| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

Level 2

Business Process

Managing environmental and social impact of noise and vibration

Approvals

Content Approved by:

Molly Smith, Technical Lead

Content approved by:

Dr. Rossa Donovan,

Standard and Control Document Owner

Approved for publication by:

John Winnifrith,

Standards and Controls Management Team

This document is the property of Network Rail. It shall not be reproduced in whole or part nor disclosed to a third party without the written permission of Network Rail.

© Copyright 2019 Network Rail.

Uncontrolled copy once printed from its electronic source.

Published and Issued by Network Rail, 2nd Floor, One Eversholt Street, London, NW1 2DN.



| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

User information

This Network Rail document contains colour-coding according to the following Red–Amber–Green classification.

Red requirements – no variations permitted

- Red requirements are to be complied with and achieved at all times.
- Red requirements are presented in a red box.
- Red requirements are monitored for compliance.
- Non-compliances shall be investigated, and corrective actions enforced.

Amber requirements – variations permitted subject to approved risk analysis and mitigation

- Amber requirements are to be complied with unless an approved variation is in place.
- Amber requirements are presented with an amber sidebar.
- Amber requirements are monitored for compliance.
- Variations can only be approved through the national variations process.
- Non-approved variations shall be investigated, and corrective actions enforced.

Green guidance - to be used unless alternative solutions are followed

- Guidance shall be followed unless an alternative solution produces a better result.
- Guidance is presented with a dotted green sidebar.
- Guidance is not monitored for compliance.
- Alternative solutions shall be documented to demonstrate effective control.

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

Compliance

This Network Rail standard/control document is mandatory and shall be complied with by Network Rail Infrastructure Limited and its contractors if applicable from 7th March 2020.

Where it is considered not reasonably practicable¹ to comply with the requirements in this standard/control document, permission to comply with a specified alternative shall be sought in accordance with the Network Rail standards and controls process, or with the Railway Group Standards Code if applicable.

If this standard/control document contains requirements that are designed to demonstrate compliance with legislation they shall be complied with irrespective of a project's Governance for Railway Investment Projects (GRIP) stage. In all other circumstances, projects that have formally completed GRIP Stage 3 (Option Selection) may continue to comply with any relevant Network Rail standards/control documents that were current when GRIP Stage 3 was completed.

NOTE 1: Legislation includes Technical Specifications for Interoperability (TSIs).

NOTE 2: The relationship of this standard/control document with legislation and/or external standards is described in the purpose of this standard.

Disclaimer

In issuing this standard/control document for its stated purpose, Network Rail Infrastructure Limited makes no warranties, expressed or implied, that compliance with all or any standards/control documents it issues is sufficient on its own to provide safety or compliance with legislation. Users are reminded of their own duties under legislation.

Compliance with a Network Rail standard/control document does not, of itself, confer immunity from legal obligations.

Where Network Rail Infrastructure Limited has granted permission to copy extracts from Network Rail standards or control documents, Network Rail Infrastructure Limited accepts no responsibility for, nor any liability in connection with, the use of such extracts, or any claims arising there from.

This disclaimer applies to all forms of media in which extracts from Network Rail standards and control documents might be reproduced.

Supply

Copies of standards/control documents are available electronically, within Network Rail's organisation. Hard copies of this document might be available to Network Rail people on request to the relevant controlled publication distributor. Other organisations can obtain copies of this standard/control document from an approved distributor.

¹ This can include gross proportionate project costs with the agreement of the Network Rail Assurance Panel (NRAP).

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

Issue record

Issue Date Comments01 December 2019

Reference documentation

NR/L1/ENV/100 Environment and Social Performance Policy NR/L2/ENV/015 Environment and Social Minimum Requirements for Projects - Design and Construction NR/L2/INV/002 Accident and Incident Reporting and Investigation NR/L3/MTC/MG0194 Management of Third-party Complaints NR/L3/MTC/PL0215 Communicating with the public NR/L3/MTC/RCS0216/GHE03 Noise – Working near homes / schools / hospitals NR/GN/ESD10 Noise, Nuisance and Disturbance Guidance Note NR/GN/ESD25 Guidance on Best Practicable Means (BPM) BS 5228 1:2009+A1:2014 Code of Practice for noise and vibration control on Construction and Open Sites - Part 1 Noise, published by British Standards Institution BS 5228 2:2009+A1:2014 Code of Practice for noise and vibration control on Construction and Open Sites - Part 2 Vibration, published by British Standards Institution BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings (Vibration sources other than blasting). BS 61672-1: 2013 Electroacoustics. Sound level meters. Specifications BS 7385-2: 1993 Evaluation and measurement for vibration in buildings. Guide to damage levels from ground-borne vibration BS ISO 4866: 2010 Mechanical vibration and shock - Vibration of fixed structures - Guidelines for the measurement of vibrations and evaluation of their effects on structures. Electroacoustics. Sound level meters. Pattern BS EN 61672-2:2013+A1:2017 evaluation tests BS EN IEC 60942:2018 Electroacoustics. Sound calibrators. External document Environmental Good Practice on Site (4th Edition) – published by Construction Industry Research and Information Association (CIRIA) 2015. Tabulated references to other documentation within this code of

practice, including Working Instructions, Procedures,

Guidance Notes and relevant forms

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

Legislation

This standard/control document has been reviewed to confirm it complies with the following legislation:

Clean Neighbourhood and Environment Act, 2005

The Control of Noise (Codes of Practice for Construction and Open Sites) (England) Order, 2002

The Control of Noise (Codes of Practice for Construction and Open Sites) (Scotland) Order, 2002

Control of Noise at Work Regulations, 2005

Control of Pollution Act, 1974 (as amended)

Environmental Protection Act, 1990

The Environment Act, 1995

The Environmental Information Regulations, 2004

Noise Emissions in the Environment by Equipment for Use Outdoors Regulations, 2001 (as amended)

The Noise Insulation (Railway and Other Guided Transport System) Regulations, 1996

Compliance with this standard does not, on its own, provide compliance with the legislation listed.

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

Contents

| 1 Purpose | 8 |
|---|------|
| 2 Scope | 8 |
| 3 Definitions | 8 |
| Figure 1 – Process for noise abatement, Section 61 and complaints | . 11 |
| 4 Defining roles and responsibilities | . 12 |
| 5 Process for noise and vibration abatement | . 12 |
| 5.1 Designing out noise and vibration nuisance | . 12 |
| 5.2 Planning and management of works programme | . 12 |
| 5.3 Noise and Vibration Risk Assessment (NRVA) | . 13 |
| 5.4 Identification of noise and vibration control measures | . 13 |
| 5.5 Works package plans | . 14 |
| 5.6 General plant and equipment requirements | . 14 |
| 5.7 Vibration | . 15 |
| 5.8 Inspection and monitoring | . 15 |
| 6 The Section 61 Process | . 15 |
| 6.1 Overview | . 15 |
| 6.2 Consent application preparation | . 16 |
| 6.3 Consent packages | . 16 |
| 6.4 Submission of application | . 16 |
| 7 Implementing the Consent | . 17 |
| 7.1 Advance notification to local residents and occupants | . 17 |
| 7.2 Compliance monitoring | . 17 |
| 7.3 Dispensations and variations | . 17 |
| 8 Managing stakeholders and dealing with complaints | . 18 |
| 8.1 Stakeholder engagement | . 18 |
| 8.2 Dealing with complaints | . 18 |
| Figure 2 – Process for dealing with complaints | . 19 |
| 8.3 Investigating a complaint | . 19 |
| 8.4 Liability and claims | . 20 |
| 9 Process for dealing with noise nuisance and legal actions | . 20 |
| 9.1 Statutory nuisances | |
| 9.2 Dealing with notices, orders and summons | . 20 |
| 9.3 Regulatory compliance to avoid or manage complaints about noise | . 21 |
| 9.4 Provision of information | . 21 |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| 10 Maintaining appropriate records | 21 |
|--|----|
| Table 2 – Records | 22 |
| Appendix A - RACI Template | 23 |
| Appendix B - NVRA Example template | 30 |
| Appendix C - Noisy works template | 36 |
| Appendix D - Section 61 Example Application Form | 37 |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

1 Purpose

This business process identifies how to design out noise and vibration impacts in the design process, as well as, how to plan and manage these to minimise noise and vibration risks, as well as statutory nuisance complaints.

This business process also outlines how to manage stakeholders and respond to complaints to facilitate our relationships with our stakeholders.

2 Scope

This business process specifies the process to:

a) use best practicable means (BPM) to control and minimise noise and vibration impacts on third parties:

NOTE 1: Further information on BPM can be found on NR/GN/ESD25 available on Safety Central.

- b) use Section 61 Consent application to develop or meet a Code of Practice agreed with a Local Authority;
- c) deal with noise and vibration complaints, Orders and Summons.

The process applies to any activity carried out by Network Rail or its contractors that might create noise and vibration impacts and has the potential to cause a nuisance to sensitive third party receptors, e.g. housing, schools, hospitals etc.

Other than complaints handling, this business process does not apply to:

a) the control of noise and vibration impacts arising from the operation of the railway;

NOTE 2: This means arising directly from the running of rolling stock on Network Rail infrastructure, or ancillary plant/equipment.

b) occupational noise exposure;

NOTE 3: This is covered by the Control of Noise at Work Regulations 2005.

c) the statutory duty on Network Rail as the responsible authority to apply the provisions of the Noise Insulation (Railways and Other Guided Transport Systems) Regulations, 1996 where new or additional track is introduced.

NOTE 4: Such matters should be considered during the design stage of any enhancement scheme.

3 Definitions

For the purpose of this document, the following terms and definitions apply.

NOTE: These definitions have been taken from government and statutory agency sources.

| Term | Definition |
|------------------------------|---|
| Best Practicable Means (BPM) | Measures taken to reduce the impacts of noise and vibration caused by works. NOTE: BPM is defined in Section 72 of the Control of Pollution Act as 'reasonably practicable for the local conditions and circumstances, using measures including good design, good practice installation, maintenance, manner and periods of operation of plant and machinery, acoustic structures and the financial implications of each'. |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| Term | Definition |
|---|---|
| Control of Pollution Act (COPA) 1974 (as amended) | Covers a variety of environmental issues including noise pollution and the prevention of atmospheric pollution. |
| Environmental Protection Act (EPA) 1990 | Makes provision for the improved control of pollution arising from certain industrial and other processes to reduce the risk of statutory nuisance. NOTE: 'Process' means any activities carried on in GB, whether on premises or by means of mobile plant, which are capable of causing pollution of the environment. |
| Local Authority | Local governmental body responsible for a range of essential services for people and businesses in defined areas, including waste collection. NOTE: County councils are responsible for waste management strategy whereas metropolitan, unitary, district and city councils are responsible for waste collection. |
| Maintenance works | Work of a regular basis that is needed to enable trains to run reliably and safely throughout the year. |
| Noise | Unwanted sound. NOTE: The main types of noise likely to cause noise nuisances relevant to Network Rail include transportation, construction and demolition, commercial and industrial sources categorised as operational/maintenance noise and construction noise. |
| Noise and Vibration Risk Assessment (NVRA) | A systematic assessment of the likelihood and magnitude of noise and vibration impacts resulting from activities, products, services or works (positive or negative). NOTE: It may be incorporated into an Environmental Risk Assessment, where appropriate. |
| Responsible manager | The person accountable for the appointment of a competent and capable person in charge. |
| Section 60, Control of Pollution Act 1974 | Applies to the control of statutory nuisance on construction and engineering works such as demolition, boring, opening up, erection, construction, alteration, repair or maintenance of buildings, structures and roads. |
| Section 60 Notice | A noise abatement order issued by a Local Authority if it finds the noise and vibration impacts of construction or engineering activities are unacceptable. NOTE: The notice may impose restrictions on the type of plant/machinery, hours of operation and the level of noise or vibration emitted. Failure to observe the terms of a notice or consent is an offence under the COPA, 1974. Failure to meet the terms of the notice may lead to fines and may even result in a "stop notice" via a court order. |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| Term | Definition |
|--|--|
| Section 61 Consent | Prior consent for construction or engineering works granted by a Local Authority to Network Rail or a contractor under Section 61 of the COPA, 1974. |
| | NOTE: Where prior consent has been obtained and activities are carried out in accordance with it, a Local Authority cannot impose additional controls or restrictions under a Section 60 notice or pursue statutory nuisance action under Section 82 of the Environmental Protection Act, 1990. |
| Section 80, Environment Protection Act 1990 | Section 80 allows a notice to be served by a Local Authority when a statutory nuisance exists or is likely to occur. |
| Section 82, Environment Protection Act 1990 | Section 82 of the Environment Protection Act allows a Magistrates' Court to act on a complaint made by any person on the grounds that they are aggrieved by a statutory nuisance such as noise and vibration. |
| Statutory nuisance | Something that (under the Environment Protection Act) affects a person's health or causes disturbance to them in their property. NOTE: Noise is the most frequently complained of nuisance issue. |
| Vibration | Mechanical vibration occurring in a piece of machinery or equipment or in a vehicle as a result of its operation. |

Table 1 - Terms and definitions

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

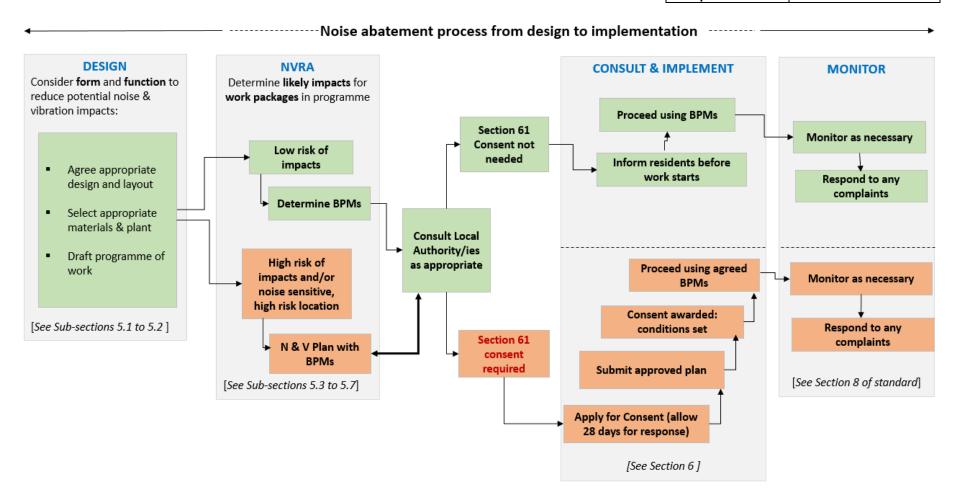


Figure 1 - Process for noise abatement, Section 61 and complaints

NOTE: Further technical assistance should be sought from an Environmental professional as appropriate.

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

4 Defining roles and responsibilities

Responsibilities for avoiding and mitigating noise and vibration issues, to meet duty of care obligations shall be embedded at all levels of Network Rail, from the Board to lineside teams.

The head of each business unit (e.g. Route Director, Capital Delivery Director, Infrastructure Maintenance Delivery Manager, or equivalent) shall identify and document the responsible manager(s) to comply with the requirements in this business process.

Network Rail staff shall use the Delegation of Authorities, where relevant, when identifying roles and responsibilities.

NOTE 1: Network Rail Delegation of Authorities is available on Network Rail's internal website.

NOTE 2: Appendix A provides a RACI template that can be used to identify roles and responsibilities.

5 Process for noise and vibration abatement

5.1 Designing out noise and vibration nuisance

The responsible manager shall take into account noise and vibration management from the initial stage of design and procurement for planned works. This shall include:

- a) form;
- b) function;
- c) materials; and
- d) methods.

NOTE 1: The objective is to allow adequate time for necessary changes to the design approach, and the facilitation of effective control and mitigation measures. This approach also provides the responsible manager with the opportunity for early stakeholder consultation on preferred options and the Best Practicable Means (BPM), as defined in Figure 1 and NR/GN/ESD25. This approach also applies to the supply chain.

The responsible manager shall select and/or procure materials and plant in accordance with BPM to eliminate or reduce noise and/or vibration.

NOTE 2: This is to avoid or reduce the potential for noise and vibration nuisance by using the best available technology or product, at a reasonable cost.

5.2 Planning and management of works programme

Pre-works planning shall include allowing time to apply for any necessary consents if the risk of noise and vibration impacts indicate that such an approach is appropriate.

NOTE: It can take up to 28 days for responses from Local Authorities.

The responsible manager shall take all reasonably practicable measures to mitigate the effects of noise and vibration when implementing works by using BPM. BPM controls shall be included within the risk assessment. This shall meet the two essential elements of BPM:

- a) practicable in terms of:
 - 1) measures appropriate to local conditions and circumstances;

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

- 2) the current state of technical knowledge; and
- 3) financial implications; and
- b) appropriate means in terms of:
 - 1) the design, installation, maintenance, manner and periods of operation of plant and machinery; and
 - 2) the design and maintenance of buildings and acoustic structures.

5.3 Noise and Vibration Risk Assessment (NRVA)

The responsible manager shall refer to NR/L3/MTC/RCS0216/GHE03 or carry out and document a risk assessment of the work package or activities in relation to the noise and vibration risk to third party. It shall identify, evaluate and control any risks associated with potential noise and vibration impacts, or effects arising from activities.

The NVRA is related to NR/L2/ENV/015 and the Environment and Social Management Plan published on Safety Central.

The risk assessment shall:

- a) identify the activities to be carried out, broken down into discrete items, activities or phases, if appropriate, in order to better evaluate risks;
- b) identify noise sensitive receptors that might be adversely impacted or affected;
- c) evaluate the potential risks of the works in giving rise to adverse noise or vibration impacts and effects on noise sensitive receptors;
- d) evaluate the cost, programme and social/reputational impacts of the risk;
- e) rank the level of significance of the risks to allow prioritisation of management controls;
- f) identify the owner of the risk; and
- g) identify the existing or proposed control measures to manage the risk.

NOTE: In evaluating the potential impacts and effects (and hence risks) of noise and vibration, consideration should be given to factors including type and location of noise sensitive receptors, existing ambient noise levels, site noise levels associated with the specific construction or engineering activities; overall duration of site operations, hours of working etc.

NR/GN/ESD25 provides details about what these risks might be. Appendix B provides the NVRA that should be used. Appendix C provides a noisy works template.

Consideration should be given to the cumulative impacts of any works, rather than being considered on a case-by-case basis.

5.4 Identification of noise and vibration control measures

The responsible manager shall identify and implement control and mitigation measures to minimise or avoid adverse impacts from any noise or vibration risks on noise sensitive receptors.

NOTE 1: E.g. hospitals, care homes, schools. The measures should be proportionate with the level of risk.

The control measures should be identified in accordance with BPM. They might include:

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

- a) reducing the duration of exposure (programme period);
- b) reducing noise levels through plant/equipment location, screening or other control measures:
- c) monitoring of noise and vibration, and site inspections;
- d) undertaking effective communication with Local Authorities, residents and other stakeholders, including complaints handling;
- e) briefing of staff and contractors regarding control measures (task briefings, work package plans, toolbox talks, etc.);
- f) scheduling of deliveries to avoid sensitive periods; and/or
- g) scheduling of works to avoid sensitive periods, where practicable.

NOTE 2: Further guidance is in NR/GN/ESD25 on Safety Central.

Such measures shall be designed to address potential impacts that might be caused by activities including:

- a) preparatory groundworks;
- b) demolition; and
- c) piling.

The measures might include the use of acoustic barriers, e.g. hoardings (oriented strand board, plywood and/or Plexiglass), straw bales, etc.

Noise and vibration impacts shall be avoided or mitigated through the consideration of the design stage of the works, methodology and programming of the works.

5.5 Works package plans

Works package plans shall set out information on:

- a) the works methodology;
- b) plant and equipment to be used; and
- c) any BPM noise or vibration control/mitigation measures that have been identified.

The responsible manager shall:

- a) communicate these measures to personnel involved in the works; and
- b) provide briefings to include:
 - 1) what BPM measures are being used and why;
 - 2) the importance of noise and vibration monitoring; and
 - 3) how to deal with any complaints.

5.6 General plant and equipment requirements

All plant and equipment shall meet the noise limit and noise marking requirements prescribed by the current Noise Emission in the Environment by Equipment for Use Outdoors Regulations 5.

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

NOTE: Refer to NR/GN/ESD25 for further details.

5.7 Vibration

The responsible manager shall identify whether works include any vibrations risks. Where vibrations risks are present, the responsible manager shall carry out an assessment of vibration levels to evaluate potential impacts from any vibration risks in line with the recommendations and criteria within BS5228, BS6472, BS 7385 and BS ISO 4866.

NOTE: This includes considering any specific vibration requirements arising from commitments or undertakings given by Network Rail to third parties.

Where significant risks are identified in relation to potential damage to buildings, structures, services or equipment, the responsible manager might have to arrange for defect, condition or other specialist surveys to be undertaken prior to the works commencing, or vibration monitoring during the works.

5.8 Inspection and monitoring

When identified during the risk assessment, the responsible manager shall identify and implement a monitoring and inspection programme for the activities concerned. The monitoring equipment shall be compliant with the requirements for a 'Class 2' instrument or better as defined in BS EN 61672-1 and BS EN 61672-2. The calibrator shall comply with the requirements for a Class 2 specification or better as defined in BS EN 60942.

NOTE: Refer to NR/GN/ESD25 for further details.

6 The Section 61 Process

6.1 Overview

Based on the results of the risk assessment, the responsible manager shall decide whether a prior consent for works under Section 61 of the Control of Pollution Act (COPA) 1974 is necessary.

The responsible manager shall undertake pre-works planning liaison with the relevant Local Authority(ies).

NOTE 1: Some Local Authorities might prefer a more informal consultation or means of managing the potential impacts of works.

Obtaining a Section 61 Consent involves three basic stages:

- a) preparatory;
- b) draft; and

NOTE 2: The preparatory and draft stages are informal, voluntary and non-statutory.

c) final stage, which is a formal statutory process.

All interested Local Authorities shall be informed throughout the entire process.

This reduces the risk of a Local Authority neighbouring the site issuing their own Environmental Protection Act (EPA) 1990 or Section 60 Abatement Notice, even though a Section 61 Consent is in place from the Local Authority in whose area the works are located.

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

Obtaining the Consent shall be the responsibility of Network Rail or its principal contractor.

NOTE 3: Local Authorities are under no legal obligation to respond to draft applications within any definitive period.

6.2 Consent application preparation

The responsible manager shall confirm that noise and vibration issues are taken into account when planning and designing the works. The responsible manager shall:

- a) allow three months or longer to obtain a Section 61 Consent; and
- b) identify the nature of the activity requiring consent.

Appendix D provides an example application template.

The application shall include:

- a) site plans;
- b) a description of the works methodology;

NOTE: This should include noise and vibration control measures in accordance with BPM.

- c) the type of plant and equipment; and
- d) predicted noise levels and associated monitoring regimes.

6.3 Consent packages

Separate consent applications for individual, discrete packages of work might be needed for complex works, e.g. site investigations/site clearance.

The cumulative noise impacts of each discrete package shall be taken into account using BPM mitigation measures. Any adjacent projects and major developments that might coincide with the railway works shall be taken into account.

Tracking schedules shall be used to identify the progress of each Section 61 application and to record consent status and progress for each works package.

6.4 Submission of application

The responsible manager shall prepare the final application for sign-off by an authorised signatory before submission to the Local Authority(ies).

Consent is normally given within the statutory 28-day determination period, but it might be necessary to re-negotiate informally with the Local Authority. Where difficulties remain, an appeal might be needed. Grounds for appeal are:

- a) non-determination of Consent;
- b) that any condition imposed is not justified;
- c) that there has been some defect or error with the Consent;
- d) that a condition is unreasonable; or
- e) that the compliance timeframe for conditions are not reasonable.

The court can vary the Consent, quash any condition or dismiss the appeal. Any Consent is likely to be for a fixed period (typically six months). The consent process is iterative,

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

with the need for applications to be revised and re-submitted to the Local Authority, as necessary.

7 Implementing the Consent

7.1 Advance notification to local residents and occupants

The responsible manager shall notify local residents/occupants about the proposed works at least two weeks prior to starting on site.

NOTE: This is usually in advance of receiving Section 61 Consent.

The information provided to residents shall include:

- a) the type of work to be carried out;
- b) the reasons behind it;
- c) its likely duration;
- d) hours of work;
- e) characteristics of any potential noise;
- f) how noise shall be monitored;
- g) together with helpline details; and
- h) the complaints procedure.

The Local Authority(ies) and any external stakeholders, e.g. parish council, MP, shall also be sent a copy of this information. Liaise with the local Community Relations Team to ascertain who should receive a copy.

7.2 Compliance monitoring

Noise and vibration monitoring and site inspections might be necessary for compliance with Section 61 Consent and to identify any problems.

The responsible manager shall:

- a) agree any monitoring in advance with the Local Authority; and
- b) confirm all personnel and contractors comply with the consent terms and conditions.

7.3 Dispensations and variations

Reasonable justification for changes to consented works might be needed.

Dispensations and variations are issued by Local Authorities.

The responsible manager shall prepare a dispensation covering all material changes to the agreed Section 61 working methods.

NOTE: E.g. extensions to working hours or using different items of major plant.

Variations cover minor changes in working methods, e.g. substitution of individual items of plant and sporadic over-runs that will not affect the consented noise levels.

Variations do not need the same level of detail as a dispensation.

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

The responsible manager shall seek advance approval at least two working days before the works starts. The correct pro-forma included in Appendix D shall be followed and shall be completed before contacting the Local Authority(ies) for their advance approval.

Dispensations and variations shall be agreed internally at least 14 days and 7 days, respectively, in advance of seeking the relevant Local Authority(ies) agreement.

Local Authority(ies) dispensation might include specific conditions to be met within a specific timeframe.

When applying for a dispensation/variation, the responsible manager shall include a statement advising how and when local people will be notified of the changes to the works programme.

The relevant Local Authority(ies) require a copy of any notifications sent out by Network Rail to lineside neighbours.

8 Managing stakeholders and dealing with complaints

8.1 Stakeholder engagement

The responsible manager shall plan and implement a programme of stakeholder engagement for the activities in accordance with NR/L3/MTC/PL0215 and NR/L2/ENV015.

Network Rail and its suppliers are expected to observe a code of conduct that only tolerates considerate social and environmental behaviours.

This includes, but is not limited to:

- a) plant and vehicle idling,
- b) personal noise,
- c) slamming car and cabin doors; and
- d) inconsiderate driving.

NOTE: Refer to NR/L2/INV/002 to report a noise or vibration to third-party incident.

8.2 Dealing with complaints

A complaint might be received by Network Rail or be passed to Network Rail from a third party. Complaints could be due to the trains themselves, the operation of the railway and ancillary services, the track (e.g. a low joint), from maintenance operations, construction activities, or from a combination of these. The process detailed in Figure 2 should be followed when dealing with complaints.

NOTE: Refer to NR/L3/MTC/MG0194 for further information on management of third-party complaints.

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

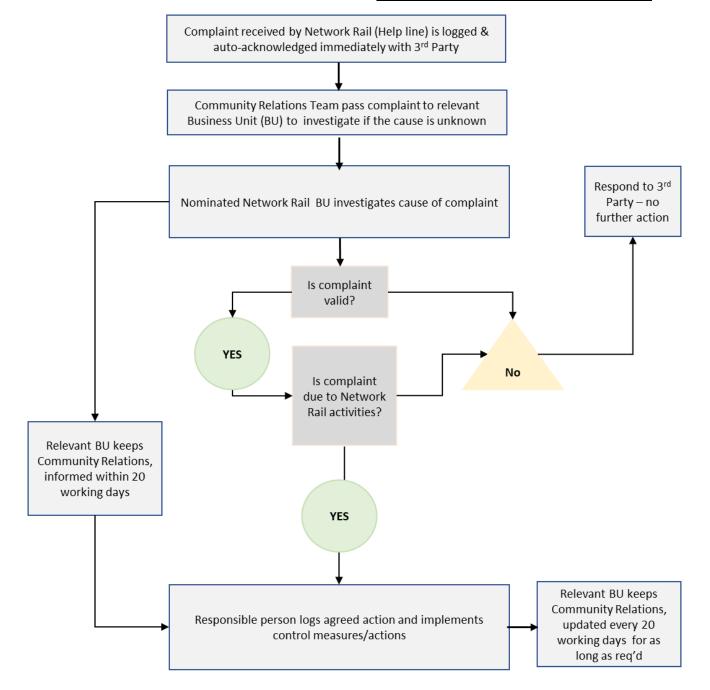


Figure 2 – Process for dealing with complaints

NOTE: It might not be possible to implement some control measures and actions within 20 working days. Updates on progress should be provided every 20 days as necessary.

8.3 Investigating a complaint

The responsible manager shall deal with noise and vibration complaints by investigating and determining whether the complaint is justified.

The extent of the investigation depends on the nature of the complaint and who made it. Complaints about construction activities from a Local Authority might require measurements of noise levels. A complaint from a resident about a recent increase in noise may only require an inspection.

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

The responsible manager shall decide what action to take.

Complaints are recorded in the central Customer Relationship Management (CRM) System.

8.4 Liability and claims

Admissions of liability or commitments that could require measures beyond minor works or set a precedent for another Network Rail business unit, or which appear to conflict with Network Rail's Environment and Social Performance Policy (NR/L1/ENV/100) or corporate interests, shall not be made without taking Network Rail Legal Team advice.

Complaints that might cause reputational damage for Network Rail shall be escalated to the Community Relations Team. The Legal Team and Secretary shall be informed and provided with full details of complaints concerning legal liability and claims for compensation made as a result of alleged noise and vibration. Claims should not be passed to Railway Claims Ltd, unless the claim relates to a period wholly prior to April 1994 or the Legal Team advised a claim is valid. Business units shall also be responsible for keeping records of any claims that are settled.

NOTE: Temporary relocation of neighbours and double/triple glazing might be requested but should not be considered unless all other mitigation measures have been considered.

9 Process for dealing with noise nuisance and legal actions

Network Rail's Legal Register provides a description of the main requirements of the law and the legal defences available. As infrastructure owner and landlord, Network Rail may be served with abatement notices alleging a statutory nuisance. In addition to Network Rail, such a Notice can also be lawfully served on a Train Operating Company (TOC) or contractor for the same nuisance.

9.1 Statutory nuisances

Under the EPA these events might happen:

- a) receipt of Noise Notice (Section 80) from a Local Authority requiring the person responsible, to remove or reduce the nuisance;
- receipt of a summons issued by a Magistrates Court on behalf of a Local Authority or person alleging breach of a Noise Notice;
- c) receipt of a summons issued by a Magistrates Court on behalf of an aggrieved individual, who wants a Court Order against Network Rail to remove or reduce an alleged nuisance (Section 82); and/or
- d) receipt of a summons issued by a Magistrates Court on behalf of an individual alleging breach of a Court Order.

9.2 Dealing with notices, orders and summons

Any organisation working on behalf of Network Rail that receives a Notice, Order or Summons shall send a copy with full details to the Legal Team and Secretary.

An employee or contractor who receives a Summons or Notice shall pass it to:

a) the Legal Team and Secretary Department at Network Rail; or

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

b) the Senior Director (this could be Region, Route or Works Delivery).

The Legal Team shall advise the Senior Director. If the Summons/Notice is valid the Senior Director shall decide what action is needed. The responsible manager shall advise the Legal Team if the time limit set out in the Notice or Order is too short for the work required (see Section 10.2). The Legal Team shall determine whether an appeal can be made.

In any proceedings for an offence under a Section 60 Notice, or an alleged offence under Section 80 of the EPA, it is a defence to demonstrate that the works have been carried out in accordance with the conditions of a Section 61 Notice, or Section 61 Consent, or in accordance with BPM. Private individuals, however, can still take action under the EPA Section 82 (see Section 7 above) or a common law action for nuisance against Network Rail.

NOTE: The responsible manager should deal with any Notice, Order or Summons immediately. There are only 21 days to appeal against a Notice to the Magistrates Court or against an Order to the Crown Court from the date of being notified. These time limits are absolute, and Network Rail cannot appeal out of time.

9.3 Regulatory compliance to avoid or manage complaints about noise

Any control measures identified in a Section 60 Notice issued by a Local Authority (either prior to or following commencement of works) or identified by Network Rail, or its contractor in a Section 61 Consent, shall be enacted in carrying out the construction works.

The Local Authority can serve a Section 60 Notice on the persons they believe to be responsible for a potential nuisance, e.g. Network Rail or its contractors. Even though Network Rail may use a contractor, the Local Authority is entitled to serve the Notice on Network Rail as being responsible for the works.

Failure to observe the terms of a Notice or Consent is an offence under the COPA 1974.

9.4 Provision of information

Network Rail should comply with the statutory nuisance provisions of the COPA and EPA.

NOTE: There is no statutory limit for railway noise.

Section 93 of the COPA gives Local Authorities legal powers to require Network Rail to provide information about noise and vibration levels from its activities. Failure to do so is an offence under the COPA.

10 Maintaining appropriate records

The responsible manager shall maintain the records in Table 2 in compliance with a document control system and procedures as appropriate.

Suppliers and contractors are required to manage documentation via an agreed document control system.

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| Record Title | Retention Period |
|---------------------|--|
| Monitoring records | For duration of work and for six months following completion |
| Section 61 Consents | One year (advisory) |
| Section 60 Notices | Indefinite; especially if similar work is required at a future date on the same site |

Table 2 - Records

| Ref: | NR/L2/ENV/121 | | |
|------------------|------------------|--|--|
| Issue: | 1 | | |
| Date: | 07 December 2019 | | |
| Compliance date: | 07 March 2020 | | |

Appendix A - RACI Template

NOTE: This template includes the requirements where responsible manager has been mentioned.

| Section and requirement | Responsible Manager | Accountable | Communicated | Informed |
|--|------------------------|-------------|--------------|----------|
| 4 Roles and Responsibilities | | | | |
| Identify roles and responsibilities | | | | |
| 5.1 Designing out noise and vibration nuisance | | | | |
| Take into account noise and vibration management from the initial stage of design and procurement for planned works. This shall include: a) Form; b) Function; c) Materials; and d) methods Select and/or procure materials and plant in accordance with BPM to eliminate or reduce noise and/or vibration | | | | |
| 5.2 Planning and management of works programme | | | | |
| Take all reasonably practicable measures to mitigate the effects of noise and vibration when implementing works by using BPM. | | | | |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| Т | 1 | |
|---|---|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| Where vibrations risks are present, carry out an assessment of vibration levels to evaluate potential impacts from any vibration risks in line with the recommendations and criteria within BS5228, BS6472, BS 7385 and BS ISO 4866. | | |
|--|--|--|
| 5.8 Inspection and monitoring | | |
| When identified during the risk assessment, identify and implement a monitoring and inspection programme for the activities concerned. The monitoring equipment shall be compliant with the requirements for a 'Class 2' instrument or better as defined in BS EN 61672-1 and BS EN 61672-2. | | |
| 6.1 Overview (Section 61 process) | | |
| Based on the results of the risk assessment, shall decide whether a prior consent for works under Section 61 of the Control of Pollution Act (COPA) 1974 is necessary | | |
| Undertake pre-works planning liaison with the relevant Local Authority(ies). | | |
| Obtain the consent (NR or principal contractor) | | |
| Inform Local Authority(ies) throughout the entire process. | | |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| | 1 | |
|---|-------|--|
| 6.2 Consent application preparation | | |
| Confirm that noise and vibration issues are taken into account when planning and designing the works. | | |
| Shall: allow three months or longer to obtain a Section 61 Consent Identify the nature of the activity requiring consent. | | |
| 6.4 Submission of application | | |
| Prepare the final application for sign-off by an authorised signatory before submission to the Local Authority(ies). | | |
| 7.1 Advance notification to local residents and occupants | | |
| Notify local residents/occupants about the proposed works at least two weeks prior to starting on site. | | |
| Liaise with local Community Relations Teams to ascertain who should receive a copy of the above information. | | |
| 7.2 Compliance monitoring | | |
| Agree any monitoring in advance with the Local Authority; and confirm all personnel and contractors comply with the consent terms and conditions. | | |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| | <u> </u> | 1 |
|--|----------|---|
| 7.3 Dispensations and variations | | |
| Prepare a dispensation covering all material | | |
| changes to the agreed Section 61 working | | |
| methods. | | |
| Seek advance approval at least two working | | |
| days before the works starts. Appendix D | | |
| shall be followed and completed before | | |
| contacting the Local Authority(ies) | | |
| When applying for a dispensation/variation, | | |
| include a statement advising how and when | | |
| local people will be notified of the changes | | |
| to the works programme. | | |
| 8.1 Stakeholder engagement | | |
| Plan and implement a programme of | | |
| stakeholder engagement for the activities in | | |
| accordance with NR/L3/MTC/PL0215 and | | |
| NR/L2/ENV015. | | |
| 8.3 Investigating | | |
| Deal with noise and vibration complaints by | | |
| investigating and determining whether the | | |
| complaint is justified. | | |
| Decide what action to take | | |
| Decide what action to take. | | |
| O 4 Lightlifty and plains | | |
| 8.4 Liability and claims | | |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| Complaints that might cause reputational | | | |
|---|-----------------|--|--|
| damage for Network Rail shall be escalated | | | |
| to the Community Relations Team. | | | |
| Legal Team and Secretary shall be informed | | | |
| and provided with full details of complaints | | | |
| concerning legal liability and claims for | | | |
| compensation made as a result of alleged | | | |
| noise and vibration. | | | |
| Keep records of any claims that are settled. | | | |
| 9.2 Dealing with notices, orders and | | | |
| summons | | | |
| | | | |
| Advise Senior Director | Legal Team | | |
| Advise the Legal Team if the time limit set | | | |
| out in the Notice or Order is too short for the | | | |
| work required. | | | |
| If the Summons/Notice is valid, decide what | | | |
| action is needed | Senior Director | | |
| | | | |
| Determine whether an appeal can be made. | Legal Team | | |
| | | | |
| 10 Maintaining appropriate records | | | |
| Maintain the [required] records in | | | |
| compliance with a document control system | | | |
| and procedures as appropriate. | | | |
| Documents include: | | | |
| Monitoring records (for duration of work and | | | |
| for six months post completion) | | | |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| Section 61 Consent (one year) Section 60 Notices (indefinite: especially if similar work is required at a future date on the same site) | | |
|---|--|--|
| Suppliers and contractors are required to manage documentation via an agreed document control system. | | |

| Ref: | NR/L2/ENV/121 | |
|------------------|------------------|--|
| Issue: | 1 | |
| Date: | 07 December 2019 | |
| Compliance date: | 07 March 2020 | |

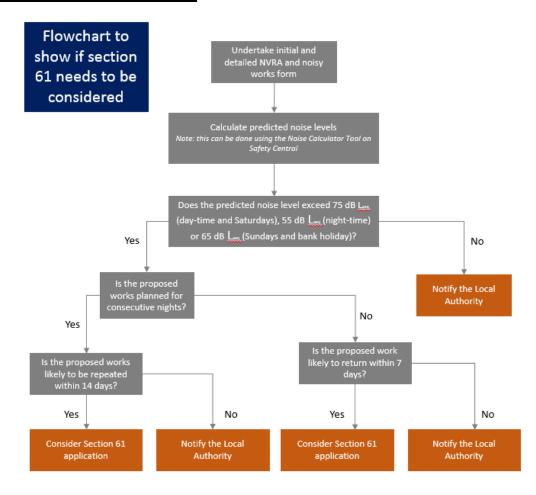
Appendix B - NVRA Example template



| Site / Project | |
|-----------------|--|
| Type of works | |
| Local authority | |

^{***}Note: This risk assessment is only applicable to construction noise and vibration***

Risk Assessment Process Flow:



Initial Risk Assessment

| Ref: | NR/L2/ENV/121 | |
|------------------|------------------|--|
| Issue: | 1 | |
| Date: | 07 December 2019 | |
| Compliance date: | 07 March 2020 | |

| _ | Printed Control of the St. | List de detelle et e est et l |
|----|---|--|
| 1. | Principal Contractor details | Include details of appointed person responsible for noise and vibration control (e.g. Environmental Manager) |
| | | |
| 2. | Address or location of proposed works | Include location on site map and nearest postcodes |
| 3. | Site Plan | Include location of nearest receptors (and sensitive receptors, e.g. schools, hospitals, care homes, etc.) Liaise with Local Authority to identify area- |
| | | specific sensitive receptors. |
| 4. | Dates, duration and hours of proposed works | Include the dates the works will be carried out and the duration of the works. |
| | | Include the proposed working hours for the works. Detail the activities to be undertaken outside normal working hours and on weekends and explain the reasons why (e.g. under possession). |
| | | Example: a. Site Establishment – 20/11/14 b. Establish Traffic Management – 17/11/14 c. Remove East Parapet – 29/11/14 d. Saw cut deck and reduce levels – 10/12/14 e. Demolish existing bridge deck – 25/12/14 (2 days) f. Install new bridge – Mid/Late Jan g. Waterproofing – Late Jan/Early Feb h. Surfacing works – Late Jan/Early Feb i. Ramp down to railway to be removed (Mid Feb) j. Demobilise – 01/04/15 |
| | | If specific dates are not available provide estimated start date, end date and duration of each activity. |

| Ref: | NR/L2/ENV/121 | |
|------------------|------------------|--|
| Issue: | 1 | |
| Date: | 07 December 2019 | |
| Compliance date: | 07 March 2020 | |

5. Particulars of works to be carried out

Description of planned works in a simple and concise way detailing the activities to be undertaken.

Example:

The works covered by this application comprise:

- Trial pits
- Boreholes
- 2 Soil Nail Testing
- Tree removal/de-vegetation works along the length of the works area
- 2 Structural Investigation (Coring)
- 6. Control measures to minimise noise and vibration social and reputational risks

Detail the measures identified to minimise impact (e.g. acoustic screening, change of plant/equipment, change of methodology, change or restrictions to working hours) and justify when deemed not practicable by providing rational behind the decision (e.g. based on cost, time and effort).

These steps should follow a mitigation hierarchy, e.g. Eliminate, Substitute, Isolate, Control.

Include generic BPM to minimise noise (e.g. no shouting, switch off noisy plants and equipment when not required, etc.).

Demonstrate that BPM is being used in order to allow Local Authorities and Network Rail to promptly respond to complaints.

Detailed Risk Assessment

 Methods to be used in each stage of development (including number, type and make of equipment and machinery (including heavy vehicles) stating sound power levels Detail the methods of working for each activity in a simple a concise way.

Example:

- Trial pits

Hand excavated trial holes to confirm rock head.

- Boreholes

Ground investigation boreholes varying in depth from 15 to 30 m deep will be drilled using a 3 tonne, 4 m tall, rotary borehole rig (with in-built diesel generator). A

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

recirculation pump (with in-built diesel generator) will be used. Rig delivered to working area by land rover. Window sampler using a small rig. - Test Soil Nails Installation of grout bonded steel soil nails and subsequent load testing to validate design of permanent works. Installation with a 4m drilling mast attached to a 3 tonne excavator. A Grout mixer and water bowser will be used. Equipment delivered by a low loader. - Structural Cores Small diameter concrete/masonry coring to verify thickness of abutment masonry, condition of abutment backfill and extent of bridge foundations, carried out using hand tools. Task lighting towers will be used. A small generator will be required. - Vegetation clearance Clearance of brambles and vegetation using hand held strimmers/brushcutters. Tree felling with chainsaws and removal by a forestry forwarder. Provide a table showing plant and equipment to be used for each activity and the related sound power levels LwA (to be used for noise predictions). *Include the duration length of equipment to* be used. Chipping on site of small arisings and grading and sorting of timber for removal and disposal. 8. Predicted noise levels This is completed when the activities are rated as either high or medium risk. Provide detailed noise predictions at nearest receptors using the noise predictions calculator. Provide an assessment of the likely noise impact using noise thresholds defined in BS5228: Code of Practice for the Control of

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| | Noise on Construction and Open Sites (Table E.1 and E.2). The DEFRA noise maps also provide guidance on noise levels. Example: Assessment Conclusions: The noise criteria that will apply to all preparatory works and construction works is 75 dB LAeq,10h during weekdays 0800 – 1800 hrs. The noise criteria that will apply to night time works is 55 dB LAeq,1h during 22:00 – 07:00 hrs. From the noise predictions, no single activity will exceed the criteria. |
|--|---|
| 9. Additional controls to minimise noise and vibration | Using the findings of the noise assessment above to detail the additional control measures to those in Section 5) identified to minimise impact (e.g. acoustic screening, change of plant/equipment, change of methodology, change or restrictions to working hours) and justify when deemed not practicable by providing rational behind the decision (e.g. based on cost, time and effort). Detail how BPM will be implemented to prevent cosmetic damage to buildings caused by vibrations. Demonstrate that BPM is being used in order to allow Local Authorities and Network Rail to promptly respond to complaints. |
| 10. Monitoring | Specify methodology and frequency. Include vibration monitoring if identified as a potential risk to nearby structures. |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| 11. Liaison and Communication | Detail residents (residential neighbours, shops and businesses) notification process (i.e. letter drop), notice and notification radius (200 m as standard but can be re-evaluated based on noise predictions to increase or reduce the area notified). When potential to impact a large area alternative communication method will be considered (e.g. drop in event, media, website). Detail complaints management process (i.e. |
|--|---|
| | report via National Helpline 03457 11 41 41, immediate action and response within 10 days). Include details of contact on site for use by the Local Authority only. |
| 12. List of plans and documents attached | If necessary |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

Appendix C - Noisy works template

| Works Location | Mileage | Work Activity to be Carried out | Contractor | Dates | Shift Times | Eqpt likely to be used on each shift | Approx Duration that each item of eqpt to be in use (%age of shift) |
|-------------------------------|------------------|---------------------------------------|------------|--------------------|-------------------|--|---|
| Example: Vernatts Drain | 45 m 0418 yds | Construct site entrance | Kier | 2/6/14 - 7/6/14 | 08:00 to 20:00 | 13t excavator 1no Bowmag roller 1no 9t dumpers 2no 20tTipper wagons 2- 4no | 50% 50% 50% 50% |
| | | | | | | | |
| | | | | | | | |

Date:

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

Appendix D - Section 61 Example Application Form

| | | letwo |
|---------------------------------|---|-------|
| Section 61 Application | Form | |
| | | |
| Site / Project | | |
| Type of works | | |
| Local authority | | |
| CONTROL (| OF POLLUTION ACT 1974 | |
| Application Fo | orm for Section 61 Consents | |
| Submission No: | 10.1.1.1 | |
| Local Authority Reference: | | |
| | N for prior consent under Section 61 of tworks intended to be carried out on the | |
| Responsible Person Role Company | | |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

Name and address of applicant:

| 1 | .2 | Co | m | na | ny |
|---|----|----|---|----|----|
| | | | | | |

Address:

Telephone No:

| 1. | Name, address and telephone number of main contractor and main site contact | Include details of appointed person responsible for Section 61 application (e.g. Environmental Manager) and contact with authority on site (e.g. Site Manager) Include the registered head office address |
|----|---|--|
| 2. | Address or location of proposed works | Include location on site map and nearest postcodes |
| 3. | Site Plan | Include location of nearest receptors (and sensitive receptors, e.g. schools, hospitals, care homes, etc.) Liaise with Local Authority to identify areaspecific sensitive receptors. |

| Ref: | NR/L2/ENV/121 |
|------------------|------------------|
| Issue: | 1 |
| Date: | 07 December 2019 |
| Compliance date: | 07 March 2020 |

| 4. Dates, duration and hours of proposed | Include the dates the works will be carried out |
|---|--|
| works | and the duration of the works. |
| | Include the proposed working hours for the works. Detail the activities to be undertaken outside normal working hours and on weekends and explain the reasons why (e.g. under possession). |
| | Example: a. Site Establishment – 20/11/14 b. Establish Traffic Management – 17/11/14 c. Remove East Parapet – 29/11/14 d. Saw cut deck and reduce levels – 10/12/14 e. Demolish existing bridge deck – 25/12/14 (2 days) f. Install new bridge – Mid/Late Jan g. Waterproofing – Late Jan/Early Feb h. Surfacing works – Late Jan/Early Feb i. Ramp down to railway to be removed (Mid Feb) j. Demobilise – 01/04/15 |
| | If specific dates are not available provide estimated start date, end date and duration of each activity. |
| 5. Particulars of works to be carried out | Presentation of the works in a simple and concise way detailing the activities to be undertaken. |
| | Example: The works covered by this application comprise: Trial pits Boreholes Soil Nail Testing Tree removal/de-vegetation works along the length of the works area Structural Investigation (Coring) |

| Ref: | NR/L2/ENV/121 | |
|------------------|------------------|--|
| Issue: | 1 | |
| Date: | 07 December 2019 | |
| Compliance date: | 07 March 2020 | |

6. Control measures to minimise noise and vibration social and reputational risks

Detail the measures identified to minimise impact (e.g. acoustic screening, change of plant/equipment, change of methodology, change or restrictions to working hours) and justify when deemed not practicable by providing rational behind the decision (e.g. based on cost, time and effort).

These steps should follow a mitigation hierarchy, e.g. Eliminate, Substitute, Isolate, Control.

Include generic BPM to minimise noise (e.g. no shouting, switch off noisy plants and equipment when not required, etc.).

Demonstrate that BPM is being used in order to allow Local Authorities and Network Rail to promptly respond to complaints.

| Ref: | NR/L2/ENV/121 | |
|------------------|------------------|--|
| Issue: | 1 | |
| Date: | 07 December 2019 | |
| Compliance date: | 07 March 2020 | |

 Methods to be used in each stage of development (including number, type and make of equipment and machinery (including heavy vehicles) stating sound power levels Detail the methods of working for each activity in a simple a concise way.

<u>Example:</u>

- Trial pits

Hand excavated trial holes to confirm rock head.

- Boreholes

Ground investigation boreholes varying in depth from 15 to 30 m deep will be drilled using a 3 tonne, 4 m tall, rotary borehole rig (with in-built diesel generator). A Recirculation pump (with in-built diesel generator) will be used. Rig delivered to working area by land rover. Window sampler using a small rig.

- Test Soil Nails

Installation of grout bonded steel soil nails and subsequent load testing to validate design of permanent works. Installation with a 4m drilling mast attached to a 3 tonne excavator. A Grout mixer and water bowser will be used. Equipment delivered by a low loader.

- Structural Cores

Small diameter concrete/masonry coring to verify thickness of abutment masonry, condition of abutment backfill and extent of bridge foundations, carried out using hand tools. Task lighting towers will be used. A small generator will be required.

- Vegetation clearance

Clearance of brambles and vegetation using hand held strimmers/brushcutters. Tree felling with chainsaws and removal by a forestry forwarder.

Provide a table showing plant and equipment to be used for each activity and the related sound power levels LwA (to be used for noise predictions).

Include the duration length of equipment to be used. Chipping on site of small arisings and grading and sorting of timber for removal and disposal.

| Ref: | NR/L2/ENV/121 | |
|------------------|------------------|--|
| Issue: | 1 | |
| Date: | 07 December 2019 | |
| Compliance date: | 07 March 2020 | |

8. Predicted noise levels This is completed when the activities are rated as either high or medium risk. Provide detailed noise predictions at nearest receptors using the noise predictions calculator. Provide an assessment of the likely noise impact using noise thresholds defined in BS5228: Code of Practice for the Control of Noise on Construction and Open Sites (Table E.1 and E.2). The DEFRA noise maps also provide guidance on noise levels. Example: Assessment Conclusions: The noise criteria that will apply to all preparatory works and construction works is 75 dB LAeq, 10h during weekdays 0800 –

Additional controls to minimise noise and vibration

Using the findings of the noise assessment above to detail the additional control measures to those in Section 5) identified to minimise impact (e.g. acoustic screening, change of plant/equipment, change of methodology, change or restrictions to working hours) and justify when deemed not practicable by providing rational behind the decision (e.g. based on cost, time and effort).

1800 hrs. The noise criteria that will apply to night time works is 55 dB LAeq,1h during

predictions, no single activity will exceed the

22:00 - 07:00 hrs. From the noise

criteria.

Detail how BPM will be implemented to prevent cosmetic damage to buildings caused by vibrations.

Demonstrate that BPM is being used in order to allow Local Authorities and Network Rail to promptly respond to complaints.

| Ref: | NR/L2/ENV/121 | |
|------------------|------------------|--|
| Issue: | 1 | |
| Date: | 07 December 2019 | |
| Compliance date: | 07 March 2020 | |

| 10. Monitoring | Specify methodology and frequency. |
|--|--|
| | Include vibration monitoring if identified as a potential risk to nearby structures. |
| 11. Liaison and Communication | Detail residents (residential neighbours, shops and businesses) notification process (i.e. letter drop), notice and notification radius (200 m as standard but can be re-evaluated based on noise predictions to increase or reduce the area notified). When potential to impact a large area alternative communication method will be considered (e.g. drop in event, media, website). Detail complaints management process (i.e. report via National Helpline 03457 11 41 41, immediate action and response within 10 days). Include details of contact on site for use by the Local Authority only. |
| 12. List of plans and documents attached | If necessary |
| | |

Standard and control document briefing note



| Ref: NR/L2/ENV/121 Issue: 1 | | | |
|--|---|--|--|
| Title: Managing environmental and social impact of noise and vibration | | | |
| Publication date: 07 December 2019 Compliance Date: 07 March 2020 | | | |
| Standard/Control Document Owner: Head of Environment and Sustainability | | | |
| Non-compliance rep (Approver of TRACKER applications): Rossa Donovan, Head of Environment and Sustainability | | | |
| Technical lead/contact for briefings: Molly Smith, Environment | al Specialist (NW&C) Tel: 07732 638941 | | |

Purpose:

This business process identifies how to design out noise and vibration impacts in the design process, as well as, how to plan and manage these to minimise noise and vibration risks, as well as statutory nuisance complaints.

This business process also outlines how to manage stakeholders and respond to complaints to facilitate our relationships with our stakeholders.

Scope:

This business process specifies the process to:

 a) use best practicable means (BPM) to control and minimise noise and vibration impacts on third parties;

NOTE 1: Further information on BPM can be found on NR/GN/ESD25 available on Safety Central.

- use Section 61 Consent application to develop or meet a Code of Practice agreed with a Local Authority;
- c) deal with noise and vibration complaints, Orders and

The process applies to any activity carried out by Network Rail or its contractors that might create noise and vibration impacts and has the potential to cause a nuisance to sensitive third party receptors, e.g. housing, schools, hospitals etc.

Other than complaints handling, this business process does not apply to:

 a) the control of noise and vibration impacts arising from the operation of the railway;

NOTE 2: This means arising directly from the running of rolling stock on Network Rail infrastructure, or ancillary plant/equipment.

b) occupational noise exposure;

NOTE 3: This is covered by the Control of Noise at Work Regulations 2005.

the statutory duty on Network Rail as the responsible authority to apply the provisions of the Noise Insulation (Railways and Other Guided Transport Systems) Regulations, 1996 where new or additional track is introduced.

NOTE 4: Such matters should be considered during the design stage of any enhancement scheme.

Overview of change

Combination of the following standards; RT/D/P/003, RT/LS/G/00022 and RT/LS/G1/00023 to make standards more manageable. New aspects include the flowchart for noise abatement, managing records and the noise and vibration risk assessment template. The standard refers to a 'responsible manager rather than a job title so the most appropriate persons in each business unit are appointed.

Detail of change

| Section(s)/clause(s) | Summary of changes |
|---|--|
| Figure 1 | Process flow for noise and vibration abatement |
| 3. Roles and responsibilities | Reference to 'Responsible Manager' rather than specific job titles allowing the different business units to identify who is best to be responsible for being compliant to that specific requirement. |
| Roles and responsibilities | Requirement to identify roles and responsibilities to comply with this business process. |
| 5.3 Noise and Vibration Risk Assessment | Template produced for noise and vibration risk assessment to allow for consistency between Regions. The use of this template is not mandatory. |
| 5.3 Noise and Vibration Risk Assessment | New requirement to carry out and document a risk assessment of the work package or activities. |
| Figure 2 | Process flow for dealing with complaints |
| 10, Maintaining appropriate records | Time line for retaining records |

OFFICIAL

Reasons for change

Four standards have been combined to develop a level 2 standard to manage the environmental and social impacts of noise and vibration. By doing this exercise and reducing the number of environmental standards we have been able to define a clearer set of requirements up-to-date with legislation.

Affected documents:

Reference Impact
NR/L2/ENV/121 ISSUE 1 New

NR/L3/MTC/EN0103 ISSUE 2 Superseded
RT/D/P/003 ISSUE 2 Superseded
RT/LS/G/00023 ISSUE 2 Superseded
RT/LS/G/00022 ISSUE 2 Superseded

Briefing requirements:

Will Briefing Management System be used to deliver the briefing to posts listed below? Yes/Ne

Technical briefings are given to those who have specific responsibilities within this standard/control document.

Awareness briefings are given to those who might be affected by the content but have no specific responsibilities within the standard/control document.

Details of the briefing arrangements are included in the associated briefing programme.

All posts identified for briefing must be as described in OrgPlus.

Roles are directly briefed and do not cascade briefings.

| Briefing (A-Awareness/ T-Technical) | Post | Function | Responsible for cascade briefing? Y/N |
|-------------------------------------|---|---|---------------------------------------|
| T | Environment Manager | Infrastructure Projects | Y |
| Т | Environment Manager | Route Services | Y |
| Т | Environment Manager (IP) | Regions | Y |
| T | Environment Manager (HO) | Regions | Y |
| Т | Environment Specialist | Infrastructure Projects | N |
| Т | Environment Specialist | Route Services | N |
| Т | Environment Specialist | Regions | Y |
| Т | Head of Safety & Sustainable Development | Property | Υ |
| Т | Head of Safety & Sustainable Development | Regions | Y |
| Т | Head of Safety & Sustainable Development | Infrastructure Projects | Y |
| Т | HSEA Specialist | Infrastructure Projects | N |
| Т | Head of Environment & Sustainability | Safety, Technical & Engineering | Y |
| Т | Environmental Strategy Manager | Safety, Technical & Engineering | Y |
| Т | Environmental Management System Manager [IP/NSC] | Safety, Technical & Engineering | Y |
| Т | Environmental Management System Manager [Ops] | Safety, Technical & Engineering | Y |
| T | Discipline Manager [IP] | Safety & Sustainable Development, Infrastructure Projects | Y |
| T | Workforce Health Safety & Environment Advisor | Regions | Y |
| Т | Workforce Health Safety & Environment Advisor (WD) | Regions | Y |
| T | Workforce Health Safety & Environment Advisor [LNW North] | Regions | Y |
| Т | Workforce Health Safety & Environment Advisor [WCMLS] | Regions | Y |
| Т | Infrastructure Maintenance Workforce HSE Advisor | Regions | N |
| Т | Principal Environment & Social Value Manager | Regions | Y |
| Α | Community Relations Manager | Regions | N |
| Α | Community Relations Executive | Regions | N |
| Α | Project Manager | Regions | N |

OFFICIAL

| Α | Head of Safety & Sustainable Development | Regions | N |
|-----|---|------------------------------------|---|
| Α | Head of Route Safety Health & Environment | Regions | Υ |
| Α | Consents Manager | Regions | N |
| Α | Head of Consents | Regions | N |
| Α | Head of Consents & Environment | Regions | N |
| Α | Chief Health Safety & Quality Officer | Safety, Technical & | N |
| A | Sustainability Strategy Manager (QHSE) | Engineering Safety, Technical & | N |
| | | Engineering | |
| Α | Energy & Carbon Strategy Manager | Safety, Technical & Engineering | N |
| Α | Sustainability Strategy Manager (QHSE) | Safety, Technical & Engineering | N |
| Α | Weather Resilience & Climate Change Adaptn Strategy | Safety, Technical & | N |
| Α | Manager Head of Maintenance Delivery | Engineering Regions | N |
| Α | Head of Maintenance Delivery [East Midlands] | Regions | N |
| Α | Head of Maintenance Delivery [Kent] | Regions | N |
| Α | Head of Maintenance Delivery [Sussex] | Regions | N |
| Т | Route Director, Anglia | Regions | N |
| Т | Route Director, Central | Regions | N |
| Т | Route Director, East Coast | Regions | N |
| Т | Route Director, East Midlands | Regions | N |
| Т | Route Director, Kent | Regions | N |
| T | Route Director, North East | Regions | N |
| Т | Route Director, North West | Regions | N |
| Т | Route Director, Scotland | Regions | N |
| Т | Route Director, Sussex | Regions | N |
| Т | Route Director, Wales | Regions | N |
| Т | Route Director, Wessex | Regions | N |
| Т | Route Director, West Coast Mainline South | Regions | N |
| Т | Route Director, Western | Regions | N |
| Α | Managing Director, Eastern | Regions | N |
| Α | Managing Director, Southern | Regions | N |
| Α | Managing Director, Wales & Western | Regions | N |
| Α | Managing Director, North West & Central | Regions | N |
| Α | Managing Director, Scotland's Railway | Regions | N |
| Α | Engineering Expert [Maintenance] | Safety, Technical and | N |
| Α | Head of Operations Principles & Standards | Engineering Safety, Technical and | N |
| | | Engineering | |
| Α . | Head of SHEQ | Route Services | Y |
| Α | Senior Communications Manager | Regions | N |
| Α | Director, Route Asset Management | Regions | N |
| A | Business Manager | Route Services | N |
| T | Infrastructure Maintenance Delivery Manager | Regions | N |
| Α | Route Programme Director (Works Delivery) | Regions | N |
| Α | Programme Manager | Regions | N |
| А | Professional Head of Asset Protection, Drainage & Off-Track | Safety, Technical & Engineering | N |
| Α | Area Depot Manager (ASMR) | Route Services | N |

OFFICIAL

| Α | Depot Manager (Holgate) | Route Services | N |
|---|--|-------------------------|---|
| А | Depot Manager (Sudbrook) | Route Services | N |
| Α | HSE Assistant | Route Services | Υ |
| Α | HSEA Specialist | Regions | Υ |
| А | HSEA Assistant | Regions | Υ |
| А | HSEA Specialist | Infrastructure Projects | Y |
| Α | HSEA Specialist [PC] | Infrastructure Projects | Y |
| Α | Ecologist | Regions | N |
| Α | Environment Specialist [Ecologist] | Infrastructure Projects | Y |
| Α | Environment Specialist [Ecologist] | Regions | Y |
| Α | Community Safety Manager | Regions | N |
| T | Capital Delivery Director, Eastern | Regions | N |
| T | Capital Delivery Director, Scotland | Region | N |
| T | Capital Delivery Director, Southern | Region | N |
| Т | Capital Delivery Director, North West & Central | Region | N |
| T | Capital Delivery Director, Wales & Western | Region | N |
| Α | Section Manager [Track] | Regions | N |
| Α | Section Manager [Off Track] | Regions | N |
| Α | Section Manager [Signalling] | Regions | N |
| Α | Mobile Operations Manager | Regions | N |
| Α | Director, Route Health, Safety Quality & Environment | Regions | Υ |
| Α | Health Safety & Environment Director | Regions | Υ |
| Α | Community Relations Manager | Regions | N |
| Α | Community Relations Executive | Regions | N |
| Α | Community Relations Manager [Scotland] | Regions | N |
| Α | Community Relations Executive [Scotland] | Regions | N |
| | Ti and the state of the state o | | |

NOTE: Contractors are responsible for arranging and undertaking their own Technical and Awareness Briefings in accordance with their own processes and procedures.