

MANAGEMENT PLAN

Emissions 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:

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APPENDICES

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DRAWINGS

Drawing	Date	Revision	Reference
Sensitive Receptors	08/10/2019	B	K153.1~09~013

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Table 1	Receptors in Prevailing wind direction within 2 km
Table 2	Sensitive Receptors (within 2 Km)
Table 3	Handling and processing of typical waste types
Table 4	Typical destination for recovered materials and residual waste
Table 5	Control of dust/particulates (PM ₁₀)

1. INTRODUCTION

This document is the Emissions Management Plan (EMP) that accompanies the 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.

An Environmental Risk Assessment (Reference: K153.1~09~002) is provided in Section 07 of the Application pack and identifies all potentially significant sources of dust and particulates associated with the acceptance, storage, sorting, separation, screening, crushing and blending of waste for recovery. These have been assessed against the principal receptor types identified within the site's vicinity.

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 perceived risk associated with the emission of dust from certain proposed operational activities and a high consequence, this management plan concentrates on the proposed measures to prevent or limit the generation of dust 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 EMP 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, 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. Receptors are shown on Sensitive Receptors Plan K153.1~09~013. These receptors are;

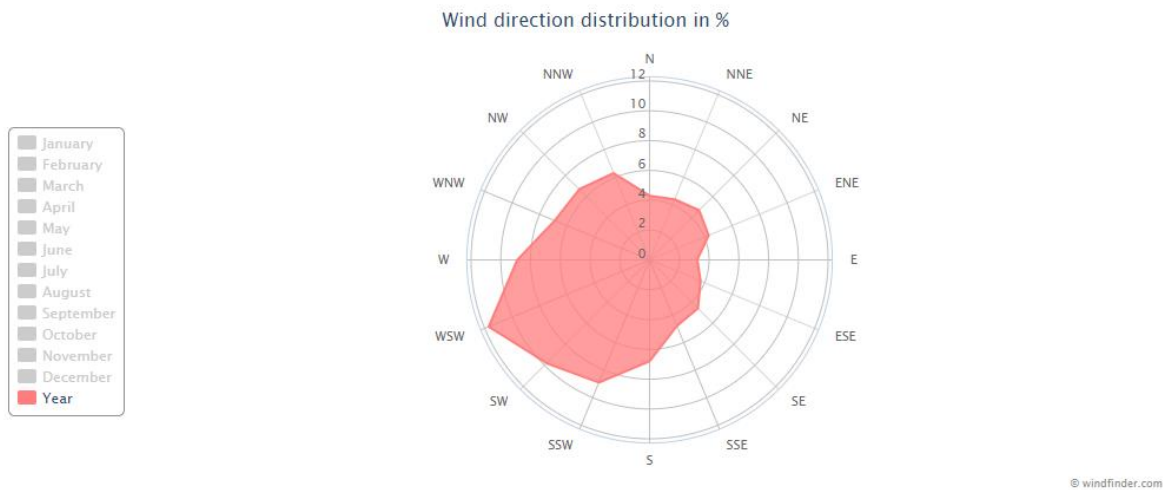
Table 1 Receptors in Prevailing wind direction within 2 km

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
12	Residents at Clees Hall and adjacent properties	1165 m	W
17	Residents at Edmunds Hill (B1508)	1635 m	NE
6	Bures Baptist Church	1150 m	E
7	Bures Scout Hut	1080 m	E
4	Businesses at Cuckoo Hill	1690 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
2	Ferriers Farm	35 m	SW
4	Allotment Gardens	1000 m	E
11	Fysh House Farm	1695 m	E
13	Woolmans Farm	1795 m	NE
	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 & Henry Road	870 m	N
8	12 No. Grade II Buildings on B1508	1215 m	NE

Less sensitive land uses include agriculture and public rights of way. In terms of agriculture the potential impacts are the same as those for the ecological interests in the area. Dust emissions have the potential to affect users of the public rights of way.

Dust emissions have the potential to have a number of nuisance effects ranging from visual impacts such as dust plumes generated by the movement of vehicles, to physical impacts causing respiratory and eye irritation, to the depositing of dust on windows, solar panels, refrigeration/heating equipment, on the outside of houses and on cars. These effects are typically associated with coarse dust which is visible and not finer particulate matter such as PM₁₀ or PM_{2.5}.

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: SENSITIVE RECEPTORS (within 2 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

RECEPTOR TYPE	DESCRIPTION	DISTANCE FROM SITE (APPROX.)	DIRECTION FROM 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
	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
	12 Residents at Clees Hall and adjacent properties	1165 m	W
	13 Residents at The Cottage, Woodcroft & Peyton Hall Farm	1430 m	ESE
	14 Residents at Ravensfield Farm	1485 m	SW
	15 Residents at Spentpenny Farm and adjacent properties	1525 m	SSE
	16 Residents at Mount Bures	1585 m	SE
	17 Residents at Edmunds Hill (B1508)	1635 m	NE
	18 Residents at Alphamstone	1825 m	NW
	19 Residents at Goulds Road	1830 m	W
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
	4 St. Mary's Church	1030 m	ESE
	5 Bures Post Office	1105 m	ESE
	6 Bures Baptist Church	1150 m	E
	7 Bures Scout Hut	1080 m	E
	8 Bures Community Centre	1210 m	ESE
	9 Bures C of E Primary School	1250 m	ESE
	10 Public House - The Lamarsh Lion	1085 m	NNW
	11 Holy Innocents' Church	1640 m	NNW
	12 St. Barnabas' Church	1805 m	NW
	13 St. John's Church	1780 m	SE

RECEPTOR TYPE	DESCRIPTION	DISTANCE FROM SITE (APPROX.)	DIRECTION FROM SITE	
	14	Mount Bures Village Hall	1660 m	SE
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
	4	Businesses at Cuckoo Hill	1690 m	E
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
	4	Allotment Gardens	1000 m	E
	5	Clees Hall Farm	1220 m	W
	6	Pricketts Hall Farm	1405 m	SSW
	7	Brook House Farm	1600 m	SE
	8	Peyton Hall Farm	1615 m	WSW
	9	Ravensfield Farm	1650 m	SW
	10	Spentpenny Farm	1675 m	SSE
	11	Fysh House Farm	1695 m	E
	12	Lamarsh Hall Farm	1750 m	NNW
	13	Woolmans Farm	1795 m	NE
	14	Lower Jennies Farm	1810 m	SSW
	15	Coppins Farm	1935 m	NW

RECEPTOR TYPE	DESCRIPTION		DISTANCE FROM SITE (APPROX.)	DIRECTION FROM SITE
	16	Lower Goulds Farm	1960 m	W
SURFACE WATER		Unnamed Drain	355 m	S
		River Stour	930 m	E
		Cambridge Brooke	1375 m	SE
		A9NW	6	SE
		Silt Lagoons	On site	On 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

RECEPTOR TYPE	DESCRIPTION		DISTANCE FROM SITE (APPROX.)	DIRECTION FROM SITE
HERITAGE SITES <i>(e.g. Scheduled Ancient Monuments, Battlefields)</i>	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
	7	32 No. Grade I & II Buildings in East Bures	1040 m	ESE
	5	2 No. Grade II Buildings - Parsonage Hall & Baker's Hall	580 m	SE
	11	Scheduled Monument - Castle Motte at Mount Burees + 7 No. Grade I & II Buildings	1710 m	SSE
	2	4 No. Grade II Farm Buildings	180 m	NW to NE
	12	Scheduled Monument - Roman villa in Alphamstone & 7 No. Grade I & II Buildings	1740 m	NW
	6	14 No. Grade II Buildings at Lamarsh Rd, Bell Hill & Henny Road	870 m	N
	8	12 No. Grade II Buildings on B1508	1215 m	NE
ATMOSPHERE	Not in an AQMA		-	-

Dust emissions from site traffic will be controlled by a combination of limiting vehicle speeds, covering all loads during transport and regular cleaning/dampening of the internal roads as required.

1.2. Other Dust/Particulate Emitting Operators

Other potential external sources of dust/particulate emissions are through soil erosion from the surrounding arable farmland, harvesting of arable crops and vehicle movements across this land.

2. OPERATIONS

2.1. Waste Deliveries

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 dust emissions will be the movement of wheeled plant. Vehicle speeds onsite will be restricted to 10 mph.

All incoming loads will be pre-booked and delivered by T&K Weavers Demolition Ltd own fleet or pre-approved waste carriers. Visual inspections of the load and Duty of Care documentation shall be reviewed for accuracy in accordance with the Waste Acceptance Procedure (See below) and retained for a minimum of 2 years.

Waste Acceptance Procedure

Only those wastes permitted by the site's Environmental Permit, as described in K153.1~09~003 List of Wastes shall be accepted at the site, a visual inspection on the waste will be undertaken on arrival to confirm this prior to acceptance.

The waste must be inspected to ensure that it conforms to the description in the documentation supplied by the producer and holder.

An assessment of the chemical, physical and biological characteristics of the waste must have been undertaken to ensure it is suitable for its intended treatment.

Where soil is accepted from a potentially contaminated site it must be accompanied by prior chemical analysis results. An assessment must have been undertaken prior to acceptance to ensure that it is suitable for its intended use without significant risk of pollution.

Operational staff are trained in the site's waste acceptance procedures, to ensure that all acceptance criteria are met and maintained.

Where waste is found to not comply with the acceptance criteria they shall be rejected, and either:

- a) Removed from the site; or
- b) Moved to the designated quarantine area pending removal.

Records of all waste acceptance, analysis results and assessment from potentially contaminated sites, will be maintained.

Only permitted wastes will be accepted. Permitted wastes are those listed in document List of Wastes K153.1~09~003.

3. DUST AND PARTICULATE (PM₁₀) MANAGEMENT

3.1. Responsibility for Implementation of this Plan

The Technically Competent Manager (TCM) shall be responsible for the implementation onsite, training of relevant persons and the annual review of the EMP. The site's Management Plan will be updated to incorporate these changes.

Refresher training and additional support may be provided by external competent persons as required.

All records of training and document reviews will be retained by the operator.

3.2. Sources & Control of Dust and Particulate Emissions

Table 5 below identifies and describes the proposed dust control measures to be employed at Ferriers Pit.

Table 5: Control of Dust/Particulates (PM₁₀)

ABATEMENT MEASURE	DESCRIPTION / EFFECT	OVERALL CONSIDERATION & IMPLEMENTATION
Site / process layout in relation to receptors	<ul style="list-style-type: none"> All operations are to be carried out within the confines of the bunded area located within the Pit. Advanced hedge planting around Pit edge 	<ul style="list-style-type: none"> The operational areas will generally be below surrounding ground levels. This not only means wind speeds within the site are generally lower than the surrounding area, but also dust emissions are potentially contained within the site boundary. Bunding and hedge planting at source and edge of site will help to further prevent dust emissions leaving the site boundary.
Site speed limit, 'no idling' policy and minimisation of vehicle movements onsite	<ul style="list-style-type: none"> Reducing vehicle movements and idling of mobile plant should reduce emissions from vehicles. Verbal communication of the site speed limit and signage will ensure drivers adhere to the speed limit and reduce re-suspension. 	<ul style="list-style-type: none"> Vehicle speeds would be restricted to a maximum of 10 mph. Formal site induction for all drivers. Speed limit signs installed at regular intervals. The most direct routes between the reception areas and site entrance will be provided throughout the life of the site. Regular grading of the roads also aids to reduce dust emissions by removing loose material from the surface.
Sheeting of vehicles	<ul style="list-style-type: none"> Prevents the escape of debris, dust and particulates from vehicles as they travel. 	<ul style="list-style-type: none"> All vehicles will remain sheeted until discharging their loads.
Design of plant and machinery	<ul style="list-style-type: none"> Preventing dust becoming airborne 	<ul style="list-style-type: none"> All plant based on the site would be equipped with upward facing exhausts.
Operation and maintenance of plant and machinery	<ul style="list-style-type: none"> Poorly maintained and operated machinery has the potential to increase emissions. Use of modern plant and equipment. 	<ul style="list-style-type: none"> All vehicles, plant and machinery would be operated and maintained in accordance with manufacturer's specifications to keep emissions to a minimum.
Reduction in operations (waste throughput, vehicle size, operational hours)	<ul style="list-style-type: none"> Reducing the duration of waste activities on site, including ceasing operations where necessary, should result in reduced emissions and re-suspension of dust and particulates from the site. 	<ul style="list-style-type: none"> Roads and circulation areas would be damped down as required to prevent dust emissions by spraying with water (e.g. tractor and bowser). Vehicle speeds would be restricted to a maximum of 10 mph.

ABATEMENT MEASURE	DESCRIPTION / EFFECT	OVERALL CONSIDERATION & IMPLEMENTATION
On-site sweeping	<ul style="list-style-type: none"> Sealed surfaces at the site entrance to be regularly cleaned by washing and sweeping as necessary 	<ul style="list-style-type: none"> Implementation of site maintenance regime to ensure weekly cleaning of hard surfaces is undertaken to prevent accumulations of dusty material.
Water suppression with bowser	<ul style="list-style-type: none"> Using bowzers is a quick method of damping down large areas of the site with large water jets. This method could also be used on easy to clean, impermeable concrete surfaces. Will assist in the cleaning of the concrete surfaces if combined with sweeping. 	<ul style="list-style-type: none"> Roads and circulation areas would be dampened down when required, to prevent dust emissions by spraying with water.

3.3. Visual Dust Monitoring

Visual inspections will be undertaken by trained site staff for dust, particularly along the downwind site boundary on a daily basis. Observations will be recorded in the Site Diary.

4. MONITORING

Site management and staff will monitor dust on an informal basis throughout the day. Any adverse observations and details of the action taken will be recorded and retained in the Site Diary.

All plant will be inspected daily and be regularly cleaned to prevent the build-up of dust on machinery parts.

No dust monitoring will occur when site is non-operational as none should be generated.

All dust monitoring results will be recorded and retained in the site office along with dates, times, weather conditions, wind direction and the name of the individual carrying out the monitoring event.

Where dust emissions are continually identified as an issue at the site boundary and complaints are received as a result, the TCM will review the mitigation measures (Table 5) and monitoring techniques detailed in this EMP in order to improve detection and prevent emissions being discharged from the site.

5. ACTIONS TO BE TAKEN

In response to significant dust being generated within the site, additional control measures will be instigated, in particular, more frequent wetting of haul road.

In the event dust is observed leaving the site boundary, additional measures such as ceasing some operations will be considered.

Additional visual dust monitoring will be undertaken to ensure these measures are effective. Records of these inspections will be kept in the Site Diary.

6. REPORTING AND COMPLAINTS RESPONSE

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

Upon receipt of a complaint, either directly from a neighbouring resident or indirectly via the Regulator. The following information will be requested but may not be provided in full:

- 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 timings and description of the complaint will be analysed in conjunction with the activities and meteorological conditions logged on site without delay 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 immediately to prevent future dust emissions.

Where contact details are made available, the complainant will be contacted within 24 hours to check that the mitigation has been effective.

The complaints information and subsequent investigation will be recorded in T&K Weavers Complaint Form (Appendix A) or other format with relevant information.

6.1. Reporting of Complaints

Appendix A provides details of how complaints will be noted and recorded. Following investigation of a complaint the complainant will be contacted to be informed what the source of the dust was, why the issue occurred and what mitigation measures have been implemented to prevent any re-occurrence.

6.2. Management Responsibilities

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

Contact Details:

Name	Contact Details
Karl Weavers	Tel: 07974 763308
	Email: weaversdemolition@hotmail.com

7. AVAILABILITY OF THE MANAGEMENT PLAN

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

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

8. SUMMARY

The management plan seeks to ensure that by the adoption of industry best practice and appropriate measures, dust emissions 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.

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

Appendices

Appendix A

Customer Details	
Complainant Name -	
Address -	
Postcode -	
Complainant Contact Details -	
Tel -	
Email -	
Date -	
Complaint Details -	
Investigation Details	
Investigation carried out by -	
Position -	
Date & time investigation carried out -	
Weather conditions -	
Wind direction and speed -	
Investigation findings -	
Feedback given to Environment Agency and/or local authority -	
Date feedback given -	
Feedback given to public -	
Date feedback given -	
Review and Improve	
Improvements needed to prevent a reoccurrence -	
Proposed date for completion of the improvements -	
Actual date for completion -	
If different insert reason for delay -	
Does the noise and Vibration management plan/Emissions Management Plan need to be updated -	
Date that the noise and Vibration management plan was updated -	
Closure	
Site manager review date	
Site manager signature to confirm no further action required	