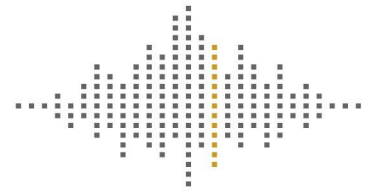


SHARPS REDMORE

ACOUSTIC CONSULTANTS ▪ Established 1990



Report

Brockley Wood Quarry

Noise Management Policy

Prepared by

Gary King MIOA MCIEH

Date 21 September 2022

Project No 2120502

Head Office

Sharps Redmore

The White House, London Road,
Copdock, Ipswich, IP8 3JH

T 01473 730073

E contact@sharpsredmore.co.uk

W sharpsredmore.co.uk

Regional Locations

South England (Head Office),
North England, Wales, Scotland

Sharps Redmore Partnership Limited

Registered in England No. 2593855

Directors

RD Sullivan BA(Hons), PhD, CEng, MIOA, MAAS, MASA;

KJ Metcalfe BSc(Hons), MIOA;

N Durup BSc(Hons), MSc, PhD, CEng, FIOA, MInstP, MASA, MAES;

GJ King MIOA, MCIEH

Company Consultant

TL Redmore BEng, MSc, PhD, MIOA



Contents

- 1.0 Phases of Operation on Site
- 2.0 Generic Causes of Noise Production
- 3.0 Noise Sensitive Receptor Locations
- 4.0 Site Management of Noise production and mitigation
- 5.0 Noise Monitoring Scheme

1.0 Phases of Operation on Site

One of the major issues for the local community, wildlife and environment is the potential negative impact of noise production on various local receptors if it is badly managed during site operations.

These potential adverse impacts can be reduced to a minimum if properly managed by site staff.

The operational life span of the quarry will cover three main phases – the construction phase, operational and extraction phase, and the restoration phase. Noise problems will arise at all these three stages if the following Noise Management Policy is not Implemented.

2.0 Generic Causes of Noise Production

Virtually every aspect of site operations will have the potential to generate differing levels of noise on site, and most of these activities will take place at each of the operational phases outlined above.

Site Operations with the Potential to Create Noise:

- Construction work to build main site access road in and to create site haul roads.
- Excavating, backfilling, and surfacing plant area.
- On Site Traffic and Plant Movements – Cars, LGV s and HGVs , Large Plant and Equipment working on site to move materials around the quarry using the unsurfaced haul roads and dumper routes across each Phase.
- Empty tippers and dumpers moving across site.
- Reversing beepers emitting white noise for Health and Safety reasons.
- Loading and tipping of loads as materials are loaded into HGV bodies and dumper trucks.
- All processing work in the Inert Waste Transfer Station including:
 - Dry processing such as crushing and screening and moving materials between stockpiles and treatment plant.
 - Loading/unloading lorries
 - Washing of virgin and waste for recycling.
 - Formation of stockpiles for pre and post treated materials.
 - Cement batching operations including loading of cement mixers.

3.0 Noise Sensitive Receptors

Uncontrolled noise can affect the following sensitive receptors and cause nuisance, loss of amenity and potential harm issues in the following ways:

Excessive noise to all personnel on site leading to hearing damage, particularly to plant operators working close to machinery and plant without noise mitigation.

Loss of amenity for the nearest residential properties such as Charity Farm and Bentley Old Hall.

Residents closest to quarry entrance during main access road construction period.

Wildlife and environment – disturbance to local wildlife affecting the populations nearest to the working areas of the site.

The nearest noise sensitive receptors are identified Figure 1 below:

FIGURE 1: Location of Noise Sensitive Receptors



4.0 Site Management of Noise and Mitigation

Whilst some noise production from every aspect of onsite work is unavoidable, with competent management by site staff, the negative impacts of uncontrolled noise can be very well mitigated.

To achieve this, the following Best Practises will be adopted as part of everyday site activities and throughout each specific phase of the quarry's life.

Good Site Management, Observation, and Inspection.

The quarry manager and staff will be fully trained and competent in all aspects of nuisance and pollution controls on site.

They will be aware of planning and permitting conditions designed to control noise and use this guidance in their daily inspection routines.

They will undertake observation and regular inspection of work on site.

They will record findings on Record Sheets and the Site Diary - Cross ref to permit and planning conditions.

They will deploy any or all the site mitigation measures if needed, which will include the following:

Mitigation Measures

- Wherever possible, plant, machinery and vehicles will be up to date and replaced every three to four years if economically viable. This is to ensure that they are fitted with the latest noise attenuation features to limit noise production at source.
- Position working plant in the plant area at the lower levels to ensure that noise is to some extent prevented from reaching the sensitive receptors by the depth of the working area and the trees surrounding the site.

- All plant, machinery and vehicles will be subject to a fully compliant maintenance regime to avoid excessive noise production from badly maintained work equipment.
- Static plant will be attenuated at the source of noise production as needed by making use of noise deafening insulation housing as part of the installation building works for the piece of kit.
- Train drivers and plant operators to use machinery without excessive noise eg preventing unnecessarily revving of engines.
- Respect site operating hours to prevent nuisance outside normal working times.
- Adopt speed limits on site roads and enforce.
- Ensure site operational staff use PPE such as Ear defenders where needed.
- Follow a comprehensive site training programme with permanent employees and site visitors to ensure that they are kept up to date and aware of actions to be taken to minimise nuisance from noise.
- Record all training and build a date matrix for renewal and new staff to be included.

Communication with Local Residents and Stakeholders

Be responsive to noise issues and potential complaints from residents or regulatory bodies such as the EA or Planners.

Investigate the origin of the complaint and if valid take urgent action to stop the issue and prevent reoccurrence.

Consider the need for further staff training or amendments to operating procedures and put in place.

Operate an “Open Door “system with all stake holders to build good and ongoing relations between the company and its neighbours.

5.0 Noise Monitoring Scheme

As part of the noise monitoring plan (NMP) it is proposed to carry out a regular noise monitoring at noise sensitive receptors around the site. The following sections outlines details of the noise monitoring scheme, which includes details of how and when noise would be measured, monitoring locations, and reporting of results.

I. How noise would be measured

Noise levels during operation of the site shall be measured during attended monitoring by a competent¹ person using a sound level meter which conform to BS EN 61672-1 Class 1. All equipment should have a valid calibration certificate.²

The measurement microphone and/or meter shall be positioned at 1.5 metres above local ground level, in free-field condition away from any buildings. A field calibration check shall be performed on the measurement system before and after the survey. Details of the field calibration check should be recorded.

¹ Member of Institute of Acoustics (IOA)

² It is recommended that sound level calibrators are calibrated at intervals not exceeding 1 year, conformity of the measuring systems with BS EN 61672-1 is verified at intervals not exceeding 2 years.

The $L_{Aeq,T}$ sound level shall be sampled by the meter for a total period of one hour at each monitoring position. Measurements within the hour shall be recorded at 10-minute intervals. Extraneous events such as bird song, or aircraft noise shall be paused/filtered out of the measurements as far as possible. Details of any events 'paused' out should be noted.

Noise levels should be sampled during the working hours of the site. Monitoring shall be scheduled as far as reasonable possible when the weather conditions are dry and free of precipitation, fog and excessive wind (more than 5m/s). Details of the weather should be determined from site observations and recorded along with site results.

II. Survey Locations

Noise monitoring would be carried out at the following locations:



Reference	Location
NSR1	Tudor House, Old London Road, Copdock
NSR2	Red House, Old London Road, Copdock
NSR3	Hare Cottage, Copdock, IP8 3JS
NSR4	Crope Hall, Charity Lane, Belstead
NSR5	Charity Farm, Charity Lane, Belstead
NSR6	Bentley Old Hall, Old Hall Lane, Bentley

Noise levels should be recorded at 6 month intervals for then life of the workings.

Where due to extraneous noise sources, such as road traffic noise, it is not practicable to determine operational noise levels from site measurement at the noise monitoring location, then measurements will be carried out at a surrogate location closer to noise source and the noise level at the receptor calculated. In such cases the method of calculations shall be reported in detail.

If monitoring shows compliance for the closest/noisiest phases of working then site operator may seek written approval from Suffolk County Council to cease the monitoring programme.

III. How results will be assessed

The permitted levels of routine site-attributable noise will be determined having regard to the national planning guidance (www.gov.uk/guidance/minerals) which provides advice on the assessment of environmental impacts from minerals extraction.

Following completion of the each survey, a report will be prepared including full details of the survey results, details of monitoring equipment, weather conditions and in the event that compliance with the agreed noise criterion is not achieved, details of the cause of the exceedance (if apparent) and the steps taken to investigate and remedy the situation.

The results shall be forwarded to site operator and the planning authority within fourteen working days of completion of the survey.