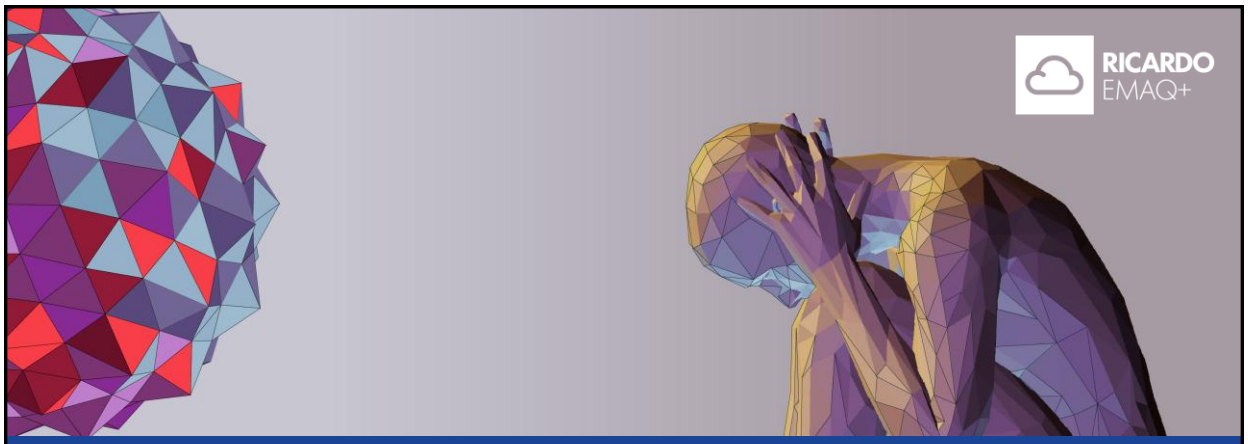


Essentials of Noise 5

Preparing & Evaluating Noise Reports

July 2025

1

RICARDO
EMAQ+

Tony Higgins

- Experienced EHO >30 years
- Former EH Manager Telford & Wrekin
- Environmental Consultant >15 years
- Expert Witness Court/Public Enquiry
- Major Applications
- ES
- Trainer with EMAQ Since 2000

01235 753620

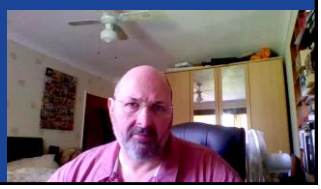
emaq@ricardo.com

Ian Marriner

- Experience EHO >30 years
- Law Degree
- Specialist in EH Procedures and Delivery
- Expert Witness Court/Public Enquiry
- Quality Systems Auditor
- Experienced Trainer

01235 753620

emaq@ricardo.com



2

3

Support with LAQM Duties

RICARDO EMAQ+

Contact EMAQ+ emaq@ricardo.com if you require support with your LAQM duties including:

Preparing your:

- Annual Status Report (ASR)
- Air Quality Action Plan (AQAP)
  - Including source apportionment
- Air Quality Strategy (AQS)
- Air Quality Management Areas (AQMAs)

Considering your:

- Consultation and Community Engagement
- Revocation
- Setting Boundaries and Tackling Uncertainty
- Smoke Control Areas

All EMAQ+ members will be eligible for a **discount** for any LAQM support secured with our experts from Ricardo, or you can have **free training credits** if you prefer.

If you would like to arrange a training class in your area, please contact our training team:

01235 753620 emaq@ricardo.com

4

Air Quality Monitoring

At Ricardo we have a dedicated team of AQ specialists and look forward to helping you with any of your air quality challenges:

- **Monitoring station Data Management and QC audits required by LAQM TG (22)**
- **Local site operations (LSO)**
- **Website and bespoke analysis and reporting**
- **Short term monitoring surveys**
  Installation through to reporting
- **Air quality forecast and alerts, public sign up**

- **Lower cost sensors**
  Hire, QA/QC and correction to nearer reference monitoring. Network management
- **Mobile Monitoring**
  Point source and concentration contour mapping
- **Diffusion tube monitoring/surveys**
  Purchase, exposure/collection, bias correction

For further information please get in touch with David Madle, Associate Director, Air Quality Monitoring
07968707279
david.madle@ricardo.com

5

Programme of the day

Introduction

Session 1: Getting the Legal's Right

Session 2: Preparing and Evaluating Noise Reports Key Elements

Session 3: Noise Management Plans

Session 4: Discharge of Statutory Duty - Statutory Nuisance

Session 5: Wording Notices and Conditions

Session 6: Final Case Study Construction Noise

6

EMAQ+ Essentials of Noise

- The course builds on and strengthens core EMAQ materials & introduces the professional experience of acoustic professions from a range of associates, ranging from consultants, to equipment manufacturers and noise modelling specialists.
- It is expected that there will be a partnership between an individual delegate and her/his sponsoring authority or organisation.
- There will be 5 “stand-alone” seminars that, together, comprise a complete ‘Essentials of Noise’ Training Course:
  - **Noise 1 – Introduction to Sound**
  - **Noise 2 – Introduction to Legislation and Controls**
  - **Noise 3 – Noise Impact Assessments**
  - **Noise 4 – Noise Modelling and Mitigation**
  - **Noise 5 – Preparing and Evaluating Noise Reports**

7

EMAQ+ Essentials of Noise

- Curriculum is based on the some key consolidated issues outlined in IOA Diploma Training course outline, and the Certificate on Noise and Environmental Assessment (CCNEAR) updated to reflect the requirements of regulators. The course…
- Integrates new legislation, guidance and Better Regulation on noise.
- Combines knowledge with practical experience of regulation and noise with technical knowledge for key areas of acoustics.
- Provides evidence of an individual’s ability to understand and apply noise evaluation techniques and outcomes using regulatory tools.
- Provides practical experience assessing noise reports.
- Builds the individual confidence to operate effectively.

8

EMAQ - Essentials of Noise

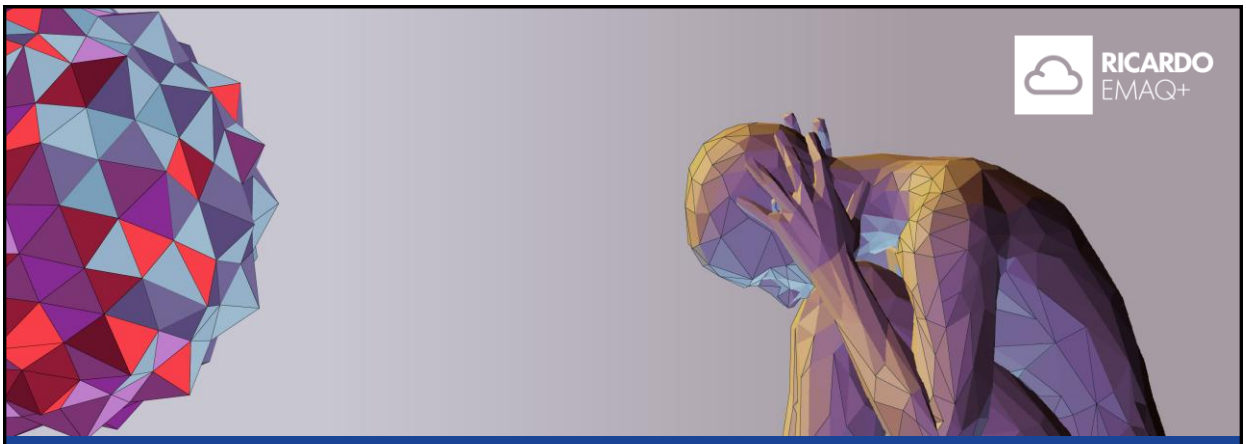
- A Certificate in Environmental Noise Regulation will then be issued to those who have:
  - Registered;
  - Identified a supervisor;
  - Gained all 5 credits; passed all 5 knowledge checks (each of >75%, 2 hours, open book)
  - Paid the fee to take the on-line 'Proficiency Test';
  - Successfully sat the 'Proficiency Test' designed to show a co-ordinated knowledge of all the aspects of EoN programme; (75%, 2 hours, all modules, open book);
  - Supervisor has:
    - verified the bona fides of the candidate and that the test was undertaken under the required conditions;
    - confirmed that the candidate has had experience of the practical elements of noise regulation listed in their development plan.

9

Note on Scope of Today's Course

- Some of the seminars in the " The Essentials of Noise" series of courses cover a very wide subject area.
- This is particularly the case with those concerned with legal and technical matters, such as today's seminar.
- Consequently, to fit the time frame of 1 day, only overviews can be covered. (If you have general questions, please feel free to send an email to emaq@ricardo.com).
- However, more detailed technical seminars will be available later as part of the Normal EMAQ training offerings and as Toolbox Talks.

10



Essentials of Noise 5

Session 1: Getting the Legal's Right

1

Conditions and Requirements

- The principles of good regulation apply to all regulatory decisions and set down five principles against which decisions will be judged.
- These principles are:
  - Proportionality;
  - Accountability;
  - Consistency;
  - Transparency; and
  - Targeting.
- These principles apply to all decisions, irrespective of the area of regulatory control and have been incorporated into the Regulators' Code.

2

The Planning Regime

- Most “development” requires planning permission.
- Development involves a change in physical form or use and is defined as:
  - “Carrying out building operations, engineering, mining operations and other operations in, on, over and under land, or the making of any material change of use of any building or other land”;
- Minor changes are often allowed under “permitted development rights” as they will have little or no impact on the neighbourhood.
- The Government are increasingly looking to streamline the planning process and encourage development.

Source: Microsoft Images

3

The Planning Regime

- Permitted development rights (PDR).
- Able to make changes without requiring planning permission:
  - Can relate to building operations, such as extensions to domestic properties;
  - Can relate to changes of use.
- PDR can be suspended either generally or on a site specific basis.
- For some PDR there is still the need for the planning authority to approve the technical detail of the change – referred to as prior approval. Can be refused.

Source: Microsoft Images

4

Planning Applications

- There are three types of planning application:
  - Full application – plans and drawings cover all planning aspects of the development;
  - Outline application – decision on the general principles of how and to what extent and nature a site can be developed;
  - Reserved matters application – relevant detailed plans following on from an approval of outline planning permission. Covers matters such as layout, appearance, scale of buildings, etc., access and landscaping.

Source: Microsoft Images

5

Material Considerations – 'Detriment to Amenity'

- The NPPF often uses the phrase 'adverse impacts on health and the quality of life' rather than using the term amenity.
- *"Decisions should prevent new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality", and*
- "remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land", where appropriate. (National Planning Policy Framework (NPPF) para 187) updated as at December 2024*.
- A lesser standard than statutory nuisance, and a proactive judgement, but it needs **evidence** to support it.
- Not always a simple case of using 'existing legislation' to cover problems!

6

Examples of Grounds for Refusal

- Noise (PPG – Noise):
  - No observed effect level (NOEL);
  - Lowest observed adverse effect level (LOAEL);
  - Significant Observed Adverse Effect Level (SOAEL).
- **Contrary to a Local Plan Policy.**

- If you want to refuse, you must find a policy to justify the refusal.

Source: .GOV.UK website

7

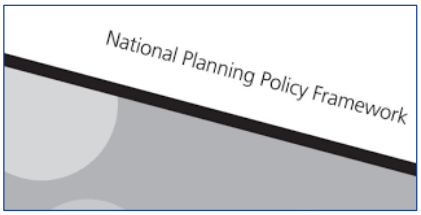
Planning Conditions

Para 56 of the NPPF update December 2024*

"*Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or obligations*".

Para 57 NPPF update December 2024*

"Conditions that are required to be discharged before development commences should be avoided, unless there is a clear justification".



8

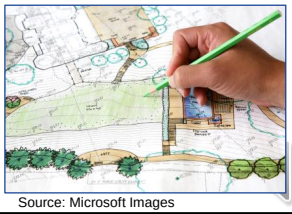
Planning Conditions

- Paragraph 57-58 of the NPPF set out 6 tests: update December 2024*
- **Necessary:**
  - Would the app be refused if condition not attached?
- **Relevant to planning.**
- **Relevant to the development:**
  - Must relate to planning and the specific development, not an adjoining site etc.
- **Reasonable in all respects:**
  - Not make it impossible to run the business properly.
- **Precise:**
  - Is it clear exactly what is meant by the condition?
- **Enforceable:**
  - Must be possible to identify a breach of the condition.

9

Planning Conditions

- Guidance should not be used generically in the wording of planning conditions, (remember the need to be precise).
- CIEH Working Group – example conditions (link).
- Better to include reference to guidance as a supporting 'informative'.
- Don't duplicate existing pollution (EPR) controls (para 201 NPPF) update December 2024* Planning is about the acceptable use of land rather than control of processes or emissions.
- Check any wording suggested by a developer meets the NPPF tests.
- Use adapted 'model' conditions if possible.



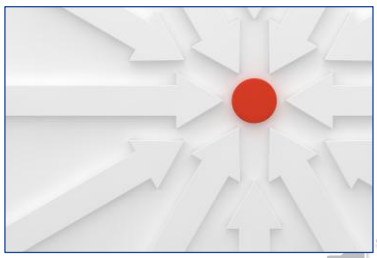
Source: Microsoft Images

10

Planning Conditions

- Keep conditions consistent – use standard/model conditions wherever possible (New CIEH Working Group – Example Planning Conditions).
- Always include reason – makes condition viable.
- Ideally include reference to the relevant planning policy.
- Think carefully and discuss with colleagues if necessary.
- Make sure conditions meet the tests! (sweet spot!)

- We will review this again later!



Source: Microsoft Images

11

Planning Conditions

- Informatives represent nonbinding ‘advice’. They are not conditions and are not enforceable.
- Attached to the planning permission for all to see.
- Provide a useful way of ‘reminding’ applicant or developer that planning permission does not provide indemnity from action under other legislation.
- Provide a good way to advise on what actions may be required to meet a particular planning condition, but if mandatory then include within a condition.
- Allows reference to ‘good practice guides’.

Source: Microsoft Images

12

Examples of Conditions

- **Scenario 1 – An application for a new industrial development with fixed machinery and external ventilation plant.**
- **Suggested condition.**
- "The rating level of noise emitted from the proposed plant should be determined in accordance with BS4142: 2014 Methods for rating and assessing industrial and commercial sound. The rating level of noise measured 1 metre from the nearest noise sensitive façade should be below the existing background LA_{90} noise level during the noise time period (23:00 – 07:00). If any of the plant has tonal or impulsive characteristics, then the rating level should be corrected by +5dB(A) to reflect the likelihood of the disturbance."

13

Examples of Conditions

- **Scenario 1 – An application for a new industrial development with fixed machinery and external ventilation plant.**
- **Suggested condition.**
- "The rating level of noise emitted from the proposed plant should be determined in accordance with BS4142: 2014 Methods for rating and assessing industrial and commercial sound. The rating level of noise measured 1 metre from the nearest noise sensitive façade should be below the existing background LA_{90} noise level during the noise time period (23:00 – 07:00). If any of the plant has tonal or impulsive characteristics, then the rating level should be corrected by +5dB(A) to reflect the likelihood of the disturbance."

Unreasonable – It's impossible to measure a source noise at a noise level below existing background; Is access to 1m from the nearest façade possible?; The way the condition is drafted requires a measurement period of 8hours.

14

Examples of Conditions

- **Scenario 1 – An application for a new industrial development with fixed machinery and external ventilation plant.**
- **Suggested condition.**
- "The rating level of noise emitted from the proposed plant should be determined in accordance with BS4142: 2014 Methods for rating and assessing industrial and commercial sound. The rating level of noise measured 1 metre from the nearest noise sensitive façade should be below the existing background LA_{90} noise level during the noise time period (23:00 – 07:00). If any of the plant has tonal or impulsive characteristics, then the rating level should be corrected by +5dB(A) to reflect the likelihood of the disturbance."

Necessary – The final sentence is unnecessary.
Precise – The rating level in the final sentence reflects guidance in a previous version of BS4142.

15

Examples of Conditions

- **Scenario 1 – An application for a new industrial development with fixed machinery and external ventilation plant.**
- **Suggested condition.**
- "The rating level of noise emitted from the proposed plant should be determined in accordance with BS4142: 2014 Methods for rating and assessing industrial and commercial sound. The rating level of noise measured 1 metre from the nearest noise sensitive façade should be below the existing background LA_{90} noise level during the noise time period (23:00 – 07:00). If any of the plant has tonal or impulsive characteristics, then the rating level should be corrected by +5dB(A) to reflect the likelihood of the disturbance."

Reason - No reason stated.

16

Examples of Conditions

- **Scenario 1 – An application for a new industrial development with fixed machinery and external ventilation plant.**
- The rating level (L_{ArTr}) of the noise emitted from the proposed development shall not exceed the existing background noise level ($L_{A90,T}$) by [specify level – usually either 3 or 5dB]. The rating level shall be determined by measurement or calculation at the boundary of the nearest noise sensitive premises or at another location that is agreed with the Local Planning Authority. Measurements shall be made in accordance with BS 4142: 2014 Methods for rating and assessing industrial and commercial sound. Where the background noise level shall be expressed as an LA_{90} 1 hour and the ambient noise levels shall be expressed as an L_{Aeq} 1 hour during the daytime [07:00-23:00] and shall be expressed as an L_{A90} and L_{Aeq} 15 minutes during the night [23:00-07:00].
- Reason: To protect the amenity of the locality, especially for people living and/or working nearby, in accordance Local Planning Policy.

17

Examples of Conditions

- **Scenario 2 – A change of use from retail to bar/club within an urban centre with some residential above shop premises**.
- **Suggested condition.**
- “The proposed development includes a bar and night club, which are inherently noisy and likely to produce amplified music/entertainment. A Noise Impact Assessment (NIA) should be undertaken to predict the effect of the development as a whole on the surrounding area. The NIA should rank the noise sources and associated activities, their location on a plan, the duration of the specific noise and the predicted noise levels at the various noise sensitive properties.”

18

Examples of Conditions

- **Scenario 2 – A change of use from retail to bar/club within an urban centre with some residential above shop premises**.
- **Suggested condition.**
- "The proposed development includes a bar and night club, which are inherently noisy and likely to produce amplified music/entertainment. A Noise Impact Assessment (NIA) should be undertaken to predict the effect of the development as a whole on the surrounding area. The NIA should rank the noise sources and associated activities, their location on a plan, the duration of the specific noise and the predicted noise levels at the various noise sensitive properties."

Unenforceable – Says 'should' not shall; No requirement to submit it for approval; No compliance time.

19

Examples of Conditions

- **Scenario 2 – A change of use from retail to bar/club within an urban centre with some residential above shop premises**.
- **Suggested condition.**
- "The proposed development includes a bar and night club, which are inherently noisy and likely to produce amplified music/entertainment. A Noise Impact Assessment (NIA) should be undertaken to predict the effect of the development as a whole on the surrounding area. The NIA should rank the noise sources and associated activities, their location on a plan, the duration of the specific noise and the predicted noise levels at the various noise sensitive properties."

Imprecise - It is unreasonable to ask for the effect to be predicted on the whole surrounding area - need to be more specific and define the area.

20

Examples of Conditions

- **Scenario 2 – A change of use from retail to bar/club within an urban centre with some residential above shop premises**.
- **Suggested condition.**
- "The proposed development includes a bar and night club, which are inherently noisy and likely to produce amplified music/entertainment. A Noise Impact Assessment (NIA) should be undertaken to predict the effect of the development as a whole on the surrounding area. The NIA should rank the noise sources and associated activities, their location on a plan, the duration of the specific noise and the predicted noise levels at the various noise sensitive properties."

Necessary – What will be the purpose of the NIA once complete? It doesn't ask for mitigation.
Reason - No reason stated.

21

Examples of Conditions

- **Scenario 2 – A change of use from retail to bar/club within an urban centre with some residential above shop premises**.
- The proposed development includes bars/clubs/pubs, [add type of premises]. Such premises are inherently noisy and are likely to provide amplified music or some form of amplified entertainment. Therefore it is essential that the proposed units are constructed appropriately to contain entertainment noise and should ensure that excessive noise does not adversely affect current occupiers of properties in the vicinity [and/or proposed hotel rooms]. Noise control measures should be incorporated into the design stage of the development. Information and a schedule of the noise control measures to be employed, together with the relevant standards of control that will be adopted, shall be required by condition to be submitted to and agreed by the local planning authority prior to commencing construction.
- Reason: To protect the amenity of the locality, especially for people living and/or working nearby, in accordance Local Planning Policy.

22

Examples of Conditions

- **Scenario 3 – Proposed B1 (now E(g)(iii)) (light industrial development).**
- **Suggested condition.**
- "Before the development commences, the developer should submit a scheme of noise mitigation measures for the site, once operational, to be agreed by the Local Planning Authority. Once agreed the noise mitigation scheme shall be maintained and should not be amended without prior written approval of the Local Planning Authority.
- Reason: To protect the amenity of the locality, especially for people living and/or working nearby, in accordance with the Local Planning Policy."

23

Examples of Conditions

- **Scenario 3 – Proposed B1 (now E(g)(iii)) (light industrial development).**
- **Suggested condition.**
- "Before the development commences, the developer should submit a scheme of noise mitigation measures for the site, once operational, to be agreed by the Local Planning Authority. Once agreed the noise mitigation scheme shall be maintained and should not be amended without prior written approval of the Local Planning Authority.
- Reason: To protect the amenity of the locality, especially for people living and/or working nearby, in accordance with the Local Planning Policy."

Necessary - B1 (**(now E(g)(iii))** is a type of development category, that includes light industry, which by definition, can be carried out in any residential area without detriment to the amenity of that area by reason of noise, vibration, smell, fumes, smoke, soot, ash, dust or grit. As such requesting a noise attenuation scheme prior to commencement, could be seen as unreasonable as the use is already controlled under the land use class definition. If the activity is likely to give rise to problems, it probably isn't or shouldn't be B1!

24

Use Classes

- **Use classes have changes since 1st September 2020.**
- Class A (Retail and food premises), B1 (offices, research and light industrial) and D (non-residential institutions and leisure) are revoked.
- Class B2 (general industrial), B8 (storage and distribution) and class C (Hotel and residential development) remain unchanged.
- Class E is introduced (this covers those uses previously covered by A1, A2, A3, B1 and D2(e)(part)) and covers retail, office, indoor sports, medical services, nursery and low impact offices, research and industrial processes).
- Class F is introduced (this covers D1 (non-residential institutions) and D2(e)(part)) and covers learning and non-residential institutions, outdoor sports and local community facilities.
- Sui Generis includes anything not contained within a use class.

25

Environmental Permit Conditions

- Industrial processes:
  - Range of controls depending upon activity, scale and pollution potential.
- Most polluting processes:
  - Emissions to air, land, water and controls relating to energy, noise and vibration;
  - A1 processes dealt with by Environment Agency;
  - A2 processes dealt with by local authorities;
  - Emissions to air;
  - B processes dealt with by local authorities.

26

Environmental Permit Conditions

- Pollution Prevention Control Act.
- BAT.
- Examples of noise conditions.
- Use of embankments to screen the source of noise.
- Enclose noisy plants or components in sound absorbing structures.
- Use of anti-vibration supports and interconnections for equipment.
- Orientation of noise-emitting machinery.
- Change the frequency of the sound:
  - From BAT reference document for Non-ferrous metal industries.

27

Environmental Permit Conditions

Conditions relating to noise are able to be included on A1 and A2 Environmental Permits. All permit conditions are required to be:

- **C**lear for both industry and the public;
- **R**elevant;
- **E**nforceable;
- **W**orkable.

- Relevant to the process being permitted.

28

Licensing Conditions

- Licensing Act 2003
  - Licensing regime for:
    - Sale of alcohol from retail and clubs
    - Provision of regulated entertainment and
    - Provision of late night refreshment
- Four licensing objectives:
  - Prevention of crime and disorder
  - Public safety
  - Prevention of public nuisance
  - Protection of children from harm

29

Licensing Conditions

- Licensing Act 2003:
  - Guidance issued under section 182.
- Public nuisance:
  - Broad common law meaning;
  - Reduction in living and working amenity and environment.
- Conditions may include:
  - Simple measures such as keeping doors and windows closed;
  - More sophisticated measures such as acoustic curtains or noise dampening speaker mounts.
- Conditions must relate to licensable activities (note that some entertainment falls outside of the licensing regime).

30

Licensing Conditions

Conditions relating to noise are able to be included on Premises Licences issued under the Licensing Act 2003 to prevent public nuisance. All licence conditions are required to be:

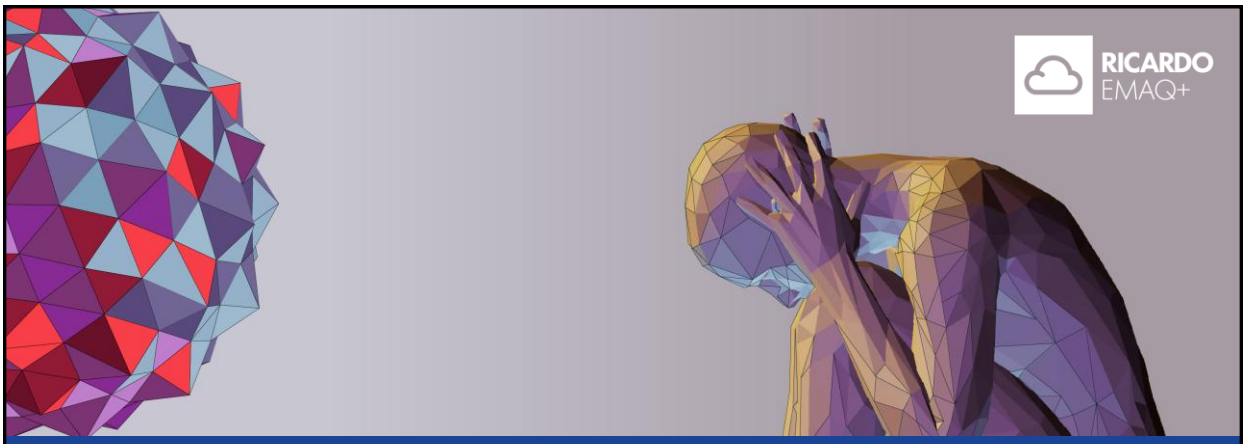
- Precise and enforceable;
- Clear and unambiguous;
- Relevant (specific rather than general);
- Proportionate, justifiable and capable of being met;
- Relevant to the application premises;
- Be within the licence holders control;
- Not duplicate other statutory requirements;
- Promote licensing objectives.

31

Summary of Key Points

- Principles of good enforcement apply across all regulatory activities.
- Noise is a relevant issue when considering planning applications as it can have an adverse impact on health and quality of life.
- Applications need to be considered on their merits.
- Any conditions imposed must be supported by planning policy reasons.
- Noise is a relevant emission for processes falling under Part A of the environmental permitting regime.
- Conditions are designed to achieve the best available technique (BAT) standard.
- Licensing conditions can be imposed where they prevent public nuisance.
- Licensing conditions must relate to licensable activities and meet the principals of fair enforcement.

32



Essentials of Noise 5

Session 2: Preparing and Evaluating Noise Reports Key Elements

July 2025

1

Aims

- What is the purpose of a report?
- Scope
- Expected Content
- Competence
- Limitations

https://dota2freaks.com/wp-content/uploads/sites/10/2019/07/dota-2-report.jpg

2

Purpose of a Report

- **Definition of 'Report'**
  - **VERB**

    1.1 Reporting

    Give a spoken or written account of something that one has observed, heard, done, or investigated.

    1.2 Be reported

    …

    1.3 Make a formal statement or complaint

    about (someone or something) to the necessary authority.

    1.4 Report to

    Be responsible to (a superior or supervisor… ***client?***)
  - **NOUN**

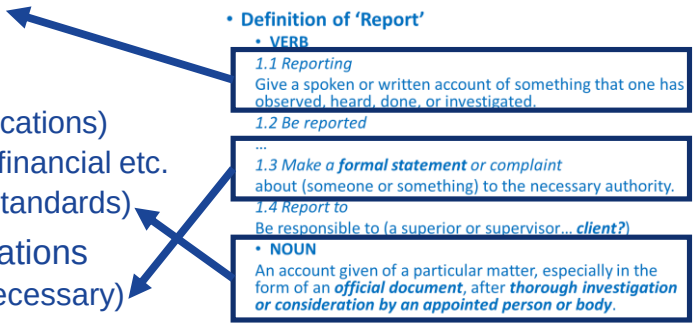
    An account given of a particular matter, especially in the form of an *official document*, after *thorough investigation or consideration by an appointed person or body*.

"Pretty good report, isn't it? Do you think I can make some serious moolah with this?"

3

Purpose of Reports

- Summary of situation
  - Background information
  - Status quo
  - Changes
- Purpose of report
  - Investigative (methods, justifications)
  - Impacts (physical, chemical, financial etc.
  - Compliance/Requirements (standards)
- Conclusions & Recommendations
  - Summary & explanation (if necessary)
- Addresses *commissioners* needs

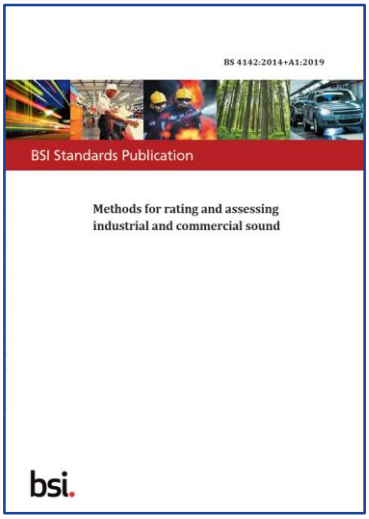


4

Content of a (Noise) Report

A formal reports generally therefore need certain minimum criteria to be met:

- Reporter's Competence
- Limitations explained
- Background summarised
- Standards applicable identified
- Method stated
- Results clearly presented
- Conclusions appropriately drawn
- Supporting information clearly presented



5

BS4142:2014 Chapter 12

Report the following, as appropriate.

a) Statement of qualifications, competency, professional memberships and experience directly relevant to the application of this British Standard of all personnel contributing to the assessment.

b) Source being assessed as follows:

1) description of the main sound sources and of the specific sound;
2) hours of operation;
3) mode of operation (e.g. continuous, twice a day, only in hot weather);
4) statement of operational rates of the main sound sources (e.g. maximum load setting, 50% max rate, low load setting); and
5) description of premises in which the main sound sources are situated (if applicable).

c) Subjective impressions, including:

1) dominance or audibility of the specific sound; and
2) main sources contributing to the residual sound.

d) The existing context (see Clause 4 and Clause 11), including an assessment of the sensitivity of the receptor Text deleted.

e) Measurement locations, their distance from the specific sound source, the topography of the intervening ground and any reflecting surface other than the ground, including a photograph, or a dimensioned sketch with a north marker. A justification for the choice of measurement locations should also be included.

Report the following, as appropriate.

f) Sound measuring systems, including calibrator or pistonphone used:

1) type and/or model;
2) manufacturer;
3) serial number; and
4) details of the latest verification test including dates.

g) Operational test:

1) reference level(s) of calibrator, multi-function calibrator or pistonphone; and
2) meter reading(s) before and after measurements with calibrator, multi-function calibrator or pistonphone applied.

h) Weather conditions, including:

1) wind speed(s) and direction(s);
2) presence of conditions likely to lead to temperature inversion (e.g. calm nights with little cloud cover);
3) precipitation;
4) fog;
5) wet ground;
6) frozen ground or snow coverage
7) temperature; and
8) cloud cover.

6

BS4142:2014 Chapter 12

i) Date(s) and time(s) of measurements.

j) Measurement time intervals.

k) Reference time interval(s).

l) Measured sound level(s):

1) residual sound level(s) and method of determination;
2) ambient sound level(s) and method of determination;
3) specific sound level(s) and method of determination;
4) justification of methods; and
5) details of any corrections applied.

m) Background sound level(s) and measurement time interval(s) and in the case of measurements taken at an equivalent location, the reasons for presuming it to be equivalent.

n) Rating level(s):

1) specific sound level(s);
2) any acoustic features of the specific sound; and
3) rating level(s).

o) Excess of the rating level(s) over the measured background sound level(s) and the initial estimate of the impacts.

p) Conclusions of the assessment after taking context into account.

q) The potential impact of uncertainty (see Clause 10).Date(s) and time(s) of measurements.

- What is the implication if one or more of these requirements are not reported?
- Does omission invalidate the reports as submitted?
- Does omission or deviation in reporting create inconsistency?
- Does the report as presented rate as fit for purpose?

7

Reporting Requirement Assessment

	Information required	Benefits to report of inclusion	Issues with omission
(a)	Qualifications/Competency	• benchmark that assessment is completed by independent and competent assessor, with verifiable expertise. • Profession bodies affiliation provides standards of conduct	• Unqualified individuals may be prone to error/increased uncertainty • No professional affiliations potentially calls into question independence of conclusions.
(b)	Source details	• Identification of source sets limits on assessment (scope). • Qualifying operational conditions, variability of levels times of operation may be critical in determining potential impact.	• Unqualified sources can under or over estimate impact. • Difficulties with interpretation • Variation can be a significant issue when dealing with complaints • temporal changes to level of particular concern
(c)	Subjective impression	• Subjective assessment should match source • Word picture of sound provides context for impact assessment. • Required for Acoustic Feature corrections* BS4142	• Links to data inconsistent/difficult • Attributing source characteristics • Real life impact assessment impossible

8

Reporting Requirement Assessment

	Information required	Benefits to report of inclusion	Issues with omission
(d)	Existing context	• A verbal description of background/residual noise provides a baseline • Identification of existing dominant sources • Context	• No baseline • No ability to decern potential changes • Contextualising impacts difficult
(e)	Measurement locations	• Measured distances/free field • Maps/terrain • Photos • GPS locations* • Attended/non attended • Uncertainty	• Failure to record data reduces confidence • Lack of data and conditions of monitoring affects reliability • Increased uncertainty
(f)	Sound Measuring systems (formal UKAS calibration)	• Type 1/Type 2 instruments traceability • Uncertainty assessments • Wind shields • Calibration drift • Meters minimum 2 years, calibrators 1 year – valid certificates included?	• Phone app used? • Increased uncertainty • Unreliable data • Unknown variance • ***What about uncalibrated meters tested against calibrated ones?***

9

Reporting Requirement Assessment

	Information required	Benefits to report of inclusion	Issues with omission
(g)	Operational calibration (field test check)	• Ensures viability of measurements if carried out before and after • Variability forms part of uncertainty if significant* ***0.5dB*** • Inability to calibrate should result in reschedule of monitoring	• Increased uncertainty • Unreliable data? • Unknown variance
(h)	Weather conditions	• Provides context • Temp (particularly cold affects measurements) (inversions?) • Wind direction/strength most significant • Precipitation increases road noise • Direct impacts on microphone • Variance in pressure/air density • Snow/fog	• Unknown weather conditions difficult to add context (uncertainty) • Variable background/residual levels mask potential source sound impacts (increases uncertainty) • Wind directions can vary sound levels very significantly. • Attended measurements less prone to issues, (context provided)
(i)	Dates/Times of measurements	• Provides temporal context • Useful to determine worst case/best case/typical • Averaging periods	• Unknown context

10

Reporting Requirement Assessment

	Information required	Benefits to report of inclusion	Issues with omission
(j)	Measurement Time Intervals	• Averaging times provide context particularly for short duration repetitive events • Cyclic activities should use cycle times • 1hour/15mins at night is NORMAL but others can be used if justified.	• No measurement periods stated provides lack of context • Additional averaging? • Lack of justification for abnormal measurement time intervals confusing
(l)	Measured sound levels	• All reports need to confirm the methods of determination of ambient, residual and therefore specific sound levels • All reports ought to justify (and normally illustrate*) how these levels are achieved.	• Inconsistency of data • Lack of clarity and robustness • Potential for verification and enhanced uncertainty
(m)	Background sound levels	• As above for residual • Note background is normally an average figure. The averaging method to determine 'typical' levels should be explained.	• Inconsistent background measurements adds complexity • Mode, median mean values may add clarity • Worst case assessment to be justified.

11

Reporting Requirement Assessment

	Information required	Benefits to report of inclusion	Issues with omission
(n)	Rating Level	• Rating level assessments can compound specific noise determination errors • ACF normally subjective, need justification • Use of formal tonal assessment/impact noise assessment provides additional clarity/justification where necessary • Worst case assessments justified.	• Unspecified justification for ACF prevents verification • Normal to use worst case • NO ACF should be challenged…? BS4142 may not be appropriate?
(o)	Excess of rating level over background	• Clearly show excess of rating level vs background level • ***Estimate*** of impacts	• LOW sound levels may be problematic to measure, modelled only? Masking by residual? • background levels <30dB need to treated with caution. • The effect of ACF become proportionately more significant
(p)	Conclusions (context)	• Provide assessment of impacts with context. • Comparison to residual	• Can produce unverified results • Numerical assessment alone is insubstantive and doesn't address the standard.
(q)	Uncertainty	• Uncertainty should be avoided • Range of results • Compliance with standard requirements, devices, weather conditions, reflections etc. = ***acceptable levels of precision*** • ***Uncertainty budgets only where needed***	• Lack of mention of uncertainty unacceptable • Reduces confidence • Look for extremes in data.

12

Layout of Reports

- Report layout is normally a scientific format, so;
  - Customer name, site name, reference numbers short title
  - Instruction, what the client has asked for
  - Scope, what standards apply and why (aims)
  - Introduction, includes background history, law and legal frameworks, summary of standards, layouts existing proposed etc.
  - Methods, locations of monitoring, type of modelling, reasons for locations, compromises deviations from standards > uncertainty assessment
  - Results, simple clear presentation per monitoring location, normally summarised with detail in appendices
  - Discussion of results range of data spread, implications including uncertainty, worst case etc.
  - Conclusion, drawing on summary data, conclusions compliance yes/no, provision of context, (normal to include multiple standards)
  - Recommendations (if any)

13

Reports for Specific Requirements

Report Type	Terminology Used	Standards used

• Environmental Noise reports categories
  • Nuisance investigations/compliance assessment
  • Planning investigations/compliance
  • Licensing investigations/compliance
  • Construction site investigations/compliance
	• Nuisance
	• BPM
	• Adverse impacts
	• Amenity
	• Public Nuisance
	• ABC method
	• dB change
		• BS4142:2014
		• BS8233:2014
		• DMRB – LA111
		• WHO – day limits
		• WHO – Night noise
		• WHO – LAMax
		• Outdoor event noise code of practice
		• Code of Practice pubs and clubs
		• BS5228

14

Conclusions and Recommendations

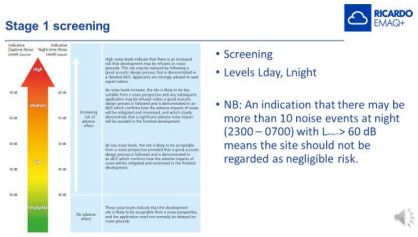
- The single biggest part of the report is the ultimate conclusion.
- The conclusion should;
  - Provide a clear and unambiguous summary of the assessment.
  - Clearly state compliance/non-compliance with the standard(s) applied, and confirm the methods used to demonstrate that compliance
  - Provide a clear statement in relation to any limitations or constraints needed to form the conclusion, e.g. uncertainty, mitigation measures/controls needed etc.
  - Make clear any recommendations (where possible) or state targets that need to be met – normal for outline applications.
- Where needed, the structure of conclusions and particularly recommendations may be further specified in other guidance, e.g. ProPG, Noise at Work etc.

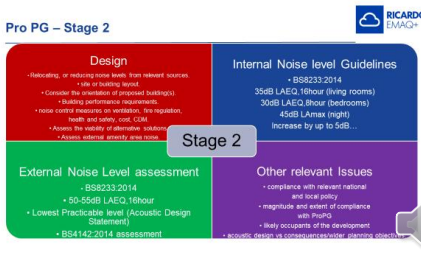
Ozark T-Shirt [link]

15

ProPG – Acoustic Design Statements (ADS)

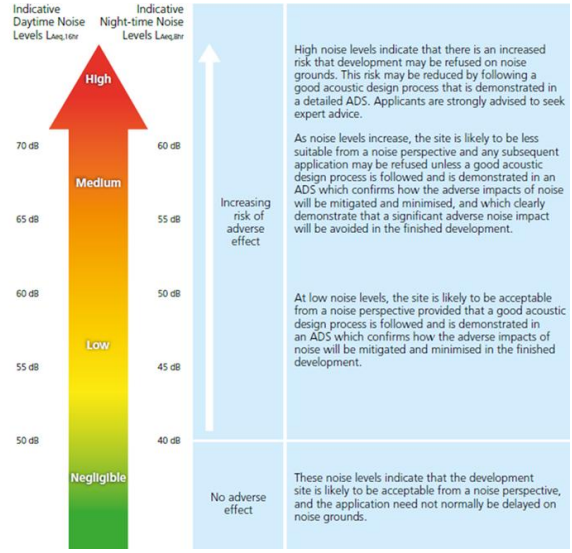
- ADS should evidence the clearly that stages 1 (screening) and 2 (detailed assessment - elements 1 – 4) have been complied with.
- An ADS should be proportionate to the scale of the development and to the degree of noise risk ;
  - Simple/small developments will require only basic ADS.
  - More complex/large developments more detailed ADS





16

Stage 1 Screening



- Screening
- Levels L_{day}, L_{night}
- NB: An indication that there may be more than 10 noise events at night (2300 – 0700) with $L_{Amax,F} > 60$ dB means the site should not be regarded as negligible risk.

17

Pro PG – Stage 2

Design

- Relocating, or reducing noise levels from relevant sources.
- site or building layout.
- Consider the orientation of proposed building(s).
- Building performance requirements.
- noise control measures on ventilation, fire regulation, health and safety, cost, CDM.
- Assess the viability of alternative solutions
- Assess external amenity area noise.

Internal Noise level Guidelines

- BS8233:2014

35dB LAEQ,16hour (living rooms)
30dB LAEQ,8hour (bedrooms)
45dB LAmax (night)
Increase by up to 5dB…

Stage 2

External Noise Level assessment

- BS8233:2014
- 50-55dB LAEQ,16hour
- Lowest Practicable level (Acoustic Design Statement)
- BS4142:2014 assessment

Other relevant Issues

- compliance with relevant national and local policy
- magnitude and extent of compliance with ProPG
- likely occupants of the development
- acoustic design vs consequences/wider planning objectives.

18

ProPG – Acoustic Design Statements (ADS)

- *b) Describe the external noise levels that occur across the site (before and after any noise mitigation measures) in an appropriate level of detail that reflects the scale and height of the proposed development. The external post mitigation noise assessment should use an informed judgement of typical worst case conditions over the foreseeable future, but it should exclude atypical noise events. Noise mapping and modelling techniques are likely to be useful for more complex sites.* ***Stage 2***

- *c) Demonstrate how good acoustic design is integrated into the overall design and how the proposed acoustic design responds to the specific circumstances of the site (exploiting opportunities and reflecting constraints)* ***Stage 2 Element 1****.*
  "Priority should be given, as part of good acoustic design, to enable the use of openable windows as extensively as is practical across the development site. Where it is not considered practical to achieve the internal noise level guidelines with windows open a justification should be provided to the LPA setting out the reasons for this. Where it is proposed that windows need to be closed in order to meet the internal noise guidelines then full details of the proposed ventilation and thermal comfort arrangements must be provided"

- *d) Confirm how the internal noise level guidelines […] will be achieved. Include, where relevant, full details of the design measures and building envelope specifications that will achieve the internal noise level guidelines. The LPA may request evidence of underlying calculations, in order to assist them in understanding any specific aspects of the assessment, which would need to be undertaken by a suitably qualified practitioner.*

19

ProPG – Acoustic Design Statements (ADS)

- *e) A detailed assessment of the potential impact on occupants should be undertaken where individual noise events are expected to exceed 45 dB $L_{Amax,F}$ more than 10 times a night inside bedrooms.*

- *f) Priority should be given, as part of good acoustic design, to enable the use of openable windows as extensively as is practical across the development site. Where it is not considered practical to achieve the internal noise level guidelines with windows open a justification should be provided to the LPA setting out the reasons for this. Where it is proposed that windows need to be closed in order to meet the internal noise guidelines then full details of the proposed ventilation and thermal comfort arrangements must be provided.*

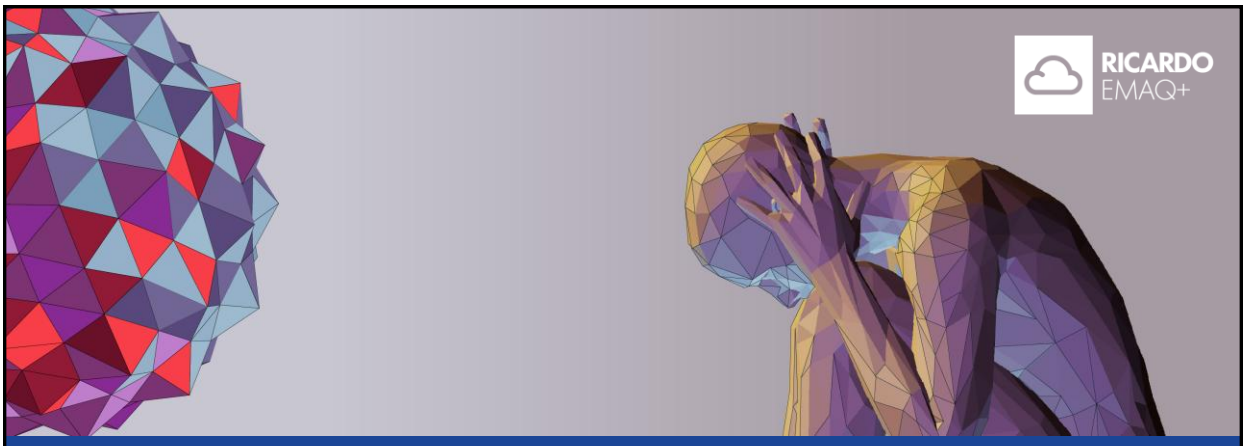
- *g) Where the LPA accepts that there is a justification that the internal LAeq target noise levels can only be practically achieved with windows closed, and provided care has been taken to design the accommodation so that it provides good living conditions (in respect of acoustics, ventilation and thermal comfort), then internal noise levels can be assessed with windows closed. In this scenario any systems used to provide "whole dwelling ventilation" (e.g. trickle ventilators) should be in the open position and the internal LAeq target noise levels should not generally be exceeded. It should also be noted that the internal noise level guidelines are generally not applicable when windows or other natural ventilators are open solely to provide "purge ventilation" as this should only occur occasionally.*

20

ProPG – Acoustic Design Statements (ADS)

- *h) Reasonable steps should be taken to minimise overheating during summer months through good design. Where openable windows / ventilators are proposed to mitigate overheating and where the internal noise level guidelines are likely to be exceeded when they are open a more detailed assessment of the potential impact on occupants during the overheating condition should be provided in the ADS.*
- *j) Present the findings of the assessment of other relevant issues. Close liaison with the LPA is recommended to fully address any local issues and local policies that are of particular importance to the specific scheme and locality (**Stage 2 Element 4**).*
- *k) Confirm, for a low noise risk site, how the adverse impacts of noise will be mitigated and minimised in the finished development (**NPPF**).*
- *l) Confirm, for a medium or high noise risk site, how the adverse impacts of noise will be mitigated and minimised and clearly demonstrate that a significant adverse noise impact has been avoided in the finished development (**NPPF**).*

21



Essentials of Noise 5

Session 3: Noise Management Plans

July 2025

1

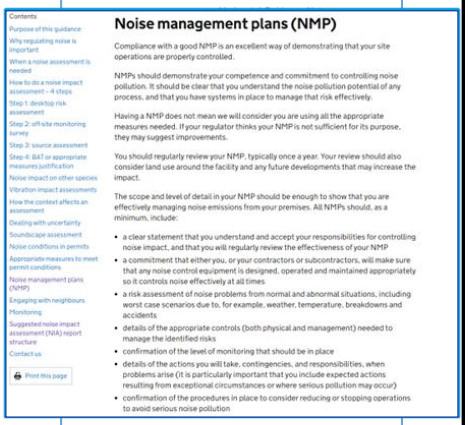
Aim

- Review noise management plan purpose
- Basic content and layout
- Review simple noise management plan

2

Noise Management Plans

- Noise Management Plans [link]
  - No fixed layout or content
  - Bespoke content for each activity/source
  - Simple or complex as required
  - Impact of sources
  - Engineered controls (Physical)
  - Operational controls (Physical/Procedural)
  - Management Controls
  - Sets a benchmark for compliance with required standards
  - Provides a method for demonstrating compliance
  - Self determination for compliance


Contents

Purpose of this guidance
Why regulating noise is important
When a noise assessment is needed
How to do a noise impact assessment – 4 steps
Step 1: desktop risk assessment
Step 2: off-site monitoring survey
Step 3: source assessment
Step 4: BAT or appropriate measures justification
Noise impact on other species
Vibration impact assessments
How the context affects an assessment
Dealing with uncertainty
Soundscape assessment
Noise conditions in permits
Appropriate measures to meet permit conditions
Noise management plans (NMP)
Engaging with neighbours
Monitoring
Suggested noise impact assessment (NIA) report structure
Contact us
Print this page

Noise management plans (NMP)

Compliance with a good NMP is an excellent way of demonstrating that your site operations are properly controlled.

NMPs should demonstrate your competence and commitment to controlling noise pollution. It should be clear that you understand the noise pollution potential of any process, and that you have systems in place to manage that risk effectively.

Having a NMP does not mean we will consider you are using all the appropriate measures needed. If your regulator thinks your NMP is not sufficient for its purpose, they may suggest improvements.

You should regularly review your NMP, typically once a year. Your review should also consider land use around the facility and any future developments that may increase the impact.

The scope and level of detail in your NMP should be enough to show that you are effectively managing noise emissions from your premises. All NMPs should, as a minimum, include:

- a clear statement that you understand and accept your responsibilities for controlling noise impact, and that you will regularly review the effectiveness of your NMP
- a commitment that either you, or your contractors or subcontractors, will make sure that any noise control equipment is designed, operated and maintained appropriately so it controls noise effectively at all times
- a risk assessment of noise problems from normal and abnormal situations, including worst case scenarios due to, for example, weather, temperature, breakdowns and accidents
- details of the appropriate controls (both physical and management) needed to manage the identified risks
- confirmation of the level of monitoring that should be in place
- details of the actions you will take, contingencies, and responsibilities, when problems arise (it is particularly important that you include expected actions resulting from exceptional circumstances or where serious pollution may occur)
- confirmation of the procedures in place to consider reducing or stopping operations to avoid serious noise pollution

3

EA NMP Guidance

- Requires:
  - a clear statement that you understand and accept your responsibilities for controlling noise impact, and that you will regularly review the effectiveness of your NMP
  - a commitment … operators, contractors or subcontractors, will make sure that any noise control equipment is designed, operated and maintained appropriately so it controls noise effectively at all times
  - a risk assessment of noise problems from normal and abnormal … including worst case scenarios due to, for example, weather, temperature, breakdowns and accidents
  - details of the appropriate controls (both physical and management)…

It would be expected that:
- Responsibilities identified,
- Evaluation of sources,
- Identification of controls,
- Abnormal event assessment

Are all recorded!

4

EA NMP Guidance States:

- confirmation of the level of monitoring that should be in place
- details of the actions …, contingencies, and responsibilities, when problems arise (it is particularly important that you include expected actions resulting from exceptional circumstances or where serious pollution may occur)
- confirmation of the procedures in place to consider reducing or stopping operations to avoid serious noise pollution
- a procedure for engaging with neighbours to minimise their concerns and respond to complaints
- at least Annual review

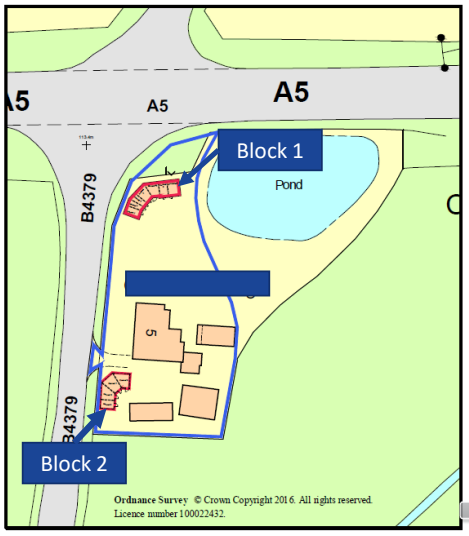
It would be expected that:
- records of actions,
- monitoring,
- evidence would be kept to demonstrate compliance with the plan.

Evidence of updates

5

Case Study: Dog Kennels

- Applicant is seeking consent from the LPA to operate a dog kennels
- Location is adjacent to main road
- 3 sensitive receptors
- High End dog kennels, 8 kennels
- Dog Boarding Licence exists
- Planning consent required for COU
- Complaints exist



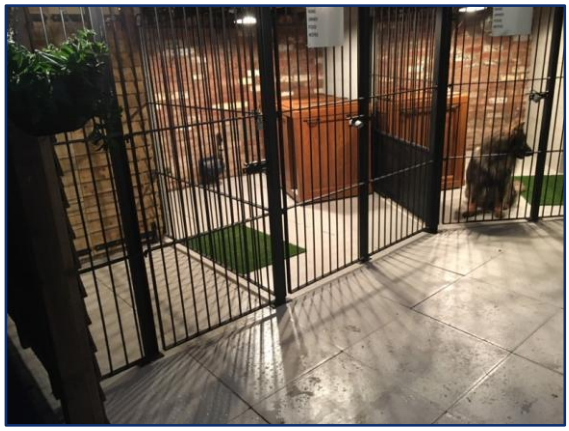
6

Site Photos Block 1

Source: Tony Higgins

7

Site Photos Block 2



Source: Tony Higgins

8

Preparing the NMP

- Layout and arrangements
  - Existing physical mitigation
  - Proposed physical mitigation
- Source noise determination (see next slides)
- Receptors
  - Screening Impact assessment
- Existing operational controls
- Proposed management controls
- Other…

Courtesy of Google Earth Image (2018).

Site

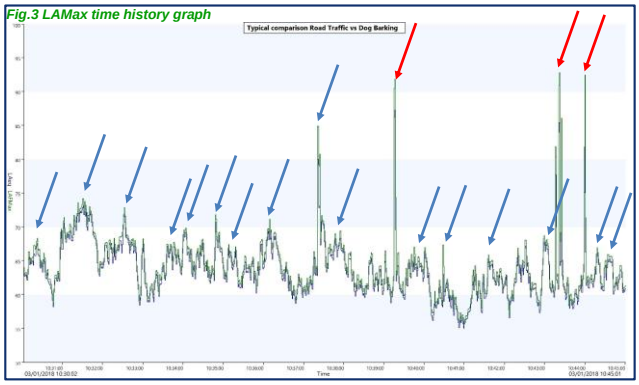
Receptors

9

NMP Dog Kennels – Source Data Analysis

- Typical noise levels
- L_{AMax} dog barks vs Cars
- The shape of the event is predictable lasts in excess of 5 – 10 seconds for cars. Dog barking (red arrows) is shorter duration sometimes only a second or two, and much higher level, 85 – 95dB L_{AMax},

Fig.3 LAMax time history graph

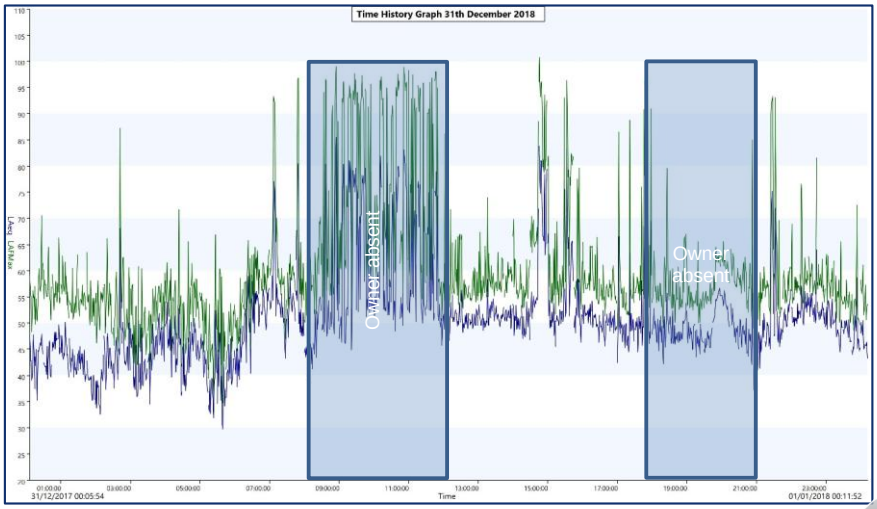


Source: Tony Higgins

10

*Source Data

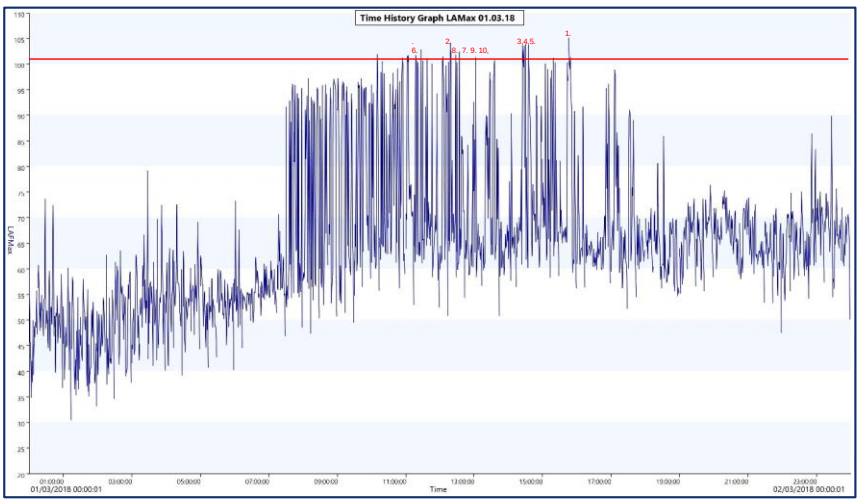
- Complaints made
- Reason for barking?
- Identified other influencing factors?



Source: Tony Higgins

11

10th Highest L_{AMax}



Source: Tony Higgins

12

Impact Assessment (No Mitigation)

Receptor	Distance from road (m)	Distance from dogs (m)	Noise from road (line source)* ref: 65dB	Noise from dogs (point source) ref:101dB	Level difference (dB)	Context
1	18	65	65dB	76dB	+11	dogs likely to be audible
2	55	100	54dB	72dB	+18	dogs likely to be audible
3	180	145	49dB	69dB	+20	Dogs likely to be audible

13

Impact Assessment (with Mitigation)

Receptor	Distance from road (m)	Distance from dogs (m)	Noise from road (line source)* ref: 65dB	Noise from dogs (point source) ref:101dB	Level difference (dB)	Context
1	18	65	65dB	76dB	-29dB	Brick/tile structure oriented away from receptor (40dB)
2	55	100	54dB	72dB	-22dB	Brick/tile structure oriented away from receptor (40dB)
3	180	145	49dB	69dB	0dB	Overlapping timber structure/tile roof oriented away from receptor (20dB)

14

Noise Management Plan

Mr R Barker
Canine House
Quiet Lane
Sleepy Town

NOISE MANAGEMENT PLAN – Kennels

Canine House, Quiet Lane, Sleepy Town

VERSION HISTORY	
VERSION	1
Date First Issued	27/7/20
Date of Variations	-
Date of Latest Variation	-

AUTHORISATION	SIGNED	DATE
Prepared by:		27.07.20
Authorised by:		

Contents

Identified location
Provide context
Logical layout
Version number
Prepared/authorised

15

Noise Management Plan

1 Introduction

Further to submission of a planning application for operation of part of the premises as a dog kennels, the operator has been asked for a Noise Management Plan as an means of demonstrating management of the facility in line with best practice, and clearly demonstrate that the methods of operation of the facility are in line with best practice and serve to minimise noise to an acceptable level.

The Noise Management Plan (NMP) process, uses the basic low site capacity, existing infrastructure (high quality kennel buildings) and management techniques to ensure barking is reduced to a minimum.

This NMP is designed to be a 'live' document, updated from time to time to embrace new methods of operation, or changing circumstances to ensure that dog barking does not become an adverse impact.

1.1 Site Description

The site comprises an extended detached property with outbuildings and kennels and is situated on the corner of the A5 and the B4379.

The site is screened from other premises by a plantation of trees to the rear (east) and fields beyond rising away to [redacted] which is approximately 275m away. To the south the agricultural land first gently slopes down away from the site before rising up towards the neighbouring property [redacted] which is situated approximately 120m away.

There are two blocks of kennels including in this application. Block 1 is located in the garden and comprise a brick construction with a tiled roof. Each kennel has an insulated and heated living quarters with an individual run enclosed by black painted bow topped railings. Each kennel is monitored by a CCTV camera and background music is piped throughout the block which is inaudible beyond the site boundary.

Block 1 also includes a whelping pen (for the applicant's own use) and a grooming parlour.

Block 2 is also a brick and tile construction and comprises four kennels and is located to the south of the entrance to the site and parking area. The construction is similar to those in the north of the site, but, following complaints about noise from barking dogs, the open elevation has been enclosed with UPVC sliding doors.

The property has no adjoining neighbours, the closest neighbour is located approximately 120m away to south and 60m to the north on the opposite side of the crossroads.

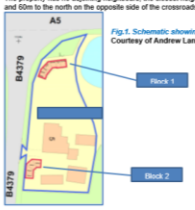


Fig.1. Schematic showing locations of dwellings and sources.
Courtesy of Andrew Lane Architecture).

1.2 Receptors

The nearest sensitive receptors have been identified as follows:

- Receptor 1 275m away to the east.
- Receptor 2 approximately 120m away to the south.
- There are no receptors west of the facility.
- Receptor 3 residential dwelling and Village Farm, 100m and 52m from Block 1 respectively.

It should be noted that other premises in the area also keep dogs.

Planning application support
And operational plan infers both planning and nuisance standards?
Site description and plan provides context
Limits scope Block 1 / Block 2
Receptors identified

16

Noise Management Plan

2 Noise sources and noisy activities

The sources of noise from the site are limited to barking dogs.

The operator has two kennels associated with the business activity as noted in fig.1 above.

Block 1 has 4 kennels each separated by iron rails from adjacent kennels, the construction is brick, with a tile roof, and concrete tiled floors as shown below.

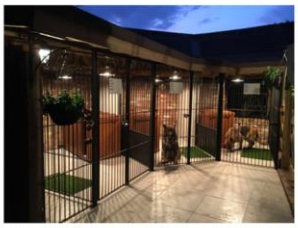


Fig.2 Block 1 kennel (2017)

The Kennels face directly away from the main receptors, a barking dog, has a maximum sound level of approximately 101 dB L_{AMax}. The decay of sound due to distance is shown in the table below.

The following table shows the free field decay of sound due to distance for each of the receptors (this excludes any attenuation due to the kennels/enclosures/barrier effects.

distance	sound reduction	Predicted level (dB)	Comments
1	0	100	Source level
10	-20	80	Measurement distance (standard)
20	-26.0206	74	
40	-32.0412	68	
52	-34.3201	66	Receptor 1
100	-40	60	Receptor 2
120	-41.5836	58	Receptor 3
275	-48.7867	51	Commercial receptor

For reference ambient road traffic from a main road is 65-70 dB at source during the day and rarely <50 dB at night.

Page | 4

2.1 Activities

The maximum number of dogs is limited by the number of kennels. There are 8 kennels in total.

Dogs do not bark without a reason, normally these are:

- Boredom. Dogs that are left alone all day with nothing to do often resort to barking out of boredom.
- Being anxious when left alone. Dogs are social animals and it is normal for them to become anxious when they are left alone for the first time.
- Fear.
- Territorial behaviour.
- Attention-seeking behaviour.

Dogs may also bark from excitement (such as when being fed or exercised) or when greeting the owner. There are expected peaks of barking during such activities but these are short duration and normally only during the day.

Most barking is short duration, and limited to a particular event and some is desirable. E.g. Barking as a result of territorial behaviour – guard dogs).

Excessive barking is normal associated with the above bullet point list. Anxious or bored dogs may bark or howl, or suffer from separation anxiety as part of pack behaviour.

Page | 5

Noisy activities identified
Block 1 / Block 2
Level of noise stated
101dB L_{AMax}
Decay due to distance table provided (context)
Cause of barking stated

17

Noise Management Plan

3 Receptor Impact assessment

There are no specified standards for determination of adverse impacts from barking dogs, therefore the following method has been used based on acoustic first principles.

The following receptors identified below as part of the noise management plan as at 26.07.20. The screening assessment below is based on barking noise levels a 100 dB L_{AMax} at night. The target noise level is to reduce emitted noise to 10dB less than ambient noise, making barking from the kennels inaudible and completely masked by ambient road traffic noise. The summary below is an attempt to classify potential impacts of barking dogs in acoustic terms. Table 3 below uses this metric for determine potential impacts.

LAMax levels <10 dB lower than ambient — inaudible
LAMax levels = ambient — barking audible but not intrusive providing <60 dB
LAMax levels >10 above ambient — barking audible and intrusive

Table 3 - Potential Sensitive Receptors

Receptor	Location / distance	Impact	Comments
Receptor 1	52m	LOW	The premises is the closest to Block 1 Kennels. Barking at this location is likely to be unnoticeable as the brick building and walls insulate the sound of dogs barking. The potential reduction in sound level due to distance is approximately 34 dB and the building (solid brick/tile construction), as a minimum is expected to reduce emitted sound by 40 dB. The resulting screening level of 26dB is inaudible. In the event that dogs are released into the exercise area, the building provides a barrier effect rather than enclosure. The resulting effect is likely to be only 20 dB further reduction indicating a sound level of 46 dB LAMax. As dogs are only in the exercise area during the day, this is <10 dB lower than ambient and inaudible.
Receptor 2	100m	LOW	Residential receptors are considered high sensitivity; however, the separation distance reduces sound by 40 dB @ 100m. The overall results will therefore be 6 dB less than for village farm above. It is concluded that noise form barking dogs will be inaudible.
Receptor 3	120m	LOW	Residential receptors are considered high sensitivity; however, the separation distance reduces sound by 42 dB @ 100m. The overall results will therefore be 8 dB less than for village farm above, however, the operator site itself is located between source and receptor further reducing levels from Block 1. It is also noted that the receptor is closest to Block 2. Block 2 has been fully acoustically treated (see section 4 below). It is concluded that noise form barking dogs will be inaudible.
Commercial Receptor	275m +	LOW	Commercial receptors are considered LOW sensitivity; however, the separation distance reduces emitted noise to 40dB which is <10dB below ambient noise levels, indicating it is unlikely that dog barking will be audible during the day. The premises does not operate at night. It is concluded that noise form barking dogs will be inaudible and will have no impact.

*Sensitivity has been assessed based on the land use, and proximity. Residential land uses are normally high risk whilst industrial uses are considered low risk. Some commercial operations such as office space may have a moderate/low risk.

Any new receptors introduced will be added to the above list and assessed as they are identified.

Page | 6

4 NOISE MANAGEMENT

The receptor impact assessment outlined in section 3 above is based on the a screening assessment carried out by Enviroconsult Limited, the assessment provided data on the maximum sound level of dogs barking, and then used predictive calculations to establish likely noise levels. The outcome of that assessment concludes that the impact of dogs kept within Blocks 1 and 2 will be negligible providing noise management plan measures are in place, and physical infrastructure for control measures is maintained. These control measures and physical infrastructure are listed below and constitute best practice for the site.

4.1 Physical infrastructure

4.1.1 Building Enclosure

The kennel building 1 and 2 are brick built structures with tile roofs in good condition.

The building is a traditional brick and tile construction with heavy construction materials. The interior of the roof area is lined with wooden panelling and provides a robust noise attenuation. Noisy activities inside the building will have little or no impact on sensitive receptors providing the building fabric is maintained.

BPM compliance	
Building integrity check	
Annual Visual building integrity check	
Access doors kept closed	

Kennel Building Block 2 is fully insulated. The basic brick construction is oriented away from the nearest receptor, and the 'open' side remaining is fitted with a sliding UPVC doors and heavy duty double glazing. (see Appendix 1 for typical glazing specification

Demonstrating BPM
An integrity check on the condition of the building fabric is to be carried out every 4 years to ensure that the building structure is intact.

A visual inspection of building integrity to be conducted every year.

Any necessary works to repair damage to the building fabric are arranged within as soon as possible.

4.1.2 Acoustic Barriers

The dogs are exercised daily, within the designated run areas. The runs are screened by the kennel buildings themselves that provide a significant barrier effect.

BPM compliance	
Activities within designated areas	
Problem dogs to be kept in Block 2	

As far as reasonably possible, all identified noisy activities to take place within designated run areas.

Any dogs noted to have a problem with barking should be moved to Block 2 (see management below).

Demonstrating BPM
Activities identified as noisy should be carried out in designated areas are likely to be recorded on CCTV. CCTV records should be retained to positively demonstrate compliance with the NMP.

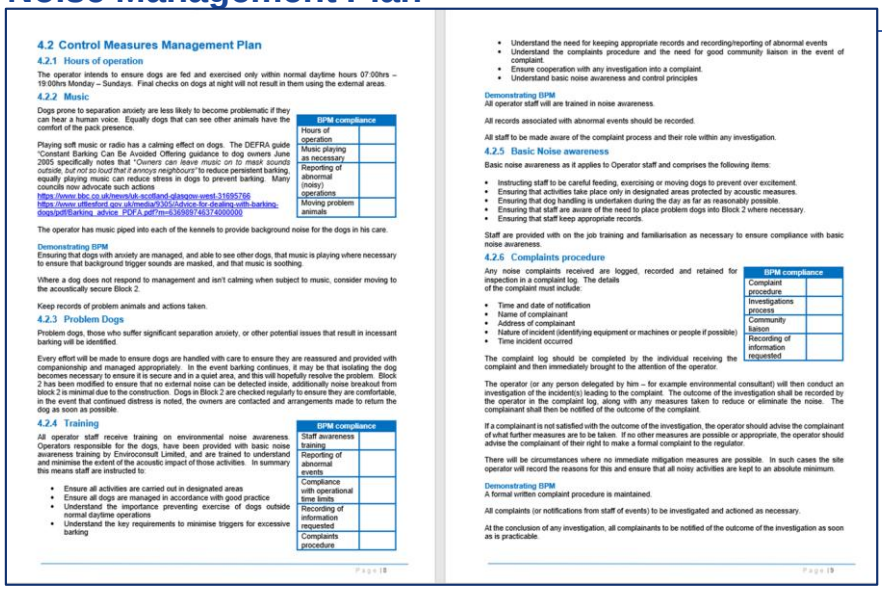
Page | 7

Assessment method provided for screening
Receptor impacts stated
Assumptions of mitigation made (not referenced)

Noise Management
Physical controls identified
Management checks identified (trick boxes)

18

Noise Management Plan



4.2 Control Measures Management Plan

4.2.1 Hours of operation

The operator intends to ensure dogs are fed and exercised only within normal daytime hours 07:00hrs – 19:00hrs Monday – Sundays. Final checks on dogs at night will not result in them using the external areas.

4.2.2 Music

Dogs prone to separation anxiety are less likely to become problematic if they can hear a human voice. Equally dogs that can see other animals have the comfort of the pack presence.

BPM compliance	
Hours of operation	
Music playing as necessary	
Reporting of abnormal (noisy) operations	
Moving problem animals	

Playing soft music or radio has a calming effect on dogs. The DEFRA guide "Constant Barking Can Be Avoided Offering guidance to dog owners June 2005 specifically notes that "*Owners can leave music on to mask sounds outside, but not so loud that it annoys neighbours*" to reduce persistent barking, equally playing music can reduce stress in dogs to prevent barking. Many councils now advocate such actions
https://www.bbc.co.uk/news/uk-scotland-glasgow-west-31695766
https://www.uttlesford.gov.uk/media/9305/Advice-for-dealing-with-barking-dogs/pdf/Barking_advice_PDFA.pdf?m=636989746374000000

The operator has music piped into each of the kennels to provide background noise for the dogs in his care.

Demonstrating BPM
Ensuring that dogs with anxiety are managed, and able to see other dogs, that music is playing where necessary to ensure that background trigger sounds are masked, and that music is soothing.

Where a dog does not respond to management and isn't calming when subject to music, consider moving to the acoustically secure Block 2.

Keep records of problem animals and actions taken.

4.2.3 Problem Dogs

Problem dogs, those who suffer significant separation anxiety, or other potential issues that result in incessant barking will be identified.

Every effort will be made to ensure dogs are handled with care to ensure they are reassured and provided with companionship and managed appropriately. In the event barking continues, it may be that isolating the dog becomes necessary to ensure it is secure and in a quiet area, and this will hopefully resolve the problem. Block 2 has been modified to ensure that no external noise can be detected inside, additionally noise breakout from block 2 is minimal due to the construction. Dogs in Block 2 are checked regularly to ensure they are comfortable, in the event that continued distress is noted, the owners are contacted and arrangements made to return the dog as soon as possible.

4.2.4 Training

All operator staff receive training on environmental noise awareness. Operators responsible for the dogs, have been provided with basic noise awareness training by Enviroconsult Limited, and are trained to understand and minimise the extent of the acoustic impact of those activities. In summary this means staff are instructed to:

BPM compliance	
Staff awareness training	
Reporting of abnormal events	
Compliance with operational time limits	
Recording of information requested	
Complaints procedure	

- Ensure all activities are carried out in designated areas
- Ensure all dogs are managed in accordance with good practice
- Understand the importance preventing exercise of dogs outside normal daytime operations
- Understand the key requirements to minimise triggers for excessive barking
- Understand the need for keeping appropriate records and recording/reporting of abnormal events
- Understand the complaints procedure and the need for good community liaison in the event of complaint.
- Ensure cooperation with any investigation into a complaint.
- Understand basic noise awareness and control principles

Demonstrating BPM
All operator staff will are trained in noise awareness.

All records associated with abnormal events should be recorded.

All staff to be made aware of the complaint process and their role within any investigation.

4.2.5 Basic Noise awareness

Basic noise awareness as it applies to Operator staff and comprises the following items:

- Instructing staff to be careful feeding, exercising or moving dogs to prevent over excitement.
- Ensuring that activities take place only in designated areas protected by acoustic measures.
- Ensuring that dog handling is undertaken during the day as far as reasonably possible.
- Ensuring that staff are aware of the need to place problem dogs into Block 2 where necessary.
- Ensuring that staff keep appropriate records.

Staff are provided with on the job training and familiarisation as necessary to ensure compliance with basic noise awareness.

4.2.6 Complaints procedure

Any noise complaints received are logged, recorded and retained for inspection in a complaint log. The details of the complaint must include:

BPM compliance	
Complaint procedure	
Investigations process	
Community liaison	
Recording of information requested	

- Time and date of notification
- Name of complainant
- Address of complainant
- Nature of incident (identifying equipment or machines or people if possible)
- Time incident occurred

The complaint log should be completed by the individual receiving the complaint and then immediately brought to the attention of the operator.

The operator (or any person delegated by him – for example environmental consultant) will then conduct an investigation of the incident(s) leading to the complaint. The outcome of the investigation shall be recorded by the operator in the complaint log, along with any measures taken to reduce or eliminate the noise. The complainant shall then be notified of the outcome of the complaint.

If a complainant is not satisfied with the outcome of the investigation, the operator should advise the complainant of what further measures are to be taken. If no other measures are possible or appropriate, the operator should advise the complainant of their right to make a formal complaint to the regulator.

There will be circumstances where no immediate mitigation measures are possible. In such cases the site operator will record the reasons for this and ensure that all noisy activities are kept to an absolute minimum.

Demonstrating BPM
A formal written complaint procedure is maintained.

All complaints (or notifications from staff of events) to be investigated and actioned as necessary.

At the conclusion of any investigation, all complainants to be notified of the outcome of the investigation as soon as is practicable.

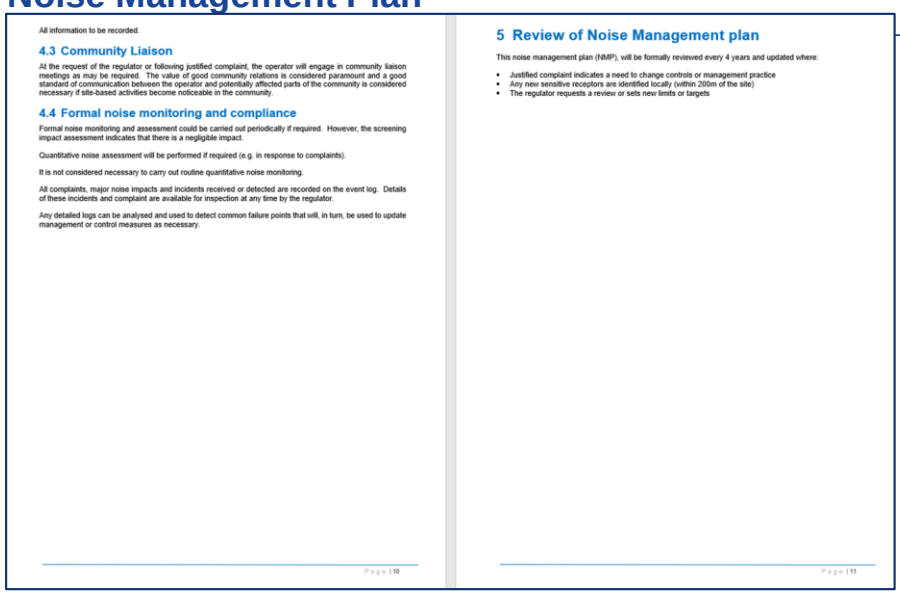
Operational Control
Measures identified
Time restrictions
Problem dogs
Tick boxes

Management Control
Measures identified
Training
Tick boxes

Complaints process

19

Noise Management Plan



All information to be recorded.

4.3 Community Liaison

At the request of the regulator or following justified complaint, the operator will engage in community liaison meetings as may be required. The value of good community relations is considered paramount and a good standard of communication between the operator and potentially affected parts of the community is considered necessary if site-based activities become noticeable in the community.

4.4 Formal noise monitoring and compliance

Formal noise monitoring and assessment could be carried out periodically if required. However, the screening impact assessment indicates that there is a negligible impact.

Quantitative noise assessment will be performed if required (e.g. in response to complaints).

It is not considered necessary to carry out routine quantitative noise monitoring.

All complaints, major noise impacts and incidents received or detected are recorded on the event log. Details of these incidents and complaint are available for inspection at any time by the regulator.

Any detailed logs can be analysed and used to detect common failure points that will, in turn, be used to update management or control measures as necessary.

5 Review of Noise Management plan

This noise management plan (NMP), will be formally reviewed every 4 years and updated where:

- Justified complaint indicates a need to change controls or management practice
- Any new sensitive receptors are identified locally (within 200m of the site)
- The regulator requests a review or sets new limits or targets

Community Liaison on request

Formal noise monitoring and demonstration of compliance on request

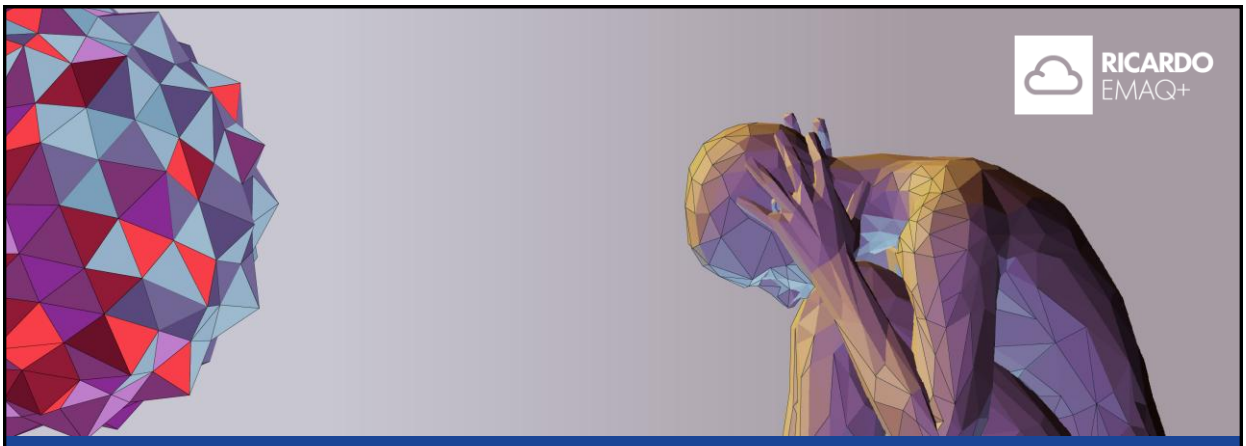
Review of management plan (4 years)

20

Noise Management Plan

- Is the plan fit for purpose?
- What has been omitted?
- What could be added to provide greater comfort?

21



Essentials of Noise 5

Session 4: Discharge of Statutory Duty - Statutory Nuisance

July 2025

1

Case Law (General)

- Statutory Nuisance:
  - Prejudicial to health or a nuisance.
- Nuisance:
  - Private or public nuisance (from the common law).
- Private Nuisance:
  - “An unlawful interference with a person’s use and enjoyment of land, or some right over or in connection with it.” (Howard v Walker [1947]).
- Public Nuisance:
  - New statutory definition;
  - Section 78 Police, Crime, Sentencing and Courts Act 2022;
  - Abolition of common law offence of public nuisance.

2

Case Law (General)

Public Nuisance

- Offence where any act or omission intentionally or recklessly:
  - Creates a risk of, or causes serious harm to the public or a section of the public; or
  - Obstructs the public or a section of the public in the exercise or enjoyment of a right that may be exercised or enjoyed by the public at large.
- "Serious harm" means:
  - Death, personal injury or disease;
  - Loss of, or damage to, property; or
  - Serious distress, serious annoyance, serious inconvenience or serious loss of amenity.

3

Case Law (General)

- Prejudice to Health:
  - Rv Bristol City Council c Everett [1999];
  - Birmingham CC v Oakely [2000];
  - Cunningham v Birmingham CC [1997].
- Unreasonable interference with use of property:
  - National Coal Board vs Thorne [1976].
- Personal discomfort:
  - Wivenhoe Port vs Colchester BC [1982];
  - Vella v (1) Lambeth LBC and (2) London and Quadrant Housing Trust [2005; EWHC 2473 (Admin) applying R v Bristol CC, ex parte Everett [1999] LGR 513 and Birmingham CC v Oakley [2001] 1 AC 617, HL.

4

Case Law (General)

- Nuisance is judged taking into account the following factors:
  - Extent of the harm (*St. Helen's Smelting Co. v Tipping [1865]*);
  - Locality – "what would be a nuisance in Belgrave Square would not necessarily be so in Bermondsey" (*Sturges v Bridgman [1879]*);
  - Time (*Soltau v de Held [1851]*);
  - Duration;
  - Frequency;
  - Convention;
  - Malice (*Hollywood Silver Fox Farm Ltd. v Emmett [1936]*).

5

Case Law (Update)

Coventry and Others v Lawrence [2014] UKSC 13, (2014) 2 WLR 433 (Supreme Court)

- Noise from motor racing circuit.
- Private claim for nuisance.
- Argued that:
  - Planning permission gave them authority;
  - Established use so not able to bring action.
- **Held.**
- Planning permission is not a defence to nuisance.
- No right to make noise.
- No defence to say was established use.
- Not a defence that complainant came to the nuisance.

6

Case Law (Update)

LB Hackney, R (on the application of) v Rottenberg 2007 (High Court)

- Residential property next to neighbouring property acting as a school and place of worship (synagogue).
- Noise from shouting, chanting and jumping.
- Abatement notice served and six breaches prosecuted – appeal against conviction was successful at Crown Court. Appeal to High Court.
- **Held.**
- Examined each of the offence dates to determine cause – identified that some related to special occasions.
- Special events were considered to be one-offs.
- Two events related to school activities and were determined to be reasonable.
- Court is not bound by the opinion of witnesses re nuisance (even where they bring a level of expertise).

7

Case Law (Update)

Barr and Others v Biffa Waste Services Limited 2012 (Court of Appeal)

- A number of properties affected by smell from a landfill site.
- Biffa held a permit which included odour provisions.
- Strategic waste operation (public benefit).
- **Held.**
- No absolute standard, must be substantial interference in the use and enjoyment of land.
- Neither planning permission nor a permit authorizes the commission of a nuisance, even where complying with conditions.
- Compliance with the permit conditions does not make the activities reasonable.

8

Case Law (Update)

Fouladi v Darout/Fouladi v A and S El Ferrami/Fouladi v St Mary Abbotts Court Ltd (2018) EWHC 3501 (High Court)

- Converted flats.
- Noise from upstairs (everyday noise plus late returns, parties and use of drums).
- Some unauthorised work to the upstairs flats.
- Action taken against first floor flat dwellers and freeholder of building.
- **Held.**
- Was a private nuisance.
- Freeholder not liable.

9

Case Law (Update)

Cocking v Eacott and Waring (2016) EWCA Civ 140 (Court of Appeal)

- Two neighbours, one claiming nuisance from barking dog and shouting.
- Complaint property occupied by daughter of owner.
- Action by complainant in relation to barking dog.
- Prosecution against owner and occupier – both convicted.
- Appeal by owner against conviction.
- **Held.**
- Generally, a landlord is not responsible for the actions of a tenant unless they have expressly authorised the nuisance or the nuisance arose as a direct result of the purpose of the let.
- There is no requirement for a landlord to stop a nuisance.

10

Case Law (Update)

Cocking v Eacott and Waring (2016) EWCA Civ 140 (Court of Appeal)

- But, occupant had a bare licence and owner paid all bills and maintained house.
- A licensor is not the same as a landlord.
- On the basis of the licence, the owner exercised control and therefore would be considered as the occupier (even though she didn't live there).

11

Case Law (Update)

Fearn and Others v Board of Trustees of the Tate Gallery [2023] UKSC 4

- The case was brought by the occupants of a number of flats situated adjacent a viewing platform sited on the Tate Modern in London. They claimed that their privacy was being intruded upon by users of the viewing platform. The flats are at a similar height to the viewing platform and have a number of glass walls. Approximately 500,000 to 600,000 people use the viewing platform each year and many display an interest in the flats, taking photographs etc and posting these online.
- The case was dismissed by the Court of Appeal, but was appealed to the Supreme Court.

12

Case Law (Update)

Fearn and Others v Board of Trustees of the Tate Gallery [2023] UKSC 4

- The Supreme Court determined that the claim could give rise to a claim for nuisance at common law. The court confirmed a number of core principles relating to private nuisance, in particular:
  - Nuisance is a use of land which wrongfully interferes with the ordinary use and enjoyment of land;
  - The interference must be substantial, judged by the standards of the ordinary person;
  - Even where the interference is substantial, the defendant will not be liable it it is doing no more that making a common and ordinary use of its own land;
  - What amounts to ordinary use will take account of the character of the locality;
  - There is no defence to say that the use of land is beneficial to the public;
  - Where land is being used abnormally, those affected are not required to take measures to mitigate the impact.

13

Statutory Nuisance

Noise – two categories of statutory nuisance deal with noise

- Section 79(1)(g) – noise emitted from premises:
  - Excludes noise from an aircraft.
- Section 79(1)(ga) – noise emitted from or caused by a vehicle, machinery or equipment in a street:
  - Excludes noise made by traffic, military forces and demonstrations.

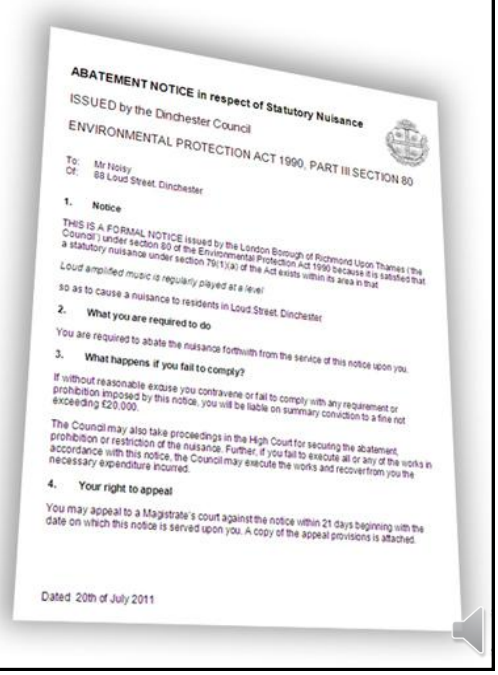
14

Statutory Nuisance

Local Authority Duties

The Environmental Protection Act 1990 places 3 duties on local authorities:

- To inspect its area from time to time to detect any statutory nuisances;
- To take reasonable steps to investigate complaints relating to statutory nuisance; and
- To serve an abatement notice where they determine that a statutory nuisance exists etc.



ABATEMENT NOTICE in respect of Statutory Nuisance

ISSUED by the Dinchester Council

ENVIRONMENTAL PROTECTION ACT 1990, PART III SECTION 80

To: Mr Noisy
Of: 88 Loud Street, Dinchester

1. Notice

THIS IS A FORMAL NOTICE issued by the London Borough of Richmond Upon Thames ('the Council') under section 80 of the Environmental Protection Act 1990 because it is satisfied that a statutory nuisance under section 79(1)(a) of the Act exists within its area in that

Loud amplified music is regularly played at a level

so as to cause a nuisance to residents in Loud Street, Dinchester

2. What you are required to do

You are required to abate the nuisance forthwith from the service of this notice upon you.

3. What happens if you fail to comply?

If without reasonable excuse you contravene or fail to comply with any requirement or prohibition imposed by this notice, you will be liable on summary conviction to a fine not exceeding £20,000.

The Council may also take proceedings in the High Court for securing the abatement, prohibition or restriction of the nuisance. Further, if you fail to execute all or any of the works in accordance with this notice, the Council may execute the works and recover from you the necessary expenditure incurred.

4. Your right to appeal

You may appeal to a Magistrate's court against the notice within 21 days beginning with the date on which this notice is served upon you. A copy of the appeal provisions is attached.

Dated 20th of July 2011

15

Statutory Nuisance

RICARDO EMAQ+

Complaint investigation – common failures:

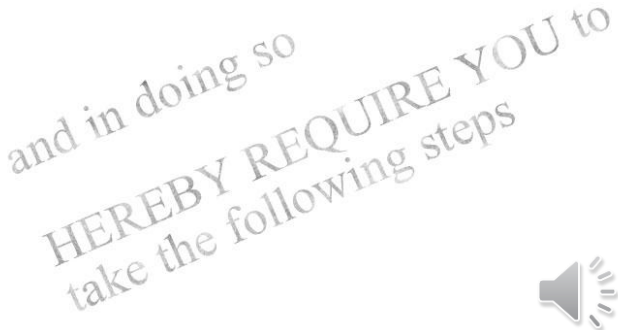
- Authorisation of officers;
- No or failure to follow an investigation procedure;
- Failure to keep proper records;
- Failure to properly keep and store evidence;
- Inadequate liaison between services;
- Excessive delays;
- Inadequate liaison with complainants;
- Delays or failure to serve an abatement notice.

16

Statutory Nuisance

Section 80(1) Duty to serve a notice where:

- LA are satisfied that a statutory nuisance:
  - Exists; or
  - Has occurred and likely to recur; or
  - Is likely to occur.
- Decision based on the 'balance of probabilities', taking all of the factors into account.



17

Statutory Nuisance

Service of an abatement notice – noise from premises (section 79(1)(g)):

- LA allowed to delay the service of an abatement notice for up to 7 days while it takes appropriate steps to seek abatement/prevent a recurrence;
- This could be through negotiation, including reminding the offender of other controls that may apply e.g. planning, permit or licensing conditions;
- If the LA is convinced that the nuisance will be abated without the need to serve an abatement notice then no notice is required (but document the reasons for the decision);
- Otherwise a notice should be served.

18

Statutory Nuisance

Duty to serve a notice

Table

Breakdown of EPA90 noise notices served, against number of Councils serving

0	24
1	17
2	18
3	17
4	22
5-9	58
10+	140

19

Statutory Nuisance

The abatement notice:

- The simple notice;

vs

- The works specific notice.

Source: Microsoft Images

20

Abate the Nuisance/Specified Works

- R vs Wheatly (drainage):
  - Execute such works and do such things as may be necessary… so that the same shall no longer be a nuisance or prejudicial to health".
- R vs Falmouth and Truro Port Health Authority:
  - 'Abate the nuisance'.

Too vague and general. Court required that any works should be specified in the order.

Watercourse defined as a limited area of water and not a river or estuary.
Authorities serving notice for sewerage discharges not obliged to consult with the Sewerage undertaker.
Notice not invalid for failing to specify works.
Does this apply also to EA regulated industry?

21

Specifying Works on an Abatement Notice

Sterling Homes v Birmingham CC [1996] QBD 1996

- Operation of a large press at an industrial site in close proximity to a residential block owned by Sterling Homes, caused a nuisance.
- The Council served on Sterling Homes and referenced transmission of noise and vibration through the building from the nearby industrial premises.
- It stated:
  - *'Do hereby require you to abate the said nuisance within 56 days . . and for that same purpose require you to carry out such works as may be necessary to ensure that the noise and vibration does not cause prejudice to health or a nuisance, take any other steps as may be necessary for that purpose'.*
- The notice was defective. It left unspecified what works were required.

22

Case Law in Respect of Notices

Kirklees Metropolitan Council v Field; Thackray; Marsh and Wilson [1998] 162 JP 88

- Held that: An abatement notice requiring works to be carried out must state clearly what works are required to be considered necessary.

David Budd v Colchester BC [1999] ALL ER (D) 218

- Abatement notices under section 80 a local authority had a choice whether simply to require abatement of the nuisance or in addition to specify in the notice the works or steps required for that purpose:
  - In this case the notice required a house holder to remove a nuisance caused by barking dogs. It did not need to specify the manner in which the nuisance was to be abated;
  - There are circumstances though envisaged where it would 'wholly unreasonable not to specify the works or steps required'.

23

Statutory Nuisance

- Key legal cases:
  - Elvington Park Ltd and Anor v City of York Council [2009];
  - Elvington Park Ltd and Anor, R (on the application of) v The Crown Court at York Council [2011];
  - A notice can just state to abate, but if works or steps are referred to as being necessary then these need to be included on the notice.

Source: Microsoft Images

24

Statutory Nuisance

- Practical drafting advice:
  - Where abstention or ordinary care is required;
    - Require abatement and prohibition of recurrence.
  - Where the terms of the notice require steps to be taken or work done;
    - Specify them clearly in the notice.
  - Where the notice or the associated paperwork imply works are necessary;
    - Specify them clearly in the notice.
  - If in doubt, leave works and steps out;
    - Require abatement and prohibit a recurrence.
  - Try to avoid uncertainty.

25

Statutory Nuisance

- Service of a notice:
  - Hierarchy;
  - If structural defect then ‘owner’;
  - If nuisance has not yet occurred then ‘owner’ or ‘occupier’;
  - In all other occasions serve on ‘person responsible for the nuisance’ unless;
  - Person responsible is not known in which case serve on ‘owner’ or ‘occupier’.

Source: Microsoft Images

26

Alternative Action

- Anti-Social Behaviour, Crime and Policing Act 2014:
  - Range of new powers;
  - Replaces existing ASB powers;
  - Community Protection Notices (CPN's);
    - Similar to Abatement Notices,
    - Unreasonable behaviour,
    - Detrimental impact on quality of life in locality,
    - Service does not meet EPA duty.

The Guardian [link]

27

OMBUDSMAN

28

Investigation Procedures and Policies

Policies and Procedures

- Standards.
- Consistency.
- Manage expectations.
- Compliance with law.

Ombudsman says:

"Organisations want to deal with complainants in ways that are open, fair and proportionate. A considered, policy-led approach helps staff to understand clearly what is expected of them, what options for action are available, and who can authorise these actions. A policy that can be shared with complainants if they start to behave unreasonably can help in managing their expectations and their behaviour, as far as possible, while the substance of their complaint is addressed."

29

Repeated Complaints

- (unproven) Complaints made routinely can be significant drain on resources, and frustrating for complainants, officers and alleged perpetrators alike.
- Unproven complaints could also be a form of harassment to others:
  - *Harassment is when someone behaves in a way which offends you or makes you feel distressed or intimidated. This could be abusive comments or jokes, graffiti or insulting gestures. Harassment is a form of discrimination under the Equality Act 2010;*
  - *s.29 Provision of services…*
- Vexatious complainants.

"to speak to me… [like that] is to harass a peaceful man"
Untouchables

30

Local Government Ombudsman

"For us, unreasonable and unreasonably persistent complainants are those complainants who, because of the nature or frequency of their contacts with an organisation, hinder the organisation's consideration of their, or other people's, complaints."

We distinguish between 'persistent' complainants and 'unreasonably persistent' complainants.

People bringing complaints to the Ombudsman are 'persistent' because they feel the organisation has not dealt with their complaint properly and are not prepared to leave the matter there.

Around 46% of the complaints we investigate in detail are upheld signalling that this persistence is frequently justified. And almost all complainants see themselves as pursuing justified complaints.

https://www.lgo.org.uk/information-centre/reports/advice-and-guidance/guidance-notes/guidance-on-managing-unreasonable-complainant-behaviour

31

Unreasonable Behaviour

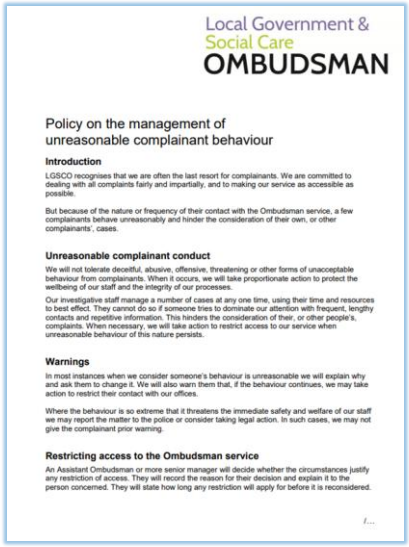
- Overrides legal duties to investigate?
- Complainants are expecting to access services.
- They are (normally) emotionally charged when doing so.
- Their 'expectation' is that you will resolve their issue.
- Unreasonable behaviour must go beyond what is normal…

Ombudsman's examples

- Refusing to specify the grounds of a complaint, despite offers of help.
- Refusing to cooperate with the complaints investigation process.
- Refusing to accept that certain issues are not within the scope of a complaints procedure.
- Insisting on the complaint being dealt with in ways which are incompatible with the adopted complaints procedure or with good practice.
- Making unjustified complaints about staff who are trying to deal with the issues, and seeking to have them replaced.
- Changing the basis of the complaint as the investigation proceeds.
- Denying or changing statements he or she made at an earlier stage.
- Introducing trivial or irrelevant new information at a later stage.
- Raising many detailed but unimportant questions, and insisting they are all answered.
- Submitting falsified documents from themselves or others.
- Adopting a 'scatter gun' approach: pursuing parallel complaints on the same issue with various organisations.
- Making excessive demands on the time and resources of staff with lengthy phone calls, emails to numerous council staff, or detailed letters every few days, and expecting immediate responses.
- Submitting repeat complaints with minor additions/variations the complainant insists make these 'new' complaints.
- Refusing to accept the decision; repeatedly arguing points with no new evidence.

32

Example Behaviour Policy



Local Government & Social Care OMBUDSMAN

Policy on the management of unreasonable complainant behaviour

Introduction

LGSCO recognises that we are often the last resort for complainants. We are committed to dealing with all complaints fairly and impartially, and to making our service as accessible as possible.

But because of the nature or frequency of their contact with the Ombudsman service, a few complainants behave unreasonably and hinder the consideration of their own, or other complainants', cases.

Unreasonable complainant conduct

We will not tolerate deceitful, abusive, offensive, threatening or other forms of unacceptable behaviour from complainants. When it occurs, we will take proportionate action to protect the wellbeing of our staff and the integrity of our processes.

Our investigative staff manage a number of cases at any one time, using their time and resources to best effect. They cannot do so if someone tries to dominate our attention with frequent, lengthy contacts and repetitive information. This hinders the consideration of their, or other people's, complaints. When necessary, we will take action to restrict access to our service when unreasonable behaviour of this nature persists.

Warnings

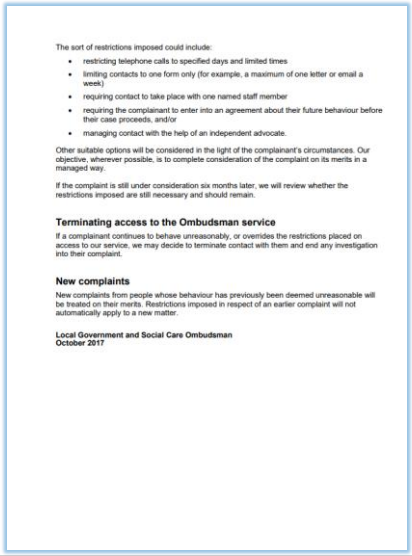
In most instances when we consider someone's behaviour is unreasonable we will explain why and ask them to change it. We will also warn them that, if the behaviour continues, we may take action to restrict their contact with our offices.

Where the behaviour is so extreme that it threatens the immediate safety and welfare of our staff we may report the matter to the police or consider taking legal action. In such cases, we may not give the complainant prior warning.

Restricting access to the Ombudsman service

An Assistant Ombudsman or more senior manager will decide whether the circumstances justify any restriction of access. They will record the reason for their decision and explain it to the person concerned. They will state how long any restriction will apply for before it is reconsidered.

/...



The sort of restrictions imposed could include:

- restricting telephone calls to specified days and limited times
- limiting contacts to one form only (for example, a maximum of one letter or email a week)
- requiring contact to take place with one named staff member
- requiring the complainant to enter into an agreement about their future behaviour before their case proceeds, and/or
- managing contact with the help of an independent advocate.

Other suitable options will be considered in the light of the complainant's circumstances. Our objective, wherever possible, is to complete consideration of the complaint on its merits in a managed way.

If the complaint is still under consideration six months later, we will review whether the restrictions imposed are still necessary and should remain.

Terminating access to the Ombudsman service

If a complainant continues to behave unreasonably, or overrides the restrictions placed on access to our service, we may decide to terminate contact with them and end any investigation into their complaint.

New complaints

New complaints from people whose behaviour has previously been deemed unreasonable will be treated on their merits. Restrictions imposed in respect of an earlier complaint will not automatically apply to a new matter.

Local Government and Social Care Ombudsman
October 2017

33

Summary of Key Points

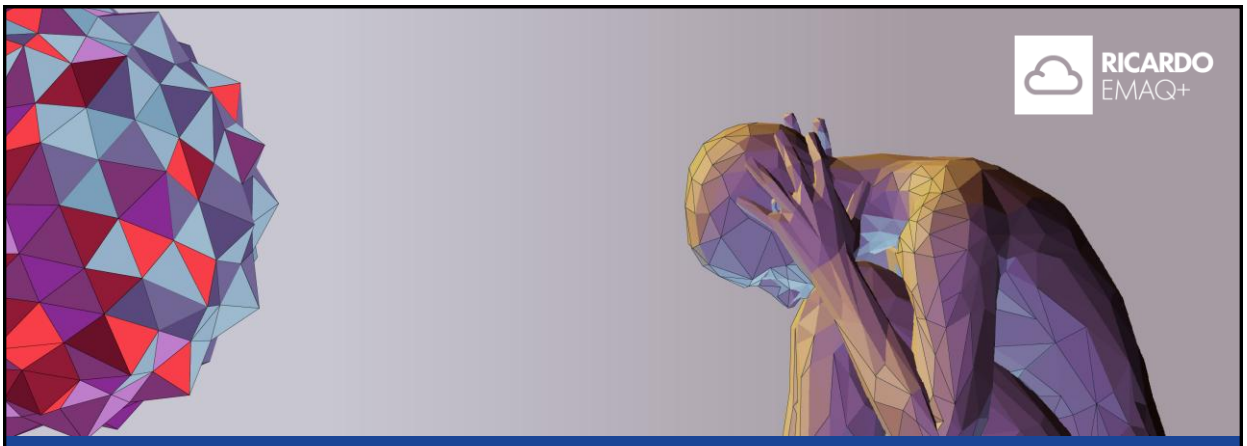
- It is important to be up to date and understand case law relating to statutory nuisance.
- There are two categories of noise nuisance:
  - Noise from premises;
  - Noise in the street from vehicles, equipment and machinery.
- Local authorities have a number of duties under the Act:
  - To inspect its area for nuisances;
  - To investigate complaints;
  - To serve an abatement notice where a statutory nuisance is found.
- Abatement notices may be either simple e.g. abate or more specific and include a schedule of work.

34

Summary of Key Points

- Other powers should also form part of the toolkit for addressing nuisance issues.
- Complainants will often complain to the ombudsman where they believe that their complaint has not been properly investigated.
- The ombudsman will consider whether there has been maladministration.
- Controls can be imposed on unreasonably persistent complainants.

35



Essentials of Noise 5

Session 5: Wording Notices and Conditions

July 2025

1

Nuisance Abatement Notice

Statutory Notices

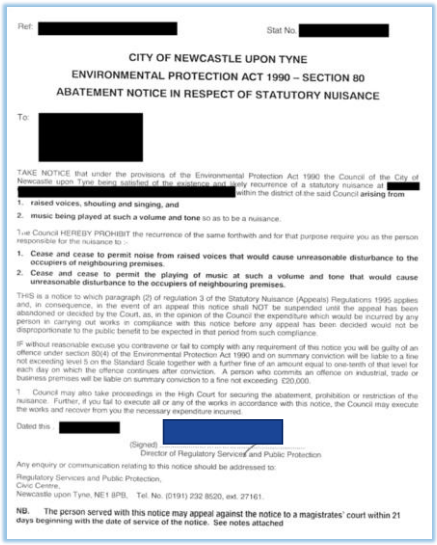
- Undertake a fair investigation.
- Determine that a statutory nuisance:
  - Exists;
  - Likely to recur;
  - Will occur.
- Determine the person(s) to serve.
- Carefully draft the notice.
- Decide if including schedule.
- Determine reasonable timescale.
- Decide if suspended on appeal.

2

Abatement Notices

Notices MUST:

- Be assigned to the person responsible or where not possible the owner or occupier;
- State the name;
- State the address of the person, and the address at which the nuisance is caused;
- Clearly identify the nuisance;
- Clearly specify the abatement, occurrence/recurrence;
- Specify the works required*;
- Specify the time frame for compliance;
- Be signed and dated by a suitably authorised and delegated individual;
- Reference number;
- State appeal regs 2005 on the reverse;
- Be properly served.



Ref: [redacted] Stat No. [redacted]

CITY OF NEWCASTLE UPON TYNE
ENVIRONMENTAL PROTECTION ACT 1990 – SECTION 80
ABATEMENT NOTICE IN RESPECT OF STATUTORY NUISANCE

To: [redacted]

TAKE NOTICE that under the provisions of the Environmental Protection Act 1990 the Council of the City of Newcastle upon Tyne being satisfied of the existence and likely recurrence of a statutory nuisance at [redacted] within the district of the said Council **arising from**

1. **raised voices, shouting and singing, and**
2. **music being played at such a volume and tone** so as to be a nuisance.

THE Council HEREBY PROHIBIT the recurrence of the same forthwith and for that purpose require you as the person responsible for the nuisance to :-

1. **Cease and cease to permit noise from raised voices that would cause unreasonable disturbance to the occupiers of neighbouring premises.**
2. **Cease and cease to permit the playing of music at such a volume and tone that would cause unreasonable disturbance to the occupiers of neighbouring premises.**

THIS is a notice to which paragraph (2) of regulation 3 of the Statutory Nuisance (Appeals) Regulations 1995 applies and, in consequence, in the event of an appeal this notice shall NOT be suspended until the appeal has been abandoned or decided by the Court, as, in the opinion of the Council the expenditure which would be incurred by any person in carrying out works in compliance with this notice before any appeal has been decided would not be disproportionate to the public benefit to be expected in that period from such compliance.

IF without reasonable excuse you contravene or fail to comply with any requirement of this notice you will be guilty of an offence under section 80(4) of the Environmental Protection Act 1990 and on summary conviction will be liable to a fine not exceeding level 5 on the Standard Scale together with a further fine of an amount equal to one-tenth of that level for each day on which the offence continues after conviction. A person who commits an offence on industrial, trade or business premises will be liable on summary conviction to a fine not exceeding £20,000.

The Council may also take proceedings in the High Court for securing the abatement, prohibition or restriction of the nuisance. Further, if you fail to execute all or any of the works in accordance with this notice, the Council may execute the works and recover from you the necessary expenditure incurred.

Dated this [redacted]

(Signed) [redacted]
Director of Regulatory Services and Public Protection

Any enquiry or communication relating to this notice should be addressed to:

Regulatory Services and Public Protection,
Civic Centre,
Newcastle upon Tyne, NE1 8PB. Tel. No. (0191) 232 8520, ext. 27161.

NB. The person served with this notice may appeal against the notice to a magistrates' court within 21 days beginning with the date of service of the notice. See notes attached

3

Abatement Notices

- Abatement Notices are the means of resolving problems that cannot be negotiated… (See Regulators Code).
- S.80 Environmental Protection Act 1990:
  - Note… we evidence the nuisance, not the intent so NO 'mens rea' (Guilty Mind);
  - We SHALL service notice*;
  - Notice is subject to appeal;
  - Notice can be suspended pending appeal or NOT*;
  - Served on the **person responsible**, or occupier, owner or of land, *normally*** in that order;
  - Occasionally some nuisance would be served on multiple persons.

4

Abatement Notices

- Suspension of a notice on appeal.
- Notice will not be suspended where:
  - Nuisance is prejudicial to health;
  - Suspension would render the notice of no practical effect;
  - The expenditure which would be incurred in carrying out works in compliance with the notice would not be disproportionate to the public benefit.
- Preventing suspension is determined at the time of drafting.

5

Service of Notice

- Section 160 EPA 1990.
- (1) Any notice required or authorised by or under this Act to be served on or given to an inspector may be served or given by delivering it to him or by leaving it at, or sending it by post to, his office.
- (2) Any such notice required or authorised to be served on or given to a person other than an inspector may be served or given by delivering it to him, or by leaving it at his proper address, or by sending it by post to him at that address.
- (3) Any such notice may:
  - (a) in the case of a body corporate, be served on or given to the secretary or clerk of that body;
  - (b) in the case of a partnership, be served on or given to a partner or a person having the control of management of the partnership business.

Source: Microsoft Images

6

Statutory Nuisance

How quickly does the notice have to be served?

- For noise nuisance from premises (Section 79(1)(g)).
- 7 day delay allowed.
- Negotiation/resolution.
- Can serve or decide not to serve.

- For noise in the street (section 79(ga)).
- No delay allowed!

Source: Microsoft Images

7

Statutory Nuisance

Appeals

a) Notice is not justified.
b) Informality, defect or error in notice.
c) Unreasonable/unnecessary requirements or refusal of alternative requirements.
d) Unreasonable time period(s) specified.
e) Best practicable means were used (industrial, trade or business premises).
f) Requirements are more onerous than a s.60 COPA 1974 notice.
g) Concerns consents relating to vehicles/machinery on the street.
h) Notice should have been served on someone else responsible.
i) Notice should have been served on owner/occupier.
j) Notice should have been served on someone else in addition to the appellant.

8

Case Law in Respect of Notices

Challenging the Terms of the Notice

Stagecoach Ltd v McPail [1998] SCCR 289

- The defendant cannot challenge the terms of a notice in a subsequent trial if the notice could have been appealed to the Magistrates' court and the defendant had failed to do so.

Appeals

SFI Group v Gosport BC [1999] Independent 3 May 1999

- The Court should consider the facts at the point when the notice was served and not at the time the appeal was decided.

9

Statutory Nuisance

Enforcement

'If a person on whom an abatement notice is served, without reasonable excuse, contravenes or fails to comply with any requirement or prohibition imposed by the notice, he shall be guilty of an offence.'

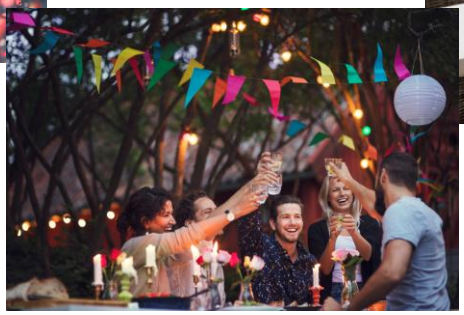
No duty to enforce!

Affordable Wardrobe: [link]

10

Statutory Nuisance Scenario

Ambrose Gardens – Case Study



Source: Microsoft Images

11

Statutory Nuisance Scenario

15 Ambrose Gardens is a three storey terraced Edwardian villa which is advertised through AirBnB. It was added onto the website about 3 months ago. It has four bedrooms and a hot tub in the rear garden. The advert includes the heading “PARTY!! Hot Tub House”. There are a number of reviews as part of the listing including one which states “Aleesha was very helpful and accommodating. She was a great host. It’s a perfect party house which has an amazing jacuzzi, pool table and ample space to dance. Will book again! It was a great party!!”

The house is owned by Aleesha Chigwell who lives a short distance away at Denham Croft, Islington.

The neighbours on each side of 15 Ambrose Gardens have been complaining about noise from parties being held at the property since it was added to the AirBnB website. There is at least one party and sometimes up to 3 parties in a week. On the days without parties, the neighbours are also complaining about talking, shouting, singing, etc related to the use of the hot tub. This noise often goes until the early hours of the morning.

The minimum period of occupancy for the house is 2 days, but can be longer, although most of the users only tend to stay for 2-3 nights.

12

Statutory Nuisance Scenario

Ambrose Gardens – Key Facts

Noise complaints from:

- Parties;
- Use of hot tub;
- Regular pattern of disturbance;
- Disturbance into early hours and throughout week;
- Residential property but being promoted as a "party house";
- Typical residential neighbourhood;
- Different occupiers for each event.

Source: Microsoft Images

13

Statutory Nuisance Scenario

Ambrose Gardens – Analysis of Facts

- Landlord is not usually responsible for the activities of tenants.
- Different tenants every few days.
- Service of notice on tenants likely to be ineffective.
- Landlord can be responsible where either they:
  - Participate in the nuisance; or
  - Authorise it.
- "Authorisation by letting" where the nuisance is an inevitable consequence of the letting (Cocking v Eacott & Waring (2016)).
- Does this apply to both party and hot tub noise?

14

Statutory Nuisance Scenario

Ambrose Gardens – Determination

- Landlord may be participating in events, but if not she is certainly actively promoting the property for parties.
- She is aware of the consequences of party use e.g. nuisance.
- Strong argument that nuisance is an inevitable consequence of this letting activity.
- Use of hot tub is less clear (is nuisance inevitable?).
- Abatement notice could be served on landlord (based on Cocking).
- Legal responsibilities would need to be confirmed.
- Abatement notices could be served on tenants for party and/or hot tub noise (as well).

15

Statutory Nuisance Scenario

Ambrose Gardens – Determination

- Schedule or not:
  - Cause of nuisance clear;
  - Onus on landlord to prevent nuisance;
  - Omit schedule.
- Suspend on appeal (3 scenarios):
  - Prejudicial to health;
  - Short duration;
  - Cost of compliance outweighed by public benefit.
- All could be argued in this case, therefore reasonable not to suspend on appeal.

16

Summary of Key Points

- Abatement notices should be carefully drafted and consider the grounds for appeal when drafting.
- Identifying the correct person to serve the notice on is crucial.
- Decide whether the notice would be suspended on appeal.
- Ensure that service meets the requirements of the Act.
- There is no duty to enforce a breach of the notice but you should follow your enforcement policy.
- Case law can help to find a resolution to common problems.

17

Planning Conditions

- When to apply conditions.
- What are the rules for drafting conditions?
- What type of conditions are appropriate?
- The 6 tests.

18

When to Apply Planning Conditions

- Why are conditions imposed on a planning permission?
  - When used properly, conditions can enhance the quality of development and enable development to proceed where it would otherwise have been necessary to refuse planning permission,
  - by mitigating the adverse effects.
  - The objectives of planning are best served when the power to attach conditions to a planning permission is exercised in a way that is clearly seen to be fair, reasonable and practicable.
  - It is important to ensure that conditions are tailored to tackle specific problems, rather than standardised or used to impose broad unnecessary controls.

https://www.gov.uk/guidance/use-of-planning-conditions

19

The 6 Tests

- Paragraph 56 of the National Planning Policy Framework makes clear that planning conditions should be kept to a minimum, and only used where they satisfy the following tests:
  - necessary;
  - relevant to planning;
  - relevant to the development to be permitted;
  - enforceable;
  - precise; and
  - reasonable in all other respects.

https://www.gov.uk/guidance/use-of-planning-conditions

PLANNING CONDITIONS
56. Planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects. Agreeing conditions early is beneficial to all parties involved in the process and can speed up decision making. Conditions that are required to be discharged before development commences should be avoided, unless there is a clear justification[23]

PLANNING OBLIGATIONS
57. Planning obligations must only be sought where they meet all of the following tests[24]:
a) necessary to make the development acceptable in planning terms;
b) directly related to the development; and
c) fairly and reasonably related in scale and kind to the development.

23 Sections 100ZA(4-6) of the Town and Country Planning Act 1990 will require the applicant's written agreement to the terms of a pre-commencement condition, unless prescribed circumstances apply.
24 Set out in Regulation 122(2) of the Community Infrastructure Levy Regulations 2010.

20

When Conditions Should NOT be Used

- Any proposed condition that fails to meet one of the 6 tests should not be used. Specifically:
- Conditions which unreasonably impact on the deliverability of a development:
  - Conditions which place unjustifiable and disproportionate financial burdens;
  - LPA's should consider policies in the National Planning Policy Framework and supporting guidance on viability.
- Conditions reserving outline application details:
  - Where details have been submitted as part of an outline application, they must be treated by the local planning authority as forming part of the development for which the application is being made;
  - Conditions cannot be used to reserve these details for subsequent approval. The exception is where the applicant has made it clear that the details have been submitted for illustration purposes only.
- Conditions requiring the development to be carried out in its entirety:
  - Conditions requiring a development to be carried out in its entirety will fail the test of necessity where requiring more than is needed to deal with the problem they are designed to solve.
- Conditions requiring compliance with other regulatory requirements (eg Building Regulations, Environmental Protection Act):
  - Conditions requiring compliance with other regulatory regimes will not meet the test of necessity and may not be relevant to planning. Use of informatives to remind the applicant to obtain further planning approvals and other consents may be more appropriate.

21

When Conditions Should NOT be Used

- Conditions requiring land to be given up:
  - Conditions cannot require that land is formally given up (or ceded) to other parties, such as the local highway authority;
  - But Obligations Might… Obligations are agreements by separate parties, normally legally agreed separate to the application!
- Positively worded conditions requiring payment of money or other consideration:
  - No payment of money or other consideration can be positively required when granting planning permission. However, where the 6 tests will be met, it is permissible to prohibit development authorised pending, the entering into of a planning obligation requiring the payment of a financial contribution towards the provision of supporting infrastructure).

22

Useful Conditions!

- Useful Conditions:
  - Requesting further information (outline only normally);
  - Constrain time of development (begin within 3 years);
  - Stipulate the sequence that development should be carried out in (phasing);
  - Temporary consents (conditional);
  - Restrictions on use of premises (times, places, types of use etc.).

Planning Rules apply

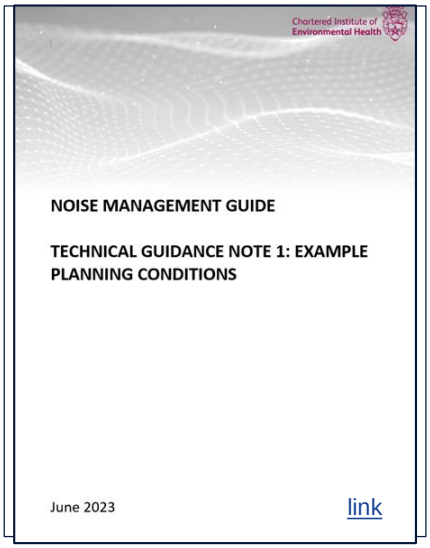
Check the guidance

[link]

23

Model Conditions

- Model conditions can improve the efficiency of the planning process, but it is important not to apply them in a rigid way and without regard to whether the 6 tests will be met. Local planning authorities may want to consider national model conditions where appropriate in the interests of maintaining consistency (see also model conditions).

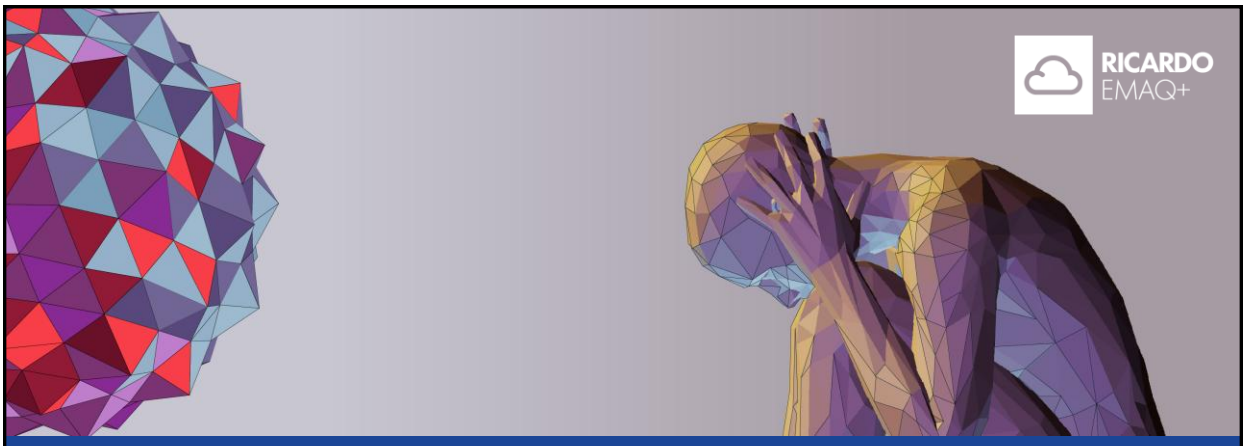


24

Summary of Key Points

- Planning conditions must be justified. Can only be used if without them the permission would be refused. (high threshold).
- Need to be agreed with the applicant “Agreeing conditions early is beneficial to all parties involved in the process and can speed up decision making.” (Para 56)
- Meet the 6 tests.
- Don’t duplicate other legislation, e.g. Nuisance, permitting, licensing…
- Planning conditions should be kept to a minimum.
- Planning conditions should avoid *pre-commencement* conditions.
- Always check with your planner when drafting conditions, it’s their legislation!

25



Essentials of Noise 5

Session 6: Final Case Study Construction Noise

July 2025

1

Aim

- Review Noise report for a construction noise scenario
- Critique contents and suitability for demonstrating compliance
- Determine suitability of approach

2

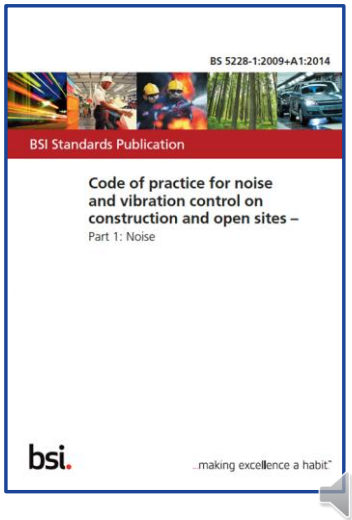
Group Work

- In groups evaluate the following ***compliance report***
- The report addresses a planning condition that requires:
  - "Construction Environment Management Plan
  - No development, (including construction, land raising and demolition if required) shall be carried ***out other than in accordance with a Construction Environment Management Plan (CEMP)*** that is first submitted to, and approved by, the local authority.
  - Reason: In the interests of prevention of pollution and protection of residential amenity."
- The CEMP set limits based on BS5228:2009 ABC method for noise, and vibration. The compliance report addresses these limits.

3

BS5228-1:2009 + A1:2014

- This British Standard refers to the need for the protection against noise and vibration of persons living and working in the vicinity of, and those working on, construction and open sites.
- It recommends procedures for noise and vibration assessment and control in respect of construction operations.
- It aims to assist architects, contractors and site operatives, designers, developers, engineers, local authority environmental health officers and planners with clear standards, guidelines on assessment and control mechanisms for noise.
- The standard effectively represents BPM for most construction style activities.
- The standard also provides guidance on Quarrying and mining including blasting



4

BS5228-1:2009 + A1:2014

- Foreword:
  - *This British Standard refers to the need for the protection against noise and vibration of persons living and working in the vicinity of, and those working on, construction and open sites. It recommends procedures for noise and vibration control in respect of construction operations and aims to assist architects, contractors and site operatives, designers, developers, engineers, local authority environmental health officers and planners.*
  - *As a code of practice, this part of BS 5228 takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading. Any user claiming compliance with this part of BS 5228 is expected to be able to justify any course of action that deviates from its recommendations.*

5

ABC Method – Threshold Noise Levels

- The ABC method is to carry out ambient monitoring and evaluate residual noise levels $L_{AEQ,1hour}$
- Results of ambient assessment are compared to the table for the intended working hours
- The Threshold noise levels established.

Table E.1 Example threshold of potential significant effect at dwellings

Assessment category and threshold value period	Threshold value, in decibels (dB)		
	Category A [A]	Category B [B]	Category C [C]
Night-time (23.00–07.00)	45	50	55
Evenings and weekends [D]	55	60	65
Daytime (07.00–19.00) and Saturdays (07.00–13.00)	65	70	75

NOTE 1 A potential significant effect is indicated if the $L_{Aeq,T}$ noise level arising from the site exceeds the threshold level for the category appropriate to the ambient noise level.

NOTE 2 If the ambient noise level exceeds the Category C threshold values given in the table (i.e. the ambient noise level is higher than the above values), then a potential significant effect is indicated if the total $L_{Aeq,T}$ noise level for the period increases by more than 3 dB due to site noise.

NOTE 3 Applied to residential receptors only.

[A] Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are less than these values.

[B] Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are the same as category A values.

[C] Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are higher than category A values.

[D] 19.00–23.00 weekdays, 13.00–23.00 Saturdays and 07.00–23.00 Sundays.

Time	Duration	LAeq (dB)	LAFMax (dB)	LA10 (dB)	LA90 (dB)
23/09/2019 08:39	00:20:08	45.5	74	47.1	41.3
23/09/2019 09:00	01:00:00	49.6	80.3	47.9	40.7
23/09/2019 10:00	01:00:00	46.7	73.2	45.6	39.5
23/09/2019 11:00	01:00:00	44.5	67.8	46.4	40.2
23/09/2019 12:00	01:00:00	45	64.6	46.9	41.9
23/09/2019 13:00	01:00:00	44.3	58.5	46.6	40.9
23/09/2019 14:00	01:00:00	46.7	67.3	48.8	41.8
23/09/2019 15:00	01:00:00	48.8	65.1	51.3	43.2
23/09/2019 16:00	01:00:00	51.3	77.5	52.3	45
23/09/2019 17:00	00:31:04	49.2	64.9	52	45.1

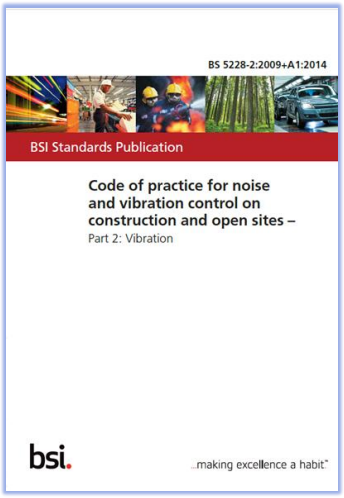
6

Vibration Standards

- BS 5228: 2009 +A1 2014 Code of practice for noise and vibration control on construction and open sites, Part 2
- Limits

Vibration Construction
PPV 1mms^{-1} as Lower action level
PPV 6mms^{-1} Trigger level
Vibration (annoyance)
PPV 0.3mms^{-1} as lower action level]
PPV 1mms^{-1} trigger level.

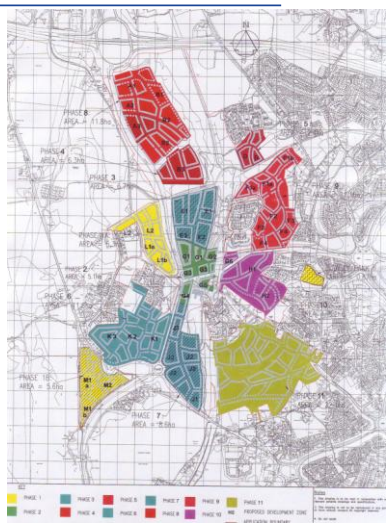
- None set but building damage levels 10mms^{-1}



7

Lawley Housing Development

- In 2011 planning consent was granted for the extension of Telford New Town.
- The Strategic Plan required the construction of 15,000 new homes, the 11 phases of the Lawley development would account for over 1/5th of all required development for the 20 year plan for the borough.
- Lawley Phase 11 was to provide a significant proportion of that number approx. 750.



https://secure.telford.gov.uk/planning/pa-documents-plans-public.aspx?ApplicationNumber=TWC/2010/0828

8

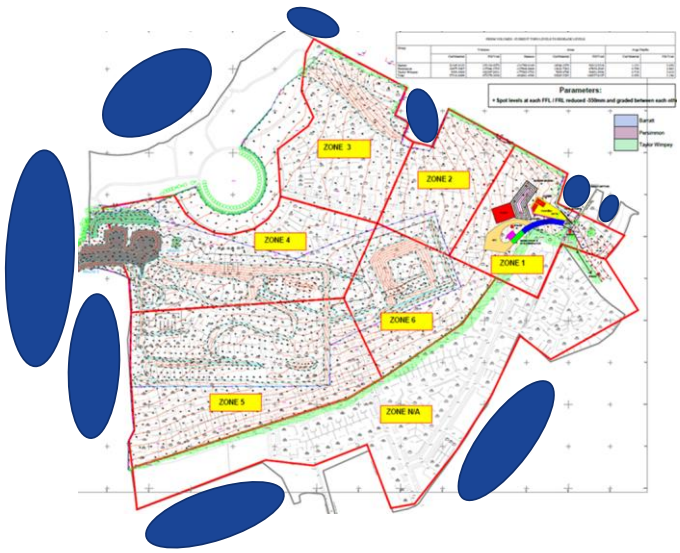
Phase 11 – Site Levelling Works

- Phase 11 requires site profiling and stabilisation works prior to construction
- Additional imported materials required to achieve levels approximately 400,000 tonnes.
- Concerns over noise, dust, HGV's

Source: Tony Higgins

9

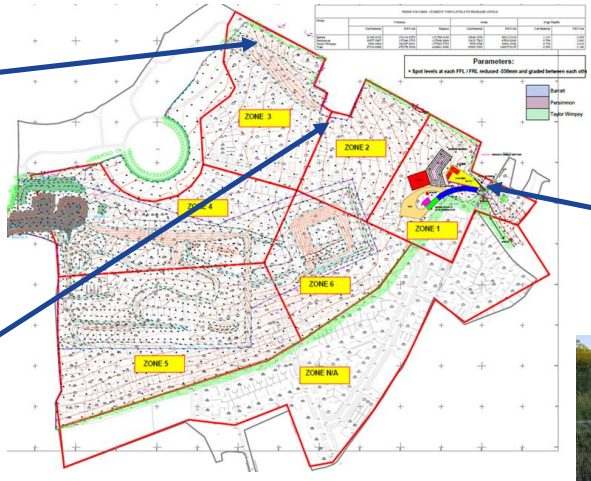
Sensitive Receptors



Reference document is Enviroconsult Report ref: 151/Lawley map

10

Monitoring Locations



Source: Tony Higgins

11

Compliance Report – Construction

Report prepared for:

Appendix 1B – October Noise and Vibration Impact Assessment

Land levelling project Lawley Village Phase 11, Lawley, Telford, Shropshire

16.10.19

Report Reference: 151/Lawley/Appendix 1B

ENVIROCONSULT
Environmental and acoustic consultancy
01952 730455 / 07908 026221
tony@enviroconsultltd.com
www.enviroconsultltd.com

www.enviroconsultltd.com

Page | 1

Environconsult Limited Registered Office: Brockton Farm Bungalow, Brockton, Sutton Maddock, Shifnal, Shropshire. TF11 9NA
Companies House registration number: 9597366

Contents

Reference document is Enviroconsult Report ref: 151/Lawley

12

Compliance Report – Construction

1 Introduction

This report comprises the second part of the Enviroconsult report reference 151/Lawley. That report provides the background and methodology for the monitoring and evaluation of compliance with acceptable noise standards for the works carried out at Phase 11 Lawley. This part of the report provides a summary of the results obtained for:

- Background and residual noise summary
- Month 1 operational compliance summary
- Month 2 operational compliance summary
- Month 3 operational compliance summary
- Final review.

This document should be considered in conjunction with the above reports

2 Compliance monitoring

October compliance monitoring was carried out between 25th September and 31st October 2019.

Monitoring was carried out at monitoring points in Zone 1 only for noise, and 2 and 3 for vibration (see Fig.3.1 in main report), these being representative of key sensitive receptors.

Measured data was collected during operational hours. Measurement data was taken in real time for both noise and vibration, but noise data has been assessed as 1-hour averaged as described in BS 5228:2009+A1(2014). The threshold limits has previously been calculated to be 65dB LAEQ,1hour.

Vibration data was considered for detailed assessment against a trigger level of 0.3mms^{-1}, (the threshold of detection of vibration).

Prevailing sounds at the nearest sensitive receptors were noted to be:

- Site operations HGV movements from the site accessing Concorde
- Site operations (muted reversing alarms (broadband),
- Distant generator noise
- Distant road traffic
- Local road traffic
- HGV road traffic (including buses along Concorde and Station Road)
- Distant construction noise (other Lawley phases)
- Bird song

There was no observed vibration during monitoring.

2.1 Weather conditions

Weather conditions plots for the period 25th September 2019 – 31st October 2019 are showing in Appendix A1. In general the weather conditions were noted to be wet with some light – moderate winds with variable wind directions. Inclement weather was noted to be common, with some periods of very heavy rain.

The results obtained are therefore likely to reflect some element of wind and rain generated noise and are likely to be an overestimate of actual impact due to the prevailing weather conditions. Heavy rain may also influence results for vibration monitoring albeit the effects are likely to be negligible.

2.2 Instruments

2.2.1 Sound level Meters

Meter GO71754 were calibrated before measurements started and therefore was calibrated once per week in line when data was downloaded. No significant calibration drift was noted (see table below).

Time	Level	Offset	Comments
23/09/2019 08:57	93.7	-0.04	Calibration carried out with warm microphone
24/09/2019 07:57	93.7	0.29	
24/09/2019 08:06	93.7	0.29	
02/10/2019 09:05	93.7	0.28	
10/10/2019 13:46	93.7	0.29	Results all very consistent, despite significant rainfall
17/10/2019 09:18	93.7	0.31	
23/10/2019 09:55	93.7	0.31	
30/10/2019 10:30	93.7	0.28	

2.2.2 Vibration monitors

Vibration meters AL182101 and AL184301 were deployed. The meters are model Axitop II vibration monitoring systems. The units comply with requirements DIN45669B baseline response and are appropriate for monitoring under BS 5228-Part 2:2009 and BS7385-Part 2:1993.

The meters were factory calibrated devices and designed to internally calibrate before use. No calibration data is therefore necessary as there are no fixed calibration standards.

Units AL182101 and AL184301 were new when delivered to the site and had not been used at other locations.

13

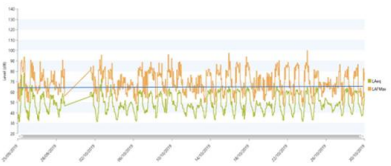
Compliance Report – Construction

3 Results (noise)

3.1 Monitoring Point 1 – Main entrance

The graph below provides a summary of the noise data for the month of October from Monitoring Point 1. The blue line indicates the compliance expected compliance level (65dB LAEQ,1hour).

Fig.3.1 Graph showing LAEQ1hour and LAMax summary data



Exceedances noted prior to 5th October are associated with setting up the site compound and are not directly related to the main construction activities. There are no other significant exceedances.

The measured levels at the site entrance location that exceeded the LAEQ 65dB limit for October were noted as follows:

Time	LAeq (dB)	LAFMax (dB)	LA90 (dB)	Comments
25/09/2019 08:00	69.3	87.6	49.6	
25/09/2019 09:00	76.2	88.6	50.7	
25/09/2019 15:00	74.9	88.6	56.3	Site preparation works grinding etc. see graph 3.1.1 below
25/09/2019 16:00	78.2	93.6	62.6	Works ceased at 5pm
25/09/2019 17:00	65.7	90	45.2	
26/09/2019 11:00	66.2	87	50.3	Vehicle noise engine revving see graph 3.1.2
03/10/2019 10:00	66.9	82.9	53.6	Vehicle tipping, engine noise see graph 3.1.3 below
03/10/2019 13:00	72.5	95.4	57.7	Vehicle tipping, engine noise, loud engine noise/chain scraping see graph 3.1.4 below
04/10/2019 12:00	66.7	80.5	59.2	Vehicle tipping, engine noise ticking over, broadband reversing alarm HGV movements see 3.1.5 below
16/10/2019 13:00	65.1	97.3	52.3	Workman on roof next to microphone continuous HGV movements, some hammering/banging, reversing alarms, HGV movements see 3.1.6 below
21/10/2019 11:00	65.1	86	57	Pneumatic equipment operating and hammering/tapping, (machinery repair), engine ticking over locally, HGV movements, and reversing alarms in distance see 3.1.7 below.

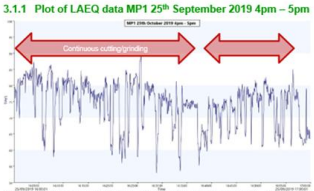
Most of the exceedances occurred during operating hours within the exception of those highlighted in green.

Detailed analysis of the results indicated that the following adverse results were caused by:

- Site preparatory works in compound area (including grinding, cutting of concrete, tarmac works etc. (Red arrows in the graphs below)
- Heavy rain impacting on the roof of the office building Green arrows in the graphs below
- Vehicle tipping and engines revving (Blue arrows in the graphs below)

The graphs and descriptions below provide detailed analysis of the acoustic events responsible for the exceedance.

3.1.1 Plot of LAEQ data MP1 25th September 2019 4pm – 5pm



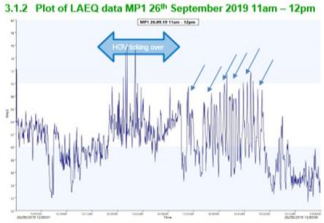
This graph reflects the worst 1hour period for site preparation works. Grinding noises and cutting noises were prominent and loud.

The overall LAEQ was noted to be 78dB LAEQ,1hour which is well above the operation levels of 65dB LAEQ,1hour. However temporary works can exceed this level. From the data gathered it is clear that significant noise site preparation (cutting of concrete and tarmac to prepare the site compound was a necessary one-off event and would not be repeated. In context the likely adverse impacts are considered acceptable.

14

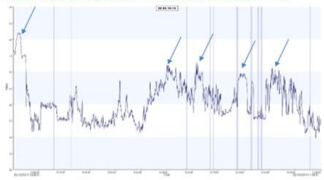
Compliance Report – Construction

3.1.2 Plot of LAEQ data MP1 26th September 2019 11am – 12pm



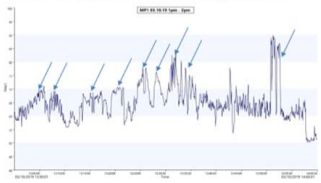
The single incident reflects one HGV parked and ticking over whilst working on the site compound. Individual engine revving events were also noted from the same vehicle. The exceedance was only marginal and in context the one vehicle event was not significant as it related to site preparation. The overall impact was negligible.

3.1.3 Plot of LAEQ data MP1 3rd October 2019 10am -11am



This graph reflects some ongoing preparation works around the compound area. HGV engine noise, and reversing alarms noted. Prominent sounds from the banksmen speaking also noted, tipping noises. The overall impact is not considered significant.

3.1.4 Plot of LAEQ data MP1 3rd October 2019 1pm -2pm



The graph shows continuous operation of a diesel engine punctuated by occasional (and prolonged revving, and reversing alarms. Activities in the site compound area at 1.50pm included very loud engine noise, and a rattling/dragging sound of chain? This activity was short lived. The overall LAEQ,1hour significantly exceeded the permitted level. The noise from this operation would have been audible and potentially intrusive for a short period in adjacent properties.

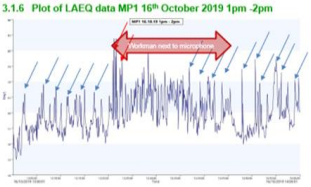
3.1.5 Plot of LAEQ data MP1 4th October 2019 1pm -2pm

The graph shows continuous operation of a diesel engine ticking over near to the compound area. More distant reversing alarms were audible, and some local hammering (red arrows) was noted. Occasional reversing alarms also noted. The overall LAEQ, 1hour only slightly exceeded the permitted level. The noise from this operation would not have been audible for a short period in adjacent properties, however, some of the hammering may have been noticeable. The overall impact during a weekday is considered negligible.

15

Compliance Report – Construction

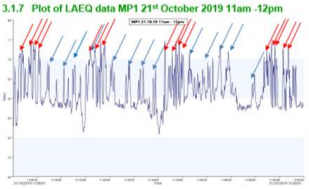
3.1.6 Plot of LAEQ data MP1 16th October 2019 1pm -2pm



The graph shows continuous movement of HGV's and the effects of a workman working on the roof next to the microphone, hammering, sanding, saving noted. Car doors slamming are evident associated with the workman. More distant reversing alarms were audible. Occasional speech and use of a radio (associated with the workman). Occasional reversing alarms also noted.

The overall LAEQ,1hour only slightly exceeded the permitted level. The noise from this operation would not have been audible for a short period in adjacent properties as the noises were very near to the microphone and therefore particularly prominent. The LAEQ1hour limit was only slightly exceeded. The overall impact is considered negligible.

3.1.7 Plot of LAEQ data MP1 21st October 2019 11am -12pm



A significant amount of pneumatic equipment operating at compound area (nut and bolt removal?) (red arrows) also local hammering/tapping machinery being repaired. HGV movements in the background, occasional reversing alarm. Overall level is only slightly above limit value. Unlikely to be significantly audible at receptors. Impact is negligible.

3.2 Monitoring Points 2 - 6

No monitoring took place from other monitoring points. October works focused on Zone 1 areas proximate to the site entrance. MP1 was therefore sufficient to characterise potential worst-case impacts.

16

Compliance Report – Construction

4 Vibration

Vibration monitoring was carried out to the two locations outlined in Appendix A2. VP1 and VP2 reflect the locations at the façade of the nearest residential receptors to the works carried out.

During operations for October the plant and equipment used was:

- Volvo A30G 6x6 Artic dumper truck (ref: VCE0A30GL007422242)
- Komatsu D65PXI-18 Dozer (ref: KMT0D127VHA090859)
- Komatsu Bulldozer D61PXI -24 (Ref: KMT0D129AJA040973)
- BOMAG single drum wheel vibratory roller (ref: 101586161290)
- CAT 336FL Excavator (Ref: CAT0336FLNBS00318)
- CAT 336FLCR Excavator (Ref: CAT0325FVRBW20207)

Various HGV's were also in operation delivering and tipping overburden materials to the site. The vibration monitoring positions were positioned to provide appropriate line of sight with these machines whilst undertaking works.

4.1 Vibration Monitoring Point VP1

The graph below provides a summary of the vibration data for the month of October from VP1. The blue line indicates the threshold of detection trigger level (0.3mms-1).

Exceedances noted around 8am and again at 5pm are associated with deployment and removal of equipment from monitoring locations. There are no other significant exceedances.

The measured levels at the site entrance location that exceeded the 0.3mms^{-1} trigger limit for October were noted as follows:

End date-time of sample	Vx peak (mm/s)	Vv peak (mm/s)	Vz peak (mm/s)	Comment
23/09/2019 12:45:50	8.79	9.20	1.82	Initial Setup background monitoring
23/09/2019 12:49:21	50.00	46.94	50.00	
23/09/2019 12:50:21	43.91	23.90	6.44	
24/09/2019 11:50:03	2.44	0.00	0.72	background vibration event (unknown)
30/09/2019 07:58:08	0.63	0.12	0.00	Morning Installation
01/10/2019 09:53:23	0.31	0.19	0.29	
01/10/2019 11:25:23	0.63	0.49	0.67	
03/10/2019 13:39:01	0.80	0.56	0.86	
04/10/2019 08:01:39	0.58	0.83	0.00	
04/10/2019 11:54:39	0.33	0.37	0.28	
08/10/2019 09:06:29	0.48	0.30	0.24	
08/10/2019 09:10:59	0.31	0.14	0.23	
08/10/2019 09:21:59	0.33	0.25	0.37	
08/10/2019 09:25:59	0.33	0.23	0.37	No sustained vibration. all individual one-off events
08/10/2019 09:31:59	0.40	0.26	0.17	
08/10/2019 09:32:29	0.52	0.25	0.17	
08/10/2019 09:33:59	0.38	0.28	0.20	
08/10/2019 12:23:29	0.41	0.36	0.06	No event more significant than that observed during background monitoring.
08/10/2019 16:16:59	0.31	0.12	0.31	
08/10/2019 16:23:29	0.38	0.27	0.20	
08/10/2019 16:33:59	0.33	0.23	0.30	
08/10/2019 16:41:59	0.36	0.23	0.45	
08/10/2019 16:54:59	0.32	0.26	0.47	
18/10/2019 12:30:23	0.40	0.16	0.06	
18/10/2019 12:51:23	1.30	1.37	0.00	No event more significant than that observed during background monitoring
18/10/2019 13:55:53	0.31	0.40	0.32	

All evens noted to be above 0.3mms-1 are shown in the table above.

Events breaching the 1mms-1 standard (likely to cause complaint were not noted during monitoring of operations in November with the exception of 18th October 2019 where a result of 1.37mms-1 was observed as a one-off event.

It is likely this was some local road traffic event such as an HGV hitting a pothole or similar on the adjacent main road.

No sustained vibration was observed during monitoring. No graphs of individual event traces have been produced.

4.2 Vibration Monitoring Point VP2

The graph below provides a summary of the vibration data for the month of October from VP2 (High View). The blue line indicates the threshold of detection trigger level (0.3mms-1).

Exceedances noted around 8am and again at 5pm are associated with deployment and removal of equipment from monitoring locations. There are no other significant exceedances.

The measured levels at the site entrance location that exceeded the 0.3mms^{-1} trigger limit for October were noted as follows:

End date-time of sample	Vx peak (mm/s)	Vv peak (mm/s)	Vz peak (mm/s)	Comments
23/09/2019 12:19:33	50.00	15.94	33.73	Initial set up (background monitoring)
23/09/2019 12:20:03	7.47	16.13	4.63	
23/09/2019 12:24:01	50.00	50.00	8.69	
23/09/2019 12:24:31	50.00	50.00	3.23	
23/09/2019 12:25:01	50.00	50.00	50.00	
23/09/2019 12:25:31	50.00	50.00	50.00	
23/09/2019 12:29:01	1.79	44.45	20.87	
23/09/2019 12:31:31	37.82	28.72	7.47	
23/09/2019 12:37:04	20.70	7.00	9.92	
23/09/2019 12:40:11	1.71	0.00	4.87	
02/10/2019 08:00:01	0.38	0.24	1.01	Morning installation
03/10/2019 07:53:02	40.40	34.59	2.40	Morning installation
03/10/2019 07:53:32	0.72	0.68	0.00	Morning installation
03/10/2019 12:30:32	0.31	0.31	0.12	
03/10/2019 17:09:32	1.17	0.00	0.00	Evening collection
07/10/2019 08:04:45	0.36	0.13	0.61	Morning installation
07/10/2019 12:59:15	0.37	0.21	0.39	
07/10/2019 14:27:15	0.31	0.17	0.19	
07/10/2019 16:10:15	0.45	0.37	0.37	
09/10/2019 08:31:35	0.43	0.00	0.00	
09/10/2019 08:50:05	0.34	0.24	0.00	
10/10/2019 16:13:30	0.59	0.25	0.66	
10/10/2019 16:58:30	0.42	0.36	0.44	
10/10/2019 11:03:30	0.53	0.14	0.17	

Reference document is Enviroconsult Report ref: 151/Lawley

17

Compliance Report – Construction

10/10/2019 11:04:00	0.38	0.15	0.17	Repeated low level vibration every 30 seconds – source unknown
10/10/2019 11:04:30	0.37	0.20	0.19	
10/10/2019 11:05:00	0.32	0.20	0.21	
10/10/2019 11:05:30	0.54	0.30	0.30	
10/10/2019 11:06:00	0.40	0.17	0.33	
10/10/2019 11:06:30	0.35	0.17	0.42	
10/10/2019 11:09:30	0.62	0.24	0.21	
10/10/2019 11:10:00	0.35	0.10	0.14	
10/10/2019 11:11:00	0.44	0.12	0.16	
10/10/2019 11:20:30	0.45	0.17	0.20	
10/10/2019 11:22:00	1.48	0.60	0.76	
10/10/2019 11:23:00	0.58	0.20	0.21	
10/10/2019 17:07:30	0.60	0.75	0.00	
11/10/2019 12:56:05	0.32	0.30	0.22	
17/10/2019 12:26:08	0.31	0.30	0.26	
22/10/2019 08:03:11	0.53	0.37	0.21	Morning Installation
22/10/2019 16:29:41	1.55	0.67	1.04	
23/10/2019 08:01:07	0.42	0.74	0.21	Morning installation
23/10/2019 12:28:37	0.31	0.17	0.16	

All evens noted to be above 0.3mms-1 are shown in the table above.

Events breaching the 1mms-1 standard (likely to cause complaint) were not noted during monitoring of operations in October with the exception of 10th October and 22nd October 2019 where a result of 1.48mms^{-1} and 1.55mms^{-1} were observed as a one-off events.

A repeated low level vibration on 10.10.19 commencing 11.03am repeating every 30 seconds is noted, but not considered significant. The amplitude of the vibration is low (<1mms^{-1})

No sustained vibration was observed during monitoring. No graphs of individual event traces have been produced.

Reference document is Enviroconsult Report ref: 151/Lawley

18

Compliance Report – Construction

5 Conclusion

Complaints about noise and vibration have been made from the commencement of works. Complaints related to:

1. noise form lorries accessing and leaving the site
2. noise from lorries on the main road and/or ticking over on site.
3. noise from the road sweeper
4. noise from reversing alarms
5. Vibration from the site compaction rollers

None of the complaints made has been sustained by the data available. The site operator has address issues 2, 3 4, and 5 directly by

2. Vibration preventing vehicles queuing up to access or leave the site, no vehicles park unnecessarily on site, except whilst in the waiting area
3. The road sweeper has been instructed not to park at the entrance to the site and 'tick over'. The road sweeper operated only during site opening hours
4. The reversing alarms have been modified or replaced to be broadband (low noise) alarms
5. The vibro compaction roller has been replaced with an alternative low noise model, but this does require additional passes to ensure compaction.

5.1 Noise

The data obtained provides good evidence that the site is generally relatively quiet.

The principle noise sources were the vehicles entering and leaving the site. Work Activities were located principally in Zone 1 during October, but also towards the centre of the site (mixture of zones 2, 4 and 6) and the centre of the site. MP1 was therefore considered a suitable monitoring position to determine impacts for noise as the majority of activity was within that zone.

Most of the noise exceedances noted were due to construction works in the compound area particularly on 25th September and 3rd October. In both cases local works involving the use of hand power tools, and heavy equipment in the compound area produced a few hours of significantly elevated measured levels.

Whilst the results were non-compliant with the BS 5228 standard this represents only 11 hours out of the 243 operating hours in September and October (4.5% of the operational time).

The overall impact is therefore considered to be negligible and likely to reduce further still in future monitoring as the site compound works are now complete.

'Normal' operational levels for MP1 were noted to be 60-62dB in the absence of site works. This comprises mainly HGV movements, reversing alarms and operational plant on site levelling out imported material.

Levels of site generated sound >55dB would be considered to have some potential for disturbance. The normal operational levels are there considered to exceed LOAEL, but are well below the level for SOAEL.

The noise impacts are therefore concluded to be noticeable but not intrusive in planning terms.

5.2 Vibration

NOTE: It should be noted that these monitoring locations are not the preferred locations. Regrettably sensitive receptors declined to have monitoring devices installed. The results are therefore from surrogate locations not necessarily representative of sensitive receptors actual perceptions. However, monitoring locations have been selected to representative of building façade locations and distances between potential sources and receptors have been aligned with monitoring locations. The vibration data is therefore a 'best estimate' of potential impact.

The data obtained for vibration includes the background measurements taken before works commenced on 23/24th September 2019. Background levels of vibration at monitoring points VP1 and VP2 were all below the 0.3mms-1 trigger level with the exception of one measurement for VP1 that was noted as 2.44mms^{-1} on 24th September. The cause of this background vibration event is unknown.

Operational monitoring of vibration at VP1 and VP2 showed a number of low-level vibration events that are just noticeable at the monitoring locations. None of the data reviewed indicates that sustained vibration has occurred. All the events noted are individual discrete impulses that appear to have no significant amplitude and would be barely perceptible at the monitoring location.

Of the 3 events noted to have higher amplitude that might be noticeable (above 1mms^{-1}) all are short duration (1-2 seconds) and are not repeated.

In context, the site has operated for 243hours, or 14580 seconds, and only 6 seconds of *noticeable* vibration has occurred at the perimeter monitoring locations. By any definition this must qualify as No adverse impact.

In planning terms the vibration impact are considered to be not noticeable.

Notwithstanding the above, it is the duty of the developer to ensure that BPM is operated at all times to ensure emitted noise from the site is kept to a minimum in line with the **Noise Management Plan NMP**.

Operational plant has been changed as follows:

- The vibro compaction roller has been replaced with a quieter BOMAG machine following a (unsubstantiated) complaint. The quieter machine was acquired as tit represented a less potentially intrusive option in line with demonstrating BPM.
- The site compound generator has been moved to behind the elevated section of the compound to better shield it from residential receptors.
- Batteries have been used to power security lights and security equipment to prevent the need for unattended night-time operation of the generator.

In summary there are no adverse noise or vibration events associated with the operations on site.

Further compliance reports will be issued for November and December.

Prepared by:

Tony Higgins MSc BSc(Hons) PGDip MIOA CMCIEH
Director

Reference document is Enviroconsult Report ref: 151/Lawley

19

Key Points

- Fitness for purpose?
- Traceable standards?
- Appropriate methods?
- Appropriate identification of sources/receptors?
- Impact assessments conducted?
- Compliance demonstrated?

20

Thank you for listening

If you have any queries arising from this webinar or other queries, please do not hesitate to contact the EMAQ+ team on:

Tel: 01235 753620 or emaq@ricardo.com

21