

MANAGEMENT PLAN

NOISE AND VIBRATION MANAGEMENT PLAN

SITE DETAILS:

T&K Weavers Demolition Ltd
Ferriers Pit
Ferriers Lane
Bures
CO8 5DL

APPLICANT DETAILS:

T&K Weavers Demolition Ltd
Parsonage Hall
Bures
CO8 5DH

**T & K Weavers
Demolition Ltd**

Application Reference:

EPR/HB3705UM

Document Reference:

K153.1~09~006/V2

Issue Date:

10/02/2020



Wiser Environment Ltd
Suite 11 Manor Mews
Bridge Street
St Ives
Cambridgeshire
PE27 5UW

Tel: 01480 462 232
info@wisergroup.co.uk
www.wiserenvironment.co.uk

DOCUMENT CONTROL

DOCUMENT TITLE:	NOISE AND VIBRATION MANAGEMENT PLAN
REFERENCE:	K153.1~09~006
CLIENT:	T&K Weavers Demolition Ltd
REPORTED BY:	WISER Environment Ltd
STATUS:	FINAL
ISSUE:	02
ISSUE DATE:	10/02/2020
AUTHOR:	WISER
APPROVED BY:	T & K Weavers

REVISION HISTORY

REFERENCE:	DATE	ISSUE	REVISION SUMMARY
K153.1~09~006	14/11/2019	D1	Draft Client Review
K153.1~09~006	21/11/2019	D2	Amendments post client review.
K153.1~09~006	22/11/2019	01	Published for submission.
K153.1~09~006	10/02/2020	02	Amended to reflect Noise Impact Assessment

QUALITY CONTROL

ACTION	NAME	DATE
Prepared	Charles Thomas	10/02/2020
Checked	Andrea Petrolati	10/02/2020
Approved	Charles Thomas	10/02/2020

CONTENTS

1. INTRODUCTION	5
1.1. Sensitive Receptors.....	6
2. OPERATIONS	11
3. NOISE MANAGEMENT	12
3.1. Responsibility for Implementation of this Plan	12
3.2. Sources & Control of Noise	12
3.2.1. Delivery of Waste.....	12
3.3. Noise Monitoring.....	13
4. REPORTING & COMPLAINTS RESPONSE	16
4.1. Reporting of Complaints.....	16
4.2. Management Responsibilities.....	17
5. SITE & EQUIPMENT MAINTENANCE PLAN	18
6. KEEPING RECORDS	19
7. REVIEW THE MANAGEMENT SYSTEM	20
8. AVAILABILITY OF THE MANAGEMENT PLAN	21
9. SUMMARY	22

APPENDICES

APPENDICES	REFERENCE	TITLE
Appendix A	K153.1~09~007	Complaint Form
Appendix B	SS/J3482/17579	Environmental Noise Assessment – Acoustic Associates — February 2020

DRAWINGS

REFERENCE	TITLE	REVISION	DATE
K153.1~20~013	Sensitive Receptors Plan	RevA	22/11/2019
K153.1~20~014	Permit Boundary	RevA	22/11/2019

TABLES

TABLE	TITLE
Table 1	Receptors in Prevailing wind direction within <1 km
Table 2	Distance of Receptor to Site Boundary (<1 km)
Table 3	Control of Noise Impacts
Table 4	Source-Pathway-Receptor

1. INTRODUCTION

This Noise and Vibration Management Plan (NVMP) accompanies an application for a Bespoke Waste Permit (EPR/HB3705UM) at T&K Weavers Demolition Ltd, Ferriers Pit, Ferriers Lane, Bures CO8 5DL. T&K Weavers are applying for a bespoke environmental permit to carry out the treatment of waste to produce soil, soil substitutes and aggregate. The permit applied for will be based on 'SR2010 No12: treatment of waste to produce soil, soil substitutes and aggregate'.

The site has historically been a mineral extraction (Sand and Gravel) pit since the 19th Century and waste processing operations have been carried out for 12 years. There is no history of complaint regarding noise from either the quarrying or processing activities.

An Environmental Risk Assessment (Reference: K153.1~09~002) identifies potentially significant sources of noise and vibration associated with the acceptance, storage, sorting, separation, screening, crushing, blending of waste for recovery and dispatch. These have been assessed against the principal receptor types identified within the site's vicinity; the permitted area is provided in K153.1~20~014, whilst the location of the site in relation to the sensitive receptors is shown in K153.1~20~013 Sensitive Receptors Plan.

A noise assessment was undertaken between 29th January and 5th February 2020. The report is found within Appendix B and the recommendations have been considered both within this NVMP and are reflected in the ERA.

The Environmental Risk Assessment concludes that the potential risk of vibration, odour, litter and noise is MEDIUM and does not require any further mitigation. Due to the risk associated with the production of certain noise and vibration from certain proposed operational activities and a high consequence with the locality of some sensitive receptors, this management plan concentrates on the proposed measures to prevent or limit the generation of noise and vibration at source.

This document incorporates those measures and is intended to form part of the environmental management system for the site and all staff working at the site are to be made aware of its provisions.

A copy of this NVMP will be available onsite for inspection.

1.1. SENSITIVE RECEPTORS

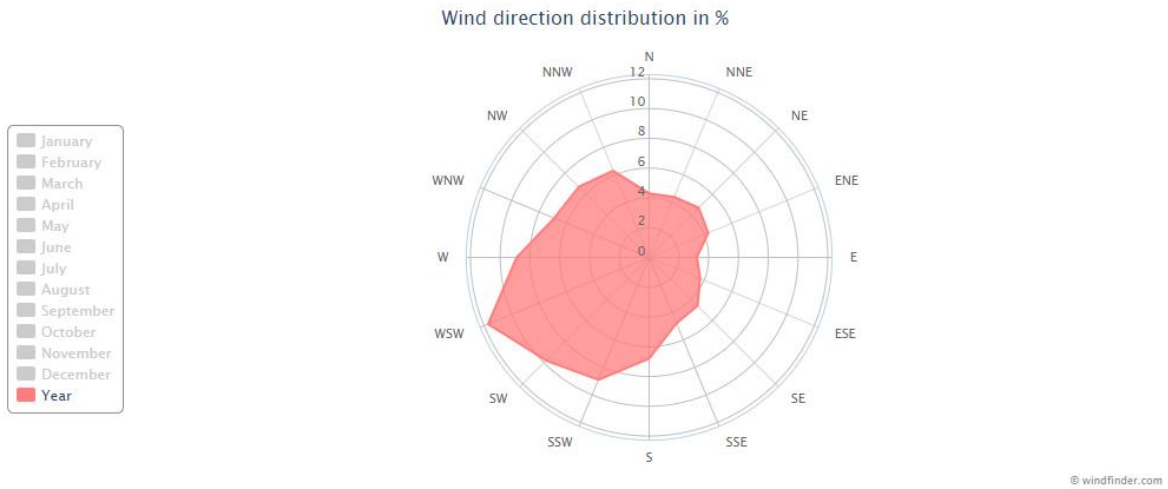
The site lies in a relatively flat, rural area and much of the land immediately adjoining is in arable use and not considered a sensitive receptor.

Figure 1 illustrates the prevailing winds from the weather station at Wattisham Airfield, Suffolk (~20 km North East from site). Wind direction is predominantly from the west southwest. This would indicate that sensitive receptors located towards the northeast and east of the site are potentially at greatest risk of windblown fugitive emissions. These receptors are;

Table 1 Receptors in Prevailing wind direction within <1 km

ID	Name	Distance	Direction
1	Residents at Westwind	30 m	E
3	Residents at Hill Farm	210 m	ENE
4	Residents at Pen-lan	210 m	E
6	Residents at The Cottages	425 m	N
7	Residents of Bures village	480 m	E
	Footpath 15	30 m	N
	Bombose Lane	10 m	N
	Lamarsh Hill	235 m	E
	Gainsborough Line (Great Eastern Line)	560 m	E
1	Bombose Farm	20 m	N
	River Stour	930 m	E
2	Habitat (BAP) - Woodland (Broadleaved)	105 m	E
2	Habitat (BAP) - Woodland (Broadleaved)	105 m	E
1	Scheduled Monument - Circular Cropmark at Ferriers Farm	140 m	E
6	14 No. Grade II Buildings at Lamarsh Rd, Bell Hill & Henny Road	870 m	N

Figure 1



Prevailing wind, Wattisham Airfield, Suffolk (source: www.windfinder.com) (05/2013 - 09/2019).

There are however a number of sensitive receptors, within 2 km of the site (summarised in Table 2 below). These are shown on drawing K153.1~20~013 Sensitive Receptors Plan. A detailed description of the setting is presented in the Environmental Risk Assessment (K153.1~09~002).

Table 2: Distance of Receptor to Site Boundary (<1 km)

RECEPTOR TYPE	DESCRIPTION	DISTANCE FROM SITE (APPROX.)	DIRECTION FROM SITE	
HUMANS PROPERTY AND	Site Workers	On Site	On Site	
	Site Visitors	On Site	On site	
	INHABITANTS OF RESIDENTIAL PROPERTIES			
	1	Residents at Westwind	30 m	E
	2	Residents at Bombhouse Farm	165 m	WNW
	3	Residents at Hill Farm	210 m	ENE
	4	Residents at Pen-lan	210 m	E
	5	Residents at Ferriers Farm & Cottage	220 m	S
	6	Residents at The Cottages	425 m	N
7	Residents of Bures village	480 m	E	

RECEPTOR TYPE	DESCRIPTION	DISTANCE FROM SITE (APPROX.)	DIRECTION FROM SITE
	8 Residents at unnamed road	595 m	S
	9 Residents at Langley Hill Farm Houses	655 m	NW
	10 Residents at Bakers Hall	770 m	SSE
	11 Residents at Lamarsh	850 m	N
SENSITIVE PUBLIC USE			
	1 Bures Train Station	695 m	ESE
	2 Public House - Eight Bells Bures	840 m	ESE
	3 Bures Market on Bures Common	905 m	ESE
COMMERCIAL USE			
	1 Ferriers Farm Pit	On site	-
	2 Parsonage Hall - T&K Weavers	510 m	SE
	3 Baker's Hall - Master Farm Services	660 m	SE
PUBLIC RIGHTS OF WAY			
	Footpath 15	30 m	N
	Footpath	160 m	W
	Footpath	305 m	S
ROADS AND RAILWAYS			
	B1508	880 m	ESE
	Bombose Lane	10 m	N
	Ferriers Lane	305 m	S
	Lamarsh Hill	235 m	E
	Gainsborough Line (Great Eastern Line)	560 m	E
RECREATIONAL AREAS			
ARABLE FARMLAND AND ALLOTMENTS			
	1 Bombose Farm	20 m	N
	2 Ferriers Farm	35 m	SW
	3 Allotment Gardens	390 m	ESE
SURFACE WATER	Unnamed Drain	355 m	S
	River Stour	930 m	E
	A9NW	6	SE
	Silt Lagoons	On site	On Site

RECEPTOR TYPE	DESCRIPTION		DISTANCE FROM SITE (APPROX.)	DIRECTION FROM SITE
GROUNDWATER		Superficial: Secondary A Aquifer. Kesgrave Catchment (Sand & gravel). Site situated on worked ground. River Terrace Deposits (Sand & gravel) identified in between north & south sites.	On site	-
		Bedrock: London Clay Formation (Clay, silt & sand) - Principal Aquifer, Crag group (sand) identified in between north & south sites.	On site	-
PROTECTED NATURE CONSERVATION SITES	DESIGNATED SITES			
	1	Habitat (BAP) - Woodland (Broadleaved)	Adjacent	SW
	2	Habitat (BAP) - Woodland (Broadleaved)	105 m	E
	3	Habitat (BAP) - Woodland (Broadleaved)	170 m	W
		SSSI - Arger Fen (closest SSSI)	3.3 km	ENE
	OTHER SITES			
	1	Habitat (BAP) - Woodland (Broadleaved)	Adjacent	SW
	2	Habitat (BAP) - Woodland (Broadleaved)	105 m	E
	3	Habitat (BAP) - Woodland (Broadleaved)	170 m	W
DESIGNATED LANDSCAPE SITES (e.g. National Parks, Heritage Coasts)		SSSI - Arger Fen (closest SSSI)	3.3 km	ENE
		Ancient Woodland: Mosses Wood	836 m	NW
HERITAGE SITES (e.g. Scheduled Ancient Monuments, Battlefields)	1	Scheduled Monument - Circular Cropmark at Ferriers Farm	140 m	E
	4	2 no Grade II Buildings at Ferriers Farm	225 m	S
	3	20 No. Grade II Buildings in West Bures	600 m	ESE
	5	2 No. Grade II Buildings - Parsonage Hall & Baker's Hall	580 m	SE

RECEPTOR TYPE	DESCRIPTION		DISTANCE FROM SITE (APPROX.)	DIRECTION FROM SITE
	2	4 No. Grade II Farm Buildings	180 m	NW
	6	14 No. Grade II Buildings at Lamarsh Rd, Bell Hill & Henry Road	870 m	N
ATMOSPHERE	Not in an AQMA		-	-

2. OPERATIONS

Incoming inert waste materials will be brought to the site using standard 8-wheel tipper. All vehicles will be sheeted to contain the load. The main potential source of Noise and Vibrations will be the movement of wheeled plant and operations of the crushers and screeners.

The principal sources of noise and vibration on site are mobile plant e.g. bulldozers, tipper vehicles, crushers and screeners. To reflect the findings of the noise assessment (Appendix B) crushing and screening activities will only take place in the southern permit area. A 3-sided bund will be constructed to surround the crushing and screening plant and the top of that bund will be no more than 10 metres distance from the centre of the plant.

Waste processing activities will not take place in the northern permit zone as they are predicted to cause excessive noise levels at nearby Assessment Locations.

To reduce noise and vibration levels, vehicle speeds onsite will be restricted to 10 mph, crushers and screeners will be operated only during operational hours. Acoustic bunds are already in situ around the operational areas.

Operational areas are located on the base of the sand and gravel pit which is located lower than surrounding sensitive receptors providing additional protection.

3. NOISE MANAGEMENT

3.1. RESPONSIBILITY FOR IMPLEMENTATION OF THIS PLAN

The responsibility for the implementation of the Noise & Vibration Management Plan is the Technically Competent Manager (TCM) and in their absence an appropriately designate person.

The effectiveness of the plan will be monitored on a daily basis and reviewed as required in the event it is shown not to be adequately limiting noise levels experienced at the nearest noise sensitive properties.

All staff are made aware, through toolbox talks and by training as required of the Noise & Vibration Management Plan and its requirements.

3.2. SOURCES & CONTROL OF NOISE

3.2.1. Delivery of Waste

The speed of passage, the nature and condition of surfaces and proximity of haul routes to sensitive receptors all affect the level of noise generated and experienced at noise sensitive receptors.

The most effective way of reducing noise generation is to limit site speeds and ensure that haul roads are maintained. The location of haul routes reduces the noise experienced beyond the site in this case, routes need to be kept as far as possible from sensitive receptors.

The tipping of inert wastes is not considered a significant source of noise. The movement of plant has been identified as the biggest contributor to overall noise generation.

The hours of operations are limited to periods when background noise levels are higher to reduce the noise impact of operations conducted within the site.

Mobile plant and machinery should be well maintained and effectively silenced. In addition, it needs to be operated by, for example, shutting down equipment not

being used and avoiding excessive revving so that noise generation is minimised. The use of broadband reversing alarms also reduces the overall level of disturbance.

Weather conditions, including in particular wind speed and direction, have an impact on the noise experienced beyond the site and management of the site needs to consider this when the wind direction is towards the noise sensitive receptors.

3.3. NOISE MONITORING

Noise monitoring will be carried out on a daily basis by an audial inspection of operations within the site along the nearest boundary to noise sensitive receptors. Detection of any unusually loud or tonal noises will be investigated, the source identified, and remedial measures put in place to minimise if not eliminate the source.

Record of the results of the monitoring together with any mitigation measures, required will be recorded.

Table 3 Control of Noise Impacts

ABATEMENT MEASURE	DESCRIPTION / EFFECT	OVERALL CONSIDERATION AND IMPLEMENTATION
Site / process layout in relation to receptors	All noisy operations are to be carried out within constructed bunds. Crushing & screening activities only take place in the southern permit area.	<ul style="list-style-type: none"> The site layout has the advantage of the fact that operations will occur at the base of the old sand and gravel pit or within the constructed bunds which provides an acoustic screen minimising the noise experienced at the nearest noise sensitive receptors.
Hours of operation	Daylight working hours only and no operations to take place when ambient noise levels are low	<ul style="list-style-type: none"> Opening hours 07:00 am until 06:00 pm Monday to Friday and 07:00 am until 12:30 pm on a Saturday.
Reversing alarms	Broadband reverse alarms/Peaks in noise emissions	<ul style="list-style-type: none"> All vehicles will be fitted with broadband reverse alarms.
Operation and maintenance of plant and machinery	Poorly maintained and operated machinery has the potential to increase noise emissions	<ul style="list-style-type: none"> All vehicles, plant and machinery will be operated and maintained in accordance with manufacturer's specifications to keep noise generation to a minimum Equipment should be shut down when not in use, where this is practicable
Access road use and maintenance	Limiting noise generated within the site	<ul style="list-style-type: none"> The access roads should be well maintained and vehicles using the road should limit their speed to below 10 mph and avoid any excessive revving.

Table 4 Source-Pathway-Receptor

SOURCE	PATHWAY	RECEPTOR	TYPE OF IMPACT	WHERE RELATIONSHIP CAN BE INTERRUPTED
Delivery of waste	Atmospheric dispersion	Residential properties, local ecology	Disturbance by significant increase in noise levels above background levels	<ul style="list-style-type: none"> Limiting hours of operation Restricting Site layout so that operations are limited to the site floor or within the visual and acoustic bunds. Screening & crushing undertaken only in the southern permit area. Using broadband reversing alarms Maintaining plant and equipment Operating plant and equipment in such a way as to minimise noise emissions

4. REPORTING & COMPLAINTS RESPONSE

4.1. REPORTING OF COMPLAINTS

The nominated person responsible for responding to complaints and implementing the complaint procedure is the TCM.

If complaints are received in relation to the activities covered by the Environmental Permit e.g. noise, dust etc., these will be discussed with the TCM and, where necessary, action taken to deal with immediate consequences.

In the event that a complaint is received either directly from a neighbouring resident or indirectly via a regulatory body. The name, address and contact details of the complainant will be sought.

- name;
- address;
- contact details;
- date(s) and time(s) to which the complaint relates; and
- nature of the complaint and any other details which may assist in the identification of the source, activity or circumstances which prompted the complaint.

The Operations TCM will then investigate the complaint to determine the cause and implement any corrective and preventative actions.

Timescales will be determined for follow-up of the corrective actions and determination of their effectiveness.

The complaints information and subsequent investigation will be recorded in T&K Weavers Demolition Ltd Complaint Form (Appendix A).

The timings and description of the complaint will be analysed in conjunction with the activities and meteorological conditions logged on site within 1 working days to identify the offending source or activity. The complainant may be asked to keep on ongoing log for correlation with the site operational log. Once the source or activity is identified suitable mitigation measures will be implemented without delay.

Where the complaint relates to noise, mitigation measures will ensure noise levels as set out in Table 2 are not exceeded. Where the complaint relates to vibration mitigation measures will be introduced as necessary to minimise any impacts. Where these levels are not exceeded but complaints continue, a review of noise and vibration mitigation measures will be undertaken to ensure the operations are as quiet as possible and do not cause unreasonable disturbance.

The complainant will be contacted to check that the mitigation has been effective.

4.2. MANAGEMENT RESPONSIBILITIES

The nominated person responsible for responding to complaints and implementing the complaint procedure is the Technically Competent Manger.

Contact Details:

NAME	CONTACT DETAILS
Karl Weavers	Tel: 07974 763308
	Email: weaversdemolition@hotmail.com

5. SITE & EQUIPMENT MAINTENANCE PLAN

All site equipment will be maintained as per manufacturer's guidelines or at least annually and records kept, as a minimum.

6. KEEPING RECORDS

As a minimum, the following records must be kept to ensure compliance with the requirements of the Environmental Permit:

- A copy of the permit
- Risk assessments
- Competence and training records
- Duty of Care documentation and Environment Agency waste returns
- Other legally required documents
- Operational procedures
- Compliance records

Records must be retained for 6 years unless they relate to off-site environmental or health effects, or the condition of the land or groundwater when they shall be retained until permit surrender.

7. REVIEW THE MANAGEMENT SYSTEM

The Management Plan will be reviewed in its entirety at least annually or following any substantial change in site operations or complaint of noise and or vibration.

Other activities which may prompt review of the Management Plan are variations to the environmental permit, accident, complaint, breach or a change in the site setting or sensitive receptors.

Where the review results in required changes, this will be documented and maintained with the site records, for example, waste storage volumes, changes to abatement measures, new or altered equipment.

8. AVAILABILITY OF THE MANAGEMENT PLAN

All site operational staff will be trained in the contents of the Noise and Vibration Management Plan to ensure compliance and consistent operation of the site.

A copy of the Noise and Vibration Management Plan will be made available at the Company's main office for reference purposes and is available on request to interested parties.

9. SUMMARY

The Noise and Vibration Management Plan seeks to ensure that by the adoption of industry best practice and appropriate measures, noise and vibrations are adequately controlled within the site and do not cause any significant impacts on amenity or the environment beyond the permit boundary.

Additional evidence has been provided to support and reinforce the argument that the proposed operator is fully committed to operating responsibly and in compliance with the Environmental Permit (if issued).

The management plan will be reviewed annually and in the event of any complaint regarding noise and or vibration to ensure its provisions remain effective.