



## NOISE AND VIBRATION MANAGEMENT PLAN

Environmental and sustainability solutions provided to  
**S NORTON & CO LTD**

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## 1.0 INTRODUCTION

### 1.1 Site Address

S Norton & Co Ltd  
 Cornwall Road,  
 Smethwick  
 B66 2JR

### 1.2 Operational Location

Grid Reference: Easting 403177, Northing 289012.

### 1.3 Site Description

The site is situated on Cornwall Road which is adjoined to the B4136 and is 1.2km northeast of Smethwick town centre. It is surrounded by mixed-use industrial and commercial developments with the nearest residential receptor located 356m southeast of the site. The Birmingham canal runs along the southern perimeter of the site. There are no sensitive ecological receptors within 250m of the site.

### 1.4 Noise and Vibration Management Requirements

The preparation of this document has been undertaken using the guidance outlined in the Environment Agency Technical Guidance Note H3 (Part 2) – Horizontal Guidance for Noise (part 2) and Sector Guidance Note (SGN) IPPC 5.06. The typical condition regarding noise and vibration on a permit is as follows:

*"Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable, to minimise, the noise and vibration."*

## 2.0 NOISE & VIBRATION

This Management Plan addresses the need to manage the potential for noise and vibration from the operations at S Norton and Co Ltd (hereon referred to as "SN&Co") that may be considered as an environmental impact and a nuisance to neighbours, neighbouring businesses and operations.

Noise has been defined in various ways, but essentially it is unwanted sounds or sound that is not desired by the recipient. The degree of annoyance and stress that can result from exposure to noise is almost impossible to quantify, since responses may vary widely between individuals.

Vibration is the oscillation of a body about a reference point. The number of oscillations per second gives the frequency of vibration (Hz). Vibration can be felt as it is transmitted through solid structures directly to the human body.

## 2.1 Noise and Sound

Noise has been defined in various ways, but essentially it is unwanted sounds or sound that is not desired by the recipient. The degree of annoyance and stress that can result from exposure to noise is almost impossible to quantify, since responses may vary widely between individuals.

Sound is the sensation produced in the ear as a result of pressure variations set up in the air by a vibrating source. Such vibrations set up a series of alternate regions of increased and decreased pressure in the surrounding air or other medium. The longitudinal motion of these pressure fronts from source to receiver through a medium (air, ground, buildings, water) takes the form of sound waves.

Noise has been defined in various terms but is essentially sound of undesirable quality. Whilst the various physical attributes of sound can be quantified, the subjective aspects of noise – the degree of annoyance and stress which can result from exposure – is less easily measured. Annoyance and attitude towards noise varies widely between individuals, hence the apparent effectiveness of control measures may vary according to the individual exposed.

## 2.2 Vibration

Like sound, vibration is the oscillation of a body about a reference point and the number of oscillations or cycles per second gives the frequency of vibration (Hz). What differentiates the sound and vibratory forms of energy is in the way they are perceived – sound can be detected by hearing whilst vibration can be felt as it is transmitted through solid structures.

As with sound, vibration may occur at a single frequency (simple periodic vibration) or more usually there are a number of different frequency components imposed on top of each other and occurring simultaneously – often different parts of a machine will vibrate at different

frequencies. A combination of superimposed frequencies can also form a repetitive periodic motion – for example motors and fans.

Random vibration occurs where there is a wide range of frequencies present which vary randomly with time. Vibration may also be transient and die away after a period of time such as occurs with the use of heavy presses or the passage of a heavily loaded vehicle. Vibration is quantified in terms of three parameters: acceleration, velocity or displacement. Displacement is the distance moved from the fixed reference position (amplitude) and may be positive or negative (mm or  $\mu$  m). The velocity is the rate at which displacement varies with time (m/s or mm/s) and acceleration which is the rate of change of velocity over time (m/s<sup>2</sup>). The latter are generally used for the purpose of determining the various frequencies of vibration and the severity. Displacement is often used to indicate the degree of unbalance in rotating machine parts.

## 2.3 Legislative Context

### 2.3.1 Environmental Protection Act 1990

Local Authorities have a duty to inspect their area from time to time to identify any statutory nuisances and where a complaint of a statutory nuisance is made by a person living in the area, to take such steps as are reasonably practical to investigate the complaint.

Where a Local Authority is satisfied that a statutory nuisance exists or is likely to occur or recur in its area, legislation requires that the authority shall serve an abatement notice requiring any of the following:

- The abatement of the nuisance or prohibiting or restricting its occurrence or recurrence; and/or,
- The execution of such works and the taking of such other steps as may be necessary for any of these purposes.

It is an offence not to comply with an abatement notice without reasonable excuse. A defence is to prove that the best practicable means were used to prevent or minimise the effects of the nuisance if the nuisance arose from industrial, trade or business premises.

### 2.3.2 Control of Pollution Act 1974

The main provisions of the Control of Pollution Act 1974 (COPA) with respect to noise are to control noise from construction sites and also to allow for the creation of noise abatement zones. Where it appears to a Local Authority that construction works are being, or are going

to be, carried out on any premises, the Local Authority may serve a Section 60 Notice imposing requirements as to the way the works are to be carried out. The Notice may specify the type of plant to be used or restrict the times that work can be undertaken or may impose noise level limits.

Sections 63-67 of COPA allow Local Authorities to designate Noise Abatement Zones. The Local Authority will maintain a register of acceptable noise levels permitted within the Noise Abatement Zones and monitoring is undertaken at specified monitoring points. Where a noise level is exceeded without consent the Local Authority may serve a noise reduction notice. Noise Abatement Zones have been criticised for their complexity and consequently few have been designated.

### 2.3.3 Noise & Statutory Nuisance Act 1993

The 1993 Act amends the Environmental Protection Act 1990 to control statutory nuisances arising from vehicles, machinery and equipment on roads. The Act makes provisions for control of audible intruder alarms which are dealt with by Statutory Nuisance proceedings.

### 2.3.4 Control of Noise at Work Regulations 2005

Exposure to moderate to loud noise levels can cause hearing loss over time because of damage to nerves in the inner ear. The body can generally repair some damage, particularly when caused by short exposures to moderate sound pressures. However, permanent damage is more likely to occur with long-term exposure to hazardous noise levels, or short term exposure to very high noise levels.

According to Regulation 4 exposure limit values and action values of the HSE Control of Noise at Work Regulations 2005:

The lower exposure action values are –

- A daily or weekly personal noise exposure of 80 dB (A-weighted); and (b) a peak sound pressure of 135 dB (C-weighted);

The upper exposure action values are –

- A daily or weekly personal noise exposure of 85 dB (A-weighted); and (b) a peak sound pressure of 137 dB (C-weighted), and;

The exposure limit values are –

- A daily or weekly personal noise exposure of 87 dB (A-weighted); and (b) a peak sound pressure of 140 dB (C-weighted).

## 2.4 Noise Act 1996

The 1996 Act provides for the control of noise from dwellings at night and for the forfeiture and confiscation of equipment. The only provision relating to industry is section 10 which amends the Environmental Protection Act 1990 by allowing Local Authorities to seize and remove any equipment that appears to be used for the emission of the noise in question.

## 2.5 Noise Control Principles

Once noise has been generated, there are a number of physical factors involved in determining how the noise is propagated and how much reaches the receiver.

**Table 1 - Source-Pathway-Receptor Model for Noise Nuisance.**

SOURCE	PATHWAY	RECEPTOR
		
		
<p>The amount of noise radiated depends upon:</p> <ul style="list-style-type: none"> <li>• The sound power level of the source;</li> <li>• The nature of the building structure;</li> <li>• Gaps in the fabric of the building;</li> <li>• The number of sources.</li> </ul>	<p>The noise received depends upon the degree of attenuation provided by:</p> <ul style="list-style-type: none"> <li>• Distance from source;</li> <li>• Attenuation provided by type of ground;</li> <li>• Screening by walls, banks or buildings;</li> <li>• Wind direction;</li> <li>• Meteorological conditions;</li> <li>• Atmospheric absorption.</li> </ul>	<p>The strength of any vibration received will depend upon:</p> <ul style="list-style-type: none"> <li>• The strength of the source;</li> <li>• Ability of the source to transmit vibration to the ground;</li> <li>• The nature of the ground conditions;</li> <li>• Distance of the receiver from the source;</li> <li>• The continuity of the transmission route;</li> <li>• The ability of the receiver to receive the vibration.</li> </ul>
<b>HAZARD</b>		Nuisance to local population.

## 2.6 Noise Control Techniques

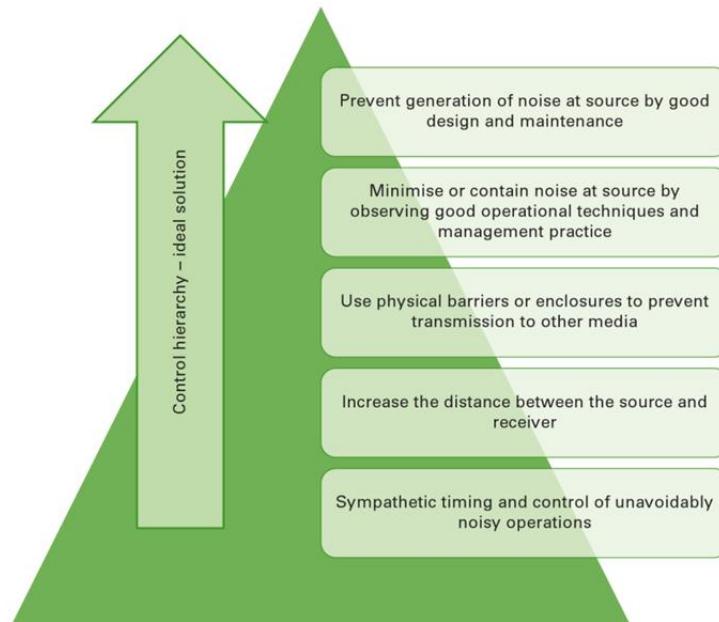
Control of noise within waste management facilities can normally be affected at 2 points in this chain:

1. By reducing at source by design or management;
2. By blocking or impeding the transmission paths, control by distance, direction or some form of noise abatement equipment

In determining the degree of control required, it is usual to calculate or measure the sound pressure level close to the source and, knowing the desired end-point, to calculate:

- The attenuation provided by the environment at the sensitive location.
- The additional attenuation required.

A hierarchy of noise control measures determines the most appropriate solution to control where practicable under any one site specific scenario.



**Figure 1 - Noise Control Hierarchy.**

### 3.0 SOURCES AND MITIGATION

A noise impact assessment was carried out by NOVA Acoustics in March 2025, conducted in accordance with BS4142:2019+A1 (2019) standard. The following sources of noise were modelled:

- Operation of metal shear located near to the northern boundary of the site and 1No. 835e 360 grab loading.
- 2No. 835e 360 grab waste from HGV unloads / loading HGV.
- 1No. CAT972 front end wheeled loader moving and sorting waste.
- HGV movements through site.
- Non-ferrous workshop noise breakout.
- ELV depollution building noise breakout.
- Maintenance workshop noise breakout.

The following mitigation measures were proposed in order to reduce the noise impact:

- During the nighttime (23:00 – 07:00) there should be no:
- HGV (un)loading with the 835e 360 grabs.
- Shear operations and associated 360 grab loading.
- CAT972 front shovel operations.
- Originally planned 5m tall sections of bay walls must be increased to 7m in height.
- Originally planned 8m tall sections of bay walls must be increased to 10m in height.
- An extension of the 10m tall section of steel wall must be erected.
- The height extensions to the steel walls could be constructed from any material providing no holes or gaps and have a minimum surface mass of 15kg/m<sup>2</sup>.

Following the above measures, it is considered that the impact of noise from the site will be reduced to an acceptable level.

### 4.0 MANAGEMENT PLAN

The Noise and Vibration Management Plan shall identify sources and potential sources of noise and vibration and shall consider the risk to sensitive receptors. The Noise and Vibration Management Plan has been produced with the intention to reduce as much as possible noise- and vibration-causing activities.

This Noise and Vibration Management Plan contains:

- An assessment of the risks of noise and vibration problems, from normal and abnormal situations, including worst case scenarios, for example of weather, temperature or breakdowns and accidents;
- The appropriate controls (both physical and management) needed to manage those risks;
- Suitable monitoring;
- Actions, contingencies and responsibilities when problems arise; and,
- Regular review of the effectiveness of noise and vibration control measures.

#### 4.1 Management Responsibilities and Review

It will be the responsibility of the technically competent manager (TCM) (or designated responsible person) to ensure that the Noise and Vibration Management Plan is adhered to at the site. This includes ensuring the mitigation measures detailed in Section 6.0 are adhered to.

The TCM (or designated responsible person) will be supported by the company's Managing Director.

#### 4.2 Other Documents

Documents to be viewed in conjunction with the Noise and Vibration Management Plan:

- EPR-B01 – Environmental Management System Manual
- EPR-OP02 – Waste Acceptance Procedure
- EPR-OP03 – Waste Treatment Procedure
- EPR-C01 – Accident Management Plan
- EPR-C02 – Fugitive Emissions Management Plan
- EPR-C04 – Drainage Management Plan
- EPR-A04 – Environmental Risk Assessment

## 5.0 SOURCE ASSESSMENT & MITIGATION

The following section identifies potential noise sources at the SN&Co non-hazardous and hazardous wastes treatment site and an assessment is made of noise impact, emergency conditions and action controls.

**Table 2 - Noise Source Assessment**

Source	Nature of Noise or Vibration	Location/Activity	Contribution to Emissions	Mitigation Measures
Vehicles delivering wastes to the site/removing loads from site.	<p>Engine sounds and reverse alarms during manoeuvres to unload waste.</p> <p>Intermittent sound during deliveries of material only.</p> <p>Hours of reception are: Mon-Fri: 06:00 - 17:00 Sat: 06:00 – 12:00 Sun: Closed</p>	<ul style="list-style-type: none"> <li>Access Roads.</li> <li>Reception Areas.</li> </ul>	Low – intermittent sound at low levels at receptor.	<ul style="list-style-type: none"> <li>Supervision of material unloading/loading.</li> <li>A speed limit of 10mph is enforced on site.</li> <li>White noise reversing alarms on vehicles.</li> <li>Engines to be switched off when not in use.</li> <li>Deliveries to be spread across the day where possible.</li> <li>Vehicle horns used as a Health and Safety measure only.</li> </ul>

Source	Nature of Noise or Vibration	Location/Activity	Contribution to Emissions	Mitigation Measures
On site mobile plant machinery (loading shovel and 360 grabber) transporting material around the site.	<p>Engine sounds and reverse alarms during manoeuvres to transport waste.</p> <p>Intermittent sound during material movements only.</p> <p>Hours of operation are: 07:00 – 23:00 daily.</p>	<ul style="list-style-type: none"> <li>At offload area and reception areas.</li> <li>Transporting material between areas.</li> <li>Transportation of treated materials to storage.</li> </ul>	Low – intermittent sound at low levels at receptor.	<ul style="list-style-type: none"> <li>A speed limit of 10mph is enforced on site.</li> <li>White noise vehicle reversing alarms fitted where possible.</li> <li>Vehicles switched off when not in use.</li> <li>Routine vehicle maintenance and inspection undertaken.</li> <li>Vehicle horns used as a Health and Safety measure only.</li> <li>Drop heights reduced to as low as possible.</li> </ul>
Metal Shear	<p>Shearing of ferrous &amp; non-ferrous scrap metals and, logging of depolluted End of Life Vehicles (ELVs).</p> <p>Intermittent noise and vibration during shearing &amp; logging activities only.</p> <p>Hours of operation are: 07:00 – 23:00 daily.</p>	<ul style="list-style-type: none"> <li>Western portion of the yard area adjacent to centrally positioned scrap metal storage bays.</li> </ul>	High – Continuous sound and vibrations at high levels at receptor.	<ul style="list-style-type: none"> <li>Equipment switched off when not in use.</li> <li>Routine maintenance and inspection undertaken.</li> <li>Noise/acoustic barriers located on key equipment.</li> <li>Drop heights reduced to as low as possible.</li> </ul>

Source	Nature of Noise or Vibration	Location/Activity	Contribution to Emissions	Mitigation Measures
Mobile Baler	<p>Baling/logging of ELVs proceeding the ELV depollution process.</p> <p>Intermittent noise and vibration during bailing &amp; logging activities only. The mobile baler will only be used if the metal shearer is unable to process wastes.</p> <p>Hours of operation are: 07:00 – 23:00 daily.</p>	<ul style="list-style-type: none"> <li>Eastern portion of the yard adjacent to the ELV depollution building.</li> </ul>	High – Continuous sound and vibrations at high levels at receptor.	<ul style="list-style-type: none"> <li>Equipment switched off when not in use.</li> <li>Routine maintenance and inspection undertaken.</li> <li>Noise/acoustic barriers located on key equipment.</li> </ul>
ELV Vehicle Depollution Rig(s)	<p>Vibrations and noise used to move ELVs from storage area to the rig and through the depollution process.</p> <p>Intermittent noise and vibration during periods of use.</p> <p>Hours of operation are: 07:00 – 23:00 daily.</p>	<ul style="list-style-type: none"> <li>ELV depollution building located in the southern portion of the site</li> </ul>	Moderate – Intermittent sound and vibration at moderate levels at receptor.	<ul style="list-style-type: none"> <li>Noise and vibratory activity take place within an enclosed building.</li> <li>Depollution equipment switched off when not in use.</li> <li>Routine plant maintenance and inspection undertaken.</li> </ul>

## 6.0 SENSITIVE RECEPTORS

### 6.1 Personnel and Visitors

Personnel/operatives working on site are the closest receptors to any noise and vibration produced on site, however due to consistent working conditions it may be unlikely that operatives would be particularly sensitive to noise and vibration. All operatives should be made aware of the issue of noise and vibration on site and should be fully conversant with the contents of the EMS Manual (EPR-B01) and this Noise and Vibration Management Plan (EPR-C03).

Personal Protective Equipment (PPE) shall be made available where appropriate.

It is unlikely that noise and vibration from SN&Co will cause nuisance or distress to visitors to the site. However, all visitors shall be made aware that the site is a waste processing plant. PPE shall be made available where appropriate or requested.

### 6.2 Neighbours

Neighbouring sites and businesses are likely to be the most sensitive receptors to noise and vibration nuisances especially those not operating industrial facilities where noisy equipment is used. The site is situated within a mixed-use industrial area, with several industrial units immediately north and east of the site. Good relationships with neighbouring land-owners and businesses are essential in order to anticipate potential problems and avoid them, where possible, before official complaints are made. SN&Co shall ensure:

- All the neighbours know how to contact the site if they consider noise and/or vibration to be a problem (contact details will be clearly visible on the site sign along with the Environment Agency details); and
- Any complaints are recorded and that problems, where possible, are dealt with promptly.

It is considered unlikely that noise and vibration from SN&Co will cause nuisance or distress to neighbours to the site given the mitigation measures in place as described in section 5.0.

### 6.3 Site Specific Sensitive Receptors

There are human sensitive receptors within 50m of the site boundary to the east, south and west of the site. These are all commercial / industrial in nature and they are the neighbours considered above. The nearest residential receptors are as follows:

- NSR1: 1-5 Lewisham Road, approximately 420m to the west.
- NSR2: a row of detached and semi-detached dwellings along Earlsmead Road, approximately 360m to the north.
- NSR3: residential properties, including 3No. 13-storey apartment blocks across Soho Way (A457), approximately 400m to the south.
- NSR4: semi-detached 2-storey dwellings along Argy Way, approximately 400m to the southeast.
- NSR5: detached 2-storey dwellings along Avery Road, approximately 460m to the southeast.
- NSR6: semi-detached 2-storey dwellings along Queens Head Road.

#### 6.4 Site of Special Scientific Interest (SSSI)

There are no SSSI's located in close proximity to the site.

### 7.0 NOISE AND VIBRATION CONTROL MEASURES

#### 7.1 IPPC and BAT

IPPC requires installations to be operated in such a way that all appropriate preventative measures are taken against pollution, in particular through the application of Best Available Techniques (BAT). BAT includes both the technology used and the way in which the installation is designed, built and operated. In deciding what level of control constitutes BAT for a given installation, a number of factors need to be considered and balanced. These include:

- Costs and benefits;
- The technical characteristics of the installation concerned;
- Geographical location;
- Local environmental conditions.

BAT, in a general sense or at sector level, will be set out in process- or sector-specific guidance. This guidance note covers in generic terms a range of abatement technologies, best practice and design features that could, taking the above site-specific criteria into account, form the basis of BAT for a range of situations. In all cases, the specific requirements relating to a particular sector should be reviewed as part of the decision-making process.

## 7.2 Indicative Best Available Technique (BAT) for Noise and Vibration

The Operator should employ basic good practice measures for the control of noise, including adequate maintenance of any parts of plant or equipment whose deterioration may give rise to increases in noise (for example bearings, air handling plant, the building fabric, and specific noise attenuation kit associated with plant or machinery).

The Operator shall employ such other noise control techniques necessary to ensure that the noise from the installation does not give rise to reasonable cause for annoyance, in the view of the regulator.

## 7.3 Controls

Assuming that all management, operational and maintenance issues have been satisfactorily addressed, once noise has been generated, there are a number of physical factors involved in determining how it is propagated and how much reaches the receiver.

Noise levels at sensitive receptors can be minimised by:

- Reduction at source;
- Ensuring adequate distance between the source and receiver; and,
- The use of barriers between the source and receiver.

In determining the degree of control required, it is usual to calculate or measure the sound pressure level close to the source and, knowing the desired end-point, calculate:

- The attenuation provided by the environment at the sensitive location;
- The additional attenuation required.

For this non-hazardous & hazardous waste treatment facility, given its geographical location and proximity to neighbouring commercial receptors with a variety of plant and machinery on site, noise level surveys and testing have been considered necessary. Consequently, SN&Co plan to commission a Baseline Noise Survey and Noise Source Inventory Report, to be produced by a qualified noise specialist.

Using a Baseline Noise and Noise Source Inventory Report for guidance, further investigation will be undertaken into how to address noise sources which may be identified in the report once operations commence.

The installation will employ such noise control techniques necessary to ensure that the noise from the installation does not give rise to reasonable cause for annoyance, in the view of the Regulator. These measures will be added to in section 5.0 of this management plan, if any are required.

Further controls pertaining to the pre-acceptance and acceptance, treatment, storage and transfer of material are detailed below:

**Pre-Acceptance and Acceptance Controls:**

- Vehicles and Plant shall be switched off when not in motion or operation.
- Continuing high levels of maintenance of vehicles and plant shall ensure minimal noise and vibration when in operation.
- Good site operating practices.

**Treatment Controls:**

- Vehicles and Plant shall be switched off when not in motion or operation.
- ELV depollution will take place inside the dedicated processing building. This mitigates noise and vibration nuisance since the processes will be conducted internally.
- Continuing high levels of maintenance of vehicles and plant will ensure minimal noise and vibration when in operation.
- Noise/acoustic barriers located on key equipment.
- Good site operating practices.

**Storage Controls:**

- Vehicles and Plant shall be switched off when not in motion or operation.
- Continuing high levels of maintenance of vehicles and plant will ensure minimal noise and vibration when in operation.
- Good site operating practices.

**Transfer Controls:**

- Vehicles and Plant shall be switched off when not in motion or operation.
- Continuing high levels of maintenance of vehicles and plant will ensure minimal noise and vibration when in operation.
- Good site operating practices.

## 7.4 Accident Management

A full Accident Management Plan is provided in document EPR-C01.

### Plant breakdown:

- On-going maintenance on plant, vehicles and equipment shall limit the likelihood of failure/breakdown. If plant, vehicles or equipment does breakdown in any way then it will not be used until a full repair can be carried out by an expert. In this instance, SN&Co may utilise other equipment for the duration of the breakdown. Any replacement plant, vehicle or equipment would be of similar technical specifications as the original and it is therefore not anticipated that this would increase noise and vibration compared to normal working conditions.

## 7.5 Good Housekeeping

Good housekeeping practises on site to minimise noise and vibration from the site shall include:

- The general maintenance and inspection of the site surface and site boundary, including fences and gates.
- On-going maintenance of all plant, vehicles and equipment to ensure good working order.
- General housekeeping and inspection procedures maintained; cleaning of all surfaces that come into contact with waste on a regular basis.
- Regular inspections outside the installation boundary to identify any noise problems.

## 7.6 Regular Review of Control Measures

The noise and vibration control measures shall be reviewed on a regular basis.

The control measures shall be reviewed as a matter of course if:

- A complaint is received;
- If new plant is brought on site;
- If new working procedures are planned;
- If additional wastes are to be accepted on site;
- Unforeseen issues become routine; and,
- After one year of operating.

## 7.7 Complaints Response

Elevated levels of noise may be identified either by receipt of a noise complaint from a third party suggesting that there is an excessive noise from SN&Co or by detection of noise as a result of daily site checks by site personnel.

SN&Co have a set procedure for dealing with and responding to complaints. If a noise or vibration complaint is made, then a complaint form will be filled out (see Appendix A). The site diary will be updated by the TCM (or designated responsible person) and a record kept at the site office. All complaints from third parties including external customers, potential customers, statutory authorities, statutory consultees, members of the general public and internal clients will be forwarded to the TCM (or designated responsible person) to action. All complaints shall be dealt with promptly and any appropriate remedial action shall be taken. A noise or vibration complaint will result in:

- Completion of a complaint form;
- Source of noise/vibration identified;
- Remedial action taken (where possible);
- Complainant notified of remedial action; and,
- Control measures reviewed.

## 8.0 MONITORING

### 8.1 Monitoring Plan

It is acknowledged that there will be instances throughout the day where there will be some noise and/or vibration generated on site. Inevitably this shall occur during the deposition, treatment and transferring of waste. It is proposed that these occurrences shall be minimised in accordance with the control measures outlined in Section 5.0 & 6.0 of this document. It shall be the responsibility of the site manager to monitor site operations and ensure that the proposed control measures are being implemented.

Any additional quantitative monitoring shall be undertaken on a required basis, as determined by the TCM. Triggers for quantitative monitoring could include:

- Receipt of a substantiated noise complaint;
- Following installation of a noise mitigation control e.g. noise attenuator or shield;
- After a change of noise risk posed by alteration or addition of a new operational process or technique;
- Upon request by the Environment Agency or Local Authority; or

- As part of on-going due diligence works to ensure compliance with the Environmental Permit.

## 8.2 Detection of Elevated Noise Levels

Any elevated levels of noise identified by monitoring undertaken will be mitigated as follows:

- The TCM (or designated responsible person) will investigate the source of the noise and carry out a range of checks at the identified source of the elevated levels if it is found to be originating from within the site. As part of these checks, the TCM (or designated responsible person) will consider the need for quantitative monitoring.
- Any noise monitoring will be completed by a qualified noise monitoring specialist in accordance with the relevant British Standards, including Method for rating industrial noise affecting mixed residential and industrial areas (BS4142).
- Monitoring locations will be agreed with the Environment Agency and/or the local Planning Authority prior to undertaking monitoring.
- The results of any noise monitoring will determine whether the site is causing an unacceptable impact at the receptor in question.
- The TCM (or designated responsible person) will then ensure the plant is being operated to the manufacturer's specification and ensure that any improvements required to minimise the noise levels are made.

To further mitigate the elevated noise levels, the following actions shall also be considered where practical and technologically viable.

- The replacement of equipment identified as generating excess noise.
- Once the improvements identified by the TCM (or designated responsible person) have been completed, the manager will commission a further set of monitoring to ensure that the improvements have met the required standard. If the noise levels are still not being met, then the manager will repeat the investigation into improvements and subsequent monitoring until the limits are met as far as is reasonably practicable.

If operational failings are identified, the retraining of employees will take place to ensure that all employees operate to the required standards. If the failings are identified as part of the operating techniques then the problem will be raised as part of the review of control measures.

The TCM (or designated responsible person) will ensure a close liaison with the Environment Agency throughout all stages of the process following an identified elevated noise level.

### **8.3 Noise and Vibration Records**

SN&Co shall keep records of site inspections. Any adverse operating conditions, non-conformances, complaints and mitigation/management failure resulting in an accident or non-compliance with the Permit shall be recorded in the Assure reporting platform.

**APPENDIX A – COMPLAINT SHEET**

NOISE/VIBRATION COMPLAINT REPORT FORM		
Complaint Details:		
Telephone number of complainant:		
Date of noise and/or vibration:		
Time of noise and/or vibration:		
Location of noise and/or vibration, if not at above address:		
Weather conditions (i.e., dry, rain, fog, snow):		
Wind direction (e.g. from NE)		
Complainant's description of noise and/or vibration: Describe the noise/vibration? Duration (time)? Constant or intermittent?		
Are there any other complaints relating to the installation?		
Any other relevant information:		
Do you accept that noise and/or vibration is likely to be from your activities?	What was happening on site at the time the noise and/or vibration occurred?	
Operating conditions at the time the noise and/or vibration occurred?	Actions taken?	
<b>Form completed by:</b>	<b>Date:</b>	<b>Signed:</b>