NOISE MANAGEMENT PLAN

GREAT BILLING QUARRY

MICK GEORGE LTD

OCTOBER 2022

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Revision	Prepared By	Date
1.0	L Jephson BEng (Hons) MIOA	6/10/22

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1. Introduction

1.1. Planning permission for Gt Billing Quarry was granted by Northamptonshire County Council on 13 July 2018 subject to Conditions (Application Ref. WP/17/00686/CRA).

1.2. An Environmental Statement was prepared to accompany the application, which included a comprehensive noise assessment. The assessment demonstrated that the operation of the quarry would not result in significant adverse impacts at surrounding noise sensitive receptors, when assessed against the requirements of minerals planning guidance.

1.3. With regards noise, the following condition was imposed to ensure noise levels were minimised:

Noise

13. Except as otherwise may be agreed in writing by the Minerals Planning Authority:

    i. All plant, equipment and machinery used on site; including vehicular traffic, shall be designed and maintained to reduce noise levels to a minimum and be operated in accordance with manufacturer's instructions.

    ii. All plant, equipment and machinery, including vehicles shall, where capable, be fitted with silencers, baffles, cladding or rubber linings, and be maintained so as to reduce noise to a minimum and operated in accordance with manufacturer's instructions.

    iii. All mobile plant/vehicles operating on the site shall be fitted with white noise audible reversing alarms or other non-tonal reversing alarms, and the operator shall issue instructions to all haulage companies and hauliers using the site that non-tonal reversing alarms shall be fitted and utilised on the site

    iv. The site shall be worked in accordance with the measures set out in Part 1 (Noise), Section 8 of British Standard 5228: 2009 "Noise and Vibration Control on Construction and Open Sites or subsequent edition thereof.

    v. The equivalent sound level (LAeq), measured over any 1 hour time period, attributable to the normal operations on site, as measured free field shall not exceed 55 dBA (1hrLAeq) at the noise sensitive premises identified in the submitted Environmental Statement. For soil stripping and bund formation and removal the equivalent sound level (LAeq), measured over any 1 hour time period as measured free field shall not exceed 70 dBA (1hrLAeq) at any residential property.

1.4. This noise management plan has been prepared to provide further details of the measures to be adopted to control noise levels from site operations.

1.5. The infilling and restoration operations to be carried out following extraction of the sand and gravel will be subject to an Environment Agency Permit and consideration of the current EA guidelines have been made within this document to ensure noise levels associated with the proposed operations do not result in significant adverse impacts.

2. Applicable Standards and Guidance

2.1. Minerals Planning Guidance

2.1.1. The National Planning Policy Framework (NPPF), revised in July 2021 [1], sets out the Government's planning policies for England and how these should be applied.

2.1.2. The purpose of the planning system is to contribute to the achievement of sustainable development and at the heart of the Framework is a presumption in favour of sustainable development.

2.1.3. With regards noise, the NPPF advises that local planning policies and decisions should contribute to and enhance the natural and local environment by:

- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels noise pollution.
- mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development (including cumulative effects) – and avoid noise giving rise to significant adverse impacts on health and the quality of life;
- identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.

2.1.4. The Planning Policy Guidance note on noise, published in March 2014 and updated July 2019 [2], defines potential adverse effects and the required mitigation, as follows:

No Observed Adverse Effect

Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life (no specific measured required to mitigate noise).

Observed Adverse Effect

Noise can be heard and causes small changes in behaviour and/or attitude, eg turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life (mitigate and reduce noise levels to a minimum).

Significant Observed Adverse Effect

The noise causes a material change in behaviour and/or attitude, eg avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area (avoid).

2.1.5. The minerals planning guidance attached to the NPPF relating to noise was updated in March 2014 [3], which covers mineral extraction and related processes, provides guidance and advises upon acceptable levels of noise from site operations.

2.1.6. For normal daytime works the guidance seeks to ensure that the operations do not result in significant adverse effects and advises for normal daytime operations that the following limits should not exceed:

- 10 dB above the background (L_{A90}) noise level; subject to
- a maximum value of 55 dB $L_{Aeq,\ 1\ hour}$ (free field).

2.1.7. Where background noise levels are low, the guidance accepts that it may be very difficult to achieve a limit based upon background + 10 dB(A) without imposing unreasonable burdens on the mineral operator. In such cases, the government guidance clearly advises the limit set should be as near that level as practicable during normal working hours and should not exceed 55 dB $L_{Aeq,\ 1\ hour}$ (free field).

2.1.8. The guidance suggests that in the evening (19:00 – 22:00) $L_{Aeq,\ 1\ hour}$ noise levels should not exceed the background (L_{A90}) noise level by more than 10 dB and during the night-time a limit of 42 dB $L_{Aeq,\ 1\ hour}$ should be adopted.

2.1.9. In addition to the general daytime works, the guidance advises that all mineral operations will have some particularly noisy short-term activities that cannot meet the limits set for normal operations. These include soil-stripping, construction or removal of bunding or spoil heaps and construction of new permanent landforms. A level of 70 dB $L_{Aeq,\ 1\ hour}$ is suggested as a limit for these activities for periods of up to eight weeks in any one year. Where the duration of temporary works may exceed eight weeks it can be appropriate to apply a lower limit for a longer period. The guidance also recognises that, in wholly exceptional cases, where there is no viable alternative, a limit of more than 70 dB $L_{Aeq,\ 1\ hour}$ may be appropriate in order to obtain other environmental benefits.

2.2. <u>British Standard BS 4142</u>

2.2.1. BS 4142 [4] is the British Standard for rating and assessing noise of a commercial or industrial nature and is relevant to the noise associated with the future operation of the site. The scope of the standard includes consideration of sound from mobile plant and vehicles within the site that is an intrinsic part of the overall sound emanating from the premises. The standard does not include consideration of sound from the passage of vehicles on public roads.

2.2.2. BS 4142 is a comparative standard in which the estimated noise levels from the proposed development are compared to the representative / typical background noise level from existing uses.

2.2.3. BS 4142 relates the likelihood of complaint to the difference between the Rating Level of the noise being assessed and the background noise level.

2.2.4. The background noise level is the L_{A90} noise level, usually measured in the absence of noise from the source being assessed, but may include other existing industrial or commercial sounds. The background noise levels should generally be obtained from a series of measurements each of not less than 15 minute duration.

2.2.5. The Rating Level of the noise being assessed is defined as its L_{Aeq} noise level (the 'specific noise level'), with the addition of appropriate corrections should the noise exhibit a marked impulsive and/or tonal component, or should the noise be irregular enough in character to attract attention. The extent of the correction is dependent upon the degree of tonality or character in the noise and is determined either by professional judgement, where the plant is not operational at present, or by measurement.

2.2.6. During the daytime, the specified noise levels are determined over a reference time interval of 1 hour, with a 15 minute assessment period adopted at night.

2.2.7. If the Rating Level of the noise being assessed exceeds the background level by 10 dB or more BS 4142 advises that there is likely to be an indication of a significant adverse impact, depending upon context. A difference between background level and Rating Level of around 5 dB is likely to be an indication of an adverse impact, depending upon context. The lower the Rating Level is, relative to the background noise level, the less likely the specific source will have an adverse or significant adverse impact. Where the Rating Level does not exceed the background noise level is an indication of a low impact, depending upon context.

2.2.8. Where the initial assessment of impact needs to be modified due to the context, all pertinent factors should be taken into account, including:

- The absolute level of sound; and
- Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background.

2.3. <u>EA Guidance</u>

2.3.1. The EA published guidance in relation to noise form permitted activities in July 2021 [5].

2.3.2. The guidance advises that BS 4142 must be used to quantify the level of environmental noise impact from industrial processes, including permitted operations.

2.3.3. Whilst the noise levels attributable to site operations are assessed in accordance with the requirements of BS 4142, the Guidance provides alternative descriptions for potential impacts which includes operational requirements, when certain limits are exceeded.

2.3.4. The Guidance advises how the level of noise impact relates to BS 4142 descriptors, as follows:

Unacceptable level of audible or detectable noise

This level of noise means that significant pollution is being, or is likely to be, caused at a receptor (regardless of whether you are taking appropriate measures).

You must take further action or you may have to reduce or stop operations. The environment agencies will not issue a permit if you are likely to be operating at this level.

The closest corresponding BS 4142 descriptor is ‘significant adverse impact’ (following consideration of the context).

Audible or detectable noise

This level of noise means that noise pollution is being (or is likely to be) caused at a receptor.

Your duty is to use appropriate measures to prevent or, where that is not practicable, minimise noise. You are not in breach if you are using appropriate measures. But you will need to rigorously demonstrate that you are using appropriate measures.

The closest corresponding BS 4142 descriptor is 'adverse impact' (following consideration of the context).

No noise, or barely audible or detectable noise

This level of noise means that no action is needed beyond basic appropriate measures or BAT.

The closest corresponding BS 4142 descriptor is 'low impact or no impact' (following consideration of context).

Low impact does not mean there is no pollution. However, if you have correctly assessed it as low impact under BS 4142, the environment agencies may decide that taking action to minimise noise is a low priority. Note that BS 4142 is unlikely to be the appropriate methodology on its own to assess low frequency noise.

3. Noise Assessment Prepared to Accompany the Planning Application

3.1. Noise Assessment

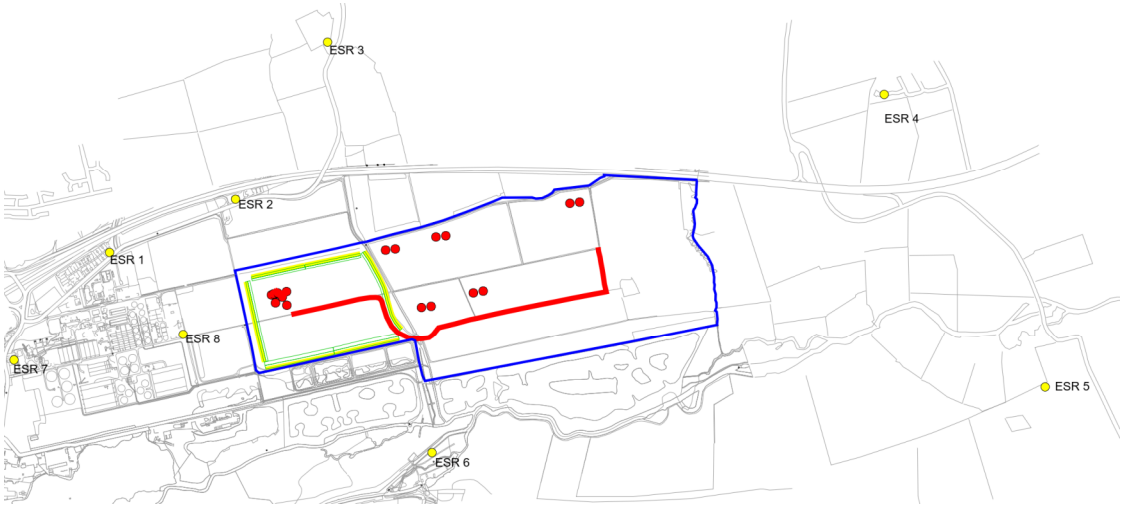
3.1.1. A comprehensive noise assessment was prepared to accompany the planning application for the proposed quarry.

3.1.2. The assessment included: the identification of noise sensitive receptors; baseline monitoring; calculations and assessment of proposed extraction, processing, infilling and restoration operations.

3.1.3. A copy of the noise assessment and proposed phasing is provided in Appendix A, for reference.

3.2. Noise Sensitive Receptors

3.2.1. There are a number of noise sensitive receptors surrounding the quarry, which were identified within the ES, as indicated below:



Location	Address	Grid Reference		Closest Distance to Extraction / Restoration Operations [m]
		Easting	Northing	
ESR 1	Lower Ecton Lane Caravan Park	481870	262258	1050
ESR 2	Esso Nene Valley Way	482404	262494	570
ESR 3	96 High Street Ecton	482796	263152	840
ESR 4	22 Pynkeny Close	485101	262947	900
ESR 5	Eden House, 366 Grendon Road	485812	261710	1500
ESR 6	57 Cogenhoe Mill Caravan Site, Mill Lane	483302	261489	250
ESR 7	21 Crow Lane, Little Billing	481465	261811	1500
ESR 8	Great Billing WRC	482182	261935	900

Table 3.1 Noise Sensitive Receptors

3.3. Baseline Noise Monitoring

3.3.1. Baseline noise monitoring was carried out to establish the prevailing background noise levels, upon which appropriate noise limits were established in accordance with the MPPG.

3.3.2. The background noise surveys were carried out during 2016.

3.3.3. At the majority of the measurement locations, background noise levels were noted to be principally attributable to traffic travelling along the A45, which runs directly to the north of the quarry. Given that traffic volumes will have likely increased since 2016, it is considered that the baseline noise levels monitored remain applicable to the present period and may be marginally lower than present, taking account of potential increases in road traffic. The baseline levels monitored therefore represent likely worst case conditions.

3.3.4. Noise measurements were made at 6 locations, representative of the noise sensitive receptors identified in Table 3.1 during daytime periods representative of the operating hours for the quarry. Details of the measurement exercise are provided in Appendix A. The survey indicated the following noise levels.

Measurement Location	Representative of NSR	Average Measured $L_{Aeq,T}$ [dB]	Lowest Measured L_{A90} [dB]
ML1	ESR 7	71	59
ML2	ESR 1, ESR 2, ESR 8	72	67
ML3	ESR 3	58	47
ML4	ESR 6	53	45
ML5	ESR 5	69	45
ML6	ESR 4	51	46

Table 3.2 Summary of Baseline Noise Monitoring

3.3.5. The table above indicates the lowest background noise levels were equivalent to or above 45 dB L_{A90}. On this basis, operational noise limits, based upon the MPPG, associated with the normal operations, were defined to be 55 dB $L_{Aeq,\ 1\ hr}$, which is a limit equivalent to or below a level of 10 dB(A) above background, thus ensuring that the operations did not result in significant adverse impacts.

3.4. Calculation of Noise Levels

3.4.1. Noise levels associated with the site operations were calculated for each main phase of the development. The operations modelled included extraction, processing, infilling and restoration, the latter relating to the permitted operations.

3.4.2. The noise levels calculated, which are presented in Appendix A, are summarised in Table 3.3.

Scenario	Noise Level at Sensitive Receptor Locations [dB $L_{Aeq,1hr}$]							
	ESR 1	ESR 2	ESR 3	ESR 4	ESR 5	ESR 6	ESR 7	ESR 8
1: Year 5 Extraction Phase 2, Restoration Phase 1	40.1	45.8	36.4	29.8	26.3	43.7	37.1	46.9
2: Year 7 Extraction Phase 4, Restoration Phase 1, 2 and 3	40.2	45.8	37.0	36.6	30.2	43.5	37.2	46.9
3: Year 9 Extraction Phase 6, Restoration Phase 3, 4, and 5	40.1	45.8	37.2	36.8	30.4	40.6	37.1	46.9
4: Year 11 Extraction Phase 8, Restoration Phase 6 and 7	40.4	46.1	38.1	31.2	26.4	40.7	37.4	47.0
5: Year 14 Extraction Phase 10, Restoration Phase 6, 7, 8, and 9	40.6	46.3	39.4	32.1	28.1	42.5	37.8	47.1
6: Year 14 Extraction Phase 10, Restoration Phase 6, 7, 8, and 9, No bunds other than around the Plant and Operations Area	40.6	46.4	40.7	32.1	28.1	44.6	37.8	47.2

Table 3.3 Calculated Noise Levels

3.5. Assessment Against Planning Guidance

3.5.1. The calculated noise levels were assessed against the requirements of the MPPG, which concluded that the noise criteria of 55 dB $L_{Aeq,\ 1\ hr}$ would not be exceeded, thus ensuring the operations did not result in significant adverse impacts.

3.5.2. Noise levels attributable to the site operations were therefore considered to be acceptable and an appropriate planning condition imposed.

3.6. Assessment Against EA Guidance

3.6.1. The EA require an assessment of noise levels against the requirements of BS 4142 and the EA specific criteria to be provided as part of a permit application.

3.6.2. The calculated noise levels presented in Table 3.3 have therefore been assessed against this guidance. Note that the calculations include both the proposed permitted operations and the other site operations not covered by the permit (extraction and processing). An assessment using these results will therefore present worst case conditions and consider the cumulative noise from the overall quarry operation.

3.6.3. Noise from the proposed operations would not be tonal or impulsive in nature. The noise generated would also not be characteristic in nature, as the main sources of noise would be associated with the operations of the engines on the plant, which has similar characteristics to the road traffic noise, which was identified to be the main existing noise source in the surrounding area.

3.6.4. Despite the noise not being characteristic in nature, the EA normally require a 3dB 'other correction' to be applied to the calculated noise levels when determining the rating level. To provide a worst case assessment the correction has been applied.

3.6.5. The calculated rating levels have been assessed against the prevailing background noise levels presented in Table 3.2, with the level differences calculated presented below.

Scenario	Difference Between Rating Level and Background Noise Level [dB]							
	ESR 1	ESR 2	ESR 3	ESR 4	ESR 5	ESR 6	ESR 7	ESR 8
1: Year 5 Extraction Phase 2, Restoration Phase 1	-24	-18	-8	-13	-16	2	-19	-17
2: Year 7 Extraction Phase 4, Restoration Phase 1, 2 and 3	-24	-18	-7	-6	-12	2	-19	-17
3: Year 9 Extraction Phase 6, Restoration Phase 3, 4, and 5	-24	-18	-7	-6	-12	-1	-19	-17
4: Year 11 Extraction Phase 8, Restoration Phase 6 and 7	-24	-18	-6	-12	-16	-1	-19	-17
5: Year 14 Extraction Phase 10, Restoration Phase 6, 7, 8, and 9	-23	-18	-5	-11	-14	1	-18	-17
6: Year 14 Extraction Phase 10, Restoration Phase 6, 7, 8, and 9, No bunds other than around the Plant and Operations Area	-23	-18	-3	-11	-14	3	-18	-17

Table 3.4 Assessment Against Background Noise Levels

3.6.6. The table above indicates that the operational noise levels would remain generally substantially below the prevailing background noise levels. The assessment on this basis would indicate that the operation would result in no noise or barely audible levels of noise.

3.6.7. Higher noise levels are anticipated at ESR 6, Cogenhoe Mill Caravan Park, which is located to the south of the quarry and closest to the proposed operational areas. The assessment above still indicates the potential for low impact, with rating noise levels not exceeding a level of more than 3 dB(A) above background. The assessment at this location would also indicate that the operation would result in no noise or barely audible levels of noise.

3.6.8. An assessment against the EA guidance would advise that **no action is needed beyond basic appropriate measures or BAT**.

4. Management and Control of Noise Levels

4.1.1. The assessment presented in Section 3 indicated that the noise levels at surrounding properties with the mitigation measures proposed would result in acceptable noise levels, with no specific measures identified to reduce noise levels.

4.1.2. The quarry manager will have responsibility for ensuring that nuisances and hazards arising from the operation of the site due to noise are minimised.

4.1.3. Appropriate management and control measures will be implemented to ensure that noise levels attributable to the operation of the site were minimised. Measures that could be adopted include:

- The plant to operate only during the permitted hours of operation, as follows:
    - 07:00 – 18:00 hours Mondays to Fridays;
    - 07:00 – 13:00 hours Saturdays;
    - No working on Sundays, Public or Bank Holidays.
- Regular inspection of the plant and equipment, with a log of the dates of the inspections maintained on site. Any defective parts would be identified and repaired / replaced as soon as possible and ideally during the next scheduled maintenance period;
- All mobile plant / vehicles operating on site shall be fitted with white noise audible reversing alarms or other non-tonal reversing alarms;
- Hauliers using the site will be required to be fitted and use non-tonal reversing alarms;
- Engines on mobile plant and vehicles parked on site to be switched off when not in use;
- Noise levels attributable to the operation of any additional fixed or mobile plant to be assessed prior to the installation / operation commencing;
- When positioning noisy equipment, consideration will be given to the proximity of receptors and the prevailing wind direction;
- The imposition of a speed limit for vehicles on site will reduce noise associated with high engine speeds and excessive braking;
- All personnel will be trained in the need to minimise noise and will be responsible for monitoring and reporting excessive noise when carrying out their everyday roles;
- Regular liaison will be maintained with neighbours to ensure they are notified in advance of activities, which may give rise to increased noise levels.

5. Noise Monitoring

5.1. Regular Inspection/Monitoring

5.1.1. The site manager will ensure that regular inspections associated with site operations and to identify any particular operations / plant, which may be generating excessive levels of noise.

5.2. Quantitative Noise Monitoring

5.2.1. Attended noise monitoring will be carried out if it is identified that problems are being caused, following receipt of a justified complaint and to demonstrate conformance with any noise levels imposed by the planning consent.

5.2.2. Noise monitoring would normally be carried out during normal working hours on a weekday between 07:00 – 18:00 hours.

5.2.3. Noise measurements would normally be made at the locations identified in Section 3.

5.2.4. The monitoring positions used would be at publicly accessible locations as close to each property as possible, where the noise levels monitored were considered to be representative of those at the adjacent dwellings.

5.2.5. At each location, two non-concurrent 15 minute attended noise measurements would normally be made, whilst the site was operational.

5.2.6. The measurements would be made at a freefield location (at least 3.5 metres from the property facade) and a height of 1.2 - 1.5 metres above ground level. Where it was necessary to make measurements adjacent to a property façade or other reflecting surface (i.e. at a distance of 1 metre from the façade or fence), a correction of -3dB(A) would be made to the measured values to convert between façade and equivalent freefield levels.

5.2.7. The measurements would be made using a Sound Level Meter designed to a minimum Class 2 specification in accordance with BS-EN 61672, which would be field calibrated before and after each exercise using a suitable acoustic calibrator. Should the two calibration levels drift by more than 0.5 dB, the measurements would be discarded and the exercise repeated.

5.2.8. The surveys would normally be carried out during dry conditions and when wind speeds averaged less than 5 m/s, to ensure any interference on the microphone was minimised.

5.2.9. Measurements would only be taken during periods of normal operation (e.g. excluding periods of plant maintenance and breakdowns) and when the site was fully operational.

5.2.10. For each measurement, the following parameters shall be recorded:

- measurement position;
- $L_{Aeq,\ 15\ minute}$ L_{A90} and $L_{Amax,F}$ noise levels;
- weather conditions, wind speeds and direction;
- activities being carried out on site; and
- other influences on noise levels.

5.2.11. Where the measurements obtained were clearly influenced by noise from other sources (e.g. road traffic), if possible, the extraneous noise would be paused out of the measurement using the pause function on the sound level meter (only possible if the events are isolated) and a note made, or a note made to the effect that the other sources of noise were identified to be the principal noise source. If the latter were the case, a note would be made regarding the audibility of operations within the quarry and professional judgement used to evaluate whether the noise levels measured attributable to the operation of the quarry were within the noise limits.

5.2.12. The measured noise levels would be assessed against the noise limits specified within Condition 13 of the planning permission and against the EA guidance to ensure the operations were not resulting in unacceptable levels of noise.

5.2.13. Where the measurements indicate that the noise limits were exceeded from site operations, the source of the noise should be identified and the operator should seek to minimise noise from that source, using Best Practicable Means, to reduce noise levels below the limits specified above.

5.2.14. The mitigation, which could include reduction at source or by additional bunding for example, should be agreed in writing with the Environment Agency and Minerals Planning Authority and implemented within a period of 8 weeks of the monitoring exercise. Following completion of the works, the measurement exercise would be repeated to ensure that the limits are achieved, and further works carried out if required.

5.2.15. Records of each noise monitoring exercise would be available for inspection within the site office within a period of 14 days from completion.

6. Action Plan and Complaints Procedure

6.1.1. If a noise problem is noticed or a complaint received, it will be immediately reported to the site manager or the next level of management if they are unavailable.

6.1.2. The source of the problem will then be investigated, normally by a visit to the complainant's property within a period of 48 hours of the complaint being received. The manager would undertake a subjective assessment of the noise giving rise to the complaint and undertake remedial action where necessary to reduce the noise.

6.1.3. Should the quarry manager consider the complaint to be justified, the EA would be informed of the complaint within a period of 7 days of the complaint having been received and a noise monitoring exercise carried out in accordance with the above scheme, within a period of 2 weeks of the complaint.

6.1.4. In the event that noise derived from the site giving rise to the complaint is justified and the noise levels found to be above the appropriate noise limits, action will be taken without delay. The remedial action will be related to the meteorological conditions and the high sensitivity receptors. The following remedial action may be appropriate: -

- Relocate landfilling operations pending change in wind direction;
- Relocate plant and equipment to less sensitive locations;
- Construct or erect acoustic bunds, barriers or screens;
- Replace noisy plant and equipment with quieter models;
- Undertake maintenance on equipment that will reduce noise levels; and
- Modify plant to incorporate noise suppression equipment.

6.1.5. Each complaint would be logged using the complaints form provided in Appendix A, which will include:

- The results of inspections and monitoring carried out by installation personnel;
- Wind speed and direction;
- Problems including date, time, duration, prevailing weather conditions and cause of the problem;
- Complaints received including address of complainant;
- Details on the corrective action taken, and any subsequent changes to operational procedures; and
- An evaluation of the effectiveness of the techniques used.

6.1.6. The complaints log will be held within the Managers Office and made available to the EA upon request.

References

1. Ministry of Housing, Communities and Local Government. National Planning Policy Framework. July 2021.

2. Department for Communities and Local Government. Planning Practice Guidance. Noise. 6 March 2014, last updated 22 July 2019.

3. Department for Communities and Local Government. Planning Practice Guidance. Assessing Environmental Impacts from Minerals Extraction. Revision Date 6 March 2014.

4. British Standards Institute. Methods for Rating and Assessing Industrial and Commercial Sound. BS 4142:2014 + A1:2019.

5. Environment Agency. Noise and Vibration Management: Environmental Permits. Published 23 July 2021.

Appendix A
ES Noise Assessment and Phasing Plans

(Attached as Separate Documents)

Appendix B
Complaint Reporting Form

Gt Billing Quarry

Noise complaint report form	Date:	Ref. No.
Name and address of complainant		
Tel no. of complainant		
Time and date of complaint		
Date, time and duration of offending noise		
Weather conditions (e.g., dry, rain, fog, snow)		
Wind strength and direction (e.g. light, steady, strong, gusting)		
Complainant's description of noise (e.g., hiss, hum, rumble, continuous, intermittent)		
Has complainant any other comments about the offending noise?		
Any other previous known complaints relating to installation (all aspects, not just noise)		
Any other relevant information		
Potential noise sources that could give rise to the complaint		
Operating conditions at the time offending noise occurred		
Action taken:		
Final outcome:		
Form completed by	Signed	