

Thorncliffe Building Supplies Ltd
EWLOE BARN INDUSTRIAL ESTATE
Waste Recycling Facility
Fugitive Emissions Management Plan
2875/012/EP
Version 1.0 Dated 15/05/2014



Oaktree Environmental Ltd

Document History:

Version	Issue date	Status	Notes
1.0	08/05/2014		For submission with the Variation application to extend the permit boundary and increase annual tonnages from <25,000 tonnes to <75,000 tonnes

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Reviewed by:

1.0 INTRODUCTION

- 1.1 This Management Plan aims to satisfy the requirement of a emissions plan to be submitted for the variation to extend the current permit boundary and to increase the annual tonnage from <25,000 tonnes to <75,000 tonnes.
- 1.2 The conditions relate to the monitoring and control of emissions not subject to specific control limits and odour.
Control measures are outlined below.

2.0 CONTROL OF DUSTS, FIBRES AND PARTICULATE MATTER

2.1 There are a number of operations, which have the potential to actively create dust.

- a. Crushing, shredding and screening of waste
- b. Movement of vehicles
- c. Loading of lorries
- d. Deposit of loads

2.2 There are also circumstances where dust can be generated passively when fine material is picked up off surfaces and stockpiles by the wind.

The following table sets out:-

- The likely sources of dust arising from the site.
- The procedures followed or planned at the site in order to prevent or minimise dust levels.

Dust source/problem	Action to be taken to prevent or minimise dust
Vehicles travelling to and from the highway to the tipping area.	• Site roads kept damp and swept in potentially dusty conditions. • Speed limit for dusty conditions set at 5 miles per hour • No unnecessary running or revving of vehicles • No delivery of potentially dusty non-hazardous wastes • Asbestos only delivered double bagged • Asbestos only stored double bagged in locked container
On site plant	• No unnecessary running on areas likely to generate dust • Speed restricted to prevent dust generation
Wind blown dust roads and surfaced areas	• Ensure all surfaced areas kept clean and tidy • Damp down surfaced areas
Wind blown dust non working areas.	• Damp down all accessible areas • Ensure nonworking areas are left with a rough surface to prevent wind pick up of dust • Ensure no potentially dusty wastes are left at the surface of wind blown areas
Extreme conditions	• Cease all operations on site • Deploy bowser for continuous damping of site
Processing Plant	• Processing of mixed waste takes place inside building • Screening and crushing equipment operated with dust suppression
Persistent escape of dust	• Deployment of fixed dust suppression equipment

- 2.3 Movement of vehicles and plant within the site can generate dust the layout of the site reduces the likely hood of dust causing a nuisance beyond the site boundary. Dust suppression equipment is available and will be deployed should observations show visible dust escaping from the site boundary towards sensitive receptors.
- 2.4 Monitoring will be undertaken to ensure that the site is not generating unacceptable concentrations of dusts, fibres and particulate matter. The monitoring will consist of twice daily visual monitoring of emissions and also of external vehicle movements on the yard areas to ensure that these are not giving rise to dust emissions. When the shredder, crusher or screener are operating dust will be constantly monitored.
- 2.5 Should visible emissions of dust, fibres and particulates be observed within the site boundary, which have the potential to cause an impact outside the site boundary; the following actions will be taken:
- a. Where dust is being generated by the crushing and screening operations dust suppression will be deployed as required to minimise dust emissions.
 - b. Drop heights from all discharge points will be kept to a minimum or shrouded to prevent dust emissions.
 - c. For roadways and turning areas within the building suppression of dust, fibres and particulates shall be undertaken using the mist air system and/or water sprays followed by sweeping if necessary.
 - d. If dust is being generated from the surface of stockpiles these will be sprayed with water. If stockpiles are likely to be in place for sometime use of a caking agent will be considered if they are persistently giving rise to dust.
 - e. The results of visual dust, fibres and particulates monitoring will be recorded in the site diary. Any actions carried out to identify the cause of dust emissions and to rectify the sources of these will also be recorded in the site diary, along with details of routine maintenance carried out on the dust control systems.
 - f. The layout of the site reduces the likely hood of dust causing a nuisance beyond the site boundary. Dust suppression equipment is available and will be deployed should observations show visible dust escaping from the site boundary towards sensitive receptors

Complaints

Thornccliffe Building Supplies Ltd fully investigate any complaints received about the site, the complaints form and procedure can be seen on the next two pages.

Complaint recording procedure.

- 1) Any complaints received will be recorded on Company's complaint form. This form will normally be completed, signed and dated by the Site Manager, if they are not available the Office Manager will complete the form.
- 2) The name, address and telephone number of the caller will be requested.
- 3) Each complaint will be given a reference number.
- 4) The caller will be asked to give details of:
 - the nature of the complaint;
 - the time;
 - how long it lasted;
 - how often it occurs;
 - is this the first time the problem has been noticed; and
 - what prompted them to complain
- 5) The person completing the form will then, if possible, make a note of :
 - the weather conditions at the time of the problem (rain, snow, fog etc.)
 - strength and direction of the wind; and
 - the activity or activities taken place on the site at the time the noise was detected, particularly anything unusual.
- 6) The reason for the complaint will be investigated and a note of the findings added to the report.
- 7) The caller will then be contacted with an explanation of the source of the complaint if identified and the action taken to prevent a recurrence of the problem in future.
- 8) If the caller is unhappy about the outcome or unwilling to identify themselves the caller will be invited to contact Natural Resources Wales and or the Local Authority.

Following any complaint the relevant management plan(s) will be reviewed to ensure appropriate actions are in place to counter any problems.

THORNCLIFFE BUILDING SUPPLIES LTD EWLOE BARN INDUSTRIAL ESTATE, MOLD ROAD, ALLTAMI Dust Complaints Report Form (RF/5A)	
Date Recorded	Reference Number
Name and address of caller	
Location of caller in relation to site	
Telephone number of caller	
Time and Date of call	
Date, time and duration of dust emission	
Caller's description of odour eg. comparison with other odours, strong/weak, continuous, fluctuating	
Any other comments about the offending odour	
Weather at the time of complaint (rain, snow, fog, etc.)	
Wind (strength, direction)	
Any other previous complaints relating to this report	
Any other relevant information	
Potential sources that could give rise to the complaint	
The operations being carried out on site at the time of the complaint eg delivery or export of waste, processing of inert waste	
Follow Up	
Actions taken	
Date of call back to complainant	
Summary of call back conversation	
Recommendations	
Change in procedures	
Changes to Management Systems	
Date changes implemented	
Form completed by: Signed	Signed by: _____ Print Name:.....

3.0 CONTROL OF LITTER

- 3.1 As the areas of the site where wastes likely to give rise to litter are fully enclosed it is not anticipated that litter will arise in quantities sufficient to cause an adverse impact outside the site boundary, however precautions will still be taken with regard to litter as follows:
- Any litter within the processing building will be collected and placed in the appropriate suitable container or stockpile.
 - All vehicles removing materials from the site will be required to keep all loads carried in open vehicles or containers secured with a net or tarpaulin to prevent items falling or being blown from the load.
- 3.2 Visual monitoring and site inspections shall be undertaken to ensure that the site and its associated operations are not generating litter. If litter is noted outside the site boundary it will be collected immediately and placed in the appropriate stockpile within the site.

4.0 CONTROL OF MUD

- 4.1 The site being fully enclosed and concrete or hard surfaced it is not prone to the build up of mud.
- 4.2 Vehicles will be visually inspected before exit to check that loads are safe and that no mud or debris is carried out on the wheels or body of the vehicle.
- 4.3 If mud/debris is found to be adhering to a vehicle it will be washed down with a pressure hose prior to leaving the site and re-inspection.
- 4.4 Visual inspections of the site surface are carried out daily (see RF/4) and staff will report any problems with mud on the site surface immediately to the site manager.
- 4.5 The deposit of material on to the highway will be treated as an emergency and will be cleared before the end of the working day by a vacuum/road sweeper. Silt will not be washed into roadside drains or gullies. A sweeper will also be hired in as necessary to ensure that hard surfaced areas of the site are free from mud and debris.
- 4.6 The storage and processing of inert waste will be located at the far end of the industrial estate and therefore a considerable distance from the public highway.
- 4.7 Whenever the external yard is in use for the deposit or storage of inert wastes additional checks will be made to ensure there are no deposits of mud or other waste on the site or public roads which could cause a risk to human health, pollution or local amenity.

5.0 CONTROL OF PESTS, FLIES AND VERMIN

- 5.1 The site will be monitored daily as part of the site checks for the presence of pests, flies and vermin these checks are recorded on the daily check sheet. Note is also taken of the weather conditions and the likelihood of material affected by flies arriving at the site. Throughout the working day managers and operatives will report any presence of pests flies and vermin to the site manager. If they receive a report confirming their presence the site manager will make an assessment of the presence and concentration of pests, flies or vermin. Due to the nature of the materials accepted at the site it is unlikely that there will be any odour issues associated with the site.
- 5.2 Based on the inspections above the site manager will determine whether or not to contact a pest control contractor.
- 5.3 All monitoring and actions are recorded in the site diary or on the daily check sheets.

6.0 CONTROL OF ODOUR

- 6.1 The site will be monitored daily as part of the site checks for the presence of odours, these checks are recorded on the daily check sheet. Throughout the working day managers and operatives will report the presence of odours to the site manager. If they receive a report confirming presence of odour the site manager will make an assessment of the presence and concentration of odour.

Potential Odour Sources

Reception of waste

Storage of waste

Process/treatment operations

Release Points

Waste vehicles arriving and reception of waste

Storage, moving the waste

Waste/material leaving the site

Accidents, human error etc.

Pathways

The pathway for odour dispersal from the site is going to be airborne transport.

Receptors

- Adjacent occupiers/users
- Site personnel/visitors

- 6.2 Potentially sensitive receptor locations for odour are typically defined as locations where people spend time and expect a reasonable level of amenity eg their homes.

Outlined below are the main best practice elements for dealing with potential environmental impacts associated with the reception, storage, treatment and movement of wastes which will be implemented by the operator.

Engaging Neighbours

The site is situated within a generally rural catchment but within a small industrial estate. The nearest residential properties are a considerable distance from the site and very unlikely to be impacted by odour from the site.

Wherever possible, activities with the potential for causing odour issues should be located away from any sensitive receptors. There are however a number of operational procedures which can minimise the impact of such activities. Outlined below are the main best practice elements for dealing with potential environmental impacts which will be implemented by the operator.

6.3 Odour control

The following controls are in place to minimise the production of odours:

Delivery of waste to site- Waste vehicles and reception

- Rigorous control of delivered waste, contaminated or odorous wastes (stored too long) should be rejected. Trained competent staff are in place to recognize odorous material and to select only suitable loads before they are delivered to the site. Any unsuitable waste will be returned or sent to another authorized facility for treatment.
- Mixed waste is deposited and stored under cover.
- Wastes entering the site will be inspected by qualified staff to ensure it complies with the terms of the Environmental Permit. See section 3 of the Environmental Management System 2875/012//MS for full details of the waste reception procedures. Including the procedures for rejection of unauthorised wastes.
- Waste vehicles entering the site will be sheeted to minimise any risk of odours or delivered in sealed vehicles. Sheets will be removed and the load inspected for acceptability. After the load has been tipped into the correct designated storage area it will again be inspected to confirm its acceptability.
- Waste will be stored in compliance with the Environmental permit and as detailed in the Environmental Management System.
- The site will be subjected to good housekeeping and any spillages cleaned up promptly to help reduce any odour potential.

Waste Processing

- Any processing of mixed waste is carried out within a building to reduce the risk of odours.

Waste Storage

- Mixed degradable waste is either processed within the day of delivery or stored within a building.
- Waste with the potential to become odorous is processed within 24 Hours or stored in a designated area.
- Sorted wastes wood, plastics, cardboard, aggregate, soils etc. are checked to ensure they are unlikely to generate odour or are contaminated with material which might.

Waste/Materials leaving site

- Regular cleaning of operational areas such as roads and drainage channels to prevent odour generation from old degrading materials.
- Vehicles carrying waste/product from the site will be sheeted.

The relevant staff are technically competent to assess the site operations as to any potential risk of causing an odour nuisance. As detailed in the Environment Management System the site has the relevant technical competent management personnel available as required under the Environmental Permitting (England & Wales) Regulations 2010 and there is a training programme to ensure sufficient suitably competent persons are available on site and this will include training for relevant staff who will be responsible for odour monitoring.

- Personnel competency records are kept on site.
- Procedures for monitoring and recording odour are in place as part of the staff training requirement. (Refer to Section 6.0 of the Environmental Management System).

Accidents, human error

The operator has an Accident Management Plan (AMP) in place for the permitted site which is reviewed at least every 4 years. The AMP details the following:-

- Identifying events or failures which have the potential to cause adverse environmental impacts;
- Assessing the likelihood of these occurrences and the potential environmental consequences;
- Taking action to minimise the potential causes and consequences of accidents; and
- Identifying the actions to be taken to minimise the consequences should such accidents occur.

6.4 Monitoring Process controls

Odour Control relating to:-

- Permitted waste types, composition,
- Processing-reception, storage, loading and unloading

6.5 Monitoring Odorous Releases

Olfactory Monitoring-

- Odour will be monitored at least weekly at specific points around the perimeter of the site or whenever odorous waste has been accepted on site or is found to be present.
- Monitoring will be carried out by a trained member of staff (see below). If odour is noted on the site boundary additional monitoring will be undertaken between that point and sensitive receptors.
- The monitoring points will be shown on a plan having regard to the wind direction prevailing at the time of monitoring. The external monitoring points will be selected with particular reference to wind direction.
- At each location observations shall be made concerning presence of odour and if present the intensity, persistence and character.

6.6 Monitoring Pathways

Monitoring Requirements	Frequency
Observed description of conditions: precipitation, drizzle, rain, sleet, snow, temperature, winds etc	At time of monitoring
Wind speed * and direction	At time of monitoring

How to monitor:

A relevant training procedure will be in place for all staff undertaking assessment duties. Sniff tests will be carried out by trained competent staff at least weekly. All relevant staff will be trained in sniff testing and will be expected to report any odours detected during the course of day to day duties. Within the site, waste reception/product storage will be monitored throughout the day.

Assessments will be carried out both routinely and in response to specific complaints (See 10.0).

The assessor should not:-

- i smoke or consume strongly flavoured food or drink for at least 30 minutes before the assessment.
- ii. consume confectionery or soft drinks immediately before or during the assessment
- iii. apply scented toiletries, such as perfume or aftershave immediately before an assessment.

6.7 Recording results:

Site inspection forms based on the pro-forma in the H4 guidance document will be used to record and analyse olfactory tests. Examples are given in Section 9 for recording tests a diary for recording detected odours and complaints and a complaints form and procedure for recording and responding to any odour complaints.

6.8 Monitoring Impacts

Monitoring of impacts shall be achieved by analysis of olfactory test records and the recording and monitoring of complaints. Complaints may be reported directly to the site or via the Local Authority or Natural Resources Wales (NRW). Complaints records will include: date and time, nature of complaint, locality of complaint, name of complainant (if available), summary of investigation, actions taken and outcome. See Section 9 below for full details of complaint recording procedures.

6.9 Contingencies and Emergency Plans

In accordance with the EA guidance on OMPs, Contingency Plans have been prepared to react to situations where 'monitoring indicates that a potential odour source is not completely under control, meteorological conditions are unfavourable or that adverse impact has occurred'.

6.10 Identification Potential Source of Odour and Actions to be taken

A Risk Assessment has been carried out detailing the potential sources of odour and the likelihood of it impacting on sensitive receptors. A copy of this Risk Assessment has been included as Appendix III to this document which shows due to the types of wastes accepted at the site odour is unlikely to be of an issue.

6.11 Problems

However if excessive odours are detected at the site boundary or other monitoring point or a complaint is received, the following remedial procedures will be taken:

Firstly identify source of odour- Is it from:-

Site operations, or an off site source

If on site

- Report to duty manager
- Identify the point of release of the odour
- Identify the cause of the release- break down, leakage, fault etc.
- Identify a solution
- Implement solution
- Carry out olfactory tests to check if fix working

In detail the actions taken if odour is being produced on site will be:

i Normal Operations:

The offending odour will be traced and the reason for the problem investigated. In such instances there may be a need to modify management or maintenance procedures.

Once solutions are in place olfactory monitoring would be scrutinised to ensure the solutions put in place are having the desired effect.

A note would be made in the site diary of the incident.

ii Abnormal conditions:

Adverse Weather Conditions:

Control operations if possible during adverse meteorological conditions. Cease tipping if control measures are not proving affective. Review Emergency Procedures.

The applicant is confident that the management system in place will control operations during adverse meteorological conditions.

Errors and Accidents

These will occur in almost every operation but there are robust checks carried out on site. The site accident management plan will seek to address the possible scenarios and the solutions available.

Breakdowns

All systems and equipment will be subject to a regime of regular inspection and preventative maintenance.

Full details of waste acceptance and rejection procedures are in the Environmental Management System

Non conforming wastes- of odorous nature

Any wastes which are confirmed to be offensively odorous and are not permitted will be removed off site by the end of the working day or if this is not practical a temporary cover will be placed over the designated storage bay until removal can be arranged.

Permitted wastes which are or which have a high risk of generating odour will only be stored for a minimal period and will be monitored more frequently in high risk conditions (warm/windy)

6.12 Assessment Procedure for Odour Monitoring:

The assessor should not:-

- smoke or consume strongly flavoured food or drink for at least 30 minutes before the assessment.
- consume confectionery or soft drinks immediately before or during the assessment
- apply scented toiletries, such as perfume or aftershave immediately before an assessment

Routine Assessment:-

- Starting point of assessment should be down wind of the site, progressing towards the site boundary and then away from the site in an up wind direction.

Assessment to be carried out as result of complaint:-

- The starting point should be the location from which the complaint was made.

Method of Assessment

- Walk slowly and breathe normally.

Classification System for Odour Parameters:

Intensity:

Odour Intensity	Description
0	No detectable odour
1	Local and impersistent (only detected during brief periods when wind drops or blows)
2	Faint odour (barely detectable, need to stand still and inhale facing into wind)
3	Moderate odour (odour easily detected while walking and breathing normally, possibly offensive)
4	Strong odour (bearable, but offensive- will my clothes/hair smell?)
5	Very strong odour (this is when you really wish you were somewhere else)

Extent:

Odour Extent	Description
0	No detectable odour
1	Local and impersistent (only detected during brief periods when wind drops or blows)
2	Impersistent as above, but detected away from site boundary)
3	Persistent, but fairly localised
4	Persistent and pervasive up to 50m from site boundary
5	Persistent and widespread (odour detected >50m from site boundary)

Sensitivity of Location where Odour Detected: (assuming detection, if not then 0)

Location Sensitivity	Description
0	Remote (no housing, commercial/industrial premises or public access area within 500m)
1	Remote (no housing, commercial/industrial premises within 500m limited public access ie little used foot path or minor road)
2	Low sensitivity (no housing etc within 100m of area affected by odour)
3	Moderate sensitivity (housing etc within 100m affected by odour)
4	High sensitivity (housing etc within area affected by odour)
5	Extra sensitive (complaints arising from residents within area affected by odour)

Training Date:.....

Signed:.....

Name:.....

OLFACTORY SURVEY ASSESSMENT REPORT (TBS/OAR/1)

Odour report form					Date	
Time of test						
Location of test e.g. street name point 1 below etc						
Weather conditions (dry, rain, fog, snow etc):						
Temperature (very warm, warm, mild, cold, or degrees if known)						
Wind strength (none, light, steady, strong, gusting)						
Wind direction (e.g. from NE)						
Intensity*						
Extent*						
Location sensitivity *						
Duration (of test)						
What does it smell like?						
Is the source evident?						
Any other comments or observations						

* Score 0-5 Refer to sniff test training

Sketch a plan of where the tests were taken, the potential source(s).

Odour Diary		Sheet No
Name:	Address:	
Telephone Number:		

Date of odour:				
Time of odour:				
Location of odour, if not at above address:				
Weather conditions (dry, rain, fog, snow etc):				
Temperature (very warm, warm, mild, cold or degrees if known):				
Wind strength (none, light, steady, strong, gusting):				
Wind direction (eg from NE):				
Intensity*				
Extent*				
Location sensitivity *				
What does it smell like? How unpleasant is it? Do you consider this smell offensive?				
How long did go on for? (time):				
What do believe the source/cause to be?				
Any actions taken or other comments:				

* Refer to sniff test training

THORNCLIFFE BUILDING SUPPLIES LTD EWLOE BARN INDUSTRIAL ESTATE Odour Complaints Report Form (RF/5B)	
Date Recorded	Reference Number
Name and address of caller	
Location of caller in relation to site	
Telephone number of caller	
Time and Date of call	
Date, time and duration of offending odour	
Caller's description of odour eg. comparison with other odours, strong/weak, continuous, fluctuating	
Any other comments about the offending odour	
Weather at the time of complaint (rain, snow, fog, etc.)	
Wind (strength, direction)	
Any other previous complaints relating to this report	
Any other relevant information	
Potential odour sources that could give rise to the complaint	
The operations being carried out on site at the time of the complaint eg delivery of waste, movement of waste	
Follow Up	
Actions taken	
Date of call back to complainant	
Summary of call back conversation	
Recommendations	
Change in procedures	
Changes to Management Systems	
Date changes implemented	
Form completed by: Signed	Signed by: _____ Print Name:.....

7.0 Control of Noise

Vehicles entering/leaving the site manoeuvring on site plant on site

Vehicles entering and leaving the site and manoeuvring on the site can generate excessive noise. Fixed and mobile plant operating on site may also generate excessive noise. The following protocols are in place:

- All vehicles and plant are fitted with effective silencers, are well maintained and as such are inspected on a regular basis with necessary repairs being conducted immediately, records of vehicle maintenance are kept.
- Drivers comply with the 10mph speed limit in force on site
- Engines are switched off when the vehicle is not in use.
- Drivers are instructed to keep engine revving to a minimum and to avoid loud cab radios blowing horns etc at all times.

8.0 Fire Prevention and Fire Emergency Response Procedure

Fires can be a key issue at waste operation sites and causes of environmental therefore measures should be in place to help minimise risks. These include:-

- Provide fire breaks
- Monitor storage quantities on site
- Good housekeeping
- No smoking on site policy
- Ensure plant and equipment is regularly maintained
- Staff fully trained in the Fire Emergency Response Procedure for the site
- Site Layout plan available showing site drainage arrangements to minimise the impact of firewater
- Advice sought from the Fire Service based on best fire-fighting practice for fire fighting strategy and possible methods to reduce the amount of firewater run-off for example use of sprays rather than jets, controlled burn and the possible re-cycling of fire fighting water, where safe and practicable to do so.
- Take into account the guidance in PPG 21 and PPG 18 (Copy to be included in Appendix IV of the Environmental Management Plan.

9.0 Emission Management Plan (Review/Revisions)

- 9.1 The EMP will be reviewed at least every three years unless it becomes apparent that the activities are giving rise to complaints and/or non compliance. The Emissions Management Plan will be revised if necessary as part of any investigative procedure and a copy forwarded to the NRW for approval before implementation.