the northern portion of the Coombe field quarry site. The arrangement of the waste management facility and infill portions of the development are indicated in figure 1 below. The area outlined in blue below is Coombe field South Quarry. This is an existing quarry site and will remain operating as such throughout the operation of the proposed development. Coombe field South does not form part of this permit application.

Activities would take place during the existing operational hours:

- 07:00 to 18:00 Monday to Friday;
- 07:00 to 13:00 Saturday;
- No activities on Sundays or Bank Holidays.

The life span of the facility is to be restricted to 2042.



*Figure 1 – Site Layout © Google*

### 2.1 Maintenance and Review of the Noise Management Plan

The noise management plan is to be continually adapted to the working practices at the facility as a means to address any noise issues if and when they arise. The management plan will be updated by a competent and appropriately trained person at the Coombefield site and will be stored in a location where it is easily accessible to relevant personnel. All complaints received are to be addressed by the following personnel:

Simon Main  
H&S Co-ordinator, Portland Stone Ltd,  
26 Tradecroft Industrial Estate,  
Wide Street, Portland,  
Dorset, DT5 2LN  
Simon@portlandskips.co.uk

### 3 Receptor Locations

The nearest residential receptors are located to the north of the site off Weston Street. These are approximately 70m from the site boundary, although the working areas are further inside the site, away from these locations. To the south of the site is Southwell village, with the nearest houses in this direction approximately 200m from the site boundary.

In both cases, there is a significant height difference between the quarry and the housing such that the houses will be screened from much of the activity. The application does not involve filling the quarry to the adjacent ground level.

**Table 1: Sensitive Receptor Locations**

Assessment Location	Land Use	Approximate OS Grid Co-ordinates, (E, N)	Distance to site boundary (m)
AL01 – Weston Street	Residential	369162, 070874	90
AL02 – Pennsylvania Close	Residential	369415, 070970	70
AL03 – Cove Park	Residential	369528, 070873	130
AL04 – Southwell Road Allotments	Residential	369179, 070427	90
AL05 – Southwell Road	Residential	368950, 070189	220
AL06 – Avalanche Road	Residential	368558, 070608	440
AL07 - Home Farm Close	Residential	368802, 070839	320

The above receptors and the site boundary are shown on an aerial photograph in Figure 2 below.



*Figure 2 – Site plan showing site, noise monitoring and receptor locations @ Google Earth*

Note the permit application only pertains to the processing of inert waste materials, quarry restoration and the waste management facility and not to the retained portion of the quarry (Coombefield South) or any other non-waste related use of the wider site. To that end, the permit application boundary only covers a limited portion of the quarry area.

#### **4 Noise Source Information**

The Coombefield operation will accept a mixture of household, commercial and industrial waste which is to be sorted on site, shredded and disposed of appropriately: either by onward transport or, in the case of any suitable non-recyclable inert material, used in the infill of the quarry site.

The majority of waste brought to the site would be processed within a new building constructed at the site but located on the quarry floor such that it is largely screened from the housing to the south and north. The building cladding and the location will assist in minimising noise from the facility. Processing in this building will include a vibrating screen separator, a slow speed shredder, a manual picking line and the bulking of materials for onward transport. External processing will typically include a tracked crusher when sufficient material is available. Materials are to be moved around the site by means of a wheeled loader.

The waste management facility is to be relocated from the existing, operational facility also operated by PSL, at Broadcroft (also on Portland). Noise measurements made at the Broadcroft facility have been used to inform the assessments presented in this Noise Management Plan. The measurements were made as short duration, attended measurement in close proximity to the existing operational plant. In some instance, these plant items will, eventually, be moved over to the Coombefield site.

**Table 2: Attended Measurement Summary**

Description	Duration	Ambient L <sub>Aeq</sub> , dB <sup>1</sup>	Max L <sub>Amax</sub> , dB <sup>2</sup>
Tracked Crusher Unit including loading (External) at 8m	3 mins	84.2	90.4
Picking line output (external) at 1m	1min 15sec	84.9	94.2
Vibrating screen (internal) @4m	1 min	79.1	91.3
Vibrating screen inc. loading (internal) @5m	2min	90.8	99.6
Note: 1 – Logarithmic average presented 2 – Maximum measured value presented			

It is noted that the levels summarised above only present the overall, dB(A) values. The full, octave band spectral data is presented in Appendix A of the noise impact assessment report (A1674 R01a).

The only additional, significant external noise source would be the dozer blade which would be used to move inert waste materials around the site and profile the restored land form. The noise source information used for the Dozer blade is taken from British Standard 5228 and is detailed in Table 3 below.

**Table 3: Dozer Blade**

Noise Source	Sound Power Level (dB) in Octave Bands, Hz							Overall, dB L <sub>WA</sub>
	63	125	250	500	1000	2000	4000	
Dozer Blade <sup>1</sup>	79	77	76	74	68	67	60	75
Source Data: 1) BS5228 Table C.2 Ref 1								

#### 4.1 Vehicle Movements

Within the noise modelling assessment, HGV movements have been modelled as a line source in accordance with the haul road methodology detailed in BS5228-1. In this instance, the noise source level was 105.5dB L<sub>WA</sub> and was modelled at a height of 0.5m above local height.

## 4.2 Noise Impact Assessment

The noise impact assessment presented in report reference A1674 R01b indicates that, noise from waste processing and restoration activities would fall below the measured background sound level at all receptor locations. This would be considered by BS4142 to be a low (below adverse) noise impact.

The context of the site is of an existing and operational quarry / mineral processing facility which has operated at the location since the 1950's therefore there is likely to be a degree of tolerance to noise of the nature proposed in this assessment. i.e. heavy vehicle movements, handling of materials etc.

## 5 Control Measures and Process Monitoring

The assessment undertaken within the permit application demonstrates that noise from the processing of inert materials and restoration works at the Coombefield site would be of a low noise impact in accordance with BS4142:2014. The assessment includes a number of inherent mitigation measures as detailed in the noise impact assessment. These measures include the following:

- The shredder, vibrating screen and picking line will be located within a building to reduce noise;
- The formation of a 3m high screen bund between the waste management portion of the site and the infill area; and,
- Works in the infill portion of the site will be conducted to a height of 2m below ground level, retaining a degree of screening from the sides of the quarry throughout the process.

Nevertheless, in accordance with the requirements of any permit, the following additional "Best Available Techniques" (BAT) measures will be put in place before the facility begins processing waste materials and will remain in place for the duration of the permit.

### 5.1 Demonstration of Best Available Techniques (BAT)

The applicable Best Available Techniques for reducing noise for the restoration and waste processing activity are summarised in the table below.

**Table 4: BAT Summary Table**

Noise Source	Operational Noise Description	Actions to be taken to meet BAT and timescales
All	Noise from the processing of inert waste, quarry restoration and waste management facility during unsociable / sensitive hours.	<ul style="list-style-type: none"> <li>The facility will only operate during the hours 07:00 to 18:00 Monday to Friday and 07:00 to 13:00 Saturday. There is to be no operation during the evening, overnight:</li> <li>Timescales: Ongoing.</li> </ul>
All	A 3m high earth bund between the waste processing and restoration areas of the site	N/A
All	Wear and tear or other damage could result in aspects of the waste processing generating additional noise including tonal elements (whine) and / or impulsive noise	<ul style="list-style-type: none"> <li>Regular maintenance will be carried out on a continual basis and any issues will be rectified as soon as possible.</li> <li>Timescales: Ongoing</li> </ul>
Vehicle movements	Noise from vehicle movements could include acceleration, braking, reversing alarms and loading / unloading of heavy materials at the site. Vehicles including shovel loaders etc in the vicinity would generate noise through the movement of materials etc.	<ul style="list-style-type: none"> <li>Site speeds restriction to be in place around the permit site and observed at all times.</li> <li>Engines to be switched off after use i.e. no idling.</li> <li>All vehicle movements are to adhere to the prescribed routing plan</li> <li>Timescales: Ongoing</li> </ul>
Skip storage and stacking	Skip storage to be undertaken externally and will potentially include bangs and clangs from the movement of empty skips.	<ul style="list-style-type: none"> <li>Skip storage area to be located centrally in the site, at least 300m from the nearest 3<sup>rd</sup> party dwelling.</li> </ul>
External waste processing including crushing, screening and loading of materials.	External waste processing activities to be undertaken outside of the waste transfer building.	<ul style="list-style-type: none"> <li>External waste processing to be undertaken to the immediate south of the 3m high earth bund, making best use of the screening influence of the bund for the dwellings to the north.</li> </ul>



5.1 Onsite Monitoring Procedures

The operations at the site will be continually monitored and checked to ensure all operations are conducted in accordance with BAT.

**Table 5: Onsite Monitoring Requirements**

Source Reference	Procedure	When will this be carried out?	Actions to be taken to meet BAT
Static Plant and Equipment	All equipment and plant at the facility shall be regularly inspected and maintained to ensure optimum operating effectiveness. The inspections will include any noise control measures i.e. silencers, enclosures and anti-vibration mounts.	Ongoing	Where inspections reveal work is required, this shall be carried out in an expedient manner and a log made to record the procedure.
Waste processing Building	The waste processing building shall be regularly inspected and maintained to ensure the ongoing protection against noise break out of internal activities and processes.	Ongoing	Where inspections reveal work is required, this shall be carried out in an expedient manner and a log made to record the procedure.
Perimeter bunds	A visual inspection of the perimeter bunds surrounding the plant shall be undertaken on a frequent basis to ensure the bunds are correctly maintained and appropriate for the task.	Frequent	Where remedial work is required, this shall be carried out in an expedient manner and a log made to record the procedure.
	Regular maintenance work including grounds keeping etc.	Annually	Annual work shall be undertaken to address the growth of plants etc on the bunds to ensure these do not have a detrimental effect on the stability / structure of the bund i.e. root growth undermining the stability of the landform.
Internal access roads and tracks	All access roads and haul roads within the site shall be maintained and kept free from pot holes etc	Ongoing	Any pot holes or defects in the access road and / or haul roads shall be addressed to maintain safety and minimise and noise generated by impacts etc.

## 5.2 Off Site Noise Monitoring

The noise impact assessment has demonstrated that noise from the waste processing and restoration activities would be comfortably below the existing background sound level in the area therefore no control measures in addition to the BAT detailed above, are required for the operation. That said, on receipt of a valid complaint, it may be useful to undertake a noise monitoring survey in the vicinity to assist in identifying and quantifying any noise impacts. It is noted that the survey is not required as a regular, ongoing compliance matter and should only be undertaken on receipt of a valid complaint to assist in addressing the highlighted issue.

The noise monitoring survey should be undertaken in line with the methodology detailed in section 6 of BS4142.

The noise monitoring locations identified at the site, used in the noise impact assessment, are detailed in figure 5 of the noise impact assessment report.

**Table 6: Noise Monitoring Locations**

Measurement Location (OS Grid Ref)	Minimum Duration	Measurement Period	Operational site Condition	Operational Noise Limit, dB
M01 (369099, 070804)	1 hour	During Operational Hours	Operational	42
	30 mins		Shut Down	
M02 (369463, 070789)	1 hour	During Operational Hours	Operational	58
	30 mins		Shut Down	
M03 (369067, 070384)	1 hour	During Operational Hours	Operational	52
	30 mins		Shut Down	

## 6 Noise Complaint Log

Should noise complaints be received, the following form should be completed and kept on record until the complaint has been resolved.

It is reiterated that the noise management plan relates solely to the processing of inert waste, quarry restoration and the waste management facility at the site. As such, there may be an initial stage of investigation to determine if the source of the noise was active during the processing of waste material and quarry restoration or from aggregate extraction.

In all instances, the complaint will be investigated by the site manager and where possible, any measures to address the source of the complaint mitigated as soon as possible. Within 48 hours of the complaint log being completed the site manager should contact the complainant to update them of the progress of the investigation and / or any actions taken to address the source of the noise.

If necessary, additional noise monitoring shall be undertaken to assist in identifying the source of the complaint.

All noise complaints shall be notified to the Environment Agency within 14 days from receipt and shall include details including actions taken / to be taken to address the noise source and complaint.



## **COOMBEFIELD QUARRY (NORTH)**

### **NOISE ASSESSMENT FOR ENVIRONMENTAL PERMIT**

Acoustics Report A1674 R01c

12th September 2022

Report for:	Portland Stone Limited
Issued to:	Land and Mineral Management Ltd
	Attention: Nick Dunn
Prepared by:	Checked by:
Janec Lillis-James Bsc Msc MIOA Acoustic Consultant	Gavin Irvine BSc (Hons) MIOA Director
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A1674 R01c	12/09/2022



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Appendix A – Noise Survey Data and Charts

## **1 Introduction**

Ion Acoustics is appointed by Land and Mineral Management Ltd (LMM) on behalf of Portland Stone Ltd (PSL) to provide advice on potential noise and vibration impacts associated with the proposed development of the Coombefield Quarry (North) site, off Southwell Road, Southwell, Portland, Dorset. The proposed development involves the restoration of an existing quarry and a waste management and transfer facility.

This assessment has been informed by a baseline noise survey carried out at the site from 9<sup>th</sup> to 17<sup>th</sup> August 2021. This report documents the relevant guidance, methodology and survey results, as well as the computer noise modelling exercise undertaken to establish the potential noise impact on nearby dwellings. Appropriate noise limits have been derived from the measured baseline noise levels and the impact derived in line with standard assessment criteria for the operational phases of the development. This report sets out the assessment and demonstrates that the impact of noise from the development will not result in any loss of amenity for nearby residents.

The survey and assessments presented in this report were undertaken by Mark Harrison of Ion Acoustics. Mark holds a BSc (Hons) degree, a post-graduate diploma in acoustics, is a Member of the Institute of Acoustics (MIOA), and has more than 13 years' experience in acoustics. Additional assessments were undertaken by Janec Lillis-James who holds an MSc degree and a BSc degree along with a post-graduate diploma in acoustics and is also a Member of the Institute of Acoustics (MIOA) with 8 years' experience. Therefore, the authors are considered qualified professional in accordance with the Dorset Council requirements.

## **2 Scheme Details**

### **2.1 Site Location**

The site is an existing quarry site in a semi-rural setting between the villages of Southwell and Wakeham, on the Isle of Portland. The quarry is located between Southwell Road and Weston Street, approximately 150m from the coast at the closest point. The Isle of Portland has historically been associated with quarrying / mining of Portland Stone and the Coombefield site has been used since the 1950s to extract Portland stone. The age of the site means many of the receptors in the area have developed around the quarry site.

The nearest residential receptors are located to the north of the site off Weston Street. These are approximately 70m from the site boundary, although the working areas are further inside the site, away from these locations. To the south of the site is the village of Southwell, with the nearest houses in this direction being approximately 200m from the site boundary.

The receptors are presented in further detail in Table 1 below. This includes an approximate OS grid co-ordinate and a distance to the site boundary.

**Table 1: Noise Assessment Locations**

Assessment Location	Approximate OS Grid Co-ordinates, (E, N)	Distance to site boundary (m)
AL01 – Weston Street	369162, 070874	90
AL02 – Pennsylvania Close	369415, 070970	70
AL03 – Cove Park	369528, 070873	130
AL04 – Southwell Road Allotments	369179, 070427	90
AL05 – Southwell Road	368950, 070189	220
AL06 – Avalanche Road	368558, 070608	440
AL07 - Home Farm Close	368802, 070839	320

The receptors are further identified in Figure 1 below. This also presents the application boundary (red line).



*Figure 1 – Site location showing site and nearest receptor locations © Google*

## 2.2 Proposed Development

There are two aspects to the proposed development: a waste management facility and the restoration / infill of the northern portion of the Coombfield quarry site. The arrangement of the waste management facility and infill portions of the development are indicated in figure 2 below. The area outlined in blue below is Coombfield South Quarry. This is an existing quarry site and will remain operating as such throughout the operation of the proposed development.



*Figure 2 – Site Layout © Google*

The waste management facility is to be relocated from the existing, operational facility also operated by PSL, at Broadcroft (also on Portland). The proposed facility will accept a mixture of household, commercial and industrial waste which is to be sorted on site and disposed of appropriately: either by onward transport or, in the case of any suitable non-recyclable inert material, used in the infill of the quarry site.

The majority of waste brought to the site would be processed within a new building constructed at the site. Processing in this building will include a vibrating screen separator, a slow speed shredder, a manual picking line and the bulking of materials for onward transport. External processing will primarily involve inert waste and will typically include a tracked crusher when sufficient material is available. Materials are to be moved around the site by means of a wheeled loader.

The waste management facility also includes areas for external skip storage and storage of recycled products. The layout of the waste management facility is presented in Figure 3 below:

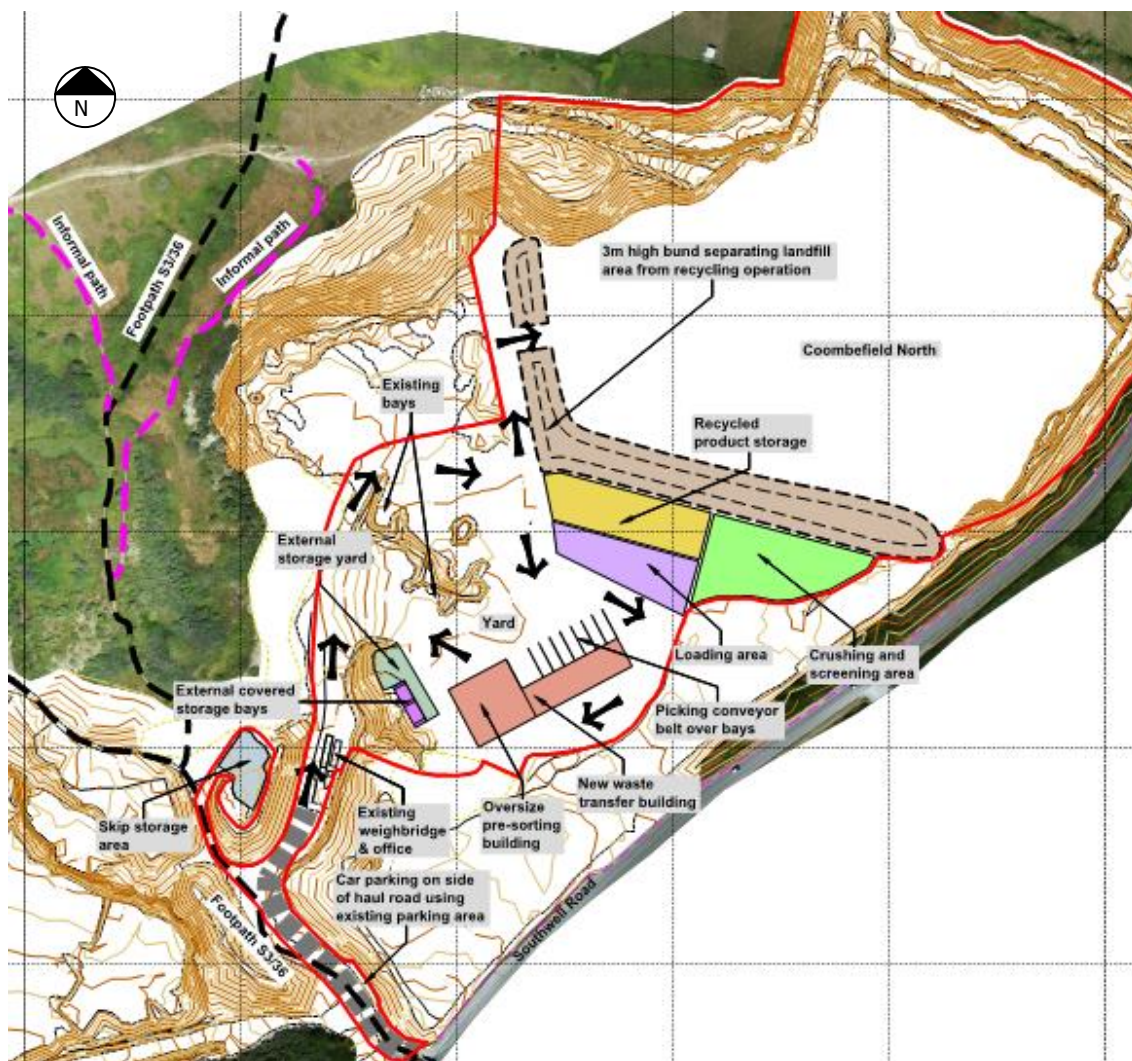


Figure 3 – Waste Management Facility Site Layout

The waste management facility is to be separated from the infilling area by means of a 3m high bund. This is to be constructed ahead of the start of operations at the waste management site and is intended to ameliorate both visual and noise impacts.

The infilling of the site will follow a staged approach, with seven stages proposed overall. Phases 1A to 3B will involve the infilling of the quarry and phase 4 is the restoration of the site ahead of returning it to the land owner. The phasing of the infilling operation is presented in Figure 4 below. Note the restoration works will leave the small parcel of land to the very north of the site, towards Weston Street unrestored. This will add a distance buffer between the closest residential receptors and the restoration works.



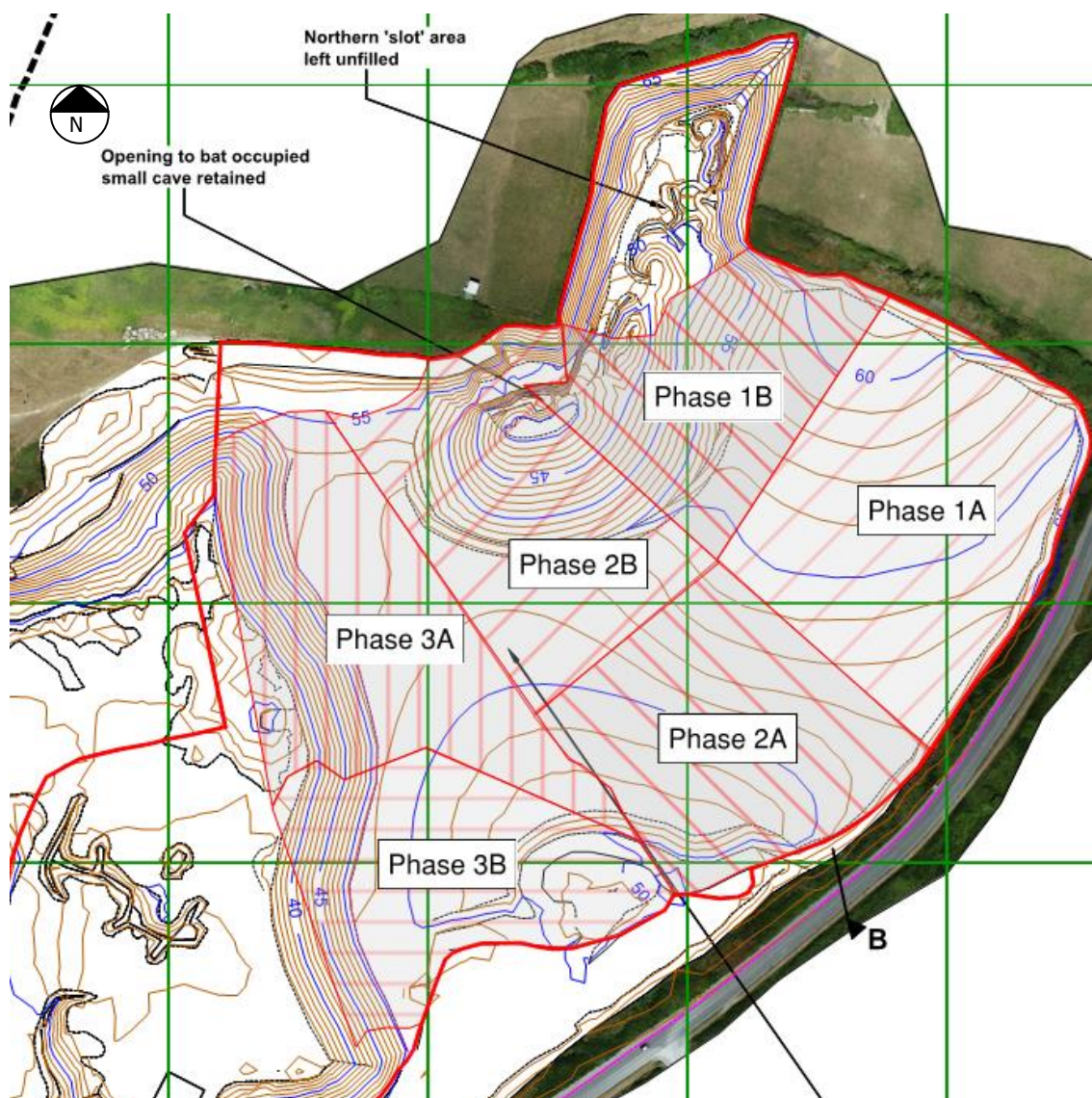


Figure 4 – Restoration Site and Phasing

Materials are to be brought to and taken from the site via HGVs using the existing site access road which joins Southwell Road to the south of the red line boundary. The intention is to match the current throughput of the Broadcroft site, resulting in up to 60 HGV movements per day.

The operational hours of the site are as follows:

- 07:00 to 18:00 Monday to Friday;
- 07:00 to 13:00 Saturday; and
- No operation on Sundays or Bank Holidays.

The life span of the facility is to be restricted to 2042.

### 3 Environmental Permitting Policy and other Guidance on Noise

Environmental permits have conditions that require operators to control pollution – this includes controlling noise and vibration. The 'Noise and vibration management: environmental permits – Updated 31 January 2022' guidance was produced by The Environment Agency, Scottish

Environment Protection Agency (SEPA), Natural Resources Wales and Northern Ireland Environment Agency.

The guidance states:

*'This guidance covers:*

- *how the environment agencies will assess noise from certain industrial processes*
- *what the law says you must do to manage noise and vibration*
- *advice on how to manage noise – in particular, how to carry out a noise impact assessment and what operators should include in a noise management plan'*

The guidance goes on to state that 'BS 4142: Methods for rating and assessing industrial and commercial sound' must be used to quantify the level of environmental noise impact from industrial processes.

Based on this, the standard, BS 4142 has been used to undertake the assessment presented in this report. This standard is summarised below.

### 3.1 BS4142: 2014 +A1: 2019 – Assessment Principles

The standard method for assessing noise of an industrial nature affecting housing, is British Standard BS 4142 "Method for rating and assessing industrial and commercial sound". A BS 4142 assessment is typically made by determining the difference between the industrial noise under consideration and the background sound level as represented by the  $L_{A90}$  parameter, determined in the absence of the industrial noise. The  $L_{A90}$  parameter is defined as the level exceeded for 90% of the measurement time, representing the underlying noise in the absence of short duration noise events such as dog barks or individual cars passing.

The industrial noise under consideration is assessed in terms of the ambient noise level,  $L_{Aeq}$ , but a character correction penalty can be applied where the noise exhibits certain characteristics such as distinguishable tones, impulsiveness or, if the noise is distinctively intermittent. The ambient noise level,  $L_{Aeq}$  is defined as the steady-state noise level with the same energy as the actual fluctuating sound over the same time period. It is effectively the average noise level during the period. The industrial noise level ( $L_{Aeq}$ ) with the character correction (if necessary) is known as rating level,  $L_{Ar}$ , and the difference between the background noise and the rating level is determined to make the BS 4142 assessment. The standard then states:

- a) "Typically, the greater the difference, the greater the magnitude of the impact.*
- b) A difference of around +10dB or more is likely to be an indication of a significant adverse impact, depending on the context.*
- c) A difference of around +5dB is likely to be an indication of an adverse impact, depending on the context.*
- d) The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context."*

The standard outlines a number of methods for defining appropriate 'character corrections' to determine the rating levels to account for tonal qualities, impulsive qualities, other sound characteristics and/or intermittency.

The standard also highlights the importance of considering the context in which a sound occurs. The standard indicates that factors including the absolute sound level, the character of the sound, the sensitivity of the receptor and the existing acoustic character of the area should be considered when assessing the noise impact. The absolute sound level is of particular importance where the measured background sound levels are low, which is typically taken as  $L_{A90}$  30dB and below. In regard to low sound levels, the standard states:

#### **4 Noise Survey**

A baseline noise survey was carried out between the 9<sup>th</sup> and 17<sup>th</sup> August 2021 at three locations in the vicinity of the site, at locations representing the nearest noise sensitive receptors. The monitoring locations used in the survey are presented in Figure 5 below:



*Figure 5 – Monitoring Location © Google*

The survey was undertaken using Rion NL52 sound level meters, each with a WS-15 windshield. The equipment was set to measure various noise indices in 15-minute periods and record sample audio recordings throughout the survey. At all locations, the microphone and windshield were mounted at approximately 1.4m to 1.5m above local ground level. The meters were calibrated

at the start and end of the survey using a Brüel & Kjær Type 4231 sound level calibrator with no drift observed. Calibration certificates are available on request.

The noise survey was entirely unattended apart from at set up and collection. All equipment was set up and collected by Mark Harrison of Ion Acoustics.

The noise monitoring locations are described in more detail below.

#### 4.1 Noise Monitoring Location 1

The first monitoring location was sited to the north of the site area, towards the rear gardens of the properties on Weston Street, approximately 110m from the road. The monitoring station was located on soft ground in a free field location though was surrounded by large rocks. The location is shown in Figure 6 below.



*Figure 6 –Monitoring Station M01 Detail*

The noise climate during the set up and collection period was subjectively considered relatively tranquil, with very few readily identifiable noise sources. Some noise from ongoing activities at the quarry were audible though this was generally low level and sporadic.

Other noise sources including general environmental noise i.e. bird noise, wildlife and very low-level wind noise in trees etc.

#### 4.2 Noise Monitoring Location 2

Monitoring location 2 was sited to the east of the site, towards Southwell Road, in the vicinity of the junction with Weston Street. The monitoring equipment was positioned on soft ground, in a free-field location, approximately 10m from the carriageway edge. Figure 7 below shows the monitoring location in further detail.



*Figure 7 –Monitoring Station 2 Detail*

The noise climate at location 2 was again relatively tranquil, dominated by bird song and other natural sounds. Road traffic noise on Southwell Road was sporadic though clearly audible. Some noise from the quarry was audible, specifically a large hydraulic breaker which was operating throughout the set-up period.

#### 4.3 Noise Monitoring Location 3

Monitoring location 3 was located to the south of the site, in the vicinity of the site access road, at a comparable distance from Weston Road as both the allotments (AL04) and the dwellings further south (AL05). Again, the monitoring equipment was positioned on soft ground, in a free-field location, and was approximately 30m from the carriageway edge. The monitoring equipment was set up at the top of a small rise which was roughly comparable to carriageway height meaning the microphone was approximately 1.5m above the carriageway. Figure 8 below shows the monitoring location in further detail.



*Figure 8 –Monitoring Station 3 Detail*

The noise climate at location 3 was comparable to location 2, though was more influenced by HGV movements on the site access roads. This included stop / start traffic as vehicles accessed / exited the site.

#### 4.4 Weather

The prevailing meteorological conditions were monitored at location 3 using a Davis Vantage Vue weather station. This logged rainfall, ambient temperature, wind speed and direction for the duration of the survey. The recorded weather data indicates that conditions during the survey were relatively settled, with warm daytime temperatures (around 17°C) and light wind speeds (2m/s to 5m/s). No rain was recorded throughout the monitoring period. The wind direction was largely from the south / south-east during the survey period though towards the end of the survey the wind was from the south west.

#### 4.5 Noise Measurements at Broadcroft Facility

In addition to the survey detailed above, a shorter duration, attended measurements survey was undertaken at PSL's facility at Broadcroft. The Broadcroft facility is to eventually close and the waste management operation is to move to the Coombefield site.

The attended noise measurements were made in shorter periods, typically around one minute in duration. This was considered suitable to adequately represent the noise of each item of plant under investigation. The measured noise levels are summarised in Table 3 below:

**Table 3: Attended Measurement Summary**

Description	Duration	Ambient L <sub>Aeq</sub> , dB <sup>1</sup>	Max L <sub>Amax</sub> , dB <sup>2</sup>
Tracked Crusher Unit including loading (External) at 8m	3 mins	84.2	90.4
Picking line output (external) at 1m	1min 15sec	84.9	94.2
Vibrating screen (internal) @4m	1 min	79.1	91.3
Vibrating screen inc. loading (internal) @5m	2min	90.8	99.6
Note: 1 – Logarithmic average presented 2 – Maximum measured value presented			

It is noted that the levels summarised above only present the overall, dB(A) values. The full, octave band spectral data is presented in Appendix A.

## 5 Survey Results

As indicated above, the Coombefield north site was still operational during the survey however, by prior arrangement with the operator, a shut-down period was programmed between 12:00 and 13:00 each working day. The values measured during these periods are taken as being the ‘true background sound level’ and are summarised in Table 4 below. The full measured data is presented in Appendix A or this report.

The ambient sound level, the logarithmic average of the L<sub>Aeq, 15min</sub> values is shown. For the background sound level, L<sub>A90</sub>, the minimum, mean (average) and mode (most common) values are presented to facilitate the derivation of the “typical” value in line with BS 4142:2014 guidance.

**Table 4: Summary of Noise Survey Data during Coombefield North Shutdowns**

Monitoring Location	Duration Hh:mm	L <sub>Aeq</sub> , dB	Background Sound Level, L <sub>A90</sub> , dB		
			Minimum	Arithmetic mean	Mode (Most common)
Location 1	06:00	41.9	32	36	37
Location 2	06:00	58.1	36	42	46
Location 3	06:00	51.6	39	42	42

The background sound level at location 1 is markedly lower than that at location 2 and 3 due to the distance to surrounding noise source i.e. roads. The background sound levels at location 2 and 3 are reasonably comparable, with both locations reporting a mean of 42dB.

### 5.1 Analysis of Background Sound Levels

In addition to the above, the distribution of L<sub>A90</sub> (integer) values during the shutdown periods are presented in charts in Appendix A. This has assisted in the derivation of the ‘typical’ background sound level.

For Location 1, the range of L<sub>A90</sub> values is between L<sub>A90</sub> 32dB and 40dB. Further analysis indicates two peak values in the distribution at L<sub>A90</sub> 36dB and 37dB. For the purposes of this assessment L<sub>A90</sub> 37dB is considered typical.

At location 2, the range of background sound levels is between  $L_{A90}$  36dB and 50dB. The distribution again demonstrates two peak values: one at 42dB and a second at 46dB. Given this,  $L_{A90}$  42dB is considered typical for this location.

At location 3 the range of background sound levels is more constrained, ranging between  $L_{A90}$  39dB and 44dB, with a peak at  $L_{A90}$  42dB. For this reason,  $L_{A90}$  42dB is considered typical for this location.

Table 5 below presents the typical background sound level and appropriate noise targets used in this assessment. The noise limits are set at a level of  $L_{A90}$  +5dB in accordance with BS4142. The standard indicates that, a difference of +5dB is *'likely to be an indication of an adverse impact, depending on the context'*. The context in this instance is a site with a history of industrial / mineral extraction use with similar noise generating activities to those proposed in the development plans. To that end, there is likely to be a degree of habituation to noise of this type therefore the context of the setting lends itself to a limit set above the background sound level.

The table also presents the assessment locations relative to the monitoring locations.

**Table 5: Proposed Noise Targets**

Monitoring Location	Assessment Location	Typical Background Sound Level, $L_{A90}$ , dB (Ref section 5.1)	Noise Limit, dB
Location 1	AL01, AL06, AL07	37	42
Location 2	AL02, AL03	42	47
Location 3	AL04, AL05	42	47

The rating level is defined as the specific noise level generated by the facility plus any specific character corrections which need to be applied in line with BS4142:2014.

## 6 Noise Modelling Assessment

A noise model has been constructed using IMMI<sup>1</sup> noise modelling software to predict noise levels to the nearest noise-sensitive receptor locations. Within the modelling software, propagation of noise has been calculated in accordance with ISO 9613-2<sup>2</sup> with the following input parameters:

- Downwind propagation (noise levels under crosswind and upwind conditions will be less);
- Soft ground between the noise source and the receiver locations ( $G = 1$ ),
- Ambient air temperature of 10°C and 70% Relative Humidity; and,
- Barriers and screening influence calculated in accordance with ISO 9613-2.

The input source data for the model is described below.

### 6.1 Internal Noise Sources

The waste transfer building is to accommodate the vibrating separator which, at Broadcroft, was loaded using a smaller shovel loader. The material was transported up the conveyors and

<sup>1</sup> IMMI noise mapping <https://www.immi.eu/en/noise-mapping-with-immi.html>

<sup>2</sup> ISO 9613-2: Acoustics – Attenuation of sound during propagation outdoors: Part 2: General method of calculation



separated, at height by a vibrating grate. Noise measurements made of the separator during operation, which included loading of the machine, are summarised in table 6 below

**Table 6: Noise Data – Vibrating Screen**

Noise Source	Sound Power Level (dB) in Octave Bands, Hz							Overall, dB L <sub>WA</sub>
	63	125	250	500	1000	2000	4000	
Vibrating Screen <sup>1</sup>	110	108	110	108	108	106	103	113
Source Data 1 Measured at Broadcroft facility								

The waste transfer building is also to accommodate a Terex TDS 820E electric slow speed shredder to shred waste. A sound power level of 114 dB L<sub>WA</sub> has been specified by the manufacturers Terex. No octave band data is available for this model, however information provided by BS 5228-1+A1:2014 has been used to derive a likely octave band spectrum, specifically Table C.8 which presents general sound level data on waste disposal sites. It is likely that the 'Waste compactors' set out in items 1 – 5 of Table C.8 will have a similar octave band spectrum to a waste shredder. These have been used to derive a likely octave band sound power spectrum used in this assessment as summarised in table 7 below.

**Table 7: Noise Data – Terex Shredder – Assumed Spectrum**

Noise Source	Sound Power Level (dB) in Octave Bands, Hz							Overall, dB L <sub>WA</sub>
	63	125	250	500	1000	2000	4000	
Terex TDS 820E Shredder <sup>1</sup>	108	109	113	111	109	105	101	114
<sup>1</sup> Derived from the examples set out in Table C.8 of BS 5228-1:2009+A1:2014								

The vibrating screen and shredder are to be located within the waste transfer building. This is to include a number of large roller shutter doors and open access for vehicles etc. The shed is assumed to be of steel frame construction and clad in a single-skin, profiled steel. The noise levels have been modelled within a building and the breakout calculated in line with standard calculation methodologies for inclusion in the noise model.

## 6.2 External Noise Sources

There are a number of significant noise sources associated with external operations at the site which have been included in the noise model. These are detailed in Table 8 below:

**Table 8: Noise Data – External Sources**

Noise Source	Sound Power Level (dB) in Octave Bands, Hz							Overall, dB L <sub>WA</sub>
	63	125	250	500	1000	2000	4000	
Dozer Blade <sup>1</sup>	79	77	76	74	68	67	60	75
Tracked Crusher <sup>2</sup>	116	113	107	104	101	99	95	107
Picking Line Output <sup>2</sup>	86	85	88	86	87	88	86	93
Source Data 1 BS5228 Table C.2 Ref 1 2 Measured at Broadcroft facility								

For the purposes of the noise modelling assessment, the picking line output and the crusher have been modelled as point sources, with the picking line modelled at 3.5m above local ground and the crusher at 2m above local ground. The dozer blade has been modelled as a line source at a height of 0.5m above local ground to approximate the engine, drive chain and the point at which the blade meets the surface.

### 6.3 Vehicle movements

The information presented in the transport statement for the development indicates that the site would expect up to 27 HGV movements per day, which includes bulk HGVs and skip vehicles. This would equate to around 2.5 vehicle per hour entering the site, assuming an 11-hour day.

Within the noise modelling assessment, vehicle movements have been modelled as a line source in accordance with the haul road methodology detailed in BS5228-1. In this instance, the noise source level was 105.5dB and was modelled at a height of 0.5m above local height.

### 6.4 Inherent Mitigation Measures

The site is to include a number of inherent mitigation measures which will ameliorate noise impacts on the nearest receptor locations. These include the following:

- The vibrating screen and shredder will be located within a building to reduce noise;
- The formation of a 3m high screen bund between the waste management portion of the site and the infill area; and,
- Works in the infill portion of the site will be conducted to a height of 2m below ground level, retaining a degree of screening from the sides of the quarry throughout the process.

## 7 Predictive Noise Assessment

Noise and vibration effects associated with the proposed development could arise from a number of sources, including:

- Processing of waste materials both within the building and externally;
- Vehicle movements within the site; and,
- Activities associated with the infilling / restoration of the quarry.

The noise modelling assessment assumes that all activities are operating concurrently. The majority of the plant would operate for 100% of the assessment period. The exception in this case being the tracked crusher, which requires a sufficient amount of material to be stock piled before being run through the machine. Given this, the crusher is assumed to operate for 50% of the assessment period.

### 7.1 Operational Noise Assessment

In the first instance, the noise model has been used to calculate specific noise levels at the third-party receptor locations identified in figure 1 above. These predicted levels have been used to evaluate the noise impact in accordance with the methodology detailed in BS 4142.

The noise sources associated with the development are considered to be broadband in nature, not demonstrating any particular tonal content during typical operation.

There is likely to be a degree of impulsive noise as waste materials are tipped from vehicles and / dropped in to the crusher etc however, these are not entirely out of keeping with the historical use of the site, where heavy machinery was used to move and manipulate stone products while

it was a working quarry. To that end, no character corrections have been added in the derivation of the rating noise level.

It is reiterated that there are seven phases to the infill / restoration operation and that the waste management facility would run concurrently through six of these phases. The exception being phase 4 when the site restoration is completed and handed back to the land owner. To that end, there are a number of permutations and noise modelling scenarios to consider. A summary of the predicted noise levels is presented in Table 9 below. This presents the maximum and minimum noise values for each receptor during the life of the development.

**Table 9: Noise Impact Assessment**

Receptor Location	Predicted (Rating) level, dB L <sub>Aeq</sub>		Rating Noise Target (ref Table 4) dB L <sub>Ar</sub>	Minimum Difference, dB
	Minimum	Maximum		
AL01 – Weston Street	22	42	42	0
AL02 – Pennsylvania Close	13	36	47	-11
AL03 – Cove Park	8	33	47	-14
AL04 – Southwell Road Allotments	20	41	47	-6
AL05 – Southwell Road	16	36	47	-11
AL06 – Avalanche Road	13	36	42	-6
AL07 - Home Farm Close	17	39	42	-3

The assessment above demonstrates that noise during the operation of the development, including both the waste management facility and the restoration / infill, will not exceed the proposed noise limits derived in line with BS4142. This demonstrates that noise would not result in any adverse noise impacts in accordance with the standard.

The greatest noise impacts are likely to occur at receptor AL01, which is closest to the proposed restoration site. The remaining receptors fall between 3dB and 14dB below the noise limit, meaning, in real terms noise would fall between parity and 10dB below the background sound level. This would be considered an indication of a low noise impact in accordance with BS4142.

In addition to the receptor predictions a noise contour plot is presented in Figure 9 below, showing the predicted noise levels (dB L<sub>Aeq</sub>) during Phase 2A, which reports the highest noise levels at receptor AL01. The contours assume that all equipment at the waste management facility is running and the dozer blade is operating within the restoration area. (Phase 2A).

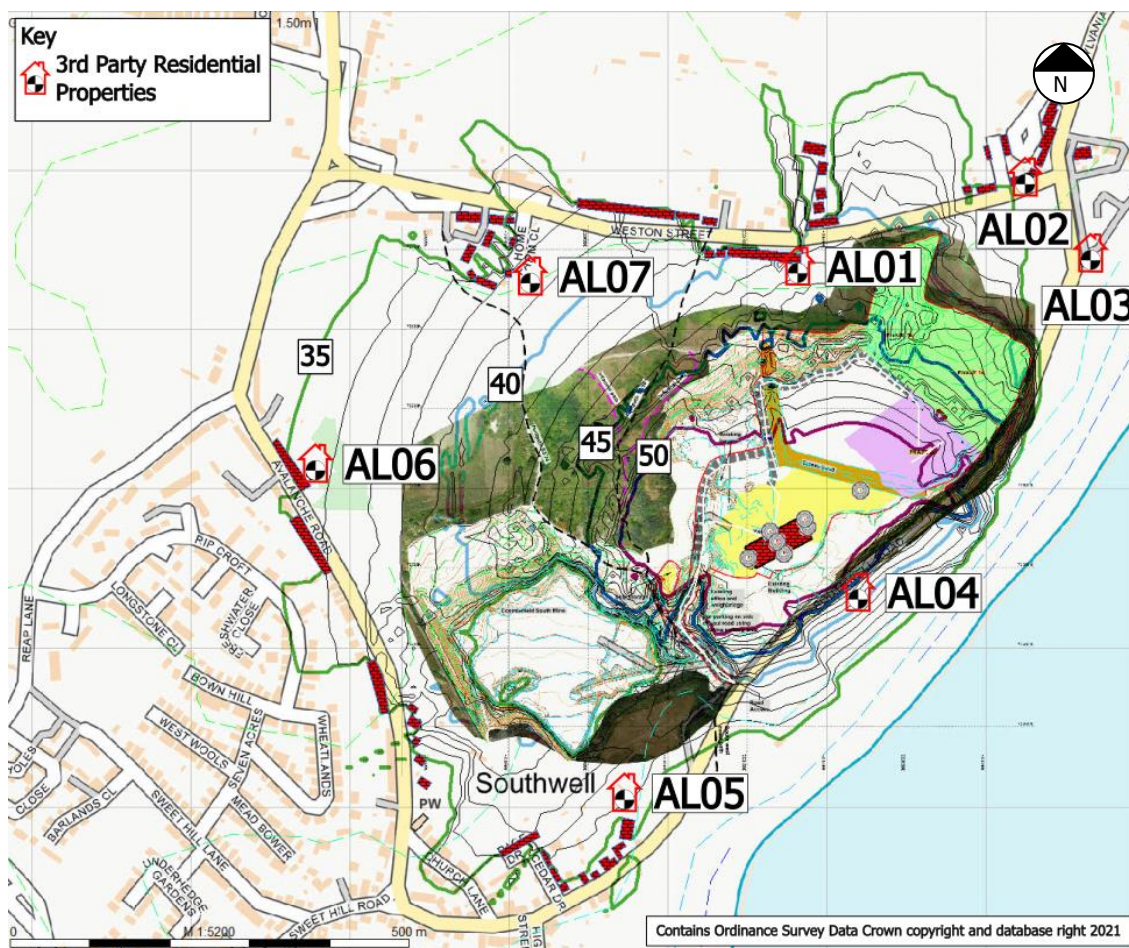


Figure 9 – Indicative Noise Contour Plot, dB LAeq

The noise contour plot above indicates that the propagation of noise is largely restricted to the immediate area surrounding the site and the higher noise levels are contained within the site boundary. The lowest contour shown (light green) is the 35dB(A) contour.

## 7.2 Uncertainty and Context

BS 4142 requires an assessment of context and uncertainty.

As indicated above, the site has historically been used for stone extraction since the 1950s therefore there is likely to be a degree of tolerance to noise of the nature proposed in this assessment. The context of the wider Isle of Portland is that there are numerous active quarries and mines meaning the development proposed for this site is not out of keeping with the character of the area.

There is uncertainty in all measurements and assessments. The uncertainty in the survey has been minimised by measuring over a number of consecutive days. Weather data measured at the site was used to ensure that the data used in the assessment was collected during periods of appropriate meteorological conditions. The background sound level varied to a degree during the survey therefore detailed consideration has been given to the derivation of the 'typical' background sound level. The calculation methodology used, ISO 9613-2, states that noise levels are predicted to  $\pm 3$ dB.

Given the above, uncertainty is not considered to have a significant impact on the overall assessment outcome.

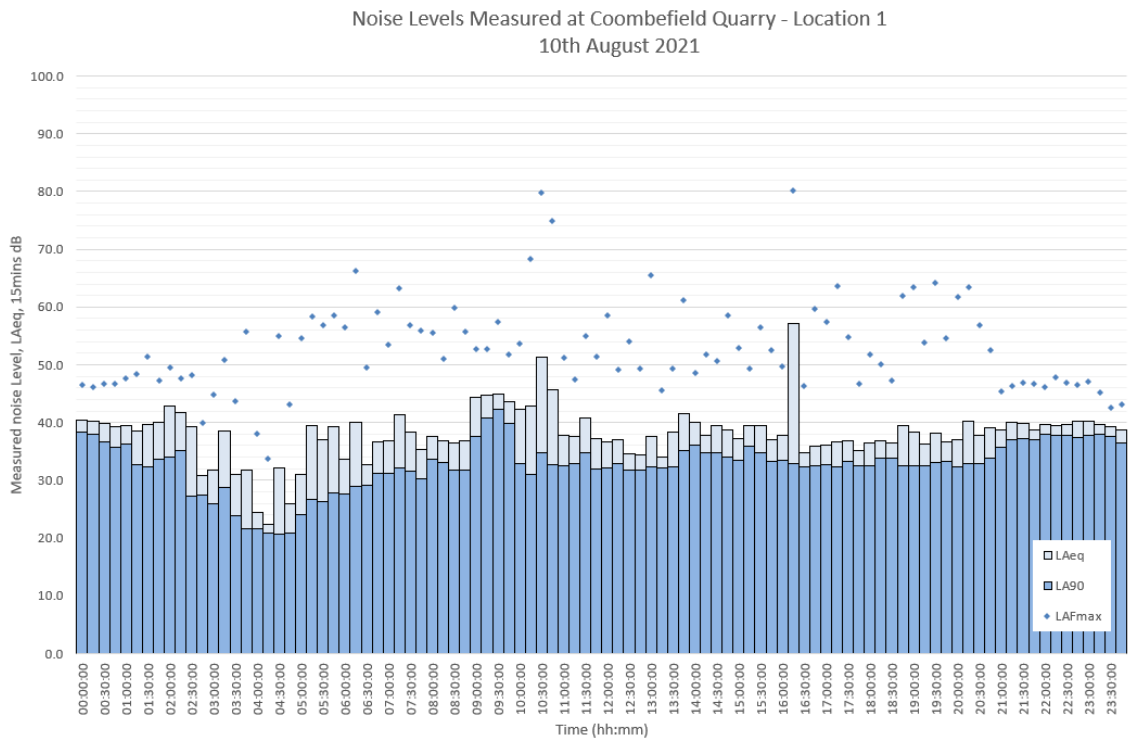
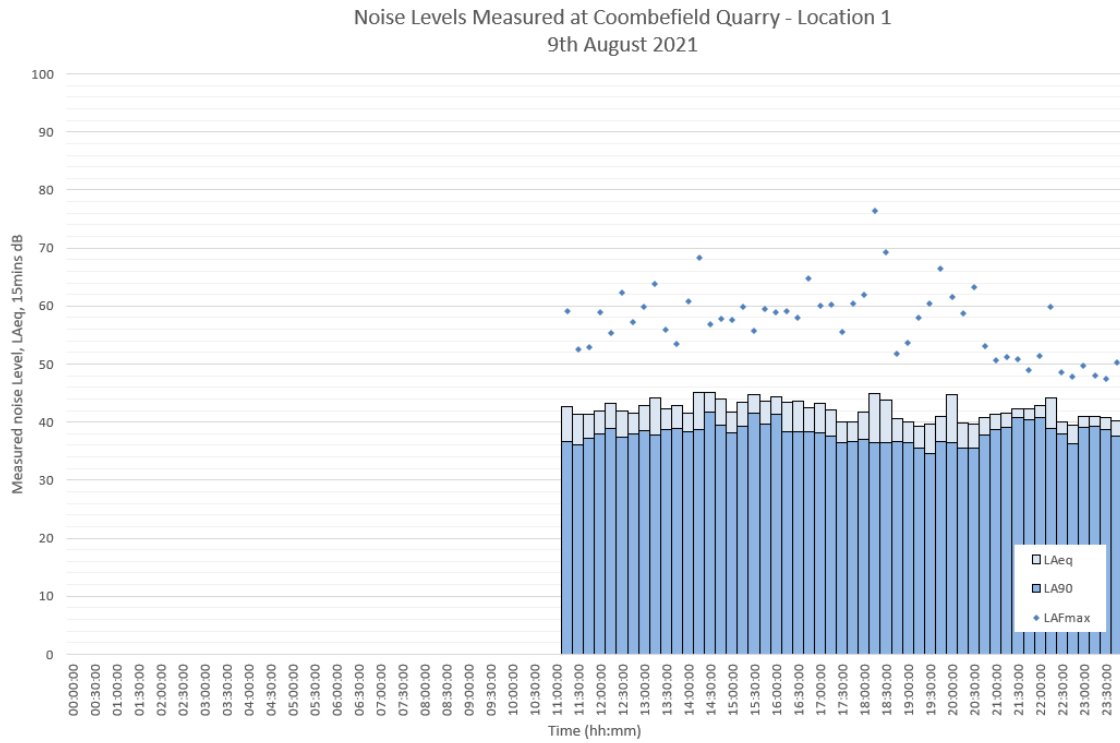
## **8 Summary**

A noise assessment has been carried out for the proposed development of the Coombefield (north) site off Southwell Road, Isle of Portland, Dorset. A baseline noise survey was undertaken at the site and a combination of the measured background sound levels and absolute noise targets have been used to derive the noise impact of the facility during the operational phases.

During the operational phase, noise levels from operations within the site, including processing of waste materials and the restoration of the old quarry site, would fall below the noise limits derived from the baseline survey data. This would indicate that activities would not result in adverse noise impacts in accordance with BS4142.

Given the above, it is considered that there are no noise-related issues associated with the proposed development which would prevent the granting of an environmental permit.

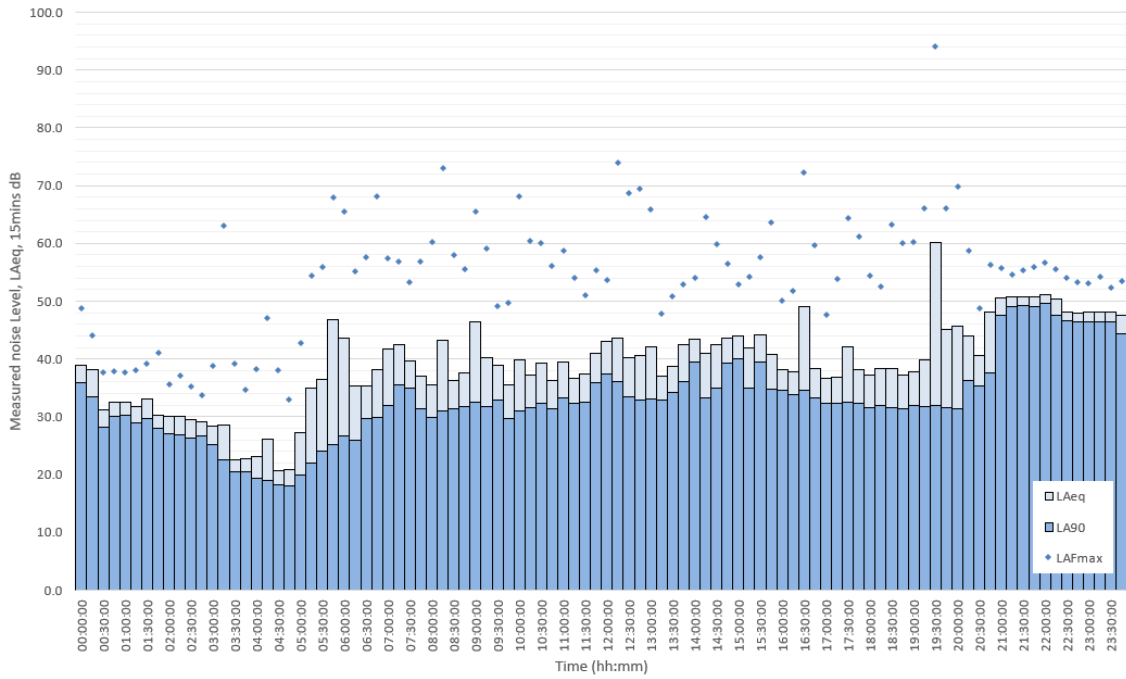
**Noise Monitoring Location 1**



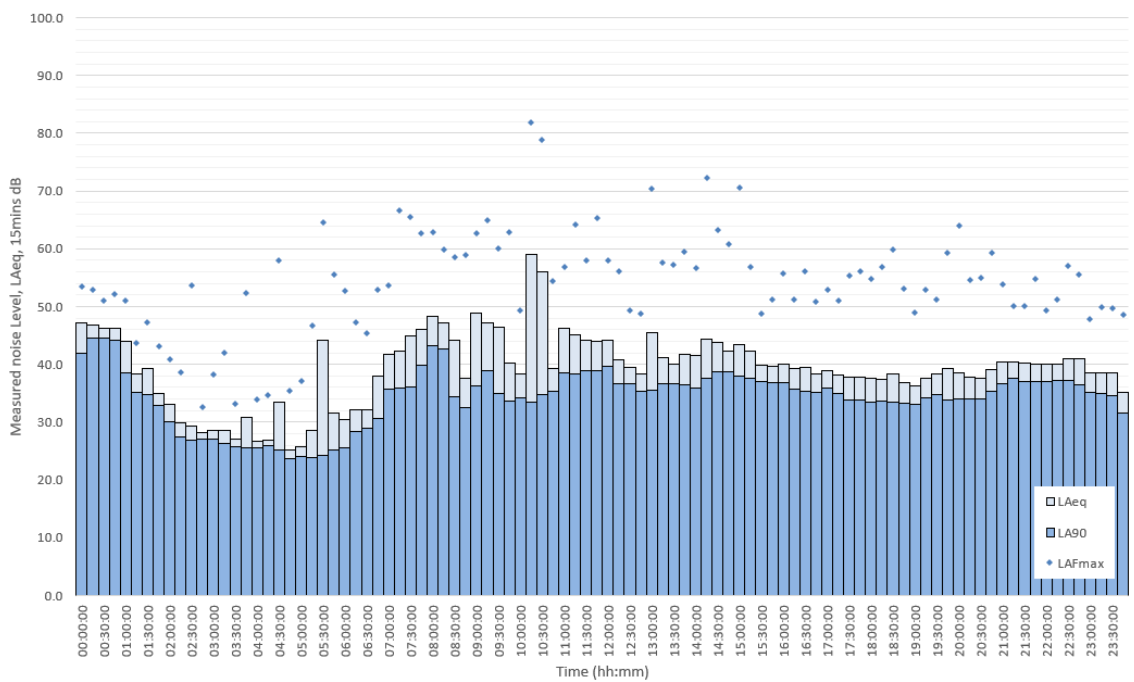
**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



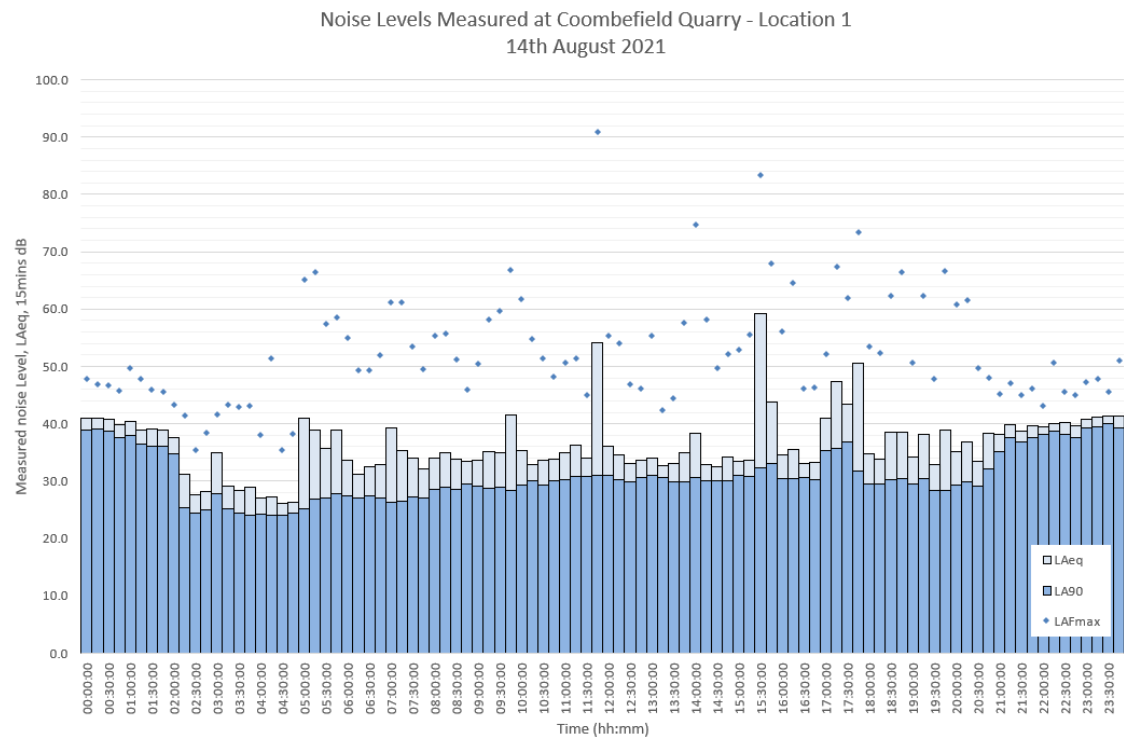
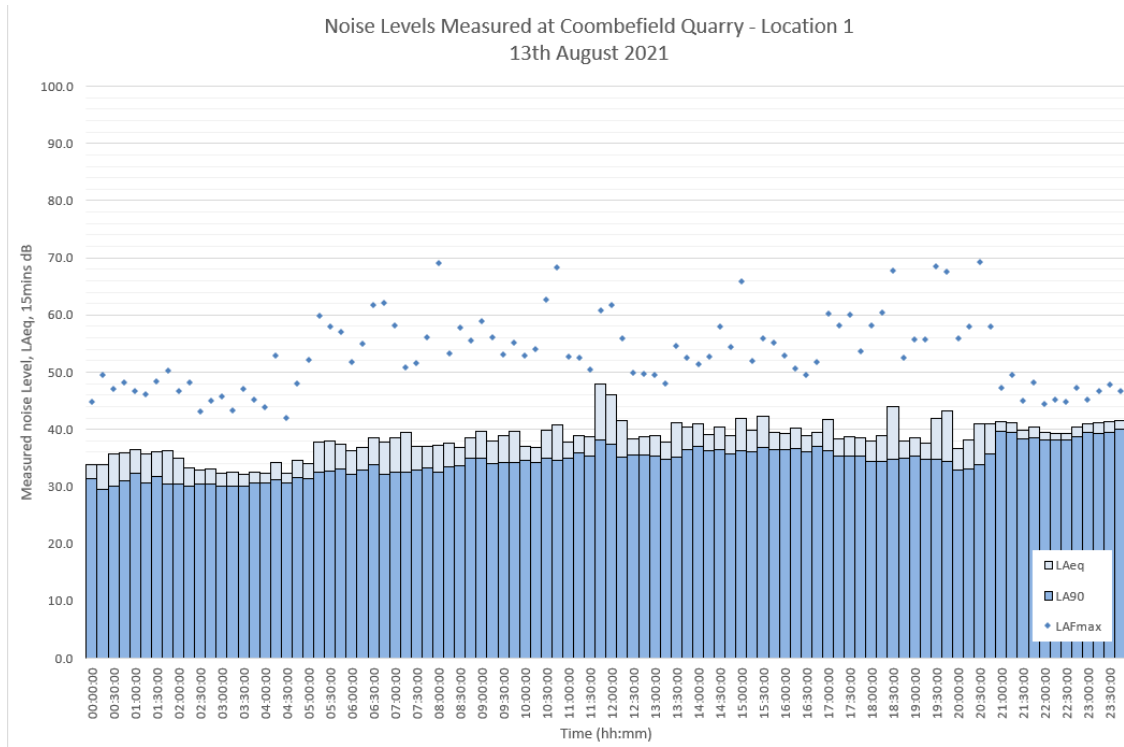
Noise Levels Measured at Coombefield Quarry - Location 1  
 11th August 2021



Noise Levels Measured at Coombefield Quarry - Location 1  
 12th August 2021



**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**

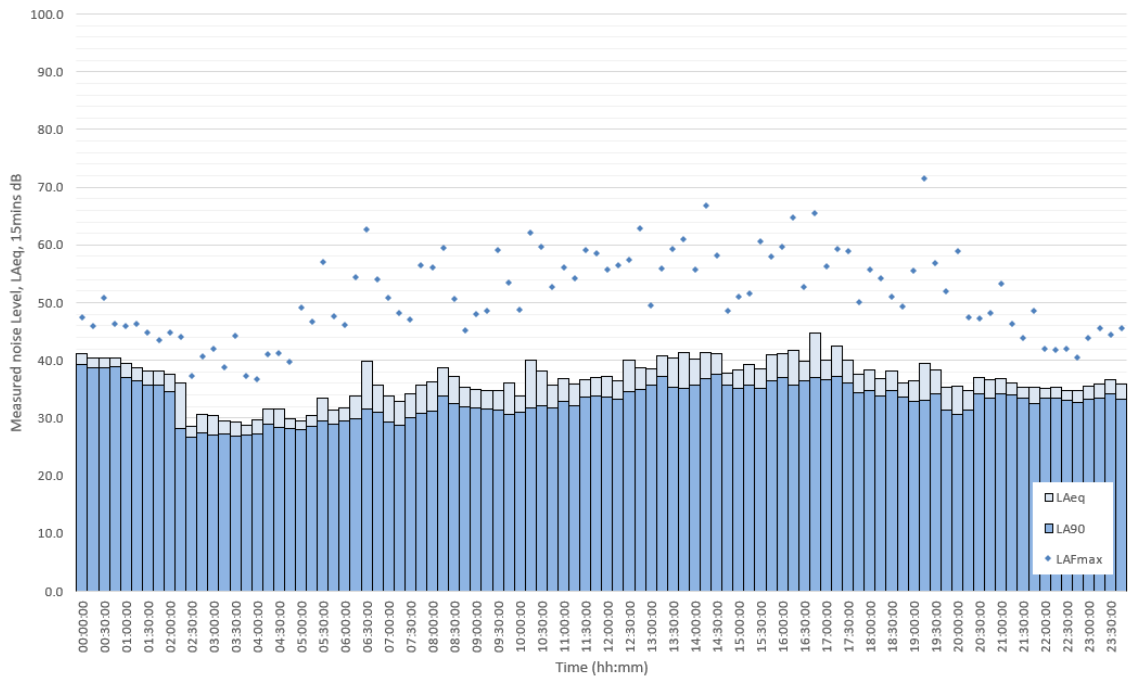




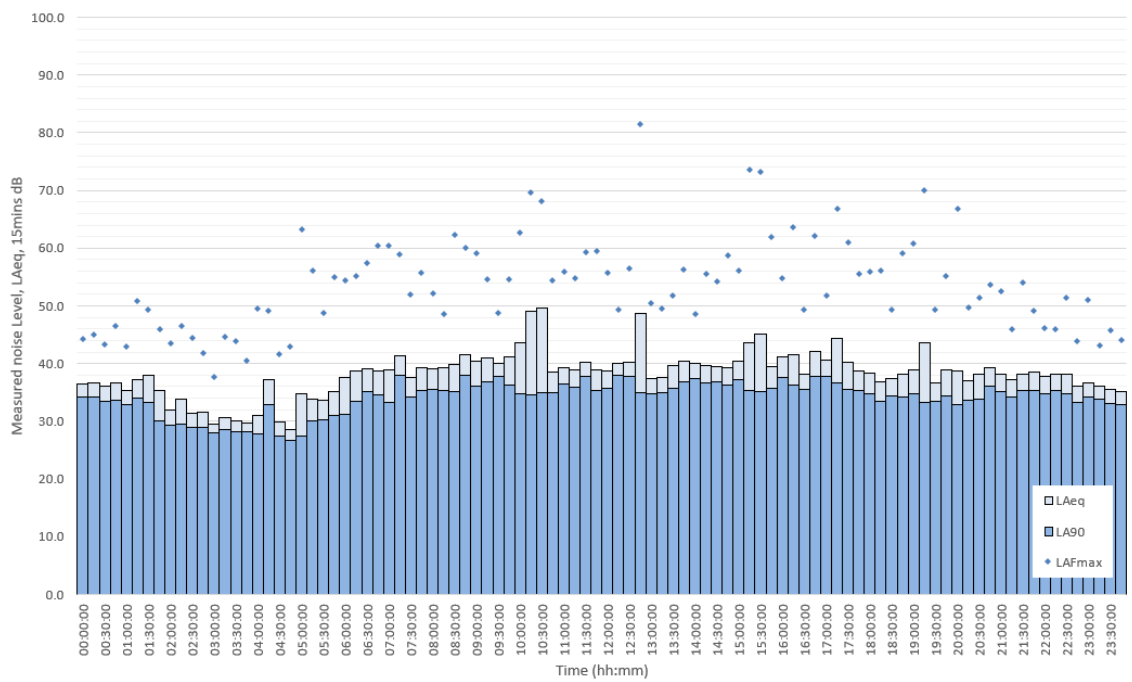
**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Noise Levels Measured at Coombefield Quarry - Location 1  
 15th August 2021



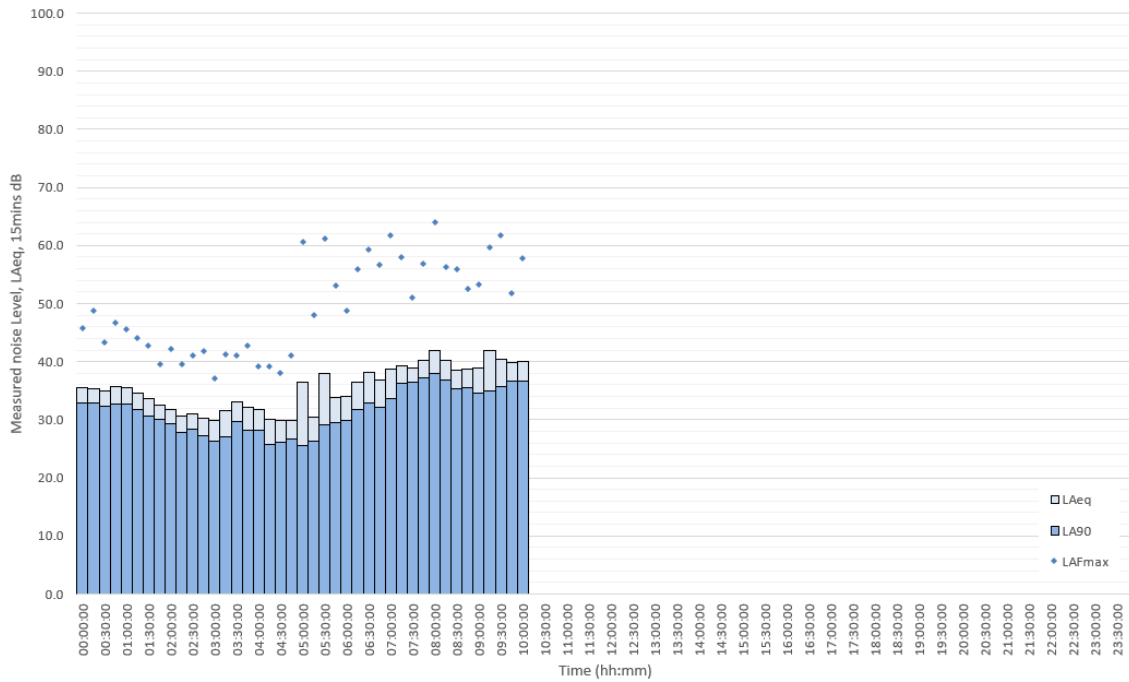
Noise Levels Measured at Coombefield Quarry - Location 1  
 16th August 2021



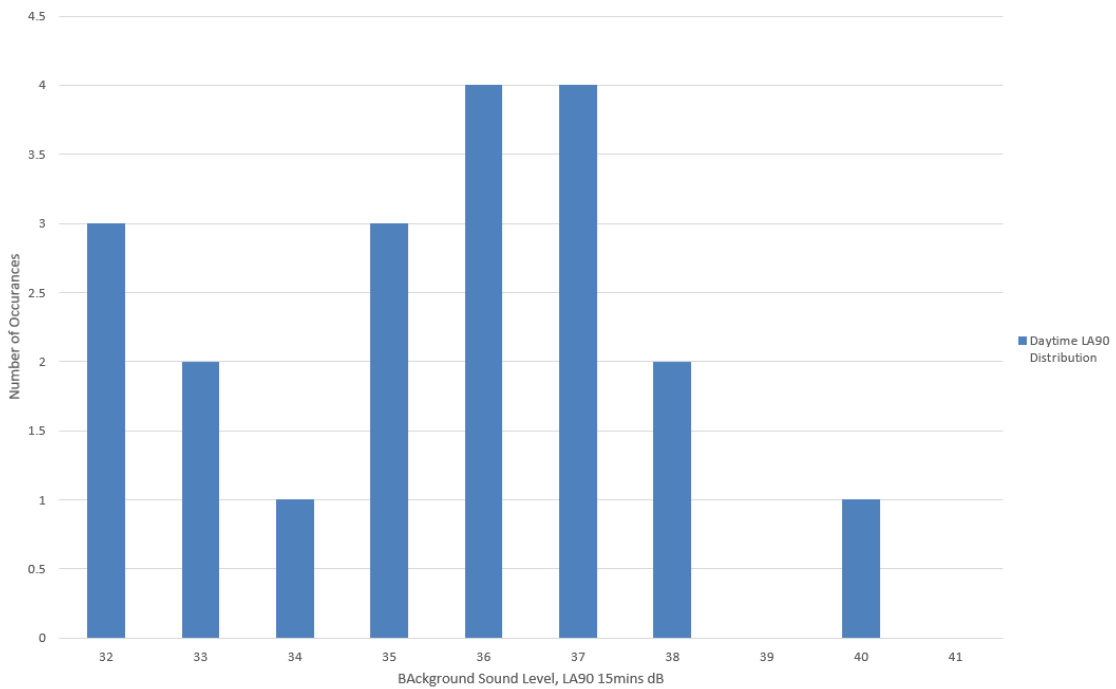
**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Noise Levels Measured at Coombefield Quarry - Location 1  
 17th August 2021



Location 1 - Daytime LA90 Distribution



**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
09/08/2021 11:15	42.6	59.2	36.7	09/08/2021 23:15	41.0	48.1	39.3	10/08/2021 11:15	37.6	47.5	32.8
09/08/2021 11:30	41.3	52.5	36.1	09/08/2021 23:30	40.8	47.4	38.7	10/08/2021 11:30	40.8	55.0	34.7
09/08/2021 11:45	41.3	53.0	37.2	09/08/2021 23:45	40.3	50.3	37.6	10/08/2021 11:45	37.3	51.4	31.9
09/08/2021 12:00	42.0	58.9	38.0	10/08/2021 00:00	40.5	46.5	38.4	10/08/2021 12:00	36.7	58.5	32.2
09/08/2021 12:15	43.3	55.3	39.0	10/08/2021 00:15	40.3	46.1	37.9	10/08/2021 12:15	37.1	49.1	32.8
09/08/2021 12:30	42.0	62.4	37.4	10/08/2021 00:30	39.8	46.8	36.7	10/08/2021 12:30	34.6	54.0	31.8
09/08/2021 12:45	41.5	57.3	38.0	10/08/2021 00:45	39.2	46.7	35.8	10/08/2021 12:45	34.4	49.4	31.8
09/08/2021 13:00	42.8	59.8	38.5	10/08/2021 01:00	39.4	47.7	36.3	10/08/2021 13:00	37.5	65.6	32.4
09/08/2021 13:15	44.2	63.9	37.7	10/08/2021 01:15	38.6	48.4	32.7	10/08/2021 13:15	34.1	45.6	32.1
09/08/2021 13:30	42.2	56.0	38.7	10/08/2021 01:30	39.7	51.5	32.4	10/08/2021 13:30	38.4	49.3	32.3
09/08/2021 13:45	42.9	53.5	39.0	10/08/2021 01:45	40.0	47.3	33.7	10/08/2021 13:45	41.6	61.1	35.2
09/08/2021 14:00	41.5	60.8	38.4	10/08/2021 02:00	42.8	49.5	34.1	10/08/2021 14:00	40.1	48.6	36.1
09/08/2021 14:15	45.1	68.3	38.8	10/08/2021 02:15	41.8	47.7	35.2	10/08/2021 14:15	37.8	51.7	34.7
09/08/2021 14:30	45.1	56.9	41.7	10/08/2021 02:30	39.3	48.3	27.2	10/08/2021 14:30	39.4	50.6	34.7
09/08/2021 14:45	43.9	57.8	39.5	10/08/2021 02:45	30.9	39.9	27.4	10/08/2021 14:45	38.7	58.6	34.1
09/08/2021 15:00	41.8	57.6	38.1	10/08/2021 03:00	31.7	44.9	26.0	10/08/2021 15:00	37.2	52.9	33.5
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09/08/2021 17:00	43.2	60.0	38.2	10/08/2021 05:00	31.0	54.6	24.1	10/08/2021 17:00	36.0	57.5	32.7
09/08/2021 17:15	42.1	60.3	37.6	10/08/2021 05:15	39.4	58.4	26.7	10/08/2021 17:15	36.6	63.6	32.4
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09/08/2021 21:15	41.5	51.3	39.1	10/08/2021 09:15	44.7	52.7	40.8	10/08/2021 21:15	40.1	46.4	37.0
09/08/2021 21:30	42.3	50.9	40.7	10/08/2021 09:30	44.9	57.5	42.3	10/08/2021 21:30	39.8	46.9	37.3
09/08/2021 21:45	42.3	49.0	40.4	10/08/2021 09:45	43.6	51.8	39.9	10/08/2021 21:45	38.8	46.7	37.1
09/08/2021 22:00	42.8	51.4	40.8	10/08/2021 10:00	42.2	53.6	32.9	10/08/2021 22:00	39.6	46.1	38.0
09/08/2021 22:15	44.1	59.8	38.9	10/08/2021 10:15	42.8	68.4	31.1	10/08/2021 22:15	39.5	47.9	37.8
09/08/2021 22:30	40.1	48.5	37.9	10/08/2021 10:30	51.3	79.8	34.8	10/08/2021 22:30	39.6	46.9	37.8
09/08/2021 22:45	39.5	47.8	36.3	10/08/2021 10:45	45.7	74.9	32.7	10/08/2021 22:45	40.3	46.6	37.4
09/08/2021 23:00	41.0	49.7	39.1	10/08/2021 11:00	37.8	51.2	32.5	10/08/2021 23:00	40.2	47.1	37.8

**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
10/08/2021 23:15	39.6	45.3	37.9	11/08/2021 11:15	36.7	54.1	32.3	11/08/2021 23:15	48.2	54.2	46.5
10/08/2021 23:30	39.2	42.6	37.6	11/08/2021 11:30	37.4	51.1	32.6	11/08/2021 23:30	48.2	52.3	46.4
10/08/2021 23:45	38.8	43.2	36.4	11/08/2021 11:45	40.9	55.4	35.9	11/08/2021 23:45	47.5	53.4	44.3
11/08/2021 00:00	39.0	48.7	35.9	11/08/2021 12:00	43.0	53.6	37.4	12/08/2021 00:00	47.1	53.5	42.0
11/08/2021 00:15	38.1	44.1	33.4	11/08/2021 12:15	43.6	74.0	36.1	12/08/2021 00:15	46.8	52.9	44.6
11/08/2021 00:30	31.2	37.7	28.2	11/08/2021 12:30	40.2	68.8	33.5	12/08/2021 00:30	46.2	51.1	44.6
11/08/2021 00:45	32.5	37.8	30.1	11/08/2021 12:45	40.6	69.4	32.8	12/08/2021 00:45	46.3	52.2	44.1
11/08/2021 01:00	32.6	37.6	30.3	11/08/2021 13:00	42.1	65.8	33.1	12/08/2021 01:00	44.0	51.1	38.6
11/08/2021 01:15	31.7	38.1	28.9	11/08/2021 13:15	37.0	47.8	32.9	12/08/2021 01:15	38.3	43.7	35.1
11/08/2021 01:30	33.0	39.2	29.7	11/08/2021 13:30	38.8	50.8	34.2	12/08/2021 01:30	39.2	47.3	34.8
11/08/2021 01:45	30.2	41.1	28.0	11/08/2021 13:45	42.4	52.9	36.0	12/08/2021 01:45	35.0	43.1	32.8
11/08/2021 02:00	30.0	35.6	27.1	11/08/2021 14:00	43.5	54.0	39.5	12/08/2021 02:00	33.1	40.8	30.0
11/08/2021 02:15	30.0	37.1	26.8	11/08/2021 14:15	40.9	64.6	33.3	12/08/2021 02:15	29.8	38.7	27.4
11/08/2021 02:30	29.6	35.2	26.4	11/08/2021 14:30	42.5	59.8	34.9	12/08/2021 02:30	29.3	53.6	26.8
11/08/2021 02:45	29.1	33.7	26.7	11/08/2021 14:45	43.7	56.5	39.2	12/08/2021 02:45	28.2	32.7	27.0
11/08/2021 03:00	28.3	38.9	25.2	11/08/2021 15:00	44.0	52.9	40.1	12/08/2021 03:00	28.6	38.2	27.1
11/08/2021 03:15	28.6	63.1	22.5	11/08/2021 15:15	41.9	54.3	34.9	12/08/2021 03:15	28.6	42.0	26.4
11/08/2021 03:30	22.5	39.1	20.4	11/08/2021 15:30	44.1	57.6	39.4	12/08/2021 03:30	27.0	33.2	25.8
11/08/2021 03:45	22.7	34.6	20.5	11/08/2021 15:45	40.7	63.6	34.7	12/08/2021 03:45	30.9	52.4	25.5
11/08/2021 04:00	23.1	38.3	19.4	11/08/2021 16:00	38.1	50.1	34.6	12/08/2021 04:00	26.7	34.0	25.5
11/08/2021 04:15	26.1	47.1	18.9	11/08/2021 16:15	37.7	51.8	33.9	12/08/2021 04:15	26.9	34.7	25.9
11/08/2021 04:30	20.7	38.0	18.2	11/08/2021 16:30	49.0	72.2	34.6	12/08/2021 04:30	33.4	57.9	25.2
11/08/2021 04:45	20.8	33.0	18.1	11/08/2021 16:45	38.3	59.6	33.2	12/08/2021 04:45	25.2	35.5	23.6
11/08/2021 05:00	27.3	42.8	19.9	11/08/2021 17:00	36.7	47.7	32.4	12/08/2021 05:00	25.8	37.2	24.1
11/08/2021 05:15	35.0	54.5	21.9	11/08/2021 17:15	36.9	53.9	32.3	12/08/2021 05:15	28.6	46.7	23.9
11/08/2021 05:30	36.4	55.9	24.0	11/08/2021 17:30	42.1	64.4	32.5	12/08/2021 05:30	44.2	64.5	24.3
11/08/2021 05:45	46.8	67.9	25.2	11/08/2021 17:45	38.2	61.1	32.4	12/08/2021 05:45	31.6	55.6	25.2
11/08/2021 06:00	43.7	65.5	26.6	11/08/2021 18:00	37.3	54.5	31.5	12/08/2021 06:00	30.5	52.8	25.5
11/08/2021 06:15	35.4	55.1	25.9	11/08/2021 18:15	38.4	52.6	31.9	12/08/2021 06:15	32.2	47.3	28.3
11/08/2021 06:30	35.3	57.6	29.7	11/08/2021 18:30	38.4	63.3	31.5	12/08/2021 06:30	32.2	45.4	28.9
11/08/2021 06:45	38.2	68.1	29.8	11/08/2021 18:45	37.3	60.0	31.3	12/08/2021 06:45	37.9	53.0	30.6
11/08/2021 07:00	41.7	57.5	32.0	11/08/2021 19:00	37.8	60.3	32.0	12/08/2021 07:00	41.7	53.6	35.8
11/08/2021 07:15	42.5	56.9	35.5	11/08/2021 19:15	39.9	66.1	31.8	12/08/2021 07:15	42.3	66.7	35.9
11/08/2021 07:30	39.6	53.2	34.9	11/08/2021 19:30	60.2	94.0	32.0	12/08/2021 07:30	44.9	65.5	36.1
11/08/2021 07:45	37.0	56.8	31.4	11/08/2021 19:45	45.1	66.0	31.6	12/08/2021 07:45	46.0	62.6	39.8
11/08/2021 08:00	35.5	60.2	29.9	11/08/2021 20:00	45.7	69.9	31.3	12/08/2021 08:00	48.4	62.8	43.2
11/08/2021 08:15	43.2	73.0	31.0	11/08/2021 20:15	43.9	58.8	36.3	12/08/2021 08:15	47.1	59.9	42.6
11/08/2021 08:30	36.2	58.0	31.4	11/08/2021 20:30	40.6	48.7	35.3	12/08/2021 08:30	44.2	58.6	34.4
11/08/2021 08:45	37.6	55.5	31.7	11/08/2021 20:45	48.2	56.3	37.6	12/08/2021 08:45	37.5	58.9	32.6
11/08/2021 09:00	46.5	65.5	32.6	11/08/2021 21:00	50.5	55.7	47.6	12/08/2021 09:00	48.8	62.6	36.2
11/08/2021 09:15	40.2	59.2	31.8	11/08/2021 21:15	50.7	54.7	49.0	12/08/2021 09:15	47.2	65.0	38.9
11/08/2021 09:30	39.0	49.1	32.8	11/08/2021 21:30	50.8	55.3	49.2	12/08/2021 09:30	46.4	60.1	34.9
11/08/2021 09:45	35.5	49.8	29.7	11/08/2021 21:45	50.8	55.9	49.1	12/08/2021 09:45	40.3	62.8	33.6
11/08/2021 10:00	39.8	68.2	31.0	11/08/2021 22:00	51.1	56.6	49.6	12/08/2021 10:00	38.3	49.4	34.3
11/08/2021 10:15	37.2	60.5	31.6	11/08/2021 22:15	50.4	55.6	47.6	12/08/2021 10:15	59.1	81.8	33.4
11/08/2021 10:30	39.3	60.0	32.4	11/08/2021 22:30	48.2	54.0	46.7	12/08/2021 10:30	56.0	78.9	34.8
11/08/2021 10:45	36.2	56.2	31.4	11/08/2021 22:45	47.9	53.2	46.5	12/08/2021 10:45	39.3	54.4	35.4
11/08/2021 11:00	39.4	58.8	33.3	11/08/2021 23:00	48.1	53.1	46.5	12/08/2021 11:00	46.3	56.9	38.5

**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
12/08/2021 11:15	45.1	64.2	38.3	12/08/2021 23:15	38.6	49.9	34.9	13/08/2021 11:15	39.0	52.6	35.9
12/08/2021 11:30	44.2	58.0	38.9	12/08/2021 23:30	38.5	49.8	34.5	13/08/2021 11:30	38.7	50.5	35.3
12/08/2021 11:45	44.0	65.3	38.9	12/08/2021 23:45	35.2	48.6	31.5	13/08/2021 11:45	47.9	60.8	38.1
12/08/2021 12:00	44.1	57.9	39.7	13/08/2021 00:00	33.9	44.8	31.3	13/08/2021 12:00	46.1	61.8	37.4
12/08/2021 12:15	40.8	56.1	36.7	13/08/2021 00:15	33.9	49.5	29.6	13/08/2021 12:15	41.6	55.9	35.2
12/08/2021 12:30	39.5	49.4	36.7	13/08/2021 00:30	35.8	47.1	30.0	13/08/2021 12:30	38.4	50.0	35.6
12/08/2021 12:45	38.4	48.8	35.3	13/08/2021 00:45	35.9	48.2	31.0	13/08/2021 12:45	38.7	49.7	35.5
12/08/2021 13:00	45.5	70.4	35.6	13/08/2021 01:00	36.5	46.8	32.3	13/08/2021 13:00	38.9	49.6	35.4
12/08/2021 13:15	41.2	57.7	36.6	13/08/2021 01:15	35.7	46.1	30.6	13/08/2021 13:15	37.7	48.0	34.7
12/08/2021 13:30	40.1	57.2	36.7	13/08/2021 01:30	36.1	48.4	31.8	13/08/2021 13:30	41.1	54.6	35.2
12/08/2021 13:45	41.7	59.5	36.5	13/08/2021 01:45	36.2	50.3	30.4	13/08/2021 13:45	40.5	52.6	36.5
12/08/2021 14:00	41.5	56.6	35.9	13/08/2021 02:00	35.0	46.8	30.5	13/08/2021 14:00	40.9	51.4	37.0
12/08/2021 14:15	44.4	72.3	37.6	13/08/2021 02:15	33.3	48.3	30.1	13/08/2021 14:15	39.1	52.7	36.3
12/08/2021 14:30	43.8	63.2	38.7	13/08/2021 02:30	32.9	43.2	30.4	13/08/2021 14:30	40.4	58.0	36.4
12/08/2021 14:45	42.2	60.8	38.7	13/08/2021 02:45	33.1	45.1	30.5	13/08/2021 14:45	39.0	54.5	35.8
12/08/2021 15:00	43.4	70.6	37.9	13/08/2021 03:00	32.3	45.7	30.0	13/08/2021 15:00	41.9	65.8	36.3
12/08/2021 15:15	42.2	56.8	37.6	13/08/2021 03:15	32.5	43.4	30.0	13/08/2021 15:15	39.9	51.9	36.0
12/08/2021 15:30	39.9	48.8	37.0	13/08/2021 03:30	32.1	47.0	30.0	13/08/2021 15:30	42.2	55.9	36.8
12/08/2021 15:45	39.7	51.2	36.9	13/08/2021 03:45	32.5	45.3	30.6	13/08/2021 15:45	39.5	55.1	36.4
12/08/2021 16:00	40.1	55.7	36.9	13/08/2021 04:00	32.4	43.9	30.7	13/08/2021 16:00	39.3	52.9	36.4
12/08/2021 16:15	39.2	51.2	35.8	13/08/2021 04:15	34.3	53.0	31.2	13/08/2021 16:15	40.2	50.7	36.7
12/08/2021 16:30	39.4	56.1	35.4	13/08/2021 04:30	32.4	42.1	30.6	13/08/2021 16:30	38.9	49.5	36.1
12/08/2021 16:45	38.4	50.9	35.1	13/08/2021 04:45	34.5	48.1	31.5	13/08/2021 16:45	39.5	51.8	37.0
12/08/2021 17:00	38.9	52.9	35.9	13/08/2021 05:00	34.0	52.2	31.4	13/08/2021 17:00	41.8	60.2	36.2
12/08/2021 17:15	38.2	51.1	34.9	13/08/2021 05:15	37.8	59.9	32.5	13/08/2021 17:15	38.4	58.1	35.3
12/08/2021 17:30	37.8	55.3	33.9	13/08/2021 05:30	37.9	57.9	32.7	13/08/2021 17:30	38.7	60.1	35.3
12/08/2021 17:45	37.8	56.2	33.9	13/08/2021 05:45	37.4	57.1	33.0	13/08/2021 17:45	38.5	53.7	35.3
12/08/2021 18:00	37.5	54.8	33.4	13/08/2021 06:00	36.2	51.8	32.2	13/08/2021 18:00	37.9	58.2	34.4
12/08/2021 18:15	37.4	56.9	33.6	13/08/2021 06:15	36.8	55.0	32.9	13/08/2021 18:15	39.0	60.4	34.4
12/08/2021 18:30	38.3	59.8	33.5	13/08/2021 06:30	38.6	61.7	33.8	13/08/2021 18:30	43.9	67.7	34.8
12/08/2021 18:45	36.8	53.1	33.3	13/08/2021 06:45	37.7	62.2	32.1	13/08/2021 18:45	37.9	52.6	34.9
12/08/2021 19:00	36.3	48.9	33.0	13/08/2021 07:00	38.6	58.2	32.6	13/08/2021 19:00	38.6	55.7	35.3
12/08/2021 19:15	37.6	53.0	34.2	13/08/2021 07:15	39.5	50.8	32.5	13/08/2021 19:15	37.6	55.7	34.8
12/08/2021 19:30	38.3	51.3	34.7	13/08/2021 07:30	37.0	51.6	32.9	13/08/2021 19:30	41.9	68.5	34.7
12/08/2021 19:45	39.2	59.3	33.9	13/08/2021 07:45	37.1	56.1	33.3	13/08/2021 19:45	43.2	67.5	34.4
12/08/2021 20:00	38.5	64.0	34.1	13/08/2021 08:00	37.2	69.1	32.5	13/08/2021 20:00	36.7	56.0	32.9
12/08/2021 20:15	37.8	54.6	34.1	13/08/2021 08:15	37.5	53.2	33.5	13/08/2021 20:15	38.1	58.0	33.0
12/08/2021 20:30	37.6	54.9	34.1	13/08/2021 08:30	36.9	57.8	33.7	13/08/2021 20:30	41.0	69.2	33.8
12/08/2021 20:45	39.1	59.3	35.4	13/08/2021 08:45	38.6	55.6	34.9	13/08/2021 20:45	40.9	57.9	35.7
12/08/2021 21:00	40.5	53.8	36.7	13/08/2021 09:00	39.6	59.0	34.9	13/08/2021 21:00	41.3	47.3	39.6
12/08/2021 21:15	40.4	50.1	37.5	13/08/2021 09:15	37.9	56.2	34.1	13/08/2021 21:15	41.1	49.6	39.4
12/08/2021 21:30	40.2	50.1	37.0	13/08/2021 09:30	38.9	53.1	34.3	13/08/2021 21:30	39.8	45.1	38.3
12/08/2021 21:45	40.1	54.8	37.1	13/08/2021 09:45	39.6	55.2	34.3	13/08/2021 21:45	40.4	48.2	38.6
12/08/2021 22:00	40.0	49.4	37.1	13/08/2021 10:00	37.0	52.9	34.6	13/08/2021 22:00	39.5	44.5	38.2
12/08/2021 22:15	40.1	51.2	37.3	13/08/2021 10:15	36.8	54.1	34.2	13/08/2021 22:15	39.3	45.2	38.1
12/08/2021 22:30	41.0	57.0	37.2	13/08/2021 10:30	39.8	62.6	35.0	13/08/2021 22:30	39.3	44.8	38.1
12/08/2021 22:45	40.9	55.5	36.5	13/08/2021 10:45	40.7	68.4	34.5	13/08/2021 22:45	40.4	47.3	38.7
12/08/2021 23:00	38.6	47.9	35.1	13/08/2021 11:00	37.8	52.8	34.9	13/08/2021 23:00	41.0	45.3	39.4

**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
13/08/2021 23:15	41.1	46.7	39.3	14/08/2021 11:15	36.3	51.4	30.9	14/08/2021 23:15	41.2	47.8	39.5
13/08/2021 23:30	41.3	47.9	39.4	14/08/2021 11:30	34.0	45.1	30.9	14/08/2021 23:30	41.4	45.5	40.0
13/08/2021 23:45	41.6	46.8	40.0	14/08/2021 11:45	54.1	90.9	31.1	14/08/2021 23:45	41.3	51.1	39.2
14/08/2021 00:00	41.0	47.9	39.0	14/08/2021 12:00	36.0	55.3	31.0	15/08/2021 00:00	41.2	47.5	39.2
14/08/2021 00:15	40.9	46.9	39.1	14/08/2021 12:15	34.5	54.1	30.3	15/08/2021 00:15	40.5	46.0	38.8
14/08/2021 00:30	40.7	46.7	38.8	14/08/2021 12:30	33.1	46.9	29.8	15/08/2021 00:30	40.5	50.9	38.7
14/08/2021 00:45	39.8	45.8	37.6	14/08/2021 12:45	33.7	46.2	30.6	15/08/2021 00:45	40.4	46.4	38.9
14/08/2021 01:00	40.5	49.7	38.0	14/08/2021 13:00	34.0	55.4	31.0	15/08/2021 01:00	39.4	45.9	37.1
14/08/2021 01:15	39.0	47.9	36.4	14/08/2021 13:15	32.7	42.4	30.6	15/08/2021 01:15	38.8	46.3	36.5
14/08/2021 01:30	39.1	45.9	36.1	14/08/2021 13:30	33.1	44.5	29.8	15/08/2021 01:30	38.1	44.9	35.8
14/08/2021 01:45	38.9	45.6	36.1	14/08/2021 13:45	34.9	57.6	29.8	15/08/2021 01:45	38.2	43.6	35.7
14/08/2021 02:00	37.5	43.4	34.7	14/08/2021 14:00	38.3	74.7	30.6	15/08/2021 02:00	37.5	44.9	34.6
14/08/2021 02:15	31.2	41.4	25.4	14/08/2021 14:15	32.8	58.1	30.1	15/08/2021 02:15	36.0	44.0	28.1
14/08/2021 02:30	27.6	35.5	24.5	14/08/2021 14:30	32.5	49.8	30.1	15/08/2021 02:30	28.5	37.4	26.7
14/08/2021 02:45	28.2	38.4	25.0	14/08/2021 14:45	34.2	52.1	30.0	15/08/2021 02:45	30.7	40.7	27.4
14/08/2021 03:00	34.9	41.6	27.9	14/08/2021 15:00	33.4	52.9	31.1	15/08/2021 03:00	30.4	42.1	27.0
14/08/2021 03:15	29.1	43.4	25.1	14/08/2021 15:15	33.6	55.5	30.8	15/08/2021 03:15	29.6	38.9	27.2
14/08/2021 03:30	28.4	42.9	24.5	14/08/2021 15:30	59.2	83.3	32.4	15/08/2021 03:30	29.4	44.3	26.8
14/08/2021 03:45	29.0	43.1	24.1	14/08/2021 15:45	43.8	68.0	33.1	15/08/2021 03:45	28.8	37.3	27.0
14/08/2021 04:00	27.1	38.1	24.2	14/08/2021 16:00	34.5	56.1	30.4	15/08/2021 04:00	29.7	36.7	27.3
14/08/2021 04:15	27.3	51.4	24.0	14/08/2021 16:15	35.6	64.6	30.4	15/08/2021 04:15	31.5	41.0	28.9
14/08/2021 04:30	26.2	35.5	24.0	14/08/2021 16:30	33.0	46.2	30.6	15/08/2021 04:30	31.5	41.2	28.4
14/08/2021 04:45	26.4	38.2	24.4	14/08/2021 16:45	33.3	46.4	30.3	15/08/2021 04:45	29.8	39.8	28.1
14/08/2021 05:00	41.0	65.1	25.2	14/08/2021 17:00	41.0	52.2	35.3	15/08/2021 05:00	29.5	49.1	28.0
14/08/2021 05:15	38.9	66.5	26.8	14/08/2021 17:15	47.4	67.3	35.7	15/08/2021 05:15	30.5	46.7	28.5
14/08/2021 05:30	35.8	57.4	27.0	14/08/2021 17:30	43.4	61.9	36.9	15/08/2021 05:30	33.5	57.1	29.5
14/08/2021 05:45	38.9	58.6	27.8	14/08/2021 17:45	50.6	73.4	31.8	15/08/2021 05:45	31.4	47.7	28.9
14/08/2021 06:00	33.7	55.0	27.5	14/08/2021 18:00	34.8	53.5	29.6	15/08/2021 06:00	31.8	46.2	29.5
14/08/2021 06:15	31.2	49.4	27.1	14/08/2021 18:15	33.9	52.4	29.6	15/08/2021 06:15	33.8	54.4	29.8
14/08/2021 06:30	32.6	49.3	27.5	14/08/2021 18:30	38.5	62.3	30.2	15/08/2021 06:30	39.8	62.7	31.6
14/08/2021 06:45	32.8	51.9	27.1	14/08/2021 18:45	38.5	66.5	30.4	15/08/2021 06:45	35.8	54.1	31.0
14/08/2021 07:00	39.2	61.1	26.3	14/08/2021 19:00	34.2	50.6	29.6	15/08/2021 07:00	33.8	50.8	29.3
14/08/2021 07:15	35.4	61.1	26.5	14/08/2021 19:15	38.2	62.3	30.5	15/08/2021 07:15	32.8	48.2	28.8
14/08/2021 07:30	34.1	53.5	27.2	14/08/2021 19:30	32.9	47.9	28.4	15/08/2021 07:30	34.3	47.0	30.1
14/08/2021 07:45	32.2	49.6	27.0	14/08/2021 19:45	38.9	66.6	28.4	15/08/2021 07:45	35.7	56.5	30.9
14/08/2021 08:00	34.0	55.4	28.5	14/08/2021 20:00	35.2	60.9	29.3	15/08/2021 08:00	36.3	56.2	31.2
14/08/2021 08:15	35.0	55.7	29.0	14/08/2021 20:15	36.8	61.6	29.8	15/08/2021 08:15	38.7	59.5	33.8
14/08/2021 08:30	33.8	51.2	28.5	14/08/2021 20:30	33.4	49.7	29.1	15/08/2021 08:30	37.3	50.6	32.6
14/08/2021 08:45	33.5	45.9	29.5	14/08/2021 20:45	38.4	48.1	32.1	15/08/2021 08:45	35.4	45.2	32.0
14/08/2021 09:00	33.6	50.4	29.1	14/08/2021 21:00	38.1	45.2	35.1	15/08/2021 09:00	34.9	48.1	31.7
14/08/2021 09:15	35.1	58.1	28.8	14/08/2021 21:15	39.8	47.1	37.5	15/08/2021 09:15	34.8	48.5	31.5
14/08/2021 09:30	35.0	59.7	28.9	14/08/2021 21:30	38.8	45.0	36.8	15/08/2021 09:30	34.7	59.2	31.3
14/08/2021 09:45	41.6	66.8	28.4	14/08/2021 21:45	39.6	46.2	37.5	15/08/2021 09:45	36.0	53.5	30.7
14/08/2021 10:00	35.4	61.7	29.4	14/08/2021 22:00	39.4	43.2	38.1	15/08/2021 10:00	33.8	48.8	31.0
14/08/2021 10:15	32.9	54.8	30.0	14/08/2021 22:15	40.1	50.7	38.7	15/08/2021 10:15	40.0	62.1	31.7
14/08/2021 10:30	33.6	51.4	29.3	14/08/2021 22:30	40.3	45.5	38.2	15/08/2021 10:30	38.1	59.7	32.1
14/08/2021 10:45	33.8	48.2	30.1	14/08/2021 22:45	39.6	45.1	37.6	15/08/2021 10:45	35.8	52.8	31.7
14/08/2021 11:00	34.9	50.6	30.3	14/08/2021 23:00	40.8	47.2	39.3	15/08/2021 11:00	36.9	56.2	32.9

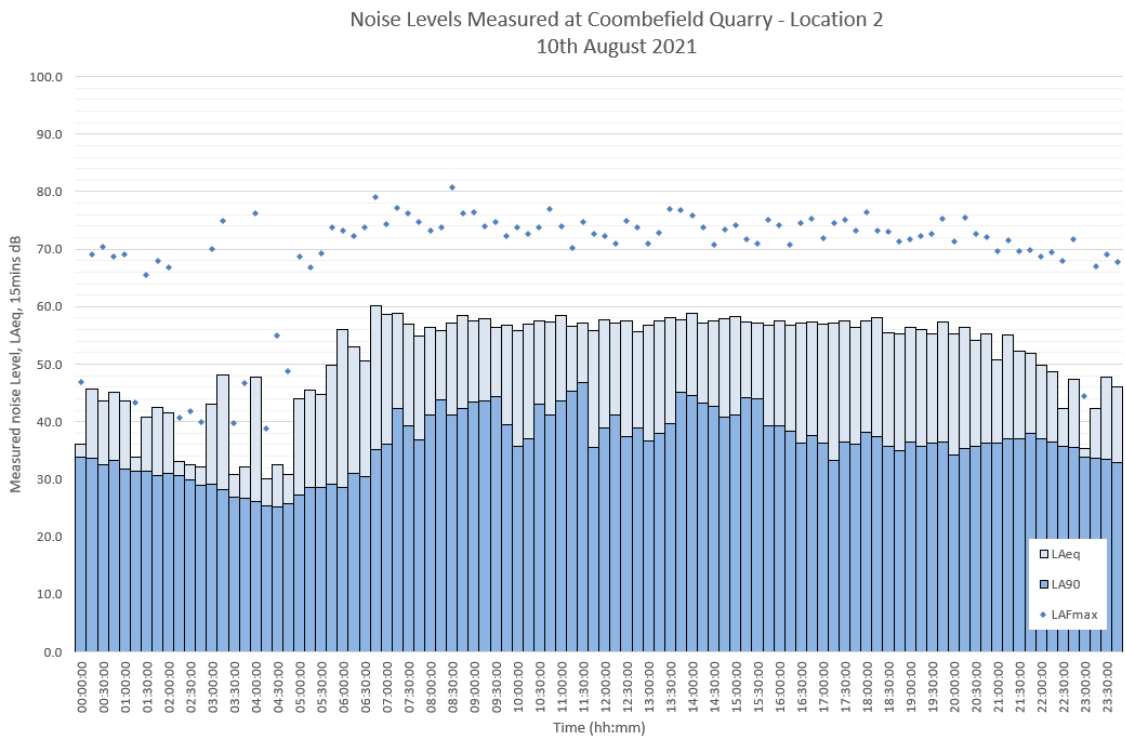
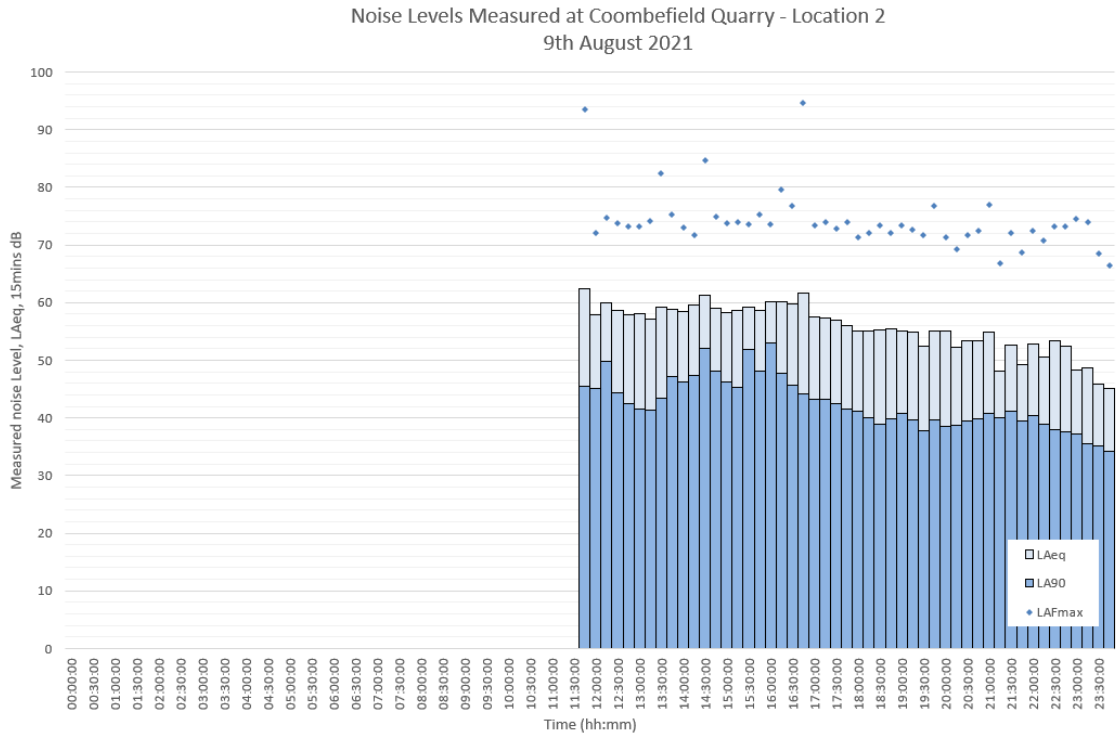
**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
15/08/2021 11:15	35.9	54.3	32.2	16/08/2021 03:15	30.6	44.6	28.5	16/08/2021 19:15	43.6	70.1	33.2
15/08/2021 11:30	36.7	59.1	33.6	16/08/2021 03:30	30.0	43.8	28.1	16/08/2021 19:30	36.6	49.4	33.5
15/08/2021 11:45	37.0	58.6	33.9	16/08/2021 03:45	29.7	40.5	28.2	16/08/2021 19:45	39.0	55.2	34.4
15/08/2021 12:00	37.3	55.7	33.7	16/08/2021 04:00	31.0	49.5	27.9	16/08/2021 20:00	38.8	66.9	32.9
15/08/2021 12:15	36.4	56.4	33.3	16/08/2021 04:15	37.3	49.2	32.9	16/08/2021 20:15	37.0	49.7	33.6
15/08/2021 12:30	40.1	57.5	34.6	16/08/2021 04:30	29.9	41.7	27.4	16/08/2021 20:30	38.2	51.5	33.9
15/08/2021 12:45	38.8	62.8	35.0	16/08/2021 04:45	28.6	42.9	26.6	16/08/2021 20:45	39.2	53.7	36.0
15/08/2021 13:00	38.5	49.6	35.7	16/08/2021 05:00	34.7	63.2	27.4	16/08/2021 21:00	38.2	52.6	35.2
15/08/2021 13:15	40.7	55.9	37.3	16/08/2021 05:15	33.9	56.1	30.1	16/08/2021 21:15	37.2	45.9	34.2
15/08/2021 13:30	40.4	59.4	35.4	16/08/2021 05:30	33.6	48.8	30.3	16/08/2021 21:30	38.2	54.0	35.3
15/08/2021 13:45	41.3	61.0	35.2	16/08/2021 05:45	35.1	54.9	31.0	16/08/2021 21:45	38.5	49.2	35.3
15/08/2021 14:00	40.2	55.7	35.8	16/08/2021 06:00	37.5	54.4	31.2	16/08/2021 22:00	37.7	46.1	34.8
15/08/2021 14:15	41.4	66.9	36.8	16/08/2021 06:15	38.8	55.1	33.5	16/08/2021 22:15	38.2	45.9	35.4
15/08/2021 14:30	41.1	58.2	37.5	16/08/2021 06:30	39.1	57.4	35.1	16/08/2021 22:30	38.2	51.4	34.7
15/08/2021 14:45	37.7	48.5	35.7	16/08/2021 06:45	38.8	60.4	34.6	16/08/2021 22:45	36.0	43.8	33.3
15/08/2021 15:00	38.4	51.0	35.1	16/08/2021 07:00	38.9	60.5	33.2	16/08/2021 23:00	36.7	51.1	34.2
15/08/2021 15:15	39.3	51.6	35.7	16/08/2021 07:15	41.3	58.9	37.9	16/08/2021 23:15	36.0	43.1	33.9
15/08/2021 15:30	38.5	60.7	35.2	16/08/2021 07:30	37.5	52.0	34.2	16/08/2021 23:30	35.5	45.7	33.0
15/08/2021 15:45	40.9	57.9	36.5	16/08/2021 07:45	39.3	55.8	35.4	16/08/2021 23:45	35.1	44.0	32.8
15/08/2021 16:00	41.1	59.6	37.0	16/08/2021 08:00	39.1	52.1	35.5	17/08/2021 00:00	35.5	45.8	32.8
15/08/2021 16:15	41.8	64.8	35.7	16/08/2021 08:15	39.2	48.6	35.4	17/08/2021 00:15	35.4	48.8	32.9
15/08/2021 16:30	39.8	52.8	36.5	16/08/2021 08:30	39.9	62.3	35.2	17/08/2021 00:30	34.9	43.4	32.4
15/08/2021 16:45	44.7	65.6	37.0	16/08/2021 08:45	41.5	60.1	38.0	17/08/2021 00:45	35.7	46.8	32.7
15/08/2021 17:00	40.0	56.3	36.7	16/08/2021 09:00	40.4	59.2	36.0	17/08/2021 01:00	35.6	45.5	32.7
15/08/2021 17:15	42.4	59.4	37.3	16/08/2021 09:15	41.0	54.6	36.9	17/08/2021 01:15	34.6	44.0	31.7
15/08/2021 17:30	40.1	59.0	36.1	16/08/2021 09:30	40.0	48.8	37.8	17/08/2021 01:30	33.6	42.7	30.6
15/08/2021 17:45	37.5	50.1	34.4	16/08/2021 09:45	41.1	54.7	36.3	17/08/2021 01:45	32.5	39.6	30.1
15/08/2021 18:00	38.3	55.8	34.8	16/08/2021 10:00	43.7	62.6	34.8	17/08/2021 02:00	31.8	42.2	29.3
15/08/2021 18:15	36.9	54.2	33.9	16/08/2021 10:15	49.0	69.6	34.5	17/08/2021 02:15	30.7	39.5	27.9
15/08/2021 18:30	38.1	51.1	34.8	16/08/2021 10:30	49.7	68.2	35.0	17/08/2021 02:30	31.1	41.0	28.3
15/08/2021 18:45	36.0	49.3	33.6	16/08/2021 10:45	38.5	54.4	34.9	17/08/2021 02:45	30.3	41.8	27.3
15/08/2021 19:00	36.4	55.5	32.8	16/08/2021 11:00	39.3	56.0	36.5	17/08/2021 03:00	29.8	37.2	26.4
15/08/2021 19:15	39.5	71.6	33.1	16/08/2021 11:15	39.0	54.8	35.9	17/08/2021 03:15	31.6	41.2	27.0
15/08/2021 19:30	38.4	56.9	34.2	16/08/2021 11:30	40.2	59.3	37.7	17/08/2021 03:30	33.0	41.1	29.7
15/08/2021 19:45	35.4	52.0	31.4	16/08/2021 11:45	38.9	59.5	35.4	17/08/2021 03:45	32.1	42.8	28.2
15/08/2021 20:00	35.5	58.9	30.6	16/08/2021 12:00	38.7	55.8	35.8	17/08/2021 04:00	31.7	39.1	28.1
15/08/2021 20:15	34.7	47.4	31.3	16/08/2021 12:15	40.0	49.4	37.9	17/08/2021 04:15	30.1	39.1	25.7
15/08/2021 20:30	37.1	47.2	34.3	16/08/2021 12:30	40.2	56.5	37.7	17/08/2021 04:30	29.8	38.1	26.2
15/08/2021 20:45	36.7	48.3	33.5	16/08/2021 12:45	48.7	81.5	35.0	17/08/2021 04:45	29.9	41.0	26.6
15/08/2021 21:00	36.8	53.2	34.3	16/08/2021 13:00	37.4	50.5	34.7	17/08/2021 05:00	36.5	60.7	25.6
15/08/2021 21:15	36.0	46.3	34.1	16/08/2021 13:15	37.5	49.6	35.0	17/08/2021 05:15	30.4	48.1	26.3
15/08/2021 21:30	35.3	43.9	33.5	16/08/2021 13:30	39.7	51.7	35.8	17/08/2021 05:30	38.0	61.2	29.2
15/08/2021 21:45	35.3	48.5	32.6	16/08/2021 13:45	40.5	56.3	36.9	17/08/2021 05:45	33.9	53.1	29.6
15/08/2021 22:00	35.1	42.0	33.4	16/08/2021 14:00	40.1	48.6	37.4	17/08/2021 06:00	34.1	48.8	29.9
15/08/2021 22:15	35.3	41.8	33.4	16/08/2021 14:15	39.7	55.5	36.6	17/08/2021 06:15	36.5	56.0	31.7
15/08/2021 22:30	34.8	42.0	33.1	16/08/2021 14:30	39.5	54.3	36.8	17/08/2021 06:30	38.2	59.4	32.9
15/08/2021 22:45	34.7	40.6	32.7	16/08/2021 14:45	39.3	58.7	36.3	17/08/2021 06:45	36.8	56.7	32.2
15/08/2021 23:00	35.5	43.9	33.3	16/08/2021 15:00	40.4	56.2	37.3	17/08/2021 07:00	38.8	61.7	33.6
15/08/2021 23:15	35.9	45.6	33.4	16/08/2021 15:15	43.6	73.6	35.3	17/08/2021 07:15	39.3	57.9	36.3
15/08/2021 23:30	36.6	44.5	34.2	16/08/2021 15:30	45.1	73.2	35.2	17/08/2021 07:30	38.9	51.0	36.4
15/08/2021 23:45	35.9	45.5	33.3	16/08/2021 15:45	39.5	61.9	35.8	17/08/2021 07:45	40.3	56.9	37.2
16/08/2021 00:00	36.4	44.2	34.2	16/08/2021 16:00	41.1	54.8	37.6	17/08/2021 08:00	42.0	64.0	37.9
16/08/2021 00:15	36.6	45.1	34.2	16/08/2021 16:15	41.6	63.7	36.3	17/08/2021 08:15	40.3	56.3	36.9
16/08/2021 00:30	36.1	43.4	33.5	16/08/2021 16:30	38.1	49.3	35.5	17/08/2021 08:30	38.5	55.9	35.3
16/08/2021 00:45	36.7	46.5	33.6	16/08/2021 16:45	42.1	62.1	37.7	17/08/2021 08:45	38.7	52.5	35.5
16/08/2021 01:00	35.3	42.9	32.9	16/08/2021 17:00	40.6	51.8	37.8	17/08/2021 09:00	38.9	53.2	34.6
16/08/2021 01:15	37.3	50.8	34.1	16/08/2021 17:15	44.3	66.8	36.6	17/08/2021 09:15	41.9	59.6	35.0
16/08/2021 01:30	38.0	49.4	33.2	16/08/2021 17:30	40.2	61.0	35.5	17/08/2021 09:30	40.4	61.7	35.8
16/08/2021 01:45	35.4	46.0	30.0	16/08/2021 17:45	38.8	55.6	35.4	17/08/2021 09:45	39.8	51.7	36.7
16/08/2021 02:00	32.0	43.6	29.4	16/08/2021 18:00	38.4	56.0	34.8	17/08/2021 10:00	40.0	57.8	36.6
16/08/2021 02:15	33.9	46.6	29.6	16/08/2021 18:15	36.9	56.1	33.5				
16/08/2021 02:30	31.3	44.4	28.9	16/08/2021 18:30	37.4	49.3	34.4				
16/08/2021 02:45	31.5	41.9	29.0	16/08/2021 18:45	38.1	59.2	34.2				
16/08/2021 03:00	29.6	37.7	28.0	16/08/2021 19:00	38.9	60.8	34.8				



**Noise Monitoring Location 2**

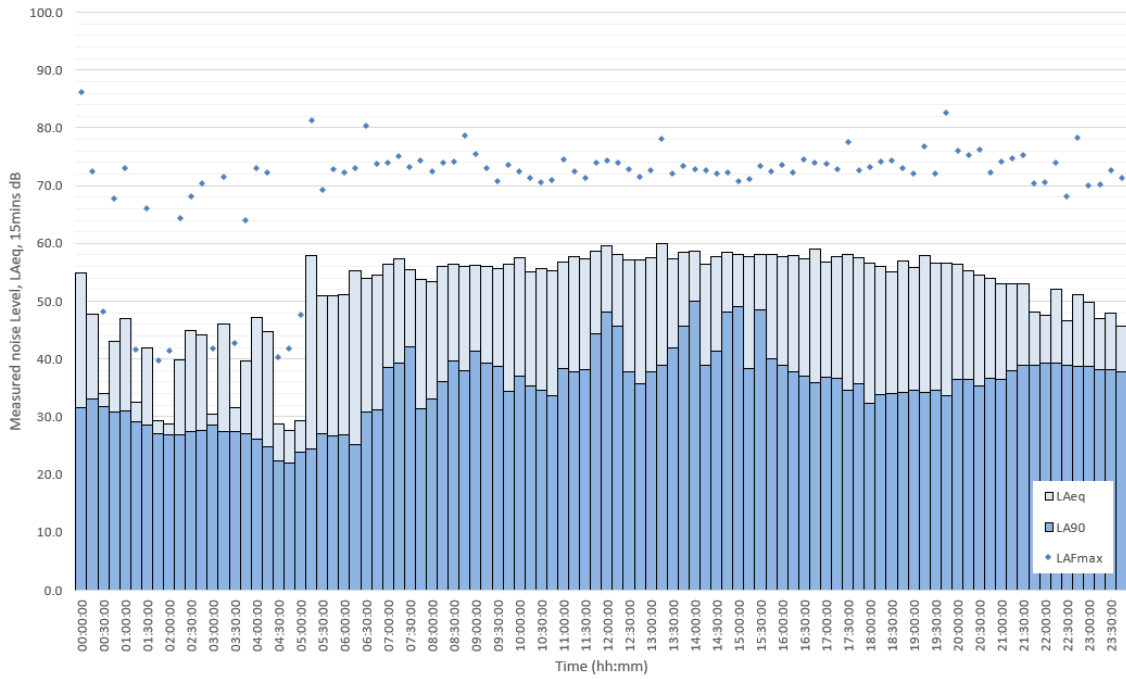




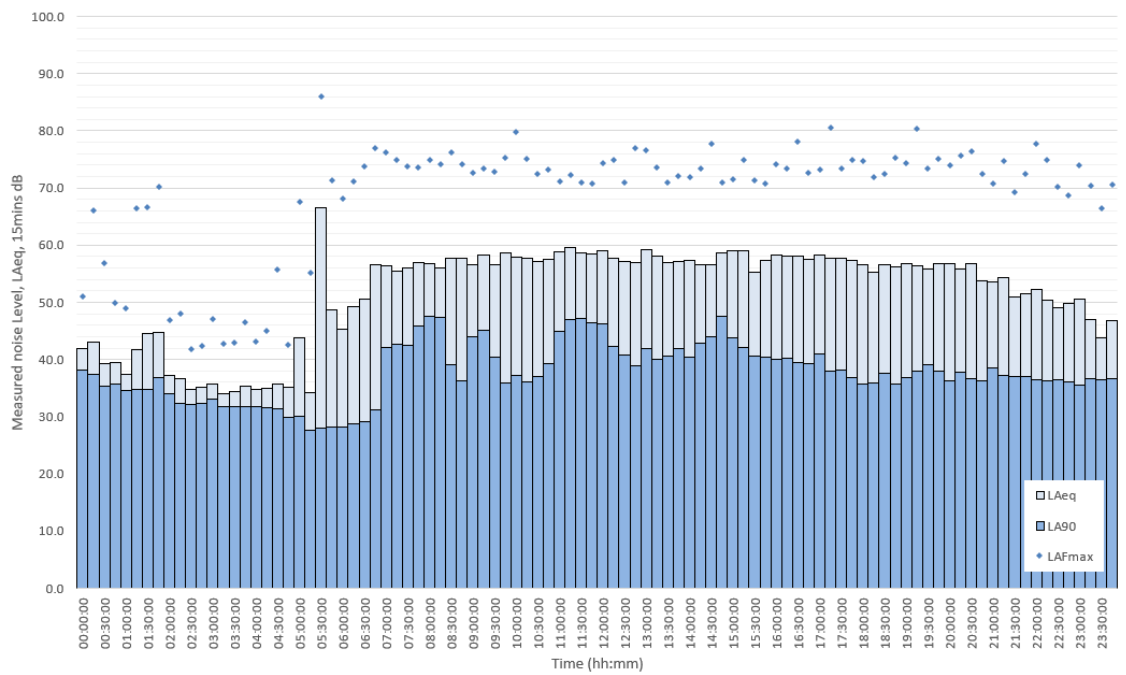
**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Noise Levels Measured at Coombefield Quarry - Location 2  
 11th August 2021



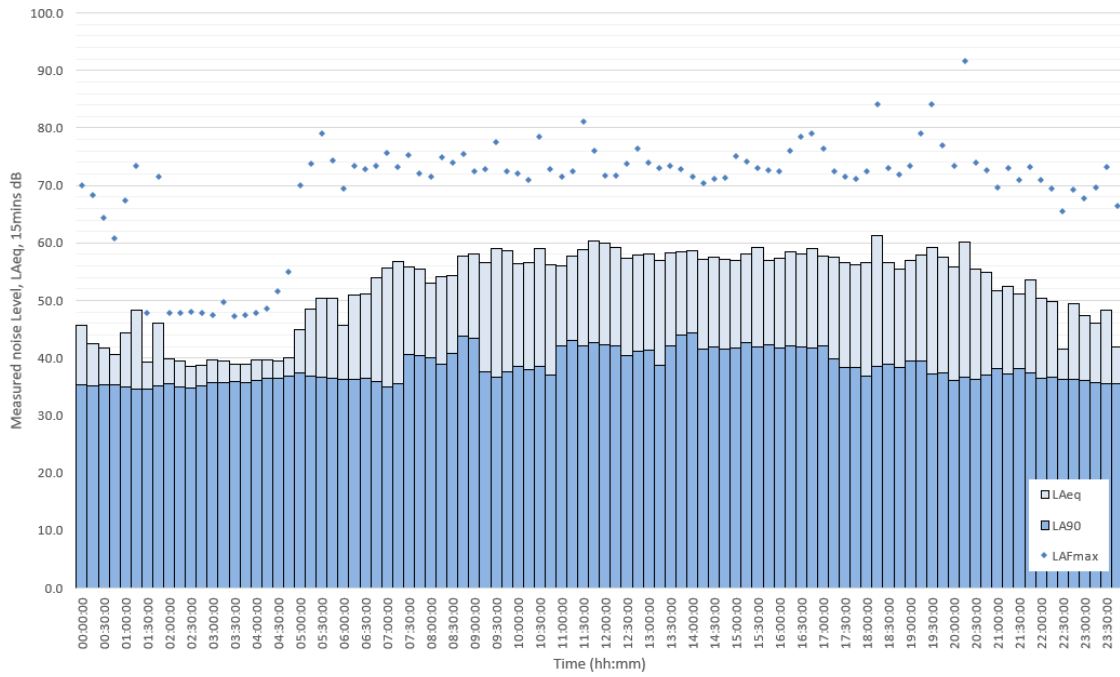
Noise Levels Measured at Coombefield Quarry - Location 2  
 12th August 2021



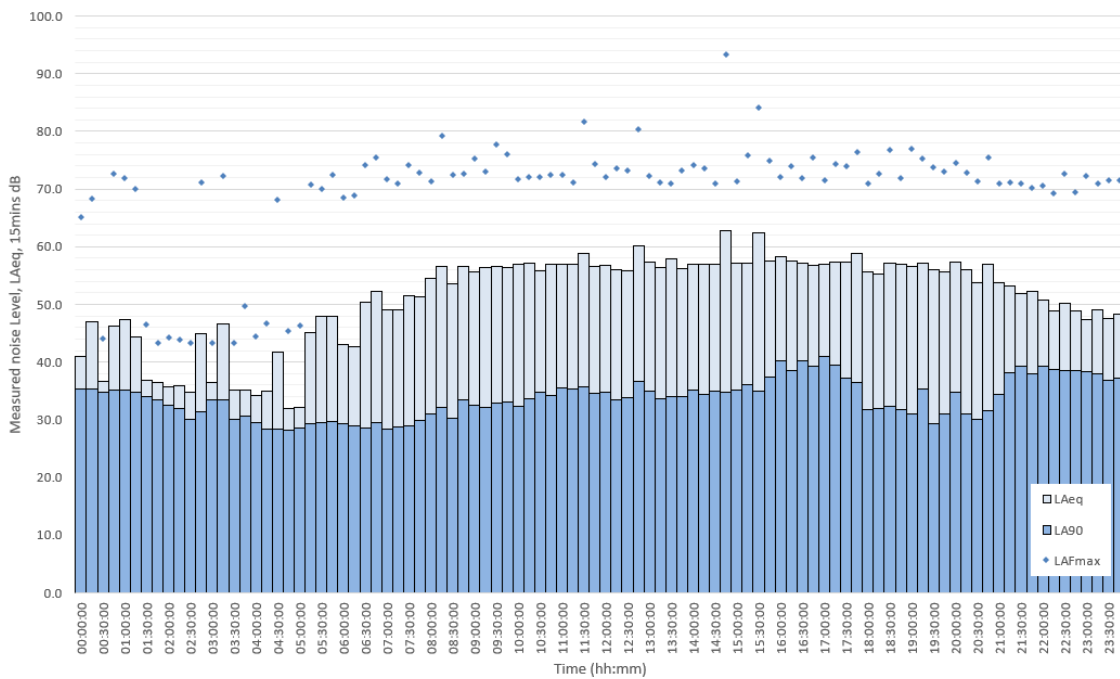
**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Noise Levels Measured at Coombefield Quarry - Location 2  
 13th August 2021



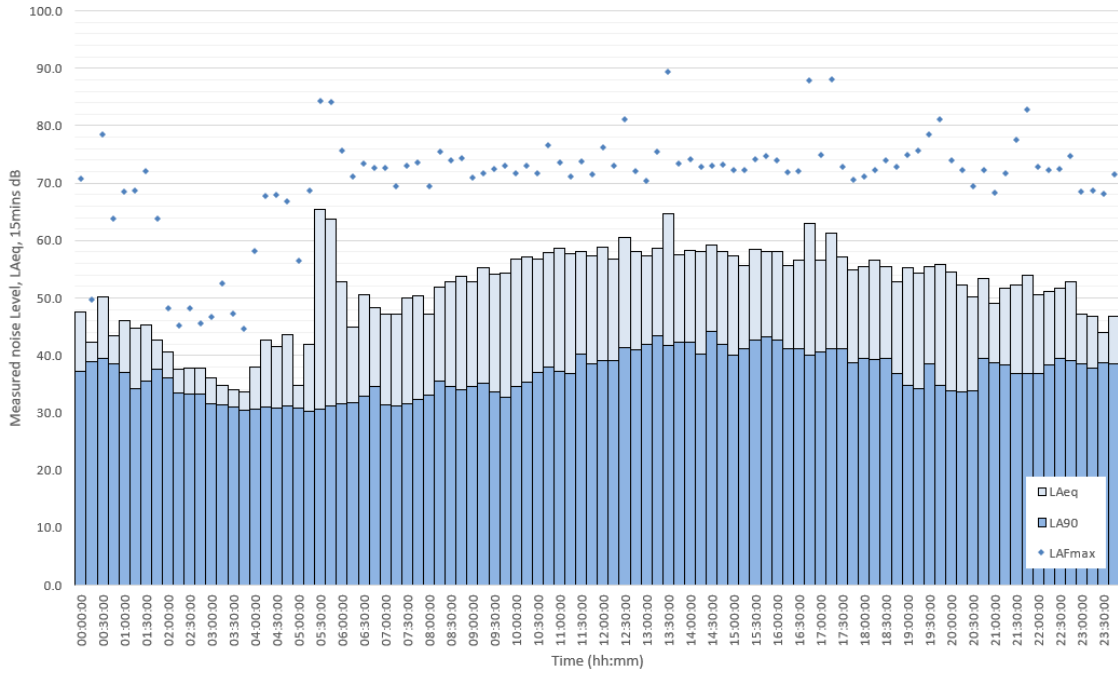
Noise Levels Measured at Coombefield Quarry - Location 2  
 14th August 2021



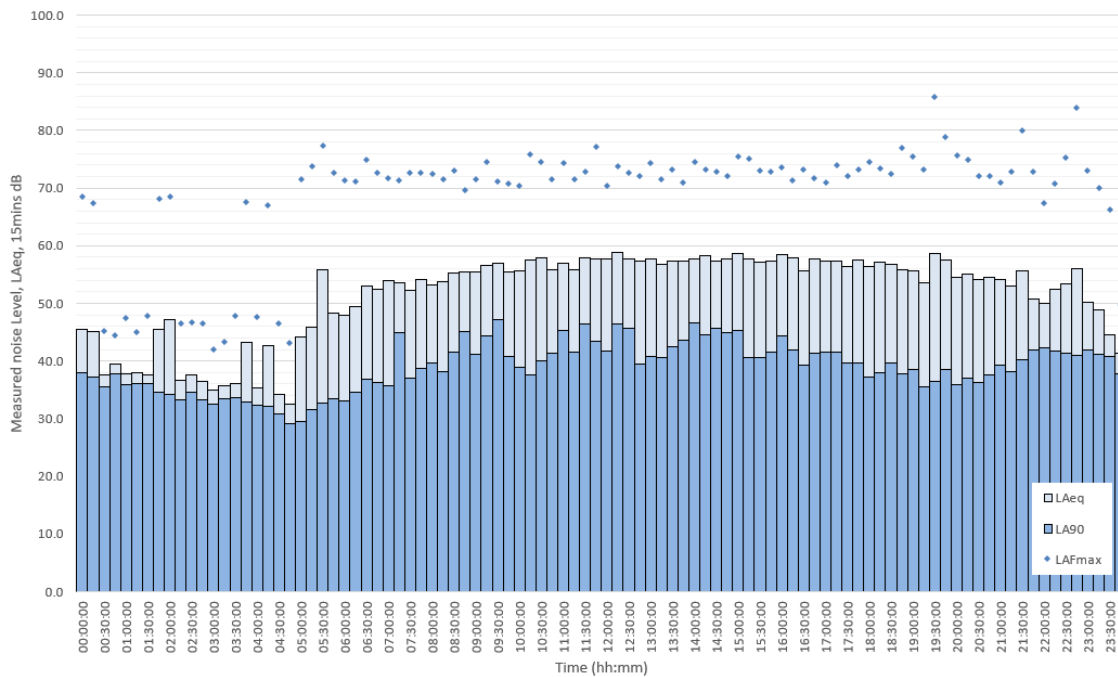
**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



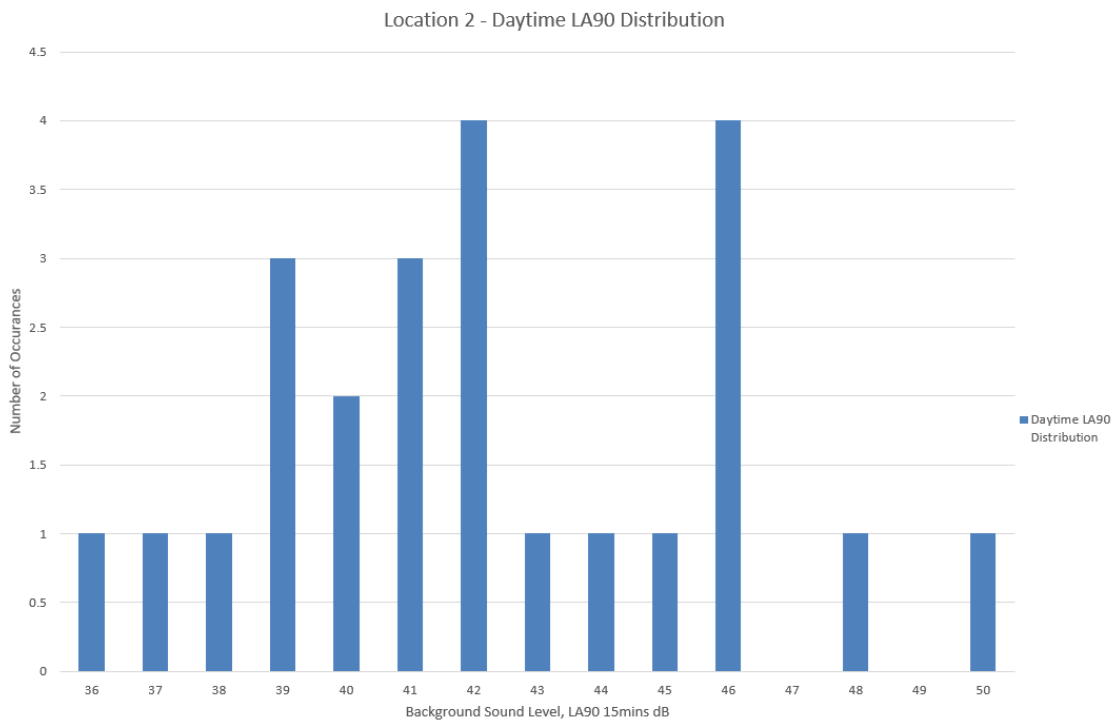
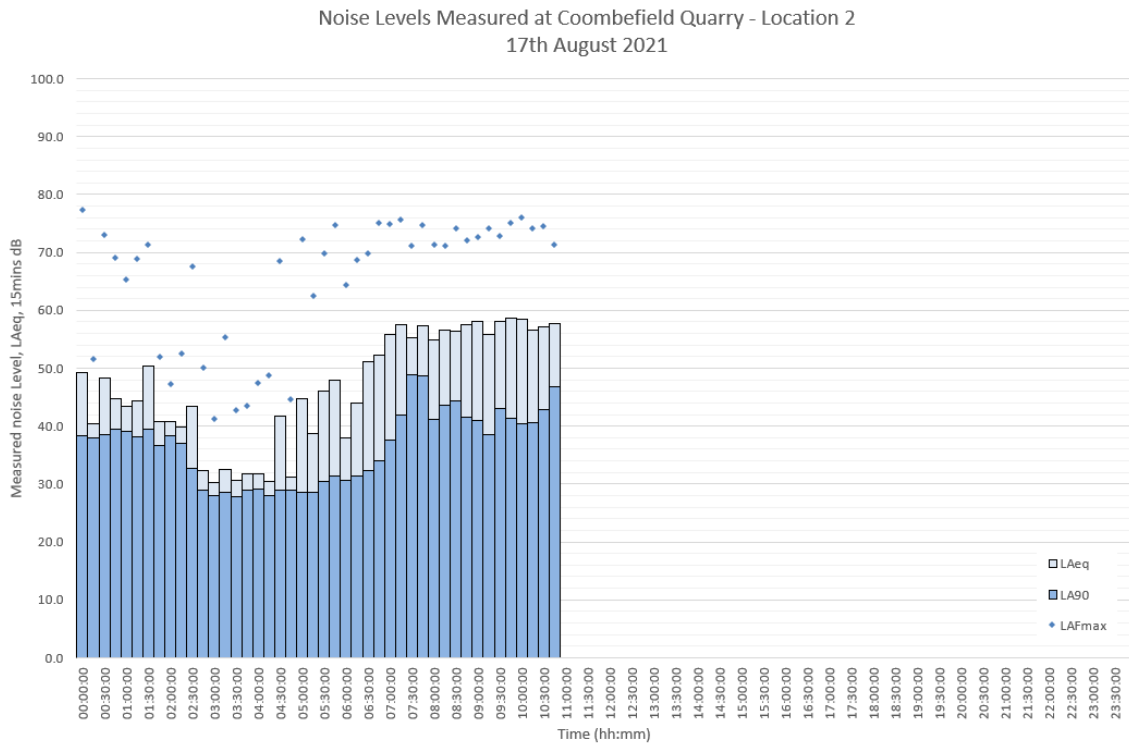
Noise Levels Measured at Coombefield Quarry - Location 2  
 15th August 2021



Noise Levels Measured at Coombefield Quarry - Location 2  
 16th August 2021



**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
09/08/2021 11:45	62.5	93.6	45.5	09/08/2021 23:45	45.1	66.5	34.2	10/08/2021 11:45	55.9	72.6	35.5
09/08/2021 12:00	57.9	72.0	45.1	10/08/2021 00:00	36.0	46.9	33.8	10/08/2021 12:00	57.7	72.2	39.0
09/08/2021 12:15	59.9	74.8	49.9	10/08/2021 00:15	45.6	69.1	33.6	10/08/2021 12:15	57.2	71.0	41.2
09/08/2021 12:30	58.7	73.8	44.3	10/08/2021 00:30	43.7	70.4	32.6	10/08/2021 12:30	57.5	75.0	37.4
09/08/2021 12:45	57.9	73.3	42.5	10/08/2021 00:45	45.1	68.8	33.3	10/08/2021 12:45	55.6	73.8	38.9
09/08/2021 13:00	58.1	73.3	41.5	10/08/2021 01:00	43.7	69.1	31.8	10/08/2021 13:00	56.7	70.9	36.7
09/08/2021 13:15	57.2	74.1	41.4	10/08/2021 01:15	33.9	43.3	31.4	10/08/2021 13:15	57.6	72.9	37.9
09/08/2021 13:30	59.3	82.4	43.5	10/08/2021 01:30	40.8	65.6	31.3	10/08/2021 13:30	58.0	76.9	39.6
09/08/2021 13:45	58.8	75.3	47.1	10/08/2021 01:45	42.4	68.0	30.6	10/08/2021 13:45	57.8	76.8	45.1
09/08/2021 14:00	58.4	73.1	46.3	10/08/2021 02:00	41.5	66.8	31.1	10/08/2021 14:00	58.8	75.9	44.6
09/08/2021 14:15	59.5	71.8	47.3	10/08/2021 02:15	33.1	40.7	30.7	10/08/2021 14:15	57.2	73.7	43.3
09/08/2021 14:30	61.3	84.6	52.0	10/08/2021 02:30	32.5	41.9	29.8	10/08/2021 14:30	57.5	70.8	42.7
09/08/2021 14:45	59.0	74.9	48.2	10/08/2021 02:45	32.1	39.9	29.0	10/08/2021 14:45	57.9	73.4	40.8
09/08/2021 15:00	58.3	73.7	46.3	10/08/2021 03:00	43.0	70.0	29.2	10/08/2021 15:00	58.3	74.2	41.2
09/08/2021 15:15	58.7	73.9	45.3	10/08/2021 03:15	48.1	75.0	28.2	10/08/2021 15:15	57.4	71.7	44.1
09/08/2021 15:30	59.3	73.6	51.8	10/08/2021 03:30	30.9	39.8	26.9	10/08/2021 15:30	57.1	70.9	43.9
09/08/2021 15:45	58.6	75.3	48.1	10/08/2021 03:45	32.2	46.7	26.6	10/08/2021 15:45	56.7	75.1	39.3
09/08/2021 16:00	60.1	73.6	53.0	10/08/2021 04:00	47.7	76.2	26.1	10/08/2021 16:00	57.5	74.1	39.3
09/08/2021 16:15	60.2	79.6	47.7	10/08/2021 04:15	30.0	38.8	25.4	10/08/2021 16:15	56.8	70.7	38.4
09/08/2021 16:30	59.8	76.8	45.6	10/08/2021 04:30	32.6	55.0	25.1	10/08/2021 16:30	57.1	74.6	36.2
09/08/2021 16:45	61.6	94.6	44.1	10/08/2021 04:45	30.9	48.8	25.7	10/08/2021 16:45	57.3	75.3	37.6
09/08/2021 17:00	57.5	73.5	43.3	10/08/2021 05:00	43.9	68.8	27.2	10/08/2021 17:00	57.0	71.9	36.2
09/08/2021 17:15	57.3	74.0	43.2	10/08/2021 05:15	45.4	66.8	28.5	10/08/2021 17:15	57.1	74.5	33.2
09/08/2021 17:30	57.0	72.9	42.5	10/08/2021 05:30	44.8	69.3	28.6	10/08/2021 17:30	57.5	75.1	36.4
09/08/2021 17:45	56.1	74.0	41.6	10/08/2021 05:45	49.8	73.8	29.1	10/08/2021 17:45	56.3	73.2	36.0
09/08/2021 18:00	55.0	71.3	41.1	10/08/2021 06:00	56.0	73.3	28.6	10/08/2021 18:00	57.6	76.5	38.1
09/08/2021 18:15	55.0	72.0	40.1	10/08/2021 06:15	53.0	72.2	31.0	10/08/2021 18:15	58.0	73.2	37.4
09/08/2021 18:30	55.2	73.4	38.9	10/08/2021 06:30	50.5	73.8	30.4	10/08/2021 18:30	55.5	73.1	35.8
09/08/2021 18:45	55.5	72.1	39.9	10/08/2021 06:45	60.1	79.0	35.2	10/08/2021 18:45	55.2	71.4	35.0
09/08/2021 19:00	55.1	73.5	40.8	10/08/2021 07:00	58.6	74.3	36.1	10/08/2021 19:00	56.3	71.7	36.4
09/08/2021 19:15	54.8	72.6	39.7	10/08/2021 07:15	58.9	77.1	42.2	10/08/2021 19:15	56.1	72.3	35.7
09/08/2021 19:30	52.4	71.8	37.8	10/08/2021 07:30	56.9	76.3	39.3	10/08/2021 19:30	55.2	72.6	36.3
09/08/2021 19:45	55.0	76.8	39.6	10/08/2021 07:45	54.8	74.8	36.8	10/08/2021 19:45	57.3	75.3	36.4
09/08/2021 20:00	55.0	71.3	38.5	10/08/2021 08:00	56.4	73.3	41.2	10/08/2021 20:00	55.2	71.4	34.3
09/08/2021 20:15	52.2	69.3	38.8	10/08/2021 08:15	55.8	73.7	43.8	10/08/2021 20:15	56.3	75.5	35.4
09/08/2021 20:30	53.4	71.7	39.4	10/08/2021 08:30	57.2	80.7	41.1	10/08/2021 20:30	54.1	72.6	35.7
09/08/2021 20:45	53.3	72.5	39.8	10/08/2021 08:45	58.5	76.2	42.3	10/08/2021 20:45	55.3	72.0	36.3
09/08/2021 21:00	54.8	77.0	40.8	10/08/2021 09:00	57.6	76.4	43.5	10/08/2021 21:00	50.8	69.6	36.2
09/08/2021 21:15	48.1	66.8	40.1	10/08/2021 09:15	57.9	73.9	43.6	10/08/2021 21:15	55.0	71.6	37.0
09/08/2021 21:30	52.7	72.0	41.2	10/08/2021 09:30	56.4	74.8	44.4	10/08/2021 21:30	52.3	69.7	37.0
09/08/2021 21:45	49.2	68.8	39.5	10/08/2021 09:45	56.8	72.2	39.4	10/08/2021 21:45	51.9	69.8	38.0
09/08/2021 22:00	52.8	72.4	40.4	10/08/2021 10:00	55.8	73.7	35.8	10/08/2021 22:00	49.8	68.8	37.0
09/08/2021 22:15	50.5	70.7	39.0	10/08/2021 10:15	56.9	72.6	37.0	10/08/2021 22:15	48.7	69.4	36.5
09/08/2021 22:30	53.3	73.2	38.0	10/08/2021 10:30	57.5	73.7	43.1	10/08/2021 22:30	42.3	68.0	35.8
09/08/2021 22:45	52.4	73.3	37.5	10/08/2021 10:45	57.4	77.0	41.1	10/08/2021 22:45	47.3	71.8	35.5
09/08/2021 23:00	48.3	74.5	37.2	10/08/2021 11:00	58.4	74.0	43.6	10/08/2021 23:00	35.4	44.4	33.8
09/08/2021 23:15	48.6	73.9	35.6	10/08/2021 11:15	56.6	70.2	45.3	10/08/2021 23:15	42.3	67.0	33.6
09/08/2021 23:30	45.9	68.5	35.1	10/08/2021 11:30	57.2	74.7	46.8	10/08/2021 23:30	47.8	69.1	33.5

**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
10/08/2021 23:45	46.1	67.8	32.9	11/08/2021 11:45	58.7	74.0	44.3	11/08/2021 23:45	45.6	71.3	37.7
11/08/2021 00:00	54.8	86.2	31.6	11/08/2021 12:00	59.6	74.3	48.1	12/08/2021 00:00	41.9	51.0	38.1
11/08/2021 00:15	47.7	72.5	33.1	11/08/2021 12:15	58.1	74.0	45.7	12/08/2021 00:15	43.1	66.0	37.4
11/08/2021 00:30	34.0	48.3	31.8	11/08/2021 12:30	57.2	72.9	37.8	12/08/2021 00:30	39.2	56.9	35.3
11/08/2021 00:45	43.0	67.8	30.9	11/08/2021 12:45	57.2	71.5	35.7	12/08/2021 00:45	39.4	49.9	35.8
11/08/2021 01:00	47.0	73.1	31.0	11/08/2021 13:00	57.6	72.6	37.7	12/08/2021 01:00	37.4	49.0	34.5
11/08/2021 01:15	32.5	41.7	29.2	11/08/2021 13:15	59.9	78.1	39.0	12/08/2021 01:15	41.7	66.4	34.8
11/08/2021 01:30	41.9	66.0	28.6	11/08/2021 13:30	57.3	72.1	41.9	12/08/2021 01:30	44.5	66.7	34.7
11/08/2021 01:45	29.4	39.7	27.0	11/08/2021 13:45	58.4	73.4	45.6	12/08/2021 01:45	44.7	70.3	36.8
11/08/2021 02:00	28.8	41.5	26.9	11/08/2021 14:00	58.7	72.9	50.0	12/08/2021 02:00	37.2	46.9	34.0
11/08/2021 02:15	39.9	64.3	26.9	11/08/2021 14:15	56.4	72.7	39.0	12/08/2021 02:15	36.7	48.1	32.4
11/08/2021 02:30	44.9	68.2	27.5	11/08/2021 14:30	57.7	72.1	41.4	12/08/2021 02:30	34.8	41.8	32.2
11/08/2021 02:45	44.1	70.4	27.6	11/08/2021 14:45	58.5	72.2	48.2	12/08/2021 02:45	35.1	42.3	32.4
11/08/2021 03:00	30.4	41.8	28.5	11/08/2021 15:00	58.0	70.7	49.0	12/08/2021 03:00	35.7	47.1	33.0
11/08/2021 03:15	46.0	71.6	27.5	11/08/2021 15:15	57.8	71.1	38.3	12/08/2021 03:15	34.0	42.8	31.8
11/08/2021 03:30	31.5	42.7	27.4	11/08/2021 15:30	58.1	73.5	48.5	12/08/2021 03:30	34.4	43.0	31.8
11/08/2021 03:45	39.6	64.1	27.1	11/08/2021 15:45	58.1	72.5	40.0	12/08/2021 03:45	35.3	46.5	31.8
11/08/2021 04:00	47.1	73.1	26.2	11/08/2021 16:00	57.7	73.6	39.0	12/08/2021 04:00	34.7	43.2	31.7
11/08/2021 04:15	44.8	72.2	24.8	11/08/2021 16:15	57.9	72.3	37.8	12/08/2021 04:15	35.0	45.1	31.5
11/08/2021 04:30	28.7	40.4	22.4	11/08/2021 16:30	57.3	74.6	37.0	12/08/2021 04:30	35.8	55.8	31.4
11/08/2021 04:45	27.7	41.8	22.0	11/08/2021 16:45	59.1	74.0	35.9	12/08/2021 04:45	35.1	42.6	29.9
11/08/2021 05:00	29.3	47.7	23.8	11/08/2021 17:00	56.8	73.8	36.8	12/08/2021 05:00	43.8	67.6	30.1
11/08/2021 05:15	57.9	81.3	24.5	11/08/2021 17:15	57.7	72.9	36.6	12/08/2021 05:15	34.2	55.2	27.7
11/08/2021 05:30	50.9	69.2	27.0	11/08/2021 17:30	58.0	77.5	34.5	12/08/2021 05:30	66.6	86.0	28.0
11/08/2021 05:45	51.0	72.9	26.6	11/08/2021 17:45	57.6	72.6	35.7	12/08/2021 05:45	48.6	71.4	28.2
11/08/2021 06:00	51.2	72.3	26.9	11/08/2021 18:00	56.5	73.2	32.4	12/08/2021 06:00	45.3	68.1	28.2
11/08/2021 06:15	55.2	73.1	25.2	11/08/2021 18:15	56.1	74.2	33.9	12/08/2021 06:15	49.3	71.1	28.8
11/08/2021 06:30	53.9	80.3	30.8	11/08/2021 18:30	55.0	74.3	34.1	12/08/2021 06:30	50.6	73.7	29.2
11/08/2021 06:45	54.6	73.7	31.2	11/08/2021 18:45	56.9	73.1	34.2	12/08/2021 06:45	56.5	77.0	31.2
11/08/2021 07:00	56.3	74.0	38.5	11/08/2021 19:00	55.8	72.0	34.5	12/08/2021 07:00	56.4	76.3	42.1
11/08/2021 07:15	57.4	75.1	39.3	11/08/2021 19:15	57.9	76.8	34.3	12/08/2021 07:15	55.4	75.0	42.6
11/08/2021 07:30	55.5	73.2	42.1	11/08/2021 19:30	56.5	72.1	34.6	12/08/2021 07:30	56.1	73.7	42.5
11/08/2021 07:45	53.7	74.3	31.4	11/08/2021 19:45	56.6	82.7	33.7	12/08/2021 07:45	57.0	73.6	45.8
11/08/2021 08:00	53.4	72.5	33.0	11/08/2021 20:00	56.4	76.0	36.4	12/08/2021 08:00	56.8	75.0	47.5
11/08/2021 08:15	56.1	73.9	36.1	11/08/2021 20:15	55.2	75.2	36.4	12/08/2021 08:15	56.0	74.2	47.3
11/08/2021 08:30	56.3	74.1	39.7	11/08/2021 20:30	54.6	76.2	35.3	12/08/2021 08:30	57.7	76.2	39.1
11/08/2021 08:45	56.1	78.7	38.0	11/08/2021 20:45	54.0	72.3	36.6	12/08/2021 08:45	57.8	74.2	36.3
11/08/2021 09:00	56.2	75.4	41.3	11/08/2021 21:00	53.1	74.1	36.4	12/08/2021 09:00	56.5	72.6	44.0
11/08/2021 09:15	56.0	73.0	39.3	11/08/2021 21:15	53.1	74.7	37.9	12/08/2021 09:15	58.2	73.5	45.1
11/08/2021 09:30	55.6	70.7	38.8	11/08/2021 21:30	53.1	75.3	38.9	12/08/2021 09:30	56.6	72.8	40.5
11/08/2021 09:45	56.4	73.6	34.4	11/08/2021 21:45	48.1	70.4	39.0	12/08/2021 09:45	58.6	75.3	35.9
11/08/2021 10:00	57.5	72.5	37.1	11/08/2021 22:00	47.6	70.5	39.3	12/08/2021 10:00	57.9	79.8	37.2
11/08/2021 10:15	55.0	71.3	35.3	11/08/2021 22:15	52.1	73.9	39.2	12/08/2021 10:15	57.7	75.1	36.0
11/08/2021 10:30	55.6	70.6	34.5	11/08/2021 22:30	46.7	68.2	38.9	12/08/2021 10:30	57.1	72.5	37.0
11/08/2021 10:45	55.3	71.0	33.7	11/08/2021 22:45	51.1	78.3	38.7	12/08/2021 10:45	57.6	73.3	39.2
11/08/2021 11:00	56.7	74.6	38.4	11/08/2021 23:00	49.8	70.0	38.7	12/08/2021 11:00	58.8	71.1	45.0
11/08/2021 11:15	57.8	72.5	37.7	11/08/2021 23:15	46.9	70.2	38.1	12/08/2021 11:15	59.5	72.3	47.0
11/08/2021 11:30	57.3	71.4	38.2	11/08/2021 23:30	48.0	72.6	38.1	12/08/2021 11:30	58.6	71.0	47.1

**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
12/08/2021 11:45	58.5	70.7	46.5	12/08/2021 23:45	46.8	70.6	36.6	13/08/2021 11:45	60.3	76.0	42.7
12/08/2021 12:00	59.1	74.3	46.2	13/08/2021 00:00	45.7	70.1	35.3	13/08/2021 12:00	59.9	71.7	42.3
12/08/2021 12:15	57.7	75.0	42.2	13/08/2021 00:15	42.5	68.4	35.2	13/08/2021 12:15	59.3	71.8	42.1
12/08/2021 12:30	57.1	70.9	40.8	13/08/2021 00:30	41.8	64.3	35.4	13/08/2021 12:30	57.4	73.7	40.4
12/08/2021 12:45	57.0	77.0	39.0	13/08/2021 00:45	40.6	60.8	35.4	13/08/2021 12:45	57.9	76.5	41.2
12/08/2021 13:00	59.2	76.6	41.9	13/08/2021 01:00	44.4	67.3	34.9	13/08/2021 13:00	58.0	74.0	41.3
12/08/2021 13:15	58.1	73.6	40.1	13/08/2021 01:15	48.3	73.4	34.6	13/08/2021 13:15	57.0	73.1	38.8
12/08/2021 13:30	56.9	71.0	40.6	13/08/2021 01:30	39.2	47.9	34.6	13/08/2021 13:30	58.3	73.4	42.1
12/08/2021 13:45	57.2	72.1	41.9	13/08/2021 01:45	46.0	71.6	35.2	13/08/2021 13:45	58.4	72.9	43.9
12/08/2021 14:00	57.4	71.9	40.4	13/08/2021 02:00	39.8	47.9	35.5	13/08/2021 14:00	58.6	71.5	44.3
12/08/2021 14:15	56.6	73.5	42.9	13/08/2021 02:15	39.4	47.8	34.9	13/08/2021 14:15	57.2	70.4	41.5
12/08/2021 14:30	56.6	77.7	43.9	13/08/2021 02:30	38.6	48.0	34.7	13/08/2021 14:30	57.5	71.2	42.0
12/08/2021 14:45	58.7	70.9	47.5	13/08/2021 02:45	38.7	47.9	35.2	13/08/2021 14:45	57.1	71.3	41.5
12/08/2021 15:00	59.0	71.5	43.8	13/08/2021 03:00	39.6	47.5	35.8	13/08/2021 15:00	57.0	75.1	41.8
12/08/2021 15:15	59.1	74.9	42.1	13/08/2021 03:15	39.5	49.8	35.8	13/08/2021 15:15	58.0	74.1	42.6
12/08/2021 15:30	55.2	71.4	40.6	13/08/2021 03:30	39.0	47.2	35.9	13/08/2021 15:30	59.2	73.0	42.0
12/08/2021 15:45	57.3	70.8	40.4	13/08/2021 03:45	39.0	47.5	35.7	13/08/2021 15:45	57.0	72.6	42.3
12/08/2021 16:00	58.3	74.1	40.0	13/08/2021 04:00	39.6	47.9	36.1	13/08/2021 16:00	57.4	72.5	41.7
12/08/2021 16:15	58.1	73.5	40.2	13/08/2021 04:15	39.6	48.5	36.5	13/08/2021 16:15	58.4	76.1	42.1
12/08/2021 16:30	58.1	78.2	39.4	13/08/2021 04:30	39.4	51.6	36.4	13/08/2021 16:30	58.1	78.5	42.0
12/08/2021 16:45	57.6	72.6	39.2	13/08/2021 04:45	40.1	54.9	36.8	13/08/2021 16:45	59.0	79.0	41.8
12/08/2021 17:00	58.3	73.3	40.9	13/08/2021 05:00	44.9	70.1	37.4	13/08/2021 17:00	57.7	76.5	42.1
12/08/2021 17:15	57.7	80.6	38.0	13/08/2021 05:15	48.5	73.8	36.8	13/08/2021 17:15	57.5	72.4	39.9
12/08/2021 17:30	57.7	73.5	38.1	13/08/2021 05:30	50.4	79.1	36.7	13/08/2021 17:30	56.6	71.6	38.4
12/08/2021 17:45	57.4	74.9	36.9	13/08/2021 05:45	50.4	74.3	36.4	13/08/2021 17:45	56.2	71.2	38.4
12/08/2021 18:00	56.5	74.7	35.7	13/08/2021 06:00	45.7	69.5	36.3	13/08/2021 18:00	56.5	72.5	36.9
12/08/2021 18:15	55.2	71.9	35.9	13/08/2021 06:15	51.0	73.4	36.3	13/08/2021 18:15	61.2	84.2	38.6
12/08/2021 18:30	56.5	72.5	37.5	13/08/2021 06:30	51.2	72.8	36.4	13/08/2021 18:30	56.6	73.1	39.0
12/08/2021 18:45	56.2	75.3	35.8	13/08/2021 06:45	54.0	73.5	35.9	13/08/2021 18:45	55.5	71.9	38.3
12/08/2021 19:00	56.7	74.4	36.9	13/08/2021 07:00	55.7	75.7	34.9	13/08/2021 19:00	57.0	73.4	39.4
12/08/2021 19:15	56.4	80.4	37.9	13/08/2021 07:15	56.7	73.3	35.6	13/08/2021 19:15	57.9	79.1	39.4
12/08/2021 19:30	55.8	73.5	39.1	13/08/2021 07:30	55.9	75.3	40.6	13/08/2021 19:30	59.3	84.2	37.3
12/08/2021 19:45	56.8	75.1	37.9	13/08/2021 07:45	55.5	72.0	40.5	13/08/2021 19:45	57.5	76.9	37.4
12/08/2021 20:00	56.8	73.9	36.3	13/08/2021 08:00	53.0	71.5	40.1	13/08/2021 20:00	55.8	73.5	36.0
12/08/2021 20:15	55.8	75.7	37.8	13/08/2021 08:15	54.1	74.9	39.0	13/08/2021 20:15	60.1	91.6	36.6
12/08/2021 20:30	56.7	76.5	36.7	13/08/2021 08:30	54.3	73.9	40.7	13/08/2021 20:30	55.5	74.0	36.2
12/08/2021 20:45	53.7	72.4	36.2	13/08/2021 08:45	57.7	75.4	43.8	13/08/2021 20:45	54.8	72.6	37.1
12/08/2021 21:00	53.6	70.8	38.5	13/08/2021 09:00	58.0	72.5	43.5	13/08/2021 21:00	51.7	69.6	38.2
12/08/2021 21:15	54.3	74.7	37.2	13/08/2021 09:15	56.5	72.9	37.5	13/08/2021 21:15	52.4	73.1	37.3
12/08/2021 21:30	50.9	69.3	37.1	13/08/2021 09:30	59.1	77.5	36.6	13/08/2021 21:30	51.2	70.9	38.1
12/08/2021 21:45	51.5	72.5	37.0	13/08/2021 09:45	58.6	72.5	37.6	13/08/2021 21:45	53.6	73.2	37.4
12/08/2021 22:00	52.2	77.8	36.5	13/08/2021 10:00	56.3	72.1	38.6	13/08/2021 22:00	50.4	70.9	36.4
12/08/2021 22:15	50.3	74.9	36.3	13/08/2021 10:15	56.5	71.0	37.9	13/08/2021 22:15	49.8	69.5	36.6
12/08/2021 22:30	49.1	70.3	36.4	13/08/2021 10:30	59.0	78.5	38.6	13/08/2021 22:30	41.5	65.6	36.3
12/08/2021 22:45	49.8	68.8	36.0	13/08/2021 10:45	56.2	72.8	37.0	13/08/2021 22:45	49.4	69.2	36.2
12/08/2021 23:00	50.5	73.9	35.6	13/08/2021 11:00	56.1	71.5	42.1	13/08/2021 23:00	47.3	67.7	36.1
12/08/2021 23:15	46.9	70.4	36.6	13/08/2021 11:15	57.7	72.4	43.0	13/08/2021 23:15	46.1	69.6	35.7
12/08/2021 23:30	43.8	66.5	36.5	13/08/2021 11:30	58.8	81.1	42.1	13/08/2021 23:30	48.4	73.2	35.6

**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
13/08/2021 23:45	41.9	66.4	35.5	14/08/2021 11:45	56.6	74.4	34.6	14/08/2021 23:45	48.4	71.6	37.2
14/08/2021 00:00	41.0	65.1	35.3	14/08/2021 12:00	56.7	72.1	34.7	15/08/2021 00:00	47.6	70.8	37.3
14/08/2021 00:15	46.9	68.4	35.4	14/08/2021 12:15	56.1	73.6	33.4	15/08/2021 00:15	42.2	49.7	38.9
14/08/2021 00:30	36.7	44.0	34.7	14/08/2021 12:30	55.8	73.3	33.8	15/08/2021 00:30	50.2	78.4	39.4
14/08/2021 00:45	46.3	72.6	35.2	14/08/2021 12:45	60.1	80.3	36.6	15/08/2021 00:45	43.4	63.8	38.5
14/08/2021 01:00	47.3	71.9	35.1	14/08/2021 13:00	57.4	72.3	35.0	15/08/2021 01:00	46.0	68.6	37.0
14/08/2021 01:15	44.4	70.0	34.8	14/08/2021 13:15	56.4	71.1	33.6	15/08/2021 01:15	44.8	68.7	34.2
14/08/2021 01:30	36.9	46.6	34.0	14/08/2021 13:30	57.9	71.0	34.0	15/08/2021 01:30	45.3	72.0	35.5
14/08/2021 01:45	36.5	43.4	33.5	14/08/2021 13:45	56.2	73.3	34.0	15/08/2021 01:45	42.7	63.8	37.5
14/08/2021 02:00	35.8	44.2	32.5	14/08/2021 14:00	56.9	74.2	35.2	15/08/2021 02:00	40.6	48.3	36.1
14/08/2021 02:15	35.9	43.8	32.0	14/08/2021 14:15	57.0	73.6	34.4	15/08/2021 02:15	37.5	45.3	33.5
14/08/2021 02:30	34.8	43.4	30.1	14/08/2021 14:30	57.0	71.0	35.0	15/08/2021 02:30	37.7	48.3	33.2
14/08/2021 02:45	44.9	71.2	31.4	14/08/2021 14:45	62.8	93.3	34.7	15/08/2021 02:45	37.7	45.5	33.2
14/08/2021 03:00	36.4	43.3	33.5	14/08/2021 15:00	57.2	71.4	35.1	15/08/2021 03:00	36.1	46.7	31.6
14/08/2021 03:15	46.7	72.2	33.4	14/08/2021 15:15	57.1	75.8	36.1	15/08/2021 03:15	34.7	52.6	31.3
14/08/2021 03:30	35.2	43.4	30.1	14/08/2021 15:30	62.5	84.1	35.0	15/08/2021 03:30	34.0	47.3	31.1
14/08/2021 03:45	35.1	49.8	30.6	14/08/2021 15:45	57.6	75.0	37.4	15/08/2021 03:45	33.7	44.6	30.5
14/08/2021 04:00	34.3	44.5	29.6	14/08/2021 16:00	58.2	72.0	40.2	15/08/2021 04:00	37.9	58.2	30.6
14/08/2021 04:15	35.0	46.7	28.4	14/08/2021 16:15	57.5	73.9	38.5	15/08/2021 04:15	42.6	67.8	31.0
14/08/2021 04:30	41.8	68.1	28.3	14/08/2021 16:30	57.1	71.9	40.3	15/08/2021 04:30	41.6	67.9	30.8
14/08/2021 04:45	31.9	45.4	28.1	14/08/2021 16:45	56.8	75.5	39.2	15/08/2021 04:45	43.7	66.8	31.2
14/08/2021 05:00	32.2	46.4	28.6	14/08/2021 17:00	56.9	71.5	40.9	15/08/2021 05:00	34.7	56.5	30.8
14/08/2021 05:15	45.2	70.8	29.4	14/08/2021 17:15	57.4	74.3	39.4	15/08/2021 05:15	41.9	68.8	30.3
14/08/2021 05:30	47.9	70.1	29.6	14/08/2021 17:30	57.3	73.9	37.2	15/08/2021 05:30	65.4	84.3	30.7
14/08/2021 05:45	48.0	72.4	29.7	14/08/2021 17:45	58.9	76.4	36.4	15/08/2021 05:45	63.8	84.2	31.2
14/08/2021 06:00	43.0	68.5	29.3	14/08/2021 18:00	55.6	71.0	31.8	15/08/2021 06:00	52.8	75.6	31.6
14/08/2021 06:15	42.6	68.9	29.0	14/08/2021 18:15	55.3	72.6	31.9	15/08/2021 06:15	45.0	71.1	31.8
14/08/2021 06:30	50.4	74.2	28.5	14/08/2021 18:30	57.2	76.8	32.3	15/08/2021 06:30	50.5	73.4	32.9
14/08/2021 06:45	52.2	75.5	29.6	14/08/2021 18:45	57.0	71.9	31.8	15/08/2021 06:45	48.3	72.6	34.5
14/08/2021 07:00	49.1	71.8	28.4	14/08/2021 19:00	56.5	76.9	31.1	15/08/2021 07:00	47.2	72.6	31.4
14/08/2021 07:15	49.1	71.0	28.8	14/08/2021 19:15	57.2	75.2	35.3	15/08/2021 07:15	47.1	69.5	31.2
14/08/2021 07:30	51.5	74.1	28.9	14/08/2021 19:30	56.0	73.8	29.4	15/08/2021 07:30	50.0	73.1	31.6
14/08/2021 07:45	51.4	72.8	29.8	14/08/2021 19:45	55.6	73.1	31.0	15/08/2021 07:45	50.3	73.6	32.4
14/08/2021 08:00	54.5	71.4	31.0	14/08/2021 20:00	57.4	74.5	34.7	15/08/2021 08:00	47.2	69.5	33.1
14/08/2021 08:15	56.5	79.2	32.1	14/08/2021 20:15	56.0	72.8	31.1	15/08/2021 08:15	51.9	75.5	35.6
14/08/2021 08:30	53.5	72.4	30.3	14/08/2021 20:30	53.7	71.3	30.1	15/08/2021 08:30	52.9	73.9	34.6
14/08/2021 08:45	56.6	72.6	33.5	14/08/2021 20:45	56.9	75.5	31.5	15/08/2021 08:45	53.8	74.4	34.1
14/08/2021 09:00	55.7	75.3	32.5	14/08/2021 21:00	53.7	71.0	34.4	15/08/2021 09:00	52.8	71.0	34.5
14/08/2021 09:15	56.3	73.0	32.2	14/08/2021 21:15	53.2	71.1	38.2	15/08/2021 09:15	55.2	71.7	35.1
14/08/2021 09:30	56.6	77.7	32.9	14/08/2021 21:30	51.8	71.0	39.3	15/08/2021 09:30	54.2	72.4	33.7
14/08/2021 09:45	56.4	76.1	33.0	14/08/2021 21:45	52.3	70.2	38.0	15/08/2021 09:45	54.3	73.1	32.7
14/08/2021 10:00	56.9	71.7	32.3	14/08/2021 22:00	50.8	70.5	39.2	15/08/2021 10:00	56.7	71.8	34.6
14/08/2021 10:15	57.1	72.0	33.6	14/08/2021 22:15	48.9	69.2	38.8	15/08/2021 10:15	57.2	73.0	35.3
14/08/2021 10:30	55.9	72.1	34.8	14/08/2021 22:30	50.2	72.6	38.6	15/08/2021 10:30	56.7	71.7	37.0
14/08/2021 10:45	57.0	72.4	34.3	14/08/2021 22:45	48.8	69.5	38.5	15/08/2021 10:45	57.9	76.6	38.0
14/08/2021 11:00	56.9	72.5	35.5	14/08/2021 23:00	47.4	72.2	38.3	15/08/2021 11:00	58.7	73.6	37.2
14/08/2021 11:15	56.9	71.1	35.3	14/08/2021 23:15	49.0	71.0	37.9	15/08/2021 11:15	57.7	71.2	36.8
14/08/2021 11:30	58.8	81.6	35.8	14/08/2021 23:30	47.6	71.6	36.8	15/08/2021 11:30	58.1	73.7	40.3



**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**

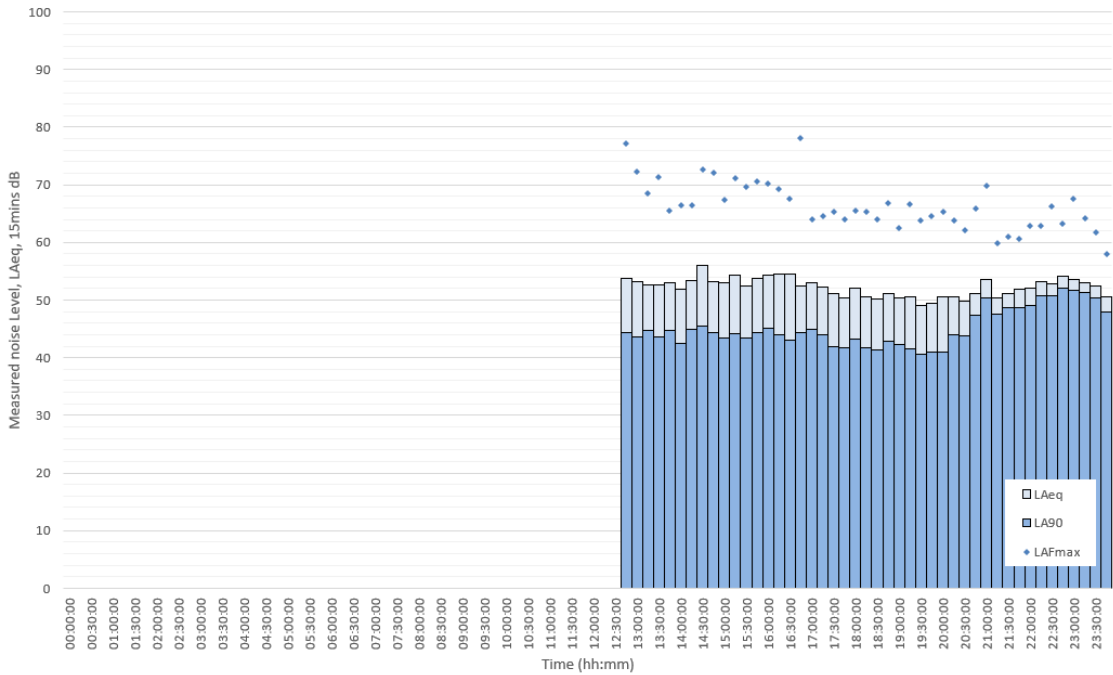


Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
15/08/2021 11:45	57.3	71.5	38.5	16/08/2021 03:45	43.3	67.5	32.8	16/08/2021 19:45	57.5	78.9	38.5
15/08/2021 12:00	58.8	76.3	39.1	16/08/2021 04:00	35.3	47.6	32.4	16/08/2021 20:00	54.5	75.6	35.9
15/08/2021 12:15	56.8	73.1	39.1	16/08/2021 04:15	42.6	67.0	32.2	16/08/2021 20:15	55.0	74.9	37.1
15/08/2021 12:30	60.5	81.1	41.3	16/08/2021 04:30	34.2	46.5	30.9	16/08/2021 20:30	54.1	72.0	36.3
15/08/2021 12:45	58.0	72.1	41.0	16/08/2021 04:45	32.5	43.2	29.2	16/08/2021 20:45	54.5	72.1	37.5
15/08/2021 13:00	57.4	70.4	41.9	16/08/2021 05:00	44.1	71.6	29.6	16/08/2021 21:00	54.1	70.9	39.2
15/08/2021 13:15	58.7	75.5	43.5	16/08/2021 05:15	45.9	73.7	31.6	16/08/2021 21:15	53.0	72.8	38.1
15/08/2021 13:30	64.6	89.4	41.7	16/08/2021 05:30	55.8	77.3	32.7	16/08/2021 21:30	55.7	80.0	40.3
15/08/2021 13:45	57.5	73.5	42.3	16/08/2021 05:45	48.3	72.6	33.4	16/08/2021 21:45	50.7	72.8	41.9
15/08/2021 14:00	58.3	74.2	42.3	16/08/2021 06:00	48.0	71.4	33.0	16/08/2021 22:00	50.0	67.3	42.3
15/08/2021 14:15	58.1	72.8	40.2	16/08/2021 06:15	49.4	71.2	34.6	16/08/2021 22:15	52.5	70.8	41.8
15/08/2021 14:30	59.3	73.0	44.1	16/08/2021 06:30	53.0	75.0	36.8	16/08/2021 22:30	53.3	75.2	41.3
15/08/2021 14:45	58.0	73.2	42.0	16/08/2021 06:45	52.5	72.6	36.2	16/08/2021 22:45	56.0	84.0	41.0
15/08/2021 15:00	57.4	72.2	40.1	16/08/2021 07:00	53.9	71.8	35.7	16/08/2021 23:00	50.1	73.0	41.9
15/08/2021 15:15	55.7	72.3	41.2	16/08/2021 07:15	53.6	71.4	44.9	16/08/2021 23:15	48.8	70.1	41.2
15/08/2021 15:30	58.4	74.2	42.7	16/08/2021 07:30	52.3	72.7	37.0	16/08/2021 23:30	44.6	66.3	40.7
15/08/2021 15:45	58.0	74.8	43.3	16/08/2021 07:45	54.2	72.7	38.8	16/08/2021 23:45	41.3	49.7	37.8
15/08/2021 16:00	58.1	73.9	42.7	16/08/2021 08:00	53.2	72.5	39.7	17/08/2021 00:00	49.3	77.3	38.3
15/08/2021 16:15	55.6	71.9	41.1	16/08/2021 08:15	53.8	71.6	38.2	17/08/2021 00:15	40.5	51.6	38.0
15/08/2021 16:30	56.6	72.1	41.2	16/08/2021 08:30	55.2	73.0	41.6	17/08/2021 00:30	48.4	73.1	38.5
15/08/2021 16:45	62.9	87.8	40.1	16/08/2021 08:45	55.4	69.7	45.2	17/08/2021 00:45	44.7	69.0	39.5
15/08/2021 17:00	56.6	75.0	40.6	16/08/2021 09:00	55.4	71.5	41.1	17/08/2021 01:00	43.5	65.3	39.1
15/08/2021 17:15	61.3	88.0	41.2	16/08/2021 09:15	56.5	74.5	44.3	17/08/2021 01:15	44.4	68.9	38.2
15/08/2021 17:30	57.2	72.8	41.2	16/08/2021 09:30	57.0	71.1	47.1	17/08/2021 01:30	50.3	71.4	39.4
15/08/2021 17:45	54.9	70.5	38.8	16/08/2021 09:45	55.5	70.8	40.8	17/08/2021 01:45	40.7	52.0	36.7
15/08/2021 18:00	55.4	71.2	39.5	16/08/2021 10:00	55.7	70.4	38.9	17/08/2021 02:00	40.7	47.2	38.3
15/08/2021 18:15	56.6	72.3	39.2	16/08/2021 10:15	57.6	75.8	37.6	17/08/2021 02:15	39.8	52.5	37.1
15/08/2021 18:30	55.4	73.9	39.4	16/08/2021 10:30	57.9	74.5	40.1	17/08/2021 02:30	43.5	67.5	32.7
15/08/2021 18:45	52.9	72.9	36.9	16/08/2021 10:45	55.9	71.5	41.4	17/08/2021 02:45	32.4	50.1	28.9
15/08/2021 19:00	55.3	74.9	34.7	16/08/2021 11:00	56.9	74.4	45.3	17/08/2021 03:00	30.3	41.2	28.0
15/08/2021 19:15	54.4	75.6	34.3	16/08/2021 11:15	55.9	71.6	41.6	17/08/2021 03:15	32.5	55.3	28.5
15/08/2021 19:30	55.4	78.5	38.6	16/08/2021 11:30	57.9	72.9	46.4	17/08/2021 03:30	30.6	42.7	27.9
15/08/2021 19:45	55.8	81.1	34.8	16/08/2021 11:45	57.8	77.1	43.4	17/08/2021 03:45	31.7	43.5	28.9
15/08/2021 20:00	54.6	74.0	33.9	16/08/2021 12:00	57.8	70.4	41.7	17/08/2021 04:00	31.7	47.4	29.1
15/08/2021 20:15	52.3	72.2	33.7	16/08/2021 12:15	58.8	73.8	46.4	17/08/2021 04:15	30.5	48.7	28.0
15/08/2021 20:30	50.1	69.4	33.9	16/08/2021 12:30	57.8	72.6	45.7	17/08/2021 04:30	41.8	68.6	28.9
15/08/2021 20:45	53.4	72.2	39.5	16/08/2021 12:45	57.3	72.1	39.5	17/08/2021 04:45	31.2	44.6	29.0
15/08/2021 21:00	49.0	68.3	38.8	16/08/2021 13:00	57.8	74.4	40.7	17/08/2021 05:00	44.7	72.3	28.5
15/08/2021 21:15	51.6	71.7	38.3	16/08/2021 13:15	56.7	71.6	40.6	17/08/2021 05:15	38.7	62.5	28.6
15/08/2021 21:30	52.2	77.6	36.9	16/08/2021 13:30	57.4	73.3	42.4	17/08/2021 05:30	46.1	69.9	30.4
15/08/2021 21:45	54.0	82.8	36.9	16/08/2021 13:45	57.3	71.0	43.7	17/08/2021 05:45	47.9	74.8	31.3
15/08/2021 22:00	50.5	72.9	36.9	16/08/2021 14:00	57.8	74.5	46.7	17/08/2021 06:00	38.0	64.4	30.7
15/08/2021 22:15	51.2	72.3	38.3	16/08/2021 14:15	58.2	73.3	44.6	17/08/2021 06:15	44.0	68.8	31.4
15/08/2021 22:30	51.6	72.4	39.4	16/08/2021 14:30	57.4	72.9	45.6	17/08/2021 06:30	51.2	69.8	32.3
15/08/2021 22:45	52.8	74.7	39.1	16/08/2021 14:45	57.7	72.0	44.9	17/08/2021 06:45	52.2	75.1	34.1
15/08/2021 23:00	47.1	68.5	38.6	16/08/2021 15:00	58.6	75.5	45.3	17/08/2021 07:00	55.9	74.9	37.5
15/08/2021 23:15	46.8	68.8	37.8	16/08/2021 15:15	57.7	75.1	40.6	17/08/2021 07:15	57.5	75.6	41.9
15/08/2021 23:30	43.9	68.2	38.8	16/08/2021 15:30	57.1	73.0	40.6	17/08/2021 07:30	55.2	71.1	48.9
15/08/2021 23:45	46.8	71.6	38.6	16/08/2021 15:45	57.4	72.8	41.6	17/08/2021 07:45	57.3	74.7	48.6
16/08/2021 00:00	45.4	68.6	38.0	16/08/2021 16:00	58.5	73.6	44.3	17/08/2021 08:00	54.8	71.3	41.2
16/08/2021 00:15	45.2	67.4	37.3	16/08/2021 16:15	57.9	71.3	42.0	17/08/2021 08:15	56.6	71.2	43.7
16/08/2021 00:30	37.6	45.2	35.6	16/08/2021 16:30	55.6	73.3	39.3	17/08/2021 08:30	56.4	74.2	44.3
16/08/2021 00:45	39.4	44.5	37.7	16/08/2021 16:45	57.8	71.8	41.4	17/08/2021 08:45	57.5	72.0	41.6
16/08/2021 01:00	37.8	47.5	35.9	16/08/2021 17:00	57.3	70.9	41.5	17/08/2021 09:00	58.1	72.6	40.9
16/08/2021 01:15	37.9	45.1	36.1	16/08/2021 17:15	57.4	73.9	41.5	17/08/2021 09:15	55.8	74.2	38.5
16/08/2021 01:30	37.6	47.9	36.0	16/08/2021 17:30	56.3	72.0	39.6	17/08/2021 09:30	58.0	72.8	43.1
16/08/2021 01:45	45.5	68.1	34.5	16/08/2021 17:45	57.6	73.3	39.7	17/08/2021 09:45	58.6	75.1	41.4
16/08/2021 02:00	47.1	68.5	34.3	16/08/2021 18:00	56.4	74.6	37.3	17/08/2021 10:00	58.5	76.0	40.5
16/08/2021 02:15	36.7	46.6	33.2	16/08/2021 18:15	57.2	73.4	38.0	17/08/2021 10:15	56.6	74.2	40.6
16/08/2021 02:30	37.6	46.7	34.6	16/08/2021 18:30	56.7	72.4	39.7	17/08/2021 10:30	57.2	74.5	42.9
16/08/2021 02:45	36.4	46.5	33.2	16/08/2021 18:45	55.9	77.0	37.8				
16/08/2021 03:00	35.0	42.1	32.6	16/08/2021 19:00	55.6	75.4	38.5				
16/08/2021 03:15	35.8	43.3	33.4	16/08/2021 19:15	53.5	73.3	35.6				
16/08/2021 03:30	36.1	47.8	33.7	16/08/2021 19:30	58.7	85.8	36.5				

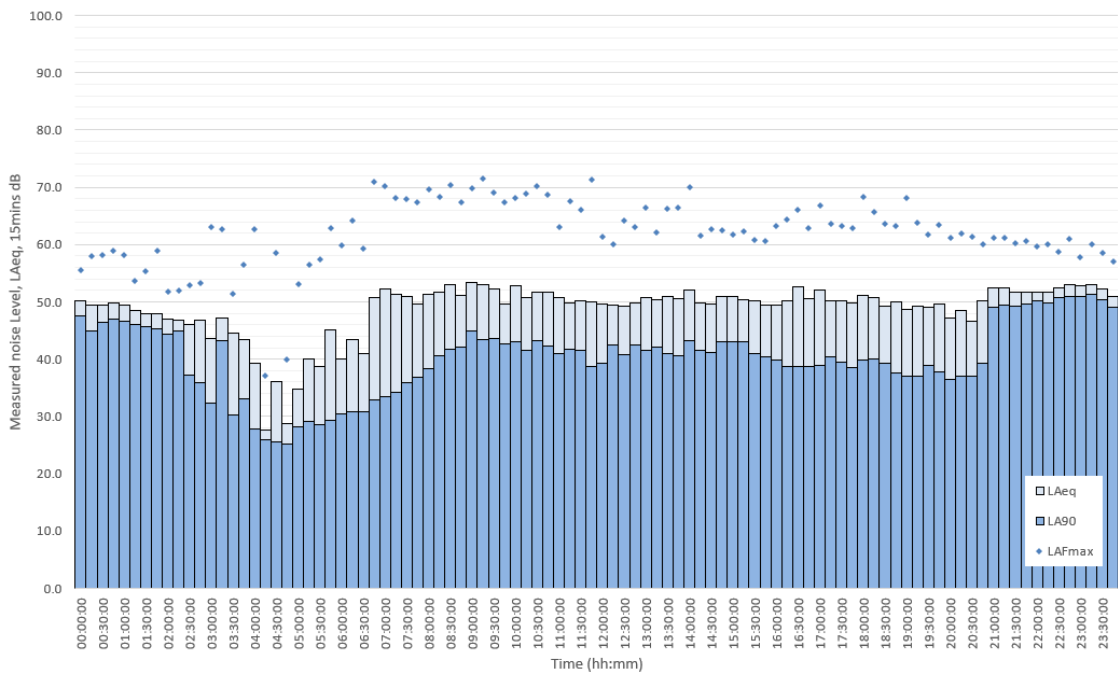


**Noise Monitoring Location 3**

Noise Levels Measured at Coombefield Quarry - Location 3  
 9th August 2021



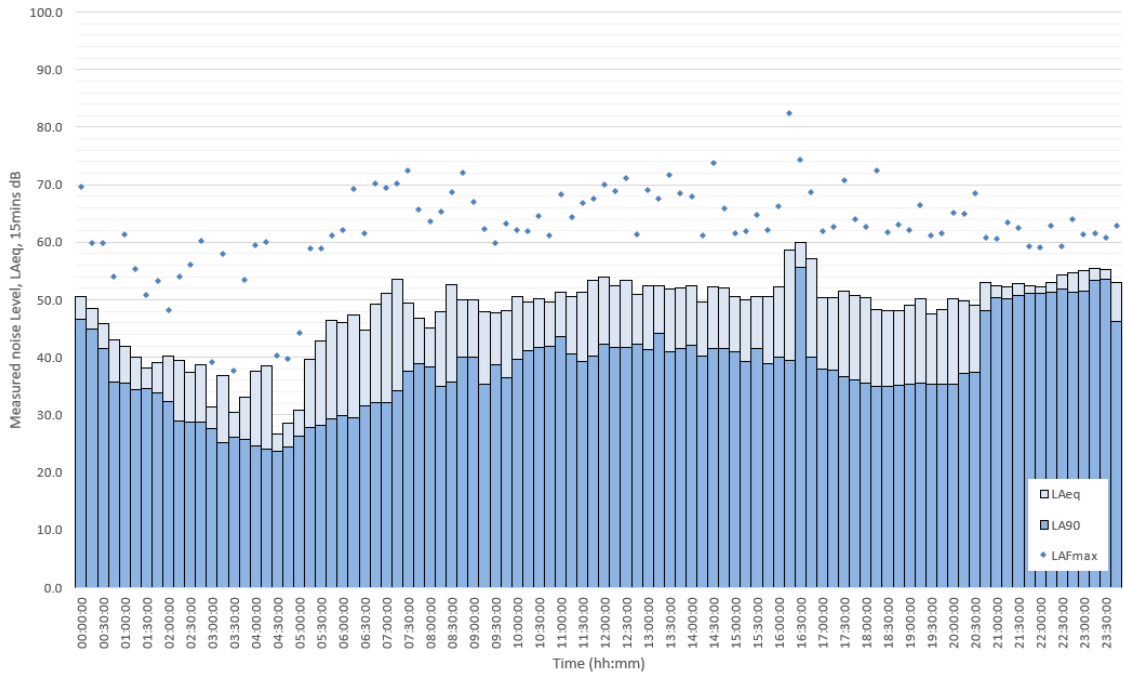
Noise Levels Measured at Coombefield Quarry - Location 3  
 10th August 2021



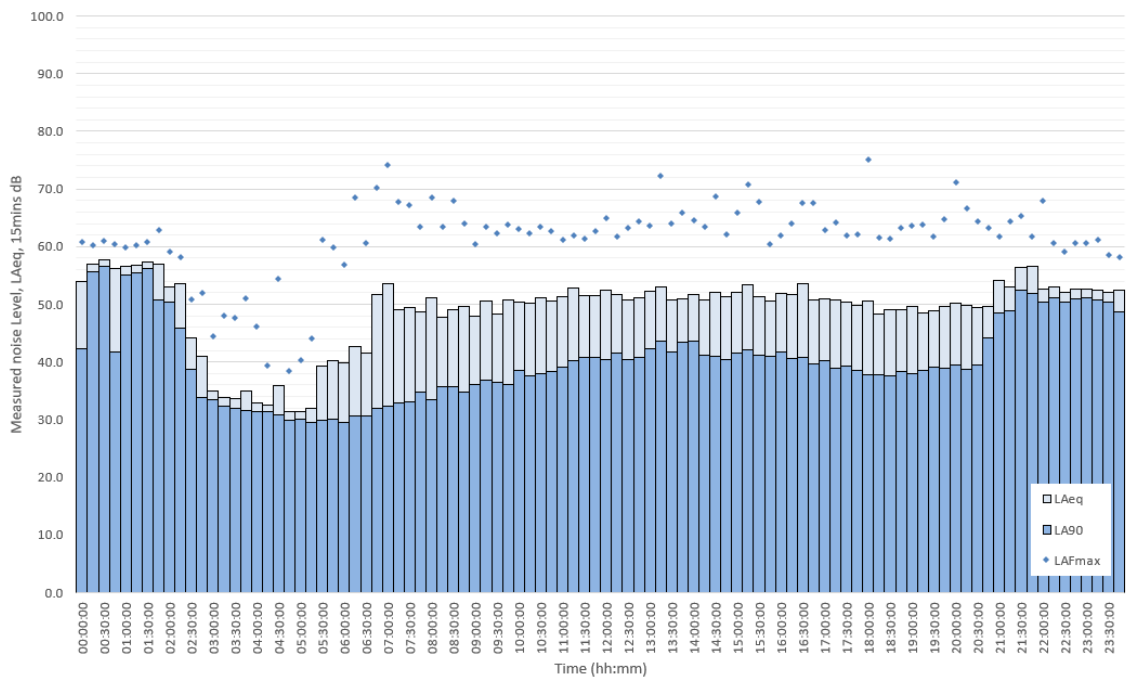
**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



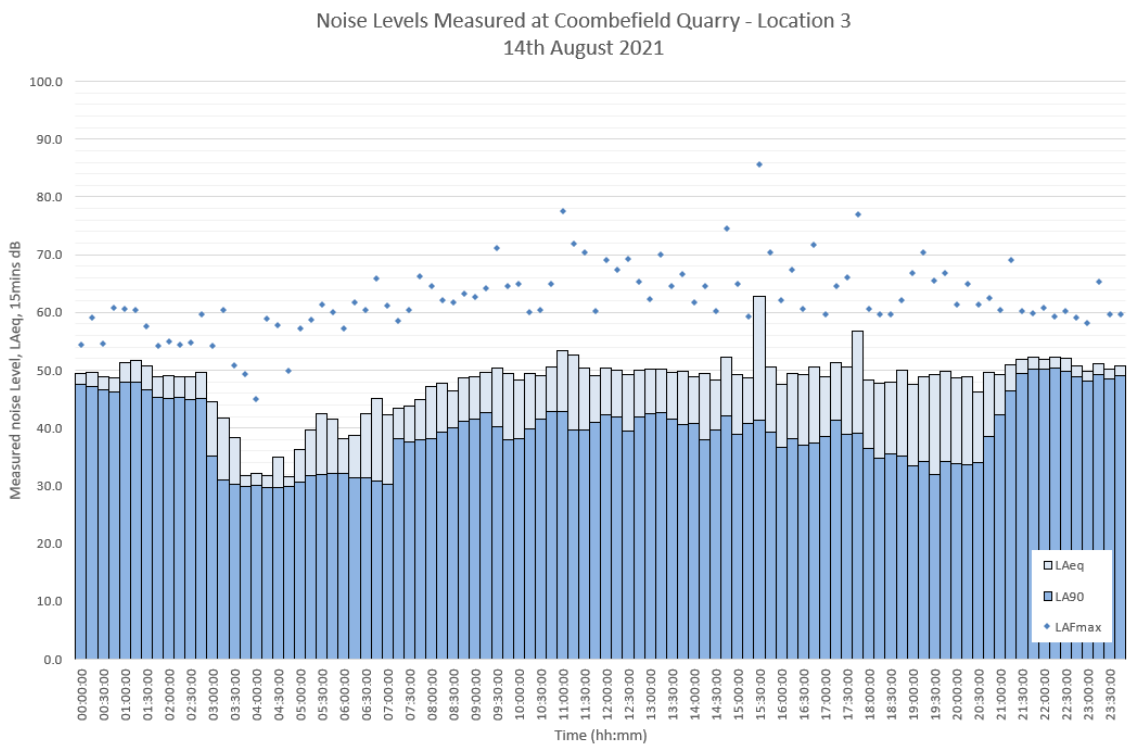
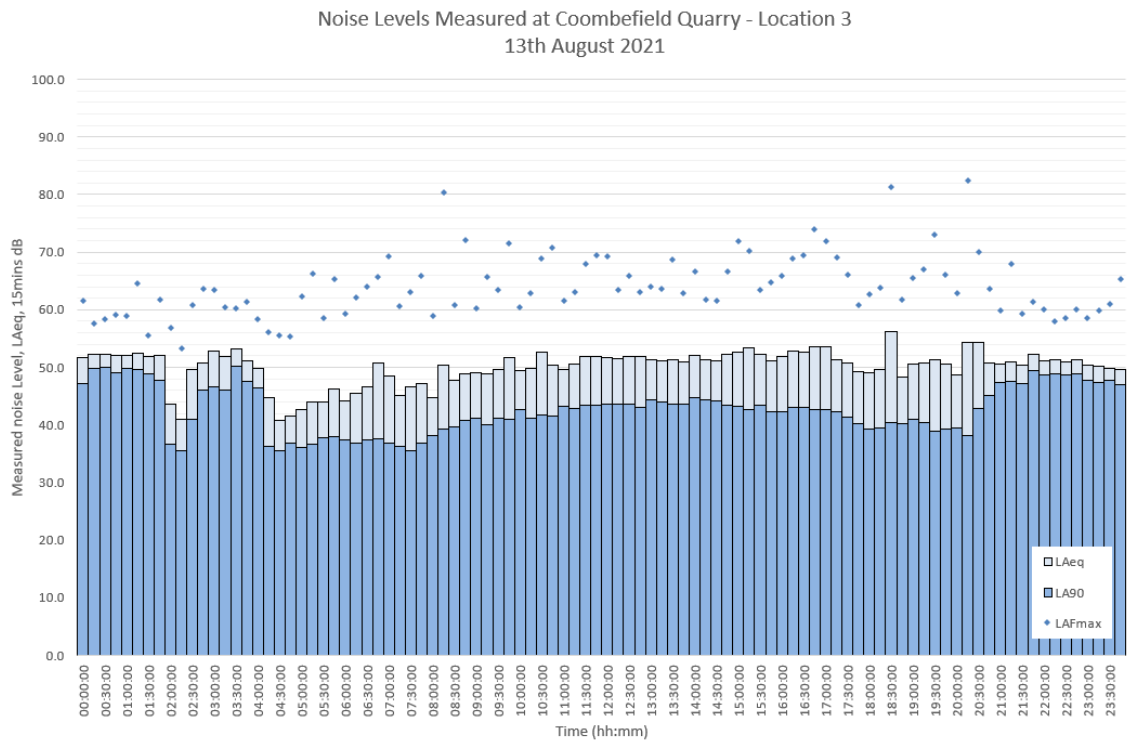
Noise Levels Measured at Coombefield Quarry - Location 3  
 11th August 2021



Noise Levels Measured at Coombefield Quarry - Location 3  
 12th August 2021



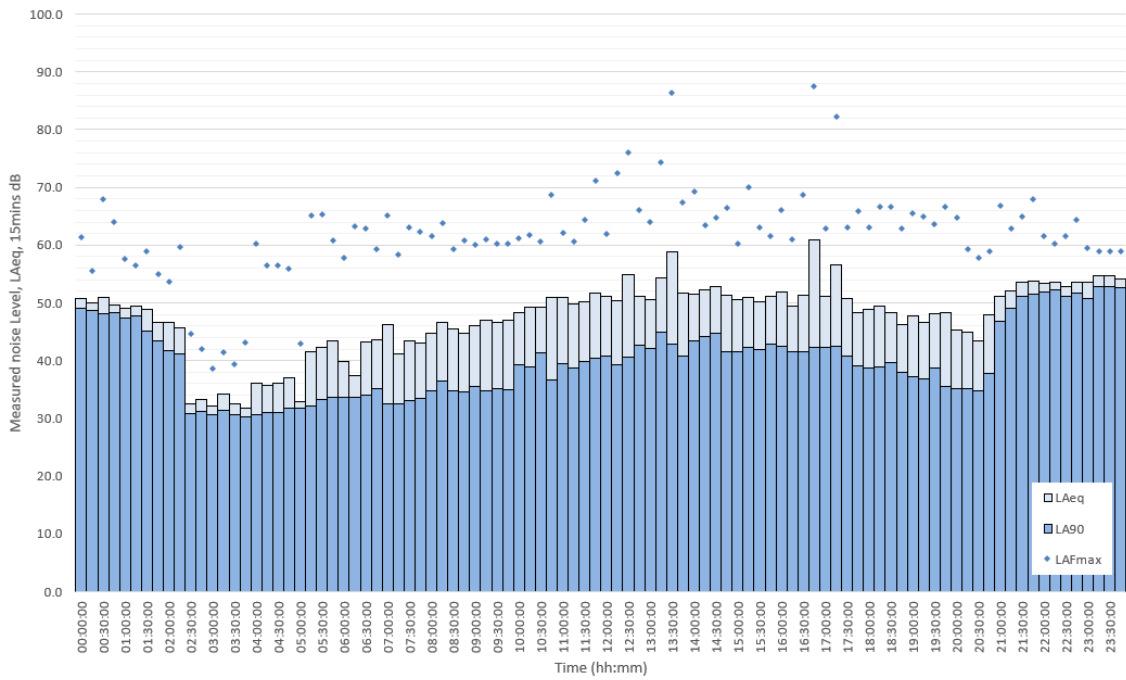
**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



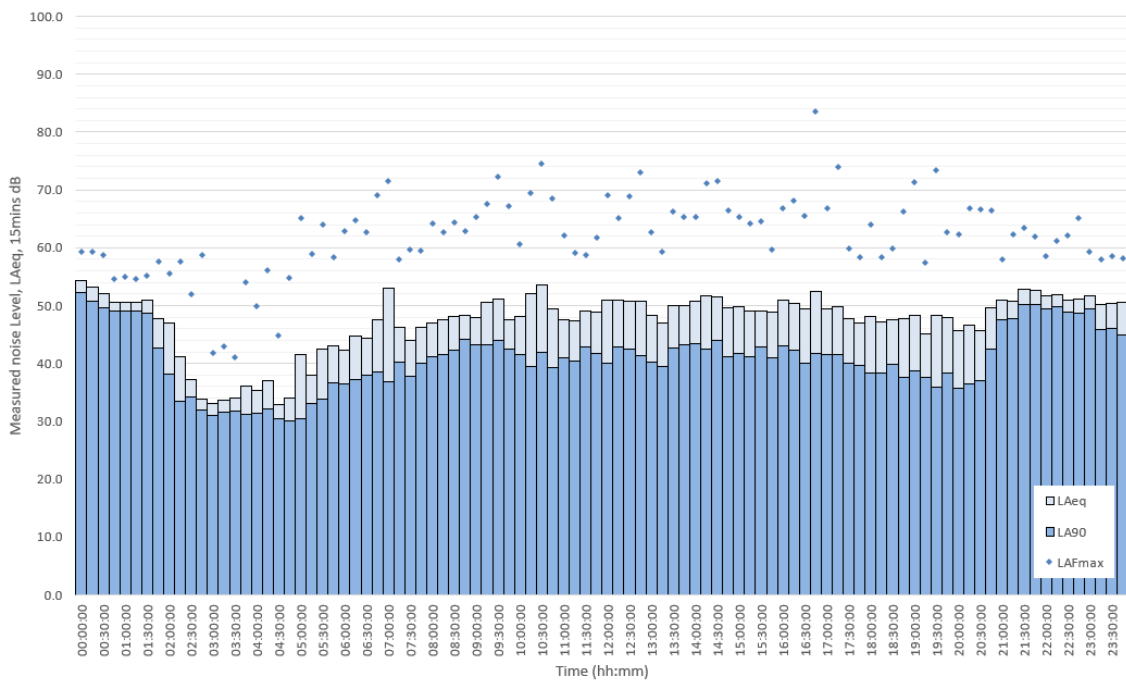
**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Noise Levels Measured at Coombefield Quarry - Location 3  
 15th August 2021



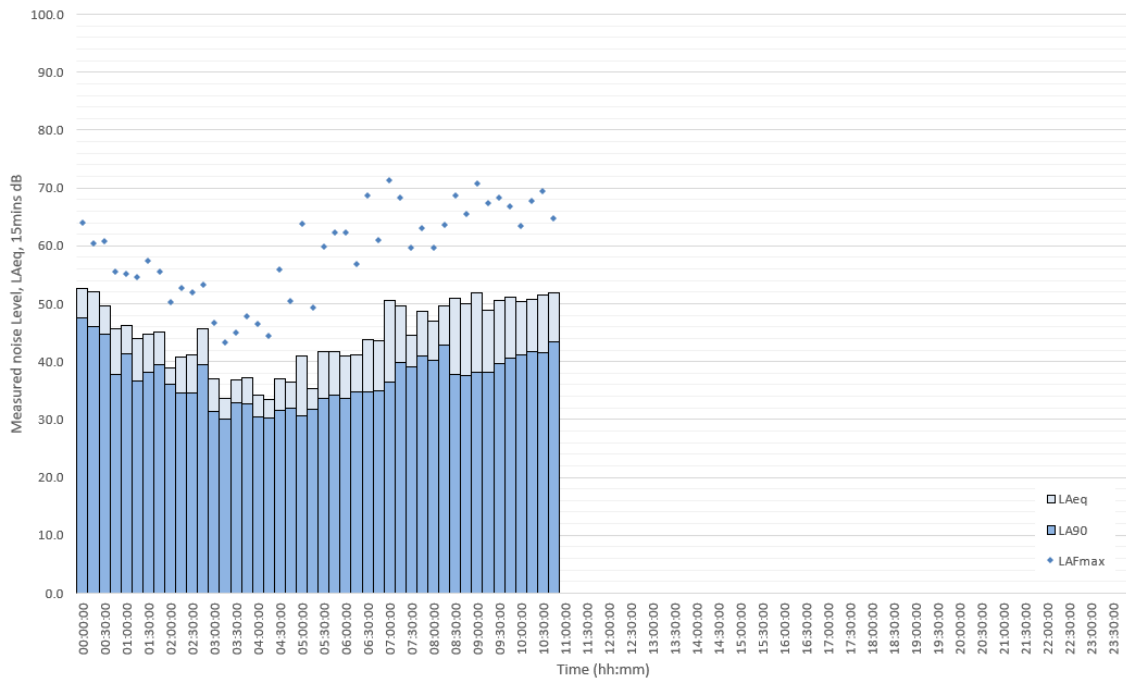
Noise Levels Measured at Coombefield Quarry - Location 3  
 16th August 2021



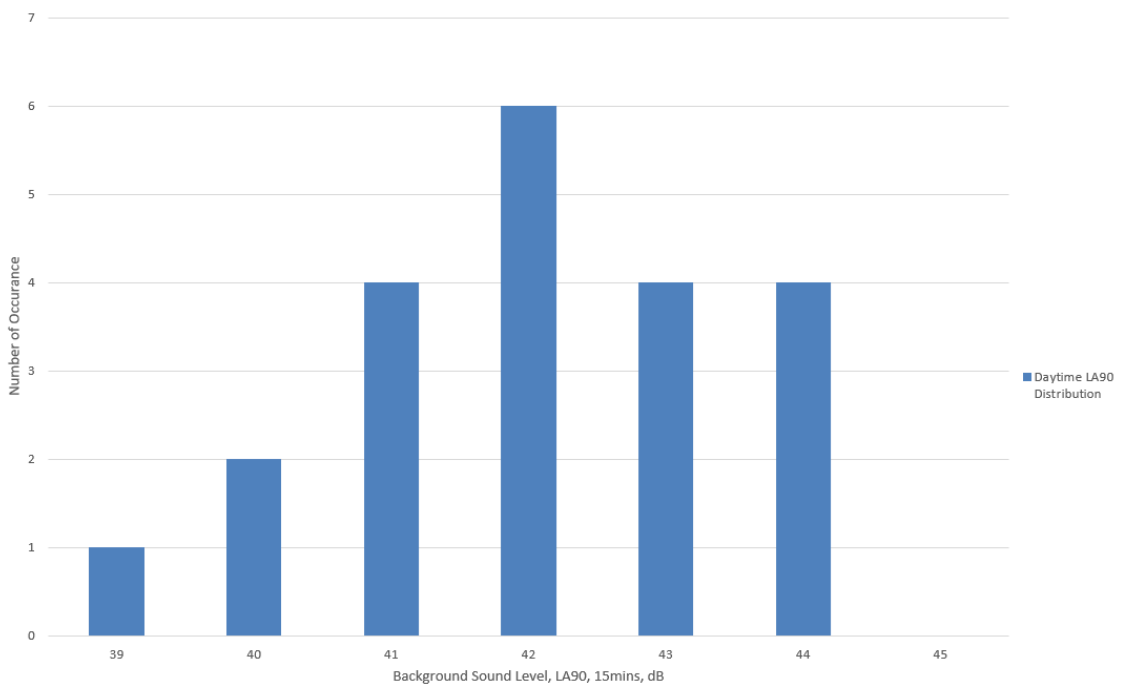
**COOMBEFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Noise Levels Measured at Coombefield Quarry - Location 3  
 17th August 2021



Location 3 - Daytime LA90 Distribution



**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
09/08/2021 12:45	53.7	77.2	44.3	10/08/2021 00:45	49.8	59.0	46.9	10/08/2021 12:45	49.9	63.0	42.5
09/08/2021 13:00	53.2	72.2	43.6	10/08/2021 01:00	49.4	58.1	46.7	10/08/2021 13:00	50.8	66.5	41.6
09/08/2021 13:15	52.6	68.5	44.7	10/08/2021 01:15	48.5	53.7	46.1	10/08/2021 13:15	50.3	62.1	42.1
09/08/2021 13:30	52.7	71.4	43.6	10/08/2021 01:30	47.9	55.3	45.6	10/08/2021 13:30	51.0	66.3	41.0
09/08/2021 13:45	53.0	65.5	44.7	10/08/2021 01:45	48.0	59.0	45.3	10/08/2021 13:45	50.5	66.5	40.6
09/08/2021 14:00	51.9	66.4	42.4	10/08/2021 02:00	46.9	51.8	44.4	10/08/2021 14:00	52.0	70.0	43.3
09/08/2021 14:15	53.4	66.4	44.9	10/08/2021 02:15	46.8	51.9	44.9	10/08/2021 14:15	49.8	61.5	41.6
09/08/2021 14:30	56.0	72.7	45.4	10/08/2021 02:30	46.0	52.9	37.3	10/08/2021 14:30	49.7	62.7	41.2
09/08/2021 14:45	53.2	72.0	44.3	10/08/2021 02:45	46.8	53.2	35.9	10/08/2021 14:45	51.0	62.5	43.0
09/08/2021 15:00	53.1	67.4	43.5	10/08/2021 03:00	43.6	63.0	32.4	10/08/2021 15:00	51.0	61.7	43.0
09/08/2021 15:15	54.3	71.1	44.2	10/08/2021 03:15	47.1	62.7	43.2	10/08/2021 15:15	50.4	62.4	43.0
09/08/2021 15:30	52.5	69.7	43.5	10/08/2021 03:30	44.5	51.4	30.2	10/08/2021 15:30	50.1	60.8	40.9
09/08/2021 15:45	53.8	70.5	44.3	10/08/2021 03:45	43.5	56.4	33.0	10/08/2021 15:45	49.5	60.6	40.5
09/08/2021 16:00	54.3	70.2	45.1	10/08/2021 04:00	39.3	62.7	27.8	10/08/2021 16:00	49.4	63.2	39.9
09/08/2021 16:15	54.6	69.3	44.0	10/08/2021 04:15	27.7	37.2	25.9	10/08/2021 16:15	50.1	64.3	38.8
09/08/2021 16:30	54.6	67.6	43.0	10/08/2021 04:30	36.1	58.6	25.6	10/08/2021 16:30	52.6	66.0	38.8
09/08/2021 16:45	52.5	78.2	44.3	10/08/2021 04:45	28.7	40.0	25.2	10/08/2021 16:45	50.5	62.9	38.8
09/08/2021 17:00	53.1	64.0	44.9	10/08/2021 05:00	34.7	53.1	28.2	10/08/2021 17:00	52.0	66.9	39.0
09/08/2021 17:15	52.3	64.5	44.0	10/08/2021 05:15	40.0	56.4	29.1	10/08/2021 17:15	50.1	63.7	40.5
09/08/2021 17:30	51.2	65.4	41.9	10/08/2021 05:30	38.7	57.4	28.5	10/08/2021 17:30	50.1	63.2	39.4
09/08/2021 17:45	50.3	64.1	41.7	10/08/2021 05:45	45.1	62.9	29.4	10/08/2021 17:45	49.9	62.9	38.5
09/08/2021 18:00	52.1	65.6	43.3	10/08/2021 06:00	40.1	59.9	30.4	10/08/2021 18:00	51.1	68.4	39.8
09/08/2021 18:15	50.5	65.3	41.7	10/08/2021 06:15	43.5	64.2	30.8	10/08/2021 18:15	50.7	65.7	40.0
09/08/2021 18:30	50.2	64.1	41.4	10/08/2021 06:30	41.0	59.4	30.8	10/08/2021 18:30	49.2	63.6	39.3
09/08/2021 18:45	51.2	66.8	42.9	10/08/2021 06:45	50.8	70.9	32.8	10/08/2021 18:45	50.0	63.3	37.6
09/08/2021 19:00	50.3	62.5	42.2	10/08/2021 07:00	52.3	70.2	33.4	10/08/2021 19:00	48.6	68.1	37.1
09/08/2021 19:15	50.5	66.6	41.6	10/08/2021 07:15	51.4	68.1	34.3	10/08/2021 19:15	49.3	63.8	37.0
09/08/2021 19:30	49.0	63.9	40.6	10/08/2021 07:30	51.0	67.9	35.9	10/08/2021 19:30	49.0	61.7	39.0
09/08/2021 19:45	49.5	64.6	41.0	10/08/2021 07:45	49.6	67.3	36.8	10/08/2021 19:45	49.7	63.5	37.8
09/08/2021 20:00	50.6	65.3	41.0	10/08/2021 08:00	51.4	69.6	38.3	10/08/2021 20:00	47.2	61.2	36.4
09/08/2021 20:15	50.6	63.8	44.0	10/08/2021 08:15	51.7	68.4	40.6	10/08/2021 20:15	48.5	62.0	37.0
09/08/2021 20:30	49.9	62.2	43.8	10/08/2021 08:30	53.0	70.4	41.8	10/08/2021 20:30	46.6	61.3	37.0
09/08/2021 20:45	51.2	65.8	47.4	10/08/2021 08:45	51.1	67.3	42.1	10/08/2021 20:45	50.1	60.0	39.3
09/08/2021 21:00	53.5	69.8	50.4	10/08/2021 09:00	53.3	69.9	44.9	10/08/2021 21:00	52.5	61.2	49.0
09/08/2021 21:15	50.3	59.9	47.5	10/08/2021 09:15	53.1	71.6	43.4	10/08/2021 21:15	52.4	61.2	49.4
09/08/2021 21:30	51.2	61.0	48.6	10/08/2021 09:30	52.2	69.0	43.7	10/08/2021 21:30	51.6	60.3	49.3
09/08/2021 21:45	51.9	60.7	48.6	10/08/2021 09:45	49.7	67.3	42.7	10/08/2021 21:45	51.6	60.6	49.7
09/08/2021 22:00	52.1	62.8	49.1	10/08/2021 10:00	52.8	68.1	43.1	10/08/2021 22:00	51.7	59.6	50.1
09/08/2021 22:15	53.2	62.9	50.7	10/08/2021 10:15	50.8	68.9	41.6	10/08/2021 22:15	51.6	60.1	49.9
09/08/2021 22:30	52.9	66.3	50.7	10/08/2021 10:30	51.6	70.2	43.2	10/08/2021 22:30	52.5	58.8	50.8
09/08/2021 22:45	54.1	63.3	52.1	10/08/2021 10:45	51.6	68.8	42.2	10/08/2021 22:45	53.0	61.0	50.9
09/08/2021 23:00	53.6	67.5	51.7	10/08/2021 11:00	50.8	63.0	41.0	10/08/2021 23:00	52.9	57.8	50.9
09/08/2021 23:15	53.1	64.2	51.4	10/08/2021 11:15	49.8	67.6	41.8	10/08/2021 23:15	53.1	60.1	51.4
09/08/2021 23:30	52.4	61.7	50.4	10/08/2021 11:30	50.2	66.1	41.6	10/08/2021 23:30	52.3	58.5	50.4
09/08/2021 23:45	50.6	58.0	48.0	10/08/2021 11:45	50.0	71.3	38.7	10/08/2021 23:45	50.9	57.1	49.0
10/08/2021 00:00	50.1	55.5	47.6	10/08/2021 12:00	49.7	61.4	39.2	11/08/2021 00:00	50.6	69.6	46.7
10/08/2021 00:15	49.4	58.0	44.9	10/08/2021 12:15	49.5	60.1	42.4	11/08/2021 00:15	48.5	59.9	45.0
10/08/2021 00:30	49.4	58.2	46.5	10/08/2021 12:30	49.2	64.2	40.7	11/08/2021 00:30	45.8	59.8	41.5

**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
11/08/2021 00:45	43.1	54.0	35.8	11/08/2021 12:45	51.0	61.3	42.2	12/08/2021 00:45	56.2	60.4	41.8
11/08/2021 01:00	41.9	61.3	35.6	11/08/2021 13:00	52.5	69.0	41.3	12/08/2021 01:00	56.5	59.8	55.1
11/08/2021 01:15	40.0	55.3	34.4	11/08/2021 13:15	52.5	67.6	44.2	12/08/2021 01:15	56.7	60.3	55.5
11/08/2021 01:30	38.1	50.9	34.5	11/08/2021 13:30	51.9	71.8	40.9	12/08/2021 01:30	57.4	60.9	56.2
11/08/2021 01:45	39.1	53.2	33.8	11/08/2021 13:45	52.0	68.5	41.6	12/08/2021 01:45	57.0	62.9	50.7
11/08/2021 02:00	40.3	48.3	32.3	11/08/2021 14:00	52.5	67.9	42.1	12/08/2021 02:00	53.0	59.1	50.3
11/08/2021 02:15	39.4	54.1	28.9	11/08/2021 14:15	49.6	61.2	40.3	12/08/2021 02:15	53.6	58.1	45.8
11/08/2021 02:30	37.4	56.2	28.7	11/08/2021 14:30	52.2	73.8	41.6	12/08/2021 02:30	44.2	50.8	38.8
11/08/2021 02:45	38.8	60.2	28.8	11/08/2021 14:45	52.1	65.9	41.5	12/08/2021 02:45	41.0	51.9	33.9
11/08/2021 03:00	31.4	39.2	27.6	11/08/2021 15:00	50.5	61.5	41.0	12/08/2021 03:00	34.9	44.5	33.4
11/08/2021 03:15	36.9	58.0	25.1	11/08/2021 15:15	50.0	61.9	39.3	12/08/2021 03:15	33.8	48.0	32.3
11/08/2021 03:30	30.4	37.7	26.1	11/08/2021 15:30	50.6	64.8	41.5	12/08/2021 03:30	33.7	47.7	32.0
11/08/2021 03:45	33.1	53.5	25.8	11/08/2021 15:45	50.6	62.1	39.0	12/08/2021 03:45	34.9	51.0	31.5
11/08/2021 04:00	37.6	59.5	24.7	11/08/2021 16:00	52.2	66.3	40.1	12/08/2021 04:00	32.8	46.1	31.3
11/08/2021 04:15	38.6	60.1	24.1	11/08/2021 16:15	58.6	82.5	39.5	12/08/2021 04:15	32.6	39.4	31.3
11/08/2021 04:30	26.6	40.3	23.7	11/08/2021 16:30	60.0	74.4	55.6	12/08/2021 04:30	35.9	54.5	30.8
11/08/2021 04:45	28.5	39.7	24.4	11/08/2021 16:45	57.1	68.7	40.0	12/08/2021 04:45	31.3	38.4	29.8
11/08/2021 05:00	30.9	44.2	26.3	11/08/2021 17:00	50.3	61.9	37.9	12/08/2021 05:00	31.4	40.4	30.0
11/08/2021 05:15	39.6	58.9	27.9	11/08/2021 17:15	50.3	62.7	37.7	12/08/2021 05:15	32.0	44.0	29.5
11/08/2021 05:30	42.9	59.0	28.2	11/08/2021 17:30	51.5	70.8	36.6	12/08/2021 05:30	39.3	61.2	29.9
11/08/2021 05:45	46.4	61.2	29.3	11/08/2021 17:45	50.8	64.0	36.1	12/08/2021 05:45	40.3	59.9	30.0
11/08/2021 06:00	46.1	62.1	29.9	11/08/2021 18:00	50.3	62.6	35.6	12/08/2021 06:00	39.8	56.9	29.6
11/08/2021 06:15	47.3	69.2	29.6	11/08/2021 18:15	48.3	72.4	35.0	12/08/2021 06:15	42.7	68.6	30.7
11/08/2021 06:30	44.8	61.5	31.5	11/08/2021 18:30	48.2	61.7	35.0	12/08/2021 06:30	41.6	60.6	30.7
11/08/2021 06:45	49.2	70.2	32.2	11/08/2021 18:45	48.1	63.1	35.1	12/08/2021 06:45	51.7	70.2	31.9
11/08/2021 07:00	51.1	69.4	32.2	11/08/2021 19:00	49.0	62.1	35.4	12/08/2021 07:00	53.6	74.1	32.4
11/08/2021 07:15	53.6	70.2	34.2	11/08/2021 19:15	50.1	66.5	35.6	12/08/2021 07:15	49.0	67.7	32.8
11/08/2021 07:30	49.4	72.4	37.6	11/08/2021 19:30	47.5	61.2	35.4	12/08/2021 07:30	49.4	67.2	33.1
11/08/2021 07:45	46.8	65.7	38.9	11/08/2021 19:45	48.3	61.5	35.3	12/08/2021 07:45	48.7	63.5	34.7
11/08/2021 08:00	45.2	63.7	38.4	11/08/2021 20:00	50.1	65.2	35.3	12/08/2021 08:00	51.2	68.5	33.5
11/08/2021 08:15	48.0	65.3	34.9	11/08/2021 20:15	49.8	65.0	37.3	12/08/2021 08:15	47.7	63.5	35.7
11/08/2021 08:30	52.7	68.7	35.7	11/08/2021 20:30	49.0	68.5	37.4	12/08/2021 08:30	49.0	68.0	35.8
11/08/2021 08:45	50.0	72.1	40.0	11/08/2021 20:45	53.0	60.8	48.1	12/08/2021 08:45	49.7	64.1	34.7
11/08/2021 09:00	50.0	67.0	40.0	11/08/2021 21:00	52.4	60.7	50.3	12/08/2021 09:00	48.0	60.5	36.1
11/08/2021 09:15	47.9	62.4	35.4	11/08/2021 21:15	52.3	63.4	50.2	12/08/2021 09:15	50.6	63.5	36.8
11/08/2021 09:30	47.8	59.9	38.8	11/08/2021 21:30	52.8	62.5	50.8	12/08/2021 09:30	48.4	62.4	36.4
11/08/2021 09:45	48.1	63.3	36.5	11/08/2021 21:45	52.4	59.3	51.2	12/08/2021 09:45	50.8	63.8	36.1
11/08/2021 10:00	50.6	62.2	39.6	11/08/2021 22:00	52.3	59.1	51.2	12/08/2021 10:00	50.3	63.1	38.6
11/08/2021 10:15	49.7	62.0	41.1	11/08/2021 22:15	53.1	62.8	51.4	12/08/2021 10:15	50.2	62.3	37.6
11/08/2021 10:30	50.2	64.5	41.8	11/08/2021 22:30	54.4	59.3	51.9	12/08/2021 10:30	51.2	63.5	37.9
11/08/2021 10:45	49.6	61.2	41.9	11/08/2021 22:45	54.7	64.0	51.4	12/08/2021 10:45	50.5	62.6	38.4
11/08/2021 11:00	51.4	68.4	43.6	11/08/2021 23:00	55.1	61.3	51.5	12/08/2021 11:00	51.3	61.1	39.1
11/08/2021 11:15	50.5	64.4	40.6	11/08/2021 23:15	55.4	61.6	53.4	12/08/2021 11:15	52.8	62.0	40.2
11/08/2021 11:30	51.3	66.8	39.2	11/08/2021 23:30	55.2	60.9	53.5	12/08/2021 11:30	51.5	61.3	40.8
11/08/2021 11:45	53.3	67.6	40.3	11/08/2021 23:45	53.1	62.8	46.2	12/08/2021 11:45	51.5	62.6	40.8
11/08/2021 12:00	53.9	70.0	42.3	12/08/2021 00:00	53.9	60.8	42.3	12/08/2021 12:00	52.4	65.0	40.4
11/08/2021 12:15	52.4	68.9	41.7	12/08/2021 00:15	56.9	60.2	55.7	12/08/2021 12:15	51.7	61.7	41.6
11/08/2021 12:30	53.4	71.1	41.8	12/08/2021 00:30	57.8	61.0	56.5	12/08/2021 12:30	50.8	63.2	40.5



**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
12/08/2021 12:45	51.1	64.3	40.7	13/08/2021 00:45	52.1	59.1	49.1	13/08/2021 12:45	51.8	63.0	43.0
12/08/2021 13:00	52.3	63.7	42.2	13/08/2021 01:00	52.0	59.0	49.8	13/08/2021 13:00	51.3	64.1	44.4
12/08/2021 13:15	53.0	72.2	43.6	13/08/2021 01:15	52.5	64.5	49.6	13/08/2021 13:15	51.2	63.6	43.9
12/08/2021 13:30	50.8	64.0	41.8	13/08/2021 01:30	51.9	55.6	48.8	13/08/2021 13:30	51.3	68.7	43.6
12/08/2021 13:45	51.0	65.9	43.4	13/08/2021 01:45	52.0	61.7	47.8	13/08/2021 13:45	50.9	62.9	43.7
12/08/2021 14:00	51.7	64.5	43.7	13/08/2021 02:00	43.7	56.8	36.7	13/08/2021 14:00	52.1	66.6	44.8
12/08/2021 14:15	50.7	63.4	41.2	13/08/2021 02:15	40.9	53.3	35.6	13/08/2021 14:15	51.4	61.7	44.4
12/08/2021 14:30	52.0	68.8	41.0	13/08/2021 02:30	49.7	60.9	40.9	13/08/2021 14:30	51.1	61.5	44.2
12/08/2021 14:45	51.3	62.1	40.5	13/08/2021 02:45	50.7	63.6	46.1	13/08/2021 14:45	52.2	66.7	43.5
12/08/2021 15:00	52.0	65.8	41.5	13/08/2021 03:00	52.8	63.5	46.7	13/08/2021 15:00	52.7	71.9	43.3
12/08/2021 15:15	53.3	70.7	42.1	13/08/2021 03:15	51.8	60.4	46.1	13/08/2021 15:15	53.3	70.2	42.7
12/08/2021 15:30	51.3	67.7	41.1	13/08/2021 03:30	53.2	60.2	50.1	13/08/2021 15:30	52.3	63.4	43.4
12/08/2021 15:45	50.6	60.5	41.0	13/08/2021 03:45	51.1	61.4	47.5	13/08/2021 15:45	51.1	64.8	42.3
12/08/2021 16:00	51.8	62.0	41.7	13/08/2021 04:00	49.8	58.4	46.4	13/08/2021 16:00	51.8	65.9	42.3
12/08/2021 16:15	51.7	64.0	40.6	13/08/2021 04:15	44.7	56.1	36.2	13/08/2021 16:15	52.9	68.9	43.0
12/08/2021 16:30	53.5	67.5	40.8	13/08/2021 04:30	40.7	55.6	35.5	13/08/2021 16:30	52.7	69.4	43.1
12/08/2021 16:45	50.7	67.6	39.6	13/08/2021 04:45	41.5	55.4	36.8	13/08/2021 16:45	53.5	73.9	42.7
12/08/2021 17:00	50.9	62.9	40.2	13/08/2021 05:00	42.6	62.3	36.1	13/08/2021 17:00	53.6	71.9	42.7
12/08/2021 17:15	50.8	64.2	38.9	13/08/2021 05:15	43.9	66.3	36.7	13/08/2021 17:15	51.3	69.0	42.3
12/08/2021 17:30	50.3	62.0	39.2	13/08/2021 05:30	43.9	58.6	37.8	13/08/2021 17:30	50.7	66.0	41.3
12/08/2021 17:45	49.8	62.1	38.6	13/08/2021 05:45	46.2	65.4	37.9	13/08/2021 17:45	49.3	60.8	40.2
12/08/2021 18:00	50.6	75.1	37.7	13/08/2021 06:00	44.1	59.4	37.4	13/08/2021 18:00	49.1	62.6	39.3
12/08/2021 18:15	48.4	61.5	37.8	13/08/2021 06:15	45.5	62.2	36.9	13/08/2021 18:15	49.7	63.9	39.4
12/08/2021 18:30	49.0	61.4	37.6	13/08/2021 06:30	46.7	64.0	37.4	13/08/2021 18:30	56.2	81.3	40.4
12/08/2021 18:45	49.0	63.2	38.3	13/08/2021 06:45	50.8	65.7	37.5	13/08/2021 18:45	48.4	61.7	40.3
12/08/2021 19:00	49.6	63.7	38.0	13/08/2021 07:00	48.5	69.2	36.8	13/08/2021 19:00	50.5	65.5	41.0
12/08/2021 19:15	48.5	63.8	38.6	13/08/2021 07:15	45.1	60.7	36.2	13/08/2021 19:15	50.8	67.0	40.5
12/08/2021 19:30	48.8	61.7	39.1	13/08/2021 07:30	46.7	63.1	35.6	13/08/2021 19:30	51.3	73.1	39.0
12/08/2021 19:45	49.6	64.7	39.0	13/08/2021 07:45	47.2	65.8	36.9	13/08/2021 19:45	50.5	66.0	39.2
12/08/2021 20:00	50.1	71.1	39.5	13/08/2021 08:00	44.8	58.9	38.1	13/08/2021 20:00	48.6	62.8	39.5
12/08/2021 20:15	49.8	66.6	38.7	13/08/2021 08:15	50.3	80.4	39.3	13/08/2021 20:15	54.3	82.4	38.1
12/08/2021 20:30	49.4	64.4	39.4	13/08/2021 08:30	47.7	60.8	39.7	13/08/2021 20:30	54.3	70.1	42.8
12/08/2021 20:45	49.7	63.2	44.1	13/08/2021 08:45	48.8	72.0	40.7	13/08/2021 20:45	50.8	63.6	45.1
12/08/2021 21:00	54.2	61.7	48.5	13/08/2021 09:00	49.0	60.2	41.2	13/08/2021 21:00	50.6	59.8	47.4
12/08/2021 21:15	53.1	64.3	48.8	13/08/2021 09:15	48.9	65.7	40.1	13/08/2021 21:15	50.9	67.9	47.6
12/08/2021 21:30	56.4	65.3	52.4	13/08/2021 09:30	49.7	63.5	41.1	13/08/2021 21:30	50.4	59.3	47.1
12/08/2021 21:45	56.5	61.7	51.9	13/08/2021 09:45	51.7	71.5	40.9	13/08/2021 21:45	52.3	61.4	49.4
12/08/2021 22:00	52.6	67.9	50.4	13/08/2021 10:00	49.5	60.4	42.7	13/08/2021 22:00	51.2	60.0	48.7
12/08/2021 22:15	53.0	60.7	51.1	13/08/2021 10:15	49.8	62.8	41.2	13/08/2021 22:15	51.4	58.0	48.8
12/08/2021 22:30	52.1	59.1	50.3	13/08/2021 10:30	52.6	68.9	41.8	13/08/2021 22:30	51.0	58.6	48.6
12/08/2021 22:45	52.6	60.7	50.9	13/08/2021 10:45	50.3	70.7	41.5	13/08/2021 22:45	51.3	60.0	48.9
12/08/2021 23:00	52.6	60.6	51.1	13/08/2021 11:00	49.6	61.6	43.3	13/08/2021 23:00	50.3	58.5	47.8
12/08/2021 23:15	52.5	61.1	50.7	13/08/2021 11:15	50.6	63.0	42.8	13/08/2021 23:15	50.1	59.8	47.4
12/08/2021 23:30	52.1	58.5	50.3	13/08/2021 11:30	51.9	67.9	43.4	13/08/2021 23:30	49.9	61.0	47.7
12/08/2021 23:45	52.4	58.1	48.6	13/08/2021 11:45	51.9	69.4	43.5	13/08/2021 23:45	49.6	65.4	46.9
13/08/2021 00:00	51.7	61.6	47.2	13/08/2021 12:00	51.6	69.2	43.6	14/08/2021 00:00	49.5	54.4	47.6
13/08/2021 00:15	52.2	57.7	49.9	13/08/2021 12:15	51.5	63.4	43.7	14/08/2021 00:15	49.7	59.2	47.1
13/08/2021 00:30	52.3	58.3	50.0	13/08/2021 12:30	51.9	65.8	43.6	14/08/2021 00:30	48.8	54.7	46.6

**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
14/08/2021 00:45	48.6	60.9	46.3	14/08/2021 12:45	50.0	65.3	42.0	15/08/2021 00:45	49.7	64.1	48.3
14/08/2021 01:00	51.4	60.7	47.9	14/08/2021 13:00	50.2	62.3	42.4	15/08/2021 01:00	49.1	57.7	47.4
14/08/2021 01:15	51.6	60.4	48.0	14/08/2021 13:15	50.1	70.0	42.6	15/08/2021 01:15	49.4	56.5	47.8
14/08/2021 01:30	50.8	57.6	46.6	14/08/2021 13:30	49.6	64.5	41.6	15/08/2021 01:30	48.9	59.0	45.1
14/08/2021 01:45	48.8	54.2	45.3	14/08/2021 13:45	49.9	66.7	40.6	15/08/2021 01:45	46.6	54.9	43.5
14/08/2021 02:00	49.1	54.9	45.1	14/08/2021 14:00	48.9	61.7	40.8	15/08/2021 02:00	46.6	53.7	41.8
14/08/2021 02:15	48.8	54.4	45.3	14/08/2021 14:15	49.4	64.6	38.0	15/08/2021 02:15	45.7	59.7	41.1
14/08/2021 02:30	48.8	54.8	44.9	14/08/2021 14:30	48.3	60.3	39.6	15/08/2021 02:30	32.5	44.6	30.9
14/08/2021 02:45	49.6	59.7	45.1	14/08/2021 14:45	52.3	74.5	42.1	15/08/2021 02:45	33.3	42.0	31.2
14/08/2021 03:00	44.5	54.2	35.1	14/08/2021 15:00	49.3	64.9	38.9	15/08/2021 03:00	32.1	38.7	30.7
14/08/2021 03:15	41.8	60.4	31.0	14/08/2021 15:15	48.7	59.4	40.7	15/08/2021 03:15	34.2	41.4	31.3
14/08/2021 03:30	38.4	50.9	30.3	14/08/2021 15:30	62.8	85.6	41.3	15/08/2021 03:30	32.6	39.3	30.6
14/08/2021 03:45	31.8	49.4	29.9	14/08/2021 15:45	50.5	70.4	39.2	15/08/2021 03:45	31.7	43.2	30.2
14/08/2021 04:00	32.2	45.0	30.1	14/08/2021 16:00	47.6	62.1	36.7	15/08/2021 04:00	36.0	60.2	30.6
14/08/2021 04:15	31.8	59.0	29.7	14/08/2021 16:15	49.5	67.3	38.2	15/08/2021 04:15	35.7	56.4	31.0
14/08/2021 04:30	34.9	57.8	29.7	14/08/2021 16:30	49.3	60.6	37.1	15/08/2021 04:30	36.0	56.4	31.1
14/08/2021 04:45	31.6	50.0	29.9	14/08/2021 16:45	50.6	71.8	37.4	15/08/2021 04:45	37.0	56.0	31.7
14/08/2021 05:00	36.2	57.2	30.6	14/08/2021 17:00	48.9	59.6	38.6	15/08/2021 05:00	32.9	42.9	31.8
14/08/2021 05:15	39.7	58.7	31.7	14/08/2021 17:15	51.4	64.6	41.4	15/08/2021 05:15	41.6	65.1	32.2
14/08/2021 05:30	42.5	61.3	32.0	14/08/2021 17:30	50.5	66.1	39.0	15/08/2021 05:30	42.2	65.4	33.2
14/08/2021 05:45	41.5	60.1	32.2	14/08/2021 17:45	56.7	76.9	39.1	15/08/2021 05:45	43.4	60.9	33.6
14/08/2021 06:00	38.2	57.3	32.2	14/08/2021 18:00	48.3	60.7	36.4	15/08/2021 06:00	39.8	57.8	33.6
14/08/2021 06:15	38.7	61.7	31.4	14/08/2021 18:15	47.8	59.7	34.7	15/08/2021 06:15	37.4	63.2	33.7
14/08/2021 06:30	42.5	60.5	31.3	14/08/2021 18:30	47.9	59.7	35.5	15/08/2021 06:30	43.3	62.9	34.0
14/08/2021 06:45	45.1	65.9	30.8	14/08/2021 18:45	50.0	62.1	35.2	15/08/2021 06:45	43.6	59.4	35.2
14/08/2021 07:00	42.2	61.1	30.2	14/08/2021 19:00	47.6	66.8	33.4	15/08/2021 07:00	46.3	65.1	32.6
14/08/2021 07:15	43.4	58.5	38.1	14/08/2021 19:15	48.8	70.4	34.3	15/08/2021 07:15	41.2	58.4	32.6
14/08/2021 07:30	43.8	60.4	37.5	14/08/2021 19:30	49.3	65.5	32.0	15/08/2021 07:30	43.5	63.1	33.1
14/08/2021 07:45	44.9	66.3	37.9	14/08/2021 19:45	49.8	66.8	34.2	15/08/2021 07:45	43.1	62.4	33.4
14/08/2021 08:00	47.1	64.5	38.2	14/08/2021 20:00	48.6	61.3	33.9	15/08/2021 08:00	44.7	61.6	34.7
14/08/2021 08:15	47.7	62.2	39.3	14/08/2021 20:15	48.8	65.0	33.6	15/08/2021 08:15	46.6	63.8	36.5
14/08/2021 08:30	46.4	61.7	40.0	14/08/2021 20:30	46.2	61.4	34.1	15/08/2021 08:30	45.4	59.4	34.7
14/08/2021 08:45	48.6	63.3	41.2	14/08/2021 20:45	49.6	62.5	38.6	15/08/2021 08:45	44.8	60.9	34.6
14/08/2021 09:00	48.9	62.7	41.6	14/08/2021 21:00	49.2	60.5	42.2	15/08/2021 09:00	46.0	60.0	35.6
14/08/2021 09:15	49.6	64.2	42.6	14/08/2021 21:15	50.9	69.0	46.5	15/08/2021 09:15	46.9	61.0	34.7
14/08/2021 09:30	50.3	71.1	40.2	14/08/2021 21:30	51.9	60.2	49.4	15/08/2021 09:30	46.6	60.3	35.1
14/08/2021 09:45	49.5	64.5	38.0	14/08/2021 21:45	52.3	59.9	50.1	15/08/2021 09:45	46.9	60.2	34.9
14/08/2021 10:00	48.4	64.9	38.2	14/08/2021 22:00	51.8	60.9	50.2	15/08/2021 10:00	48.4	61.1	39.3
14/08/2021 10:15	49.5	60.0	39.8	14/08/2021 22:15	52.3	59.3	50.4	15/08/2021 10:15	49.2	61.7	38.9
14/08/2021 10:30	49.0	60.5	41.5	14/08/2021 22:30	52.1	60.2	49.9	15/08/2021 10:30	49.3	60.6	41.3
14/08/2021 10:45	50.6	64.9	42.8	14/08/2021 22:45	50.8	59.2	48.9	15/08/2021 10:45	50.9	68.8	36.6
14/08/2021 11:00	53.3	77.5	42.8	14/08/2021 23:00	49.8	58.1	48.1	15/08/2021 11:00	50.9	62.2	39.5
14/08/2021 11:15	52.6	71.9	39.6	14/08/2021 23:15	51.2	65.4	49.2	15/08/2021 11:15	49.8	60.7	38.8
14/08/2021 11:30	50.4	70.4	39.7	14/08/2021 23:30	50.2	59.6	48.5	15/08/2021 11:30	50.1	64.3	39.9
14/08/2021 11:45	49.1	60.3	41.0	14/08/2021 23:45	50.7	59.6	49.1	15/08/2021 11:45	51.6	71.1	40.4
14/08/2021 12:00	50.3	69.0	42.3	15/08/2021 00:00	50.7	61.3	49.0	15/08/2021 12:00	51.1	62.0	40.7
14/08/2021 12:15	50.0	67.4	42.0	15/08/2021 00:15	50.0	55.5	48.6	15/08/2021 12:15	50.3	72.5	39.2
14/08/2021 12:30	49.2	69.3	39.4	15/08/2021 00:30	50.9	68.0	48.1	15/08/2021 12:30	54.9	76.0	40.6

**COOMBFIELD QUARRY (NORTH)**  
**Noise Assessment for Environmental Permit**  
**Appendix A – Noise Monitoring Data**



Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB	Time	L <sub>Aeq</sub> dB	L <sub>Amax,F</sub> dB	L <sub>AF90</sub> dB
15/08/2021 12:45	51.1	66.1	42.6	16/08/2021 04:45	34.1	54.8	30.0	16/08/2021 20:45	49.7	66.4	42.5
15/08/2021 13:00	50.5	64.1	42.1	16/08/2021 05:00	41.5	65.2	30.5	16/08/2021 21:00	50.9	57.9	47.6
15/08/2021 13:15	54.3	74.4	45.0	16/08/2021 05:15	38.0	59.0	33.1	16/08/2021 21:15	50.7	62.3	47.7
15/08/2021 13:30	58.9	86.4	42.8	16/08/2021 05:30	42.5	64.1	33.9	16/08/2021 21:30	52.8	63.4	50.1
15/08/2021 13:45	51.6	67.4	40.8	16/08/2021 05:45	43.0	58.4	36.6	16/08/2021 21:45	52.6	61.9	50.2
15/08/2021 14:00	51.5	69.2	43.4	16/08/2021 06:00	42.2	62.8	36.4	16/08/2021 22:00	51.6	58.5	49.5
15/08/2021 14:15	52.2	63.4	44.2	16/08/2021 06:15	44.7	64.8	37.2	16/08/2021 22:15	51.9	61.2	49.9
15/08/2021 14:30	52.9	64.7	44.7	16/08/2021 06:30	44.4	62.7	38.0	16/08/2021 22:30	50.9	62.2	48.9
15/08/2021 14:45	51.3	66.5	41.5	16/08/2021 06:45	47.5	69.0	38.5	16/08/2021 22:45	51.2	65.2	48.7
15/08/2021 15:00	50.6	60.3	41.6	16/08/2021 07:00	53.0	71.6	36.9	16/08/2021 23:00	51.6	59.3	49.4
15/08/2021 15:15	50.9	70.0	42.3	16/08/2021 07:15	46.2	58.0	40.2	16/08/2021 23:15	50.1	58.0	45.8
15/08/2021 15:30	50.2	63.1	42.0	16/08/2021 07:30	44.0	59.6	37.7	16/08/2021 23:30	50.4	58.6	46.1
15/08/2021 15:45	51.2	61.5	42.8	16/08/2021 07:45	46.3	59.5	40.0	16/08/2021 23:45	50.5	58.1	45.0
15/08/2021 16:00	51.9	66.1	42.4	16/08/2021 08:00	46.9	64.2	41.2	17/08/2021 00:00	52.6	64.1	47.6
15/08/2021 16:15	49.4	61.0	41.6	16/08/2021 08:15	47.5	62.7	41.6	17/08/2021 00:15	52.0	60.5	46.0
15/08/2021 16:30	51.4	68.7	41.6	16/08/2021 08:30	48.2	64.4	42.3	17/08/2021 00:30	49.6	60.8	44.8
15/08/2021 16:45	60.9	87.5	42.3	16/08/2021 08:45	48.4	62.8	44.2	17/08/2021 00:45	45.6	55.6	37.8
15/08/2021 17:00	51.1	62.9	42.3	16/08/2021 09:00	48.0	65.4	43.2	17/08/2021 01:00	46.2	55.1	41.4
15/08/2021 17:15	56.5	82.2	42.5	16/08/2021 09:15	50.5	67.5	43.2	17/08/2021 01:15	43.9	54.6	36.6
15/08/2021 17:30	50.8	63.1	40.8	16/08/2021 09:30	51.2	72.2	44.0	17/08/2021 01:30	44.7	57.5	38.1
15/08/2021 17:45	48.4	65.9	39.1	16/08/2021 09:45	47.6	67.2	42.5	17/08/2021 01:45	45.1	55.6	39.4
15/08/2021 18:00	48.8	63.1	38.8	16/08/2021 10:00	48.1	60.7	41.5	17/08/2021 02:00	39.0	50.3	36.1
15/08/2021 18:15	49.5	66.7	39.0	16/08/2021 10:15	52.0	69.5	39.5	17/08/2021 02:15	40.7	52.8	34.6
15/08/2021 18:30	48.4	66.7	39.7	16/08/2021 10:30	53.5	74.6	41.9	17/08/2021 02:30	41.2	51.9	34.5
15/08/2021 18:45	46.3	62.8	38.0	16/08/2021 10:45	49.4	68.5	39.3	17/08/2021 02:45	45.7	53.3	39.5
15/08/2021 19:00	47.8	65.5	37.2	16/08/2021 11:00	47.6	62.2	41.0	17/08/2021 03:00	37.0	46.7	31.4
15/08/2021 19:15	46.7	64.9	36.9	16/08/2021 11:15	47.3	59.2	40.4	17/08/2021 03:15	33.6	43.4	30.0
15/08/2021 19:30	48.1	63.6	38.8	16/08/2021 11:30	49.0	58.8	42.9	17/08/2021 03:30	36.8	45.1	32.9
15/08/2021 19:45	48.3	66.7	35.6	16/08/2021 11:45	48.9	61.8	41.7	17/08/2021 03:45	37.3	47.9	32.7
15/08/2021 20:00	45.3	64.8	35.2	16/08/2021 12:00	50.9	69.0	40.0	17/08/2021 04:00	34.2	46.5	30.5
15/08/2021 20:15	44.9	59.3	35.1	16/08/2021 12:15	50.9	65.2	42.9	17/08/2021 04:15	33.5	44.5	30.3
15/08/2021 20:30	43.4	57.8	34.8	16/08/2021 12:30	50.8	68.9	42.5	17/08/2021 04:30	37.1	55.9	31.5
15/08/2021 20:45	48.0	58.9	37.8	16/08/2021 12:45	50.8	73.1	41.4	17/08/2021 04:45	36.4	50.5	31.9
15/08/2021 21:00	51.2	66.8	46.8	16/08/2021 13:00	48.4	62.6	40.3	17/08/2021 05:00	40.9	63.9	30.6
15/08/2021 21:15	52.1	62.9	49.0	16/08/2021 13:15	47.0	59.4	39.4	17/08/2021 05:15	35.3	49.4	31.7
15/08/2021 21:30	53.6	65.0	51.1	16/08/2021 13:30	50.0	66.3	42.7	17/08/2021 05:30	41.7	59.8	33.6
15/08/2021 21:45	53.8	67.9	51.5	16/08/2021 13:45	50.0	65.3	43.2	17/08/2021 05:45	41.8	62.3	34.3
15/08/2021 22:00	53.3	61.6	51.8	16/08/2021 14:00	50.8	65.4	43.5	17/08/2021 06:00	40.9	62.3	33.6
15/08/2021 22:15	53.5	60.2	52.2	16/08/2021 14:15	51.6	71.1	42.5	17/08/2021 06:15	41.2	56.8	34.8
15/08/2021 22:30	52.9	61.5	51.2	16/08/2021 14:30	51.5	71.5	43.9	17/08/2021 06:30	43.8	68.8	34.8
15/08/2021 22:45	53.5	64.4	51.7	16/08/2021 14:45	49.7	66.5	41.2	17/08/2021 06:45	43.6	61.0	35.0
15/08/2021 23:00	53.5	59.5	50.8	16/08/2021 15:00	49.9	65.4	41.7	17/08/2021 07:00	50.6	71.3	36.5
15/08/2021 23:15	54.7	59.0	52.9	16/08/2021 15:15	49.0	64.2	41.1	17/08/2021 07:15	49.6	68.4	39.8
15/08/2021 23:30	54.7	59.0	52.9	16/08/2021 15:30	49.0	64.5	42.8	17/08/2021 07:30	44.6	59.6	39.1
15/08/2021 23:45	54.2	59.0	52.6	16/08/2021 15:45	48.8	59.6	40.9	17/08/2021 07:45	48.6	63.1	40.9
16/08/2021 00:00	54.3	59.3	52.2	16/08/2021 16:00	50.9	66.9	43.0	17/08/2021 08:00	46.9	59.6	40.2
16/08/2021 00:15	53.2	59.4	50.8	16/08/2021 16:15	50.3	68.1	42.3	17/08/2021 08:15	49.7	63.6	42.9
16/08/2021 00:30	52.0	58.7	49.7	16/08/2021 16:30	49.5	65.5	40.1	17/08/2021 08:30	50.9	68.7	37.8
16/08/2021 00:45	50.6	54.7	49.0	16/08/2021 16:45	52.5	83.6	41.8	17/08/2021 08:45	50.0	65.6	37.5
16/08/2021 01:00	50.5	55.0	49.1	16/08/2021 17:00	49.4	66.8	41.5	17/08/2021 09:00	51.8	70.7	38.1
16/08/2021 01:15	50.6	54.6	49.1	16/08/2021 17:15	49.9	74.0	41.5	17/08/2021 09:15	48.8	67.4	38.2
16/08/2021 01:30	51.0	55.2	48.6	16/08/2021 17:30	47.7	59.9	40.1	17/08/2021 09:30	50.5	68.4	39.7
16/08/2021 01:45	47.7	57.6	42.7	16/08/2021 17:45	47.0	58.4	39.6	17/08/2021 09:45	51.2	66.9	40.6
16/08/2021 02:00	46.9	55.5	38.2	16/08/2021 18:00	48.2	64.1	38.4	17/08/2021 10:00	50.4	63.4	41.1
16/08/2021 02:15	41.1	57.7	33.4	16/08/2021 18:15	47.2	58.4	38.3	17/08/2021 10:15	50.8	67.8	41.7
16/08/2021 02:30	37.3	51.9	34.2	16/08/2021 18:30	47.6	59.9	39.8	17/08/2021 10:30	51.5	69.5	41.6
16/08/2021 02:45	33.8	58.8	31.9	16/08/2021 18:45	47.7	66.3	37.6	17/08/2021 10:45	51.9	64.7	43.4
16/08/2021 03:00	33.0	41.9	31.0	16/08/2021 19:00	48.3	71.3	38.8	17/08/2021 11:00	0.0	0.0	0.0
16/08/2021 03:15	33.6	43.0	31.5	16/08/2021 19:15	45.2	57.4	37.5	17/08/2021 11:15	0.0	0.0	0.0
16/08/2021 03:30	34.1	41.0	31.8	16/08/2021 19:30	48.3	73.5	35.9	17/08/2021 11:30	0.0	0.0	0.0
16/08/2021 03:45	36.1	54.0	31.2	16/08/2021 19:45	47.9	62.6	38.3				
16/08/2021 04:00	35.3	49.9	31.3	16/08/2021 20:00	45.6	62.3	35.7				
16/08/2021 04:15	37.0	56.1	32.1	16/08/2021 20:15	46.6	66.9	36.5				
16/08/2021 04:30	32.9	44.8	30.4	16/08/2021 20:30	45.7	66.7	37.0				

**Attended Measurements at Broadcroft**

Tracked Crusher

Noise from the tracked crusher was subjectively considered to be broadband in nature, displaying no tones or whines or other acoustic characteristics of that nature. The machine was operating at a constant output during each measurement. Material was frequently being fed in to the machine by a shovel loader.



Noise Source	Sound Pressure Level (dB) in Octave Bands, Hz							Overall, dB L <sub>pA</sub>
	63	125	250	500	1000	2000	4000	
Tracked Crusher at 8m	93.1	89.6	84.1	81.6	77.3	74.3	71.7	83.8
	93.1	89.8	84.4	82	78.7	75.7	72.9	84.7
	93.1	89.3	83.9	81.4	78.1	74.7	71.7	84.1

Picking Line Output

The picking line is a large conveyor which transports material through a shed / building and recyclable materials are manually picked and sorted appropriately. Metal materials are left on the belt and passed through the building wall, under a magnet and the resultant material is dropped in to a skip, outside.



Noise Source	Sound Pressure Level (dB) in Octave Bands, Hz							Overall, dB L <sub>pA</sub>
	63	125	250	500	1000	2000	4000	
Picking Line @1m	77.7	76.6	76.8	76.5	77.2	76.7	75.7	83.1
	77.4	77.5	80.7	78	79.6	80.8	78.7	86.2

Vibrating Screen

The vibrating screen is loaded at ground level and the material is raised up to the screen by conveyor. Once there, the material is passed over a vibrating grid and smaller materials allowed to pass through. The larger material moves on for additional sorting.

The infeed conveyor is fed by a small telescopic handler with a shovel loader bucket attached. The screen was loaded frequent during the measurements.



Noise Source	Sound Pressure Level (dB) in Octave Bands, Hz							Overall, dB L <sub>pA</sub>
	63	125	250	500	1000	2000	4000	
Vibrating screen at 4m	78.8	81.1	79.5	76.5	73.4	70.6	67.4	79.1
Vibrating screen at 5m	89.5	86.8	88.4	87.3	87.1	85.2	82	91.9
	84.8	85.1	86.5	84.3	84.2	82.4	79.8	89.2