


# NOISE AND VIBRATION MANAGEMENT PLAN

Environmental and sustainability solutions provided to  
**BRYN RECYCLING LTD**

WRM-LTD.CO.UK



This report was prepared by **Walker Resource Management Ltd (WRM)** within the terms of its engagement and in direct response to a scope of services. This report is strictly limited to the purpose and the facts and matters stated in it and does not apply directly or indirectly and must not be used for any other application, purpose, use or matter. In preparing the report, WRM may have relied upon information provided to it at the time by other parties. WRM accepts no responsibility as to the accuracy or completeness of information provided by those parties at the time of preparing the report. The report does not take into account any changes in information that may have occurred since the publication of the report. If the information relied upon is subsequently determined to be false, inaccurate, or incomplete then it is possible that the observations and conclusions expressed in the report may have changed. WRM does not warrant the contents of this report and shall not assume any responsibility or liability for loss whatsoever to any third party caused by, related to, or arising out of any use or reliance on the report howsoever. No part of this report, its attachments or appendices may be reproduced by any process without the written consent of WRM. All enquiries should be directed to WRM.

Document Title	Noise and Vibration Management Plan
Client	Bryn Recycling Ltd
Revision	v1.0
Date	24/08/2023
Document Reference	BRY-B05
Project Reference	1213/J05
Author: Joseph Epicheff	Reviewer: Martin Ropka
	

### Copyright ©

All material on these pages, including without limitation text, logos, icons and photographs, is copyright material of Walker Resource Management Ltd (WRM). Use of this material may only be made with the express, prior, written permission of WRM. This document was produced solely for use by the named client to whom the document refers. The methodology (if any) contained in this report is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of WRM. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests.

## CONTENTS

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	Site Address .....	1
1.2	Site Description .....	1
1.3	Noise and Vibration Requirements .....	2
<b>2.0</b>	<b>NOISE &amp; VIBRATION .....</b>	<b>2</b>
2.1	Noise and Sound .....	2
2.2	Vibration .....	2
2.3	Legislative Context .....	3
2.4	Environmental Protection Act 1990 .....	3
2.5	Control of Pollution Act 1974 .....	4
2.6	Noise & Statutory Nuisance Act 1993 .....	4
2.7	Control of Noise at Work Regulations 2005 .....	4
2.8	Noise Act 1996 .....	5
2.9	Noise Control Principles .....	5
2.10	Noise Control Techniques .....	6
<b>3.0</b>	<b>MANAGEMENT PLAN .....</b>	<b>7</b>
3.1	Management Responsibilities and Review .....	7
3.2	Other Documents .....	8
<b>4.0</b>	<b>SOURCE ASSESSMENT &amp; MITIGATION .....</b>	<b>9</b>
<b>5.0</b>	<b>SENSITIVE RECEPTORS .....</b>	<b>11</b>
5.1	Personnel and Visitors .....	11
5.2	Neighbours .....	11
5.3	Site Specific Sensitive Receptors .....	12
5.4	Site of Special Scientific Interest SSSI .....	13
<b>6.0</b>	<b>NOISE AND VIBRATION CONTROL MEASURES .....</b>	<b>14</b>
6.1	IPPC and BAT .....	14
6.2	Indicative Best Available Technique (BAT) for Noise and Vibration .....	14
6.3	Controls .....	14
6.4	Accident Management .....	15
6.5	Good Housekeeping .....	16

6.6	Regular Review of Control Measures.....	17
6.7	Complaints Response.....	17
<b>7.0</b>	<b>MONITORING.....</b>	<b>17</b>
7.1	Detection of Elevated Noise Levels .....	18
7.2	Noise and Vibration Records.....	19
<b>8.0</b>	<b>ANNEX – COMPLAINT SHEET .....</b>	<b>20</b>

## 1.0 INTRODUCTION

### 1.1 Site Address

Bryn Recycling Ltd  
Gelliargwellt Farm,  
Gelligaer,  
Hengoed,  
CF82 8FY

Site Grid Reference: ST 12393 96501

### 1.2 Site Description

The area in which the waste would be deposited for recovery is within land that makes up part of Gelliargwellt Uchaf Farm and is centred on grid reference ST 12393 96501. The primary vehicle access is from Gelligaer Road, which is located to the northwest of the site. It also connects neighbouring towns including Gelligaer and Penpedairheol which are located approximately 500m and 1,500m respectively, to the northeast of the site. Penybryn is located approximately 600m to the east, with the Penallta Industrial Estate located slightly further east. Caerphilly is located approximately 8km south of the site.

The site is bound to the south by agricultural land and Parc Penallta Country Park, which comprises an area of public open space and woodland is located approximately 850m to the southeast. Nelson Bog Site of Special Scientific Interest (SSSI) is located 550m to the southeast of the site. Waun Rydd Site of Importance for Nature Conservation (SINC) is located to the east of the site and Coed Gelliau'r – Gwellt SINC is located immediately adjacent (west) to the site and comprises an ancient woodland.

The wider farm site contains an anaerobic digestion facility to the north of the deposit for recovery site with a sandstone quarry to the east. Immediately east of the site is a Materials Recycling Facility (MRF). Part of the deposit for recovery site lies within the permit boundary of the MRF (permit reference number TP3695FC).

The deposit for recovery site is largely agricultural in nature, used for grazing cattle, and it has an area of approximately 64,500m<sup>2</sup>.

### 1.3 Noise and Vibration 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 the deposit for site operated by Bryn Recycling Ltd (hereon referred to as Bryn Recycling) that may be considered as an environmental impact and a nuisance to neighbours, neighbouring businesses and operations. The definitions of noise, sound and vibration for the purposes of the Noise and Vibration Management Plan are provided in sections **Error! Reference source not found.** and **Error! Reference source not found.**.

### 2.1 Noise and Sound

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.

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.

### 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  $\mu\text{m}$ ). 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 ( $\text{m/s}^2$ ). 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

### 2.4 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.

## **2.5 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.

## **2.6 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.

## **2.7 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. These regulations are designed to protect employees from prolonged exposure to excessive noise. The regulations establish the responsibilities of an employer with regards to protecting their employees from the risks associated with exposure to noise.

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








## 2.8 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.

## 2.9 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>
HAZARD		Nuisance to local population.

## 2.10 Noise Control Techniques

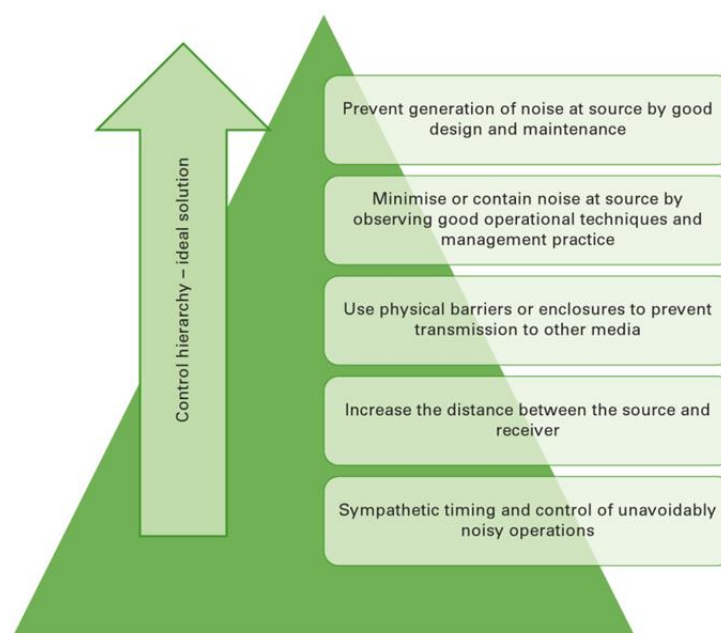
Control of noise within waste management facilities can normally be affected at 2 points in this chain:

- By reducing at source by design or management;
- 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 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.

#### 3.1 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.

### 3.2 Other Documents

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

- BRY-B01 – Environmental Management System Manual
- BRY-OP02 – Waste Acceptance Procedure
- BRY-OP03 – Waste Recovery Procedure
- BRY-B06 – Accident Management Plan
- BRY-B04 – Fugitive Emissions Management Plan
- BRY-B02 – Environmental Risk Assessment

#### 4.0 SOURCE ASSESSMENT & MITIGATION

The following section identifies potential noise sources at the deposit for recovery 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 waste to 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: 07:00-18:00 Sat: 07:00-13:00 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 5mph is enforced on site.</li> </ul>

Source	Nature of Noise or Vibration	Location/Activity	Contribution to Emissions	Mitigation Measures
On site mobile plant machinery used to transport material around the site and deposit at the final location.	<p>Engine sounds and reverse alarms during manoeuvres to transport waste.</p> <p>Intermittent sound during material movements only.</p> <p>Hours of deposit for recovery are:  Mon-Fri: 07:00-18:00  Sat: 07:00-13:00  Sun: Closed</p>	<ul style="list-style-type: none"> <li>• At offload area and reception areas.</li> <li>• Transporting material between areas.</li> <li>• Depositing waste at final location.</li> </ul>	Low – intermittent sound at low levels at receptor.	<ul style="list-style-type: none"> <li>• A speed limit of 5mph 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> </ul>

## 5.0 SENSITIVE RECEPTORS

### 5.1 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 (BRY-B01) and this Noise and Vibration Management Plan (BRY-B05).

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

It is unlikely that noise and vibration from Bryn Recycling will cause nuisance or distress to visitors to the site. Visitors to site will be a rare occurrence. However, all visitors shall be made aware that the site is a waste deposit for recovery site and PPE shall be made available where appropriate or requested.

### 5.2 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 largely agricultural area with some individual houses and small hamlets located in the vicinity 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. Bryn Recycling 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 Bryn Recycling will cause nuisance or distress to neighbours to the site given the mitigation measures in place as described in section **Error! Reference source not found..**

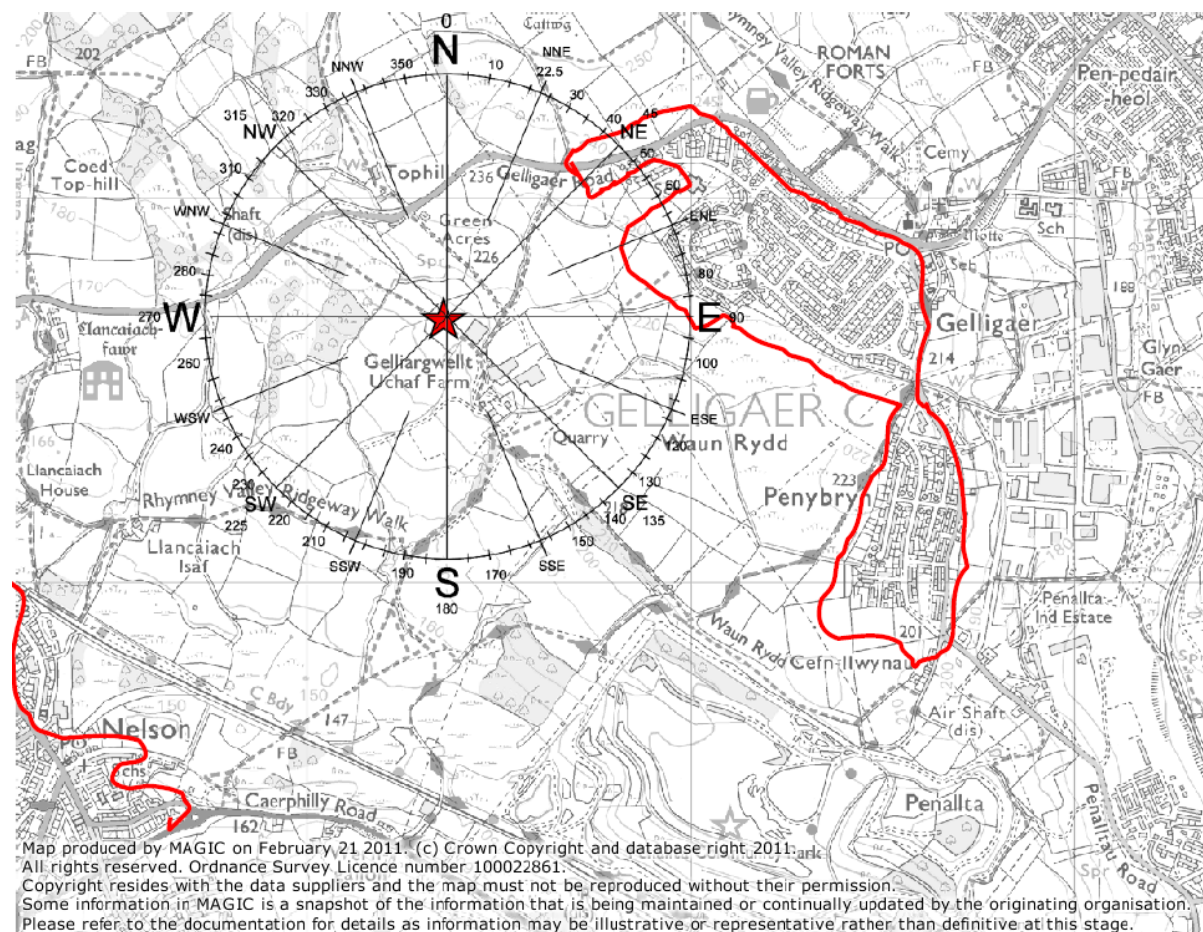
### 5.3 Site Specific Sensitive Receptors

Noise sensitive properties are shown in Table 1 below. None of the highlighted receptors were located within 300m of the site.

**Table 1 - Sensitive Receptors**

Receptor Name	X (m)	Y (m)	Distance (m)
R01 Alpine Cottage	312213	196929	200
R02 Tophill Cottage	312236	196939	200
R03 Greenacres	312310	196955	216
R04 Tophill	312202	196999	269
R05 Legion's Way	312840	197040	702
R06 School	312967	196997	796
R07 Claerwen	312940	196886	733
R08 Claerwen	313012	196777	750
R09 Plots	312908	196792	666
R10 Aneurin Bevan	313266	196659	973
R11 Brynheuog	313527	196398	1220
R12 Penybryn	313488	196234	1202
R13 Gelliargwellt	313427	196020	1199
R14 Parc	312920	195886	823
R15 Llancaiach-Isaf	311567	196148	615
R16 Llancaiach-fawr	311364	196601	749





**Figure 3 - Map Identifying Local Residential Sensitive Receptors**

#### 5.4 Site of Special Scientific Interest SSSI

Nelson Bog Site of Special Scientific Interest (SSSI) is located 350m to the south of the site. There are no records of any species of note within the curtilage of the site.

It is unlikely that any noise and/or vibration produced by the site would have an impact and would be detectable at the SSSI. It is considered that the angle of slope and the distance between the site and the SSSI would attenuate any noise and vibration sufficiently to limit the impact. The control measures detailed in this Noise and Vibration Management Plan have been detailed with a view to minimising and preventing, where possible any environmental impact from noise and/or vibration from the Bryn Recycling site.

## 6.0 NOISE AND VIBRATION CONTROL MEASURES

### 6.1 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.

### 6.2 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.

### 6.3 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.

To minimise any possible noise impact from the activities on site Bryn Recycling will employ the following noise control measures:

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

#### 6.4 Accident Management

A full Accident Management Plan is provided in document BRY-B04.

##### **Vehicle breakdown:**

On-going maintenance on vehicles shall limit the likelihood of failure/breakdown. If vehicles do breakdown in any way then the affected vehicle will not be used until a full repair can be carried out by an expert. In this instance, Bryn Recycling may utilise other equipment for the duration of the breakdown. Any replacement vehicle 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.

#### 6.5 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 vehicles to ensure good working order.

- Regular inspections outside the installation boundary to identify any noise problems.

## 6.6 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;
- After one year of operating.

## 6.7 Complaints Response

Although receipt of a complaint is thought to be very unlikely, Bryn Recycling shall 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 Annex A) and a note made in the site diary. 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;
- Control measures reviewed.

## 7.0 MONITORING

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 and transferring of waste. It is proposed that these occurrences shall be minimised in accordance with the control measures outlined in Section **Error! Reference source not found.** & 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 Natural Resources Wales or Local Authority; or
- As part of on-going due diligence works to ensure compliance with the Environmental Permit.

## 7.1 Detection of Elevated Noise Levels

Any elevated levels of noise identified 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.

## **7.2 Noise and Vibration Records**

Bryn Recycling 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 site diary.

**8.0 ANNEX – 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)		
Complainants 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?	
Form completed by:	Date:	Signed: