ODOUR MANAGEMENT PLAN

BANBURY PLANT & SKIP HIRE

Ferris Hill Farm, Sibford Road,
Hook Norton, Banbury,
Oxfordshire OX15 5JY

Prepared by:- LUMNIA CONSULTING LIMITED Ref. SL/BP/0320

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1 Introduction

1.1 General

1.1.1 Lumnia Consulting Ltd have prepared this Odour Management Plan ("OMP") on behalf of Nigel Matthews T/as Banbury Plant & Skip Hire for their facility situated at Ferris Farm, Sibford Road, Hook Norton, Banbury, Oxfordshire OX15 5JY. The site will be operated as a household, commercial and industrial (HCI) waste transfer station with treatment.

1.1.2 The site will be operated in accordance with an Environmental Management System (EMS) and Fire Prevention Plan (FPP) along with other documents targeted to specific environmental considerations including this OMP.

1.1.3 This OMP will allow Nigel Matthews T/as Banbury Plant & Skip Hire to implement an action plan should the site operatives detect an odour presence, receive complaints from local business or residents and should the EA suspect odour emissions from the site during an inspection.

1.2 Site Location

1.2.1 The site is located on Land at Ferris Farm, Sibford Road, Hook Norton, Banbury, Oxfordshire OX15 5JY. The national grid reference for the site is SP 35383 35063.

1.3 Site Management

1.3.1 The site has an assigned Technically Competent Managers (TCM), site manager and site foreman (site management) who will be responsible for the general management of the site including the acceptance and handling of any potentially odorous wastes.

1.3.2 The operator will ensure that site management delegate site documentation (which includes this OMP) in addition to all relevant company procedures to operational staff to ensure they are familiar with the requirements and conditions of the site and documents.

1.4 Waste types and quantities

1.4.1 The waste types handled on site will be household, commercial and industrial wastes including C&D & C&I as defined in the Controlled Waste (England and Wales) Regulations 2012 and Section 75 of the Environmental Protection Act 1990.

1.4.2 The maximum volumes of waste to be stored on site at any one time is shown on Drawing No. CGL/PARTC2/5A and within the Fire Prevention Plan accompanying this application documentation with residence times for each waste type.

1.4.3 If the maximum storage capacity of the site is reached, no further waste will be accepted until such time waste can be removed from the site and taken to a suitably permitted or exempt site.

1.4.4 The table overleaf details a summary of the main wastes types which will be accepted and stored at the site, the rows highlighted in red are those which will have the potential to cause odour:

Table 1.1 - Summary of Waste

Material	Max Height (m)	Max Length/Width (m)	Method of storage	Max Volume (m^3)	Max Area (m^2)	Max Storage (days)
Incoming	3.5	9/9	Loose	285	81	2
Outgoing	3.5	10/10	Loose	350	100	2
Cardboard & paper	3.6	6/1.52	Baled	33	9	7
Plastics	3.6	6/1.52	Baled	33	9	7
Metal scrap; ferrous	3.0	13/2.4	Trailer	90	0	2
Metal scrap: non-ferrous	1	1/1	Container	1	1	7
Plasterboard	3.0	10/5	Loose	150	50	7
Wood	3.0	10/10	Loose	300	100	2
Quarantine:	3.5	10/5	Loose	175	50	2
Total combustible waste stored				1092		

1.4.5 The site could also accept other common waste types with odourous potential which have not been listed in the table. It is proposed if any of these wastes are discovered they would be stored in a segregated bay and removed from the site within 48 hours.

Reference Document BPS/PartC4/1b List of Wastes & Waste Operations

1.5 Site management

1.5.1 The site has an assigned Technically Competent Manager (TCM) who will be responsible for the general management of the site including the acceptance and handling of any potentially odorous wastes.

1.5.2 The company, through the TCM, will ensure that a nominated deputy is sufficiently trained and familiar with all site management documentation (which includes this OMP) in addition to all relevant company procedures who, in the absence of the TCM, will act as the competent person.

2 Odour Risk Assessment

2.1 Methodology

2.1.1 This OMP has been completed to identify where the likely risks are in relation to surrounding land uses. This assessment has been used to inform Section 5.0 of this OMP with regard to specific odour monitoring procedures.

2.2 Odour Intensity

2.2.1 The table below highlights the intensity of the odour and provides a description by which to measure the intensity:

Odour Intensity	**Criteria**
Negligible	No detectable odour
Low	Faint odour(barely detectable)
Moderate	Moderate odour easily detected while walking (possible interference)
High	Strong odour (bearable, but offensive)
Severe	Very strong odour(this is when you really wish you were somewhere else)

2.3 Receptor Sensitivity

2.3.1 The table below outlines the receptor sensitivity to odour which will be used when determining nearby odour sensitive receptors:

Sensitivity of Receptor	**Criteria**
Low	Industrial workplaces
Medium	Industrial workplaces / Residential >250 m
High	Residential areas <200m

2.4 Sensitive Receptor Locations

2.4.1 The sensitive receptors in proximity to the site are listed Appendix 1. The nearest residential receptor is situated to the south if the facility lying approximately 175m from the facility site boundary.

2.5 Risk Matrix

2.5.1 The odour risk in any particular event can be established using the risk assessment matrix given in the table below.

		Sensitivity		
		Low	**Medium**	**High**
Intensity	**Negligible**	**NEGLIGIBLE**	**LOW**	**LOW**
	Low	**LOW**	**LOW**	**MEDIUM**
	Moderate	**LOW**	**MEDIUM**	**MEDIUM**
	High	**MEDIUM**	**MEDIUM**	**HIGH**
	Severe	**MEDIUM**	**HIGH**	**VERY HIGH**

3 POTENTIAL SOURCES OF ODOUR

3.1 General waste - storage prior to processing

3.1.1 These areas would be deemed as the "Waste reception and holding area for mixed household, industrial and commercial (HIC) waste" or "combustible waste storage areas" on Drawing No. CGL/PARTC2/5A.

3.1.2 Whilst these wastes are not commonly associated with odorous emissions, they do contain some fine organic materials which can, in some cases, be attributed to a general "musty" odour. This smell is exacerbated following ingress of rainwater which occurs predominantly whilst the wastes are resident in skips/containers at the sites of production and prior to receipt at the site.

3.1.3 Whilst not common, these wastes have the potential to contain materials of a putrescible nature which are not identifiable until the load has been tipped at the site.

3.2 General waste - residual wastes for landfill

3.2.1 These wastes are essentially the lighter, non-recyclable fraction of the treated mixed HCI which are stored in dedicated holding bays which are referenced as the temporary holding areas W2 and Fines. Some of the finer organic materials are still likely to be present in the material, however, any putrescible materials (such as 'black bag' wastes) will have been identified, isolated and rejected during the sorting process. Therefore these residual wastes for landfill have less potential to cause odour than the original mixed waste input described in Section 3.1 above.

3.3 Foul surface water

3.3.1 In the event of a rainfall incident, the external concreted areas of the site drain into the foul sewer via interceptor. Nevertheless, periodically skips which have stood on producers sites for a long time often contain foul smelling water give rise to odour when tipped.

3.4 Green wastes

3.4.1 Separated green wastes also have the potential to give rise to odorous emissions. It is important to note that the site is not a dedicated green waste handling facility – the green wastes produced at the site comprises almost entirely of branches (with/without leaves) and tree trunks separated from skips of other mixed wastes. This means that the propensity for odour is much less than that of a dedicated green waste handling facility which accepts green waste consignments consisting of branches, tree trunks, leaves, tree clippings and grass cuttings. The leaves, tree clippings and grass cuttings (not routinely accepted at the site) harbour the greatest potential for odour due to their susceptibility to aerobic composting and decomposition whilst in storage, where branches and tree trunks are not susceptible.

3.5 Background Odour Sources in the Area

3.5.1 The primary off-site source of odour would be associated with agricultural and farming activities which are prevalent in the immediate area and the wider areas surrounding the site.

3.5.2 Odour release could also be the result of abnormal weather conditions, machinery breakdowns and human error.

3.5.3 In order to determine whether complaints are the result of activities from the site or from other nearby sites an odour complaints form will need to be completed in line with the company's complaints procedure which is attached in Appendix II.

3.5.4 Other odour potentially emitting establishments are only the surrounding agricultural farms.

4 ODOUR CONTROL

4.1 Site Operations

4.1.1 Limiting odour from the waste recycling facility can best be achieved through employing effective site management and good general practice. It is much easier minimising odours in the first instance than dealing with problems once they occur.

4.1.2 This section addresses the general site management guidelines and identifies specific procedures to mitigate against odorous emissions.

4.2 Receiving Wastes

4.2.1 Rigorous control of wastes delivered to the site is required, with contaminated or odorous wastes rejected in line with the procedures outlined in the EMS and the EP. Trained competent staff are in place to recognize odorous material and to inspect incoming wastes as it is deposited at the site. Malodorous waste will be returned to the producer or sent to another authorised facility for treatment. Waste suppliers and HGV skip vehicle drivers are required to ensure that only acceptable material is brought to site to minimise the incidence of rejection.

4.2.2 Nigel Matthews T/as Banbury Plant & Skip HIre hire out skips to customers for a maximum of 2 weeks meaning that the waste received is unlikely to generate significant odourous emissions unless upon tipping; substantial odourous material is found and then actions shown in sections 6.1 and 6.2 will be followed. Incoming waste is stored for no longer than 48 hours prior to processing and stored waste is contained to reduce the impact of odourous emissions.

4.2.3 If the site reaches capacity and/or operational difficulties occur, the site will cease to accept waste and incoming wastes will be diverted to another authorised treatment facility.

4.2.4 Incoming mixed waste will be processed as soon as practicably possible to ensure that any other malodorous (or potentially malodorous) wastes contained within the incoming

mixed waste which were not identified during deposit can be identified, isolated and rejected without delay.

4.3 Storage of Wastes

4.3.1 Low storage volumes and strict turnaround of biodegradable wastes on site in accordance with Table 2 in the Fire Prevention Plan and Drawing No. CGL/PartC2/5A and will be observed. Stock rotation procedures will be observed daily and to ensure the maximum duration of storage times are not exceeded these wastes do not exceed 48 hours.

4.3.2 The waste reception areas W1 as shown on Drawing No. CGL/PartC2/5A will be used for the tipping of mixed loads prior to loading into the treatment plant or treated by way of shredding etc. These areas will primarily be used as holding areas so it is likely the waste will be stored for longer than 24 hours of being tipped. All residual wastes arising from the treatment will be mechanically or hand-sorted and fall into the one of the dedicated bays which will be removed from site or to a skip once the bay is full.

4.3.3 The remaining waste and materials which will be stored are considered to be of low risk in respect of odour emissions, nevertheless, storage times are suitably short to ensure the risk is further mitigated.

4.3.4 Waste will be stored to ensure compliance with the EP and as detailed within the EMS, FPP and this OMP document.

4.4 Loading and Transport of General Wastes

4.4.1 In all cases, the drop heights of mixed waste will be kept to an absolute minimum.

4.4.2 All waste vehicles leaving the site containing light and/or potentially malodorous wastes will be securely sheeted or enclosed at all times.

4.5 Housekeeping

4.5.1 Regular cleaning of operational areas (i.e. minimum once daily) such as roads, drainage channels and holding tank will be carried out to discourage odour generation from old degrading materials.

4.6 Liaison with Neighbours

4.6.1 In the extreme event of significant but temporary odour releases outside normal operations, neighbours will be contacted to advise them of the situation and the action being taken. The Environment Agency will also be notified.

4.6.2 An open-door policy will be encouraged by the operator to enable any complaints from neighbouring premises (if received) to be dealt with immediately. The complainant will then be supplied with remedial actions taken and any procedures or measures put in place by the operator to reduce or ideally eradicate the likelihood of a subsequent complaint.

4.6.3 If any odour complaints are received, the complaint will be assigned to an operative familiar with the sites operation who will complete a 'complaints and events log' and detailed individually on the complaints form (in Appendix II), both of which will be kept for inspection on request by the LA and/or EA. Details of information to be completed are dates, nature of complaint, weather conditions at the time of the complaint, investigation details, action taken and a signature (as a minimum). Odour complaints will be investigated and responded to within 24 hours and suitably reviewed by the site manager who is ultimately responsible.

4.6.4 The operator would also be required to make a note of any unavoidable events plant/equipment malfunctions in the site diary, rather than just actual complaints received. This will ensure that if complaints are received retrospectively from either the Council/EA or directly, any circumstances which led to that complaint as a result of elements outside of the operator’s control would be able to be attributed to the cause of

the complaint. If there are significant odour releases outside normal operations, the operator will cease operation, investigate and resolve the issue before continuing.

4.7 Training

4.7.1 All employees and sub-contractors of Nigel Matthews T/as Banbury Plant & Skip HIre involved with potentially odorous materials and their handling will receive training in Sniff testing (including office/admin workers allocated to undertake the Sniff test) and complaint reporting (management and operations staff).

4.7.2 Training will be given to all relevant persons to make sure they are competent in completing olfactory assessment survey forms, odour complaint report forms and the odour diary to ensure sufficient monitoring and reporting of odours can be carried out.

5 MONITORING

5.1 Monitoring Odorous Releases

5.1.1 Nigel Matthews T/as Banbury Plant & Skip HIre will use the following techniques to monitor odorous releases:

a) Olfactory Monitoring

b) Complaints Monitoring

c) Odour Diaries (when necessary)

5.2 Olfactory Monitoring

5.2.1 The site supervisor will monitor odour around the entire site perimeter at least once daily and an Odour Diary will be completed (Appendix II). The monitoring will be carried at intervals out while the site is operational, additional monitoring may be carried should there be reason to suspect a potential odour problem (potentially malodorous waste onsite, foul surface water issues etc.).

5.2.2 Out of hours monitoring will not be regularly required as incoming waste is stored for no longer than 48 hours prior to processing and stored waste is contained to reduce the impact of odourous emissions.

5.2.3 The results of monitoring exercises and any remedial action taken will be entered into the log book which is available for the LA/EA to inspect upon request. The name of the site supervisor will be stated in the site's diary / inspection form for each day of operation along with notes on weather including precipitation, temperature, wind speed and direction (from mounted anemometer and wind vain).

5.2.4 Should the monitoring conclude that a certain activity/waste is giving rise to odour which is migrating offsite, steps will be made to reduce the impact of this activity, which may include, but is not limited to; removal offsite to a suitably licensed facility, faster processing/lower storage rates, pumping and removal of standing surface water, relocation of waste to a more suitable area of the site etc.

5.2.5 The site supervisor will be suitably trained to carry out these duties. Further information regarding training and technical competence is provided within the site's EMS.

5.3 Odour Monitoring Procedure

5.3.1 Sniff testing will be carried out by trained; competent staff weekly or as necessary (i.e. increased regularity should the management have reason to suspect odorous emissions from the site). Assessments will be carried out both routinely and in response to specific complaints.

5.3.2 The assessor should not:

a) Smoke or consume strongly flavoured food or drink for at least 30 minutes before the assessment.
b) Consume confectionary or soft drinks immediately before the assessment.
c) Apply scented toiletries, such as perfumes or aftershave immediately before an assessment.

5.3.3 Starting points of assessments should be downwind of the site, progressing towards the site boundary and then away from the site in an upwind direction. The person carrying out the assessment should walk slowly and breathe as normal.

5.4 Complaints Monitoring

5.4.1 All odour complaints will be investigated promptly and appropriate remedial action will be taken if the complaint is validated (as per sections 4.6.2-4.6.4) e.g. remove odorous materials off site as soon as reasonably possible. Complaints will be recorded on the form found in Appendix II.

5.4.2 Complaints to the Local Authority / Environment Agency will also be recorded and taken into account. An olfactory assessment survey will be carried out from where the complaint

was made and from any convenient locations between the complainant/receptor and the site so that the complaint can be validated or rejected.

5.5 Odour Diaries

5.5.1 If members of the local community are frequently reporting odour issues in the vicinity, then they will asked (if agreeable) to keep an odour diary. This will help to build up an account of when the odour occurs, their location and the site operations that were being carried out at the time, as well as the duration of the activities taking place. Any obvious problems can then be addressed.

6 CONTINGENCY PLANS

6.1 Contingencies and Emergency Plans

6.1.1 In accordance with the Environment Agency's 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'.

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

a) Firstly identify the odour source; is it from:

   i) Site operations; or,
   ii) An off-site source (e.g. agricultural spreading operation)

b) If on site:

   i) Report incidence to the site or technically competent manager;
   ii) Identify the point of release of the odour;
   iii) Identify the cause if the release i.e. machine breakdown, leakage, etc.;
   iv) Identify a solution;
   v) Implement the solution;
   vi) Carry out olfactory tests to check the mitigation measures are working;
   vii) Record actions taken on relevant forms and site diary as required by this plan

6.1.3 Then actions taken if odour is being produced on site will be:

a) Normal Operations: The offending odour will be traced and the reason for the cause of the problem will be investigated. Once solutions are in place, olfactory monitoring will be carried out to ensure the solutions put in place are having the desired effect.

b) Abnormal Conditions: Adverse weather conditions can promote generation of odour and inhibit its effective dispersion e.g. hot weather with little wind, resulting in increased risk of odour to receptor locations. If this happens odour causing operations will cease until more favourable meteorological conditions return.

6.2 Corrective Actions for Various Situations

6.2.1 The table below summarises the various problems likely at the site and the standard responses available, which will assist in reducing odour potential.

Process	Problem	Corrective Action
Waste Delivery (Tipping)	Deposit of odorous load	Isolate material. Reject material giving rise to odour.
Stored wastes (general)	Odorous emissions detected	Olfactory/SNIFF test required to pinpoint source. Ensure procedures outlined in Section 5 are adhered to in full. Remove malodorous waste to a suitably licensed facility. Implement liaison programme if risk deemed HIGH or VERY HIGH.

6.3 OMP Management

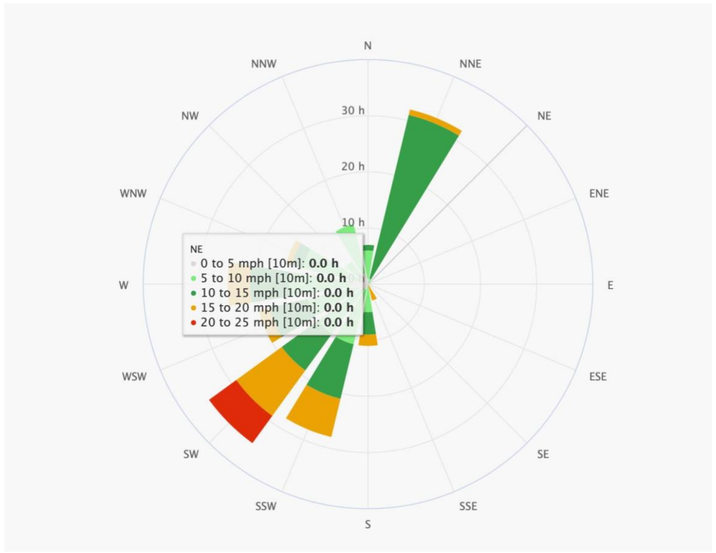
6.3.1 This OMP will be reviewed at least annually unless it becomes apparent that the activities are giving rise to pollution outside the site due to odour, in which case it will be revised within 10 days and a copy forwarded to the Environment Agency for approval before implementation. It may also be revised upon request from EA, should the permit be varied, transferred etc.

Appendix I

Drawings

Annex F - CGL/PartC2/5A

Annex G – Drainage Plan



Wind rose for Hook Norton
Based on historical records [30 years]; source Meteoblue

Human Receptors:-

1. **The Gate Hangs High (Pub) – 175m**
2. **Ramthorn Lodge (Business Units) – 500m**
3. **WhiteHills Farm – 500m**
4. **Croft Farm – 550m**
5. **The Firs (Car Garage) – 580m**
6. **New Timber Court – 500m**
7. **Six Ash Farm – 765m**
8. **Colman's Elm – 710m**
9. **Fodge Farm – 870m**
10. **Larkfields – 500m**

Appendix II

Record Forms

Odour Diary				**Sheet No**
Name: **Telephone Number:**	**Address:**			
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 (e.g. from NE):				
What does it smell like? How unpleasant is it? Do you consider this smell offensive?				
Intensity – How strong was it? (see below 1-5):				
How long did go on for? (time):				
Was it constant or intermittent in this period:				
What do believe the source/cause to be?				
Any actions taken or other comments:				

Intensity (Detectability)

1 No detectable odour
2 Faint odour (barely detectable, need to stand still and inhale facing into the wind)
3 Moderate odour (odour easily detected while walking & breathing normally)
4 Strong odour
5 Very strong odour (possibly causing nausea depending on the type of odour)

Nigel Matthews T/as Banbury Plant & Skip Hire
COMPLAINTS REPORT FORM (BPS/SL/1)

Date Recorded:	**Reference Number:**
Name and address of caller	
Telephone number of caller	
Time and Date of call	
Nature of complaint (noise, odour, dust, other) (date, time, duration)	
Weather at the time of complaint (rain, snow, fog, etc.)	
Wind (strength, direction)	
Any other complaints relating to this report	
Any other relevant information	
Potential reasons for complaint	
The operations being carried out on site at the time of the complaint	
Follow Up	
Actions taken	
Date of call back to complainant	
Summary of call back conversation	
Recommendations	
Change in procedures	
Changes to Environmental Management System (EMS)	
Date changes implemented	
Form completed by	
Signed	
Date completed	

COMPLAINT RECORDING PROCEDURE:

Any complaints received will be recorded on form BPS/SL/1. 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.

1) The name, address and telephone number of the caller will be requested.

2) Each complaint will be given a reference number.

3) The caller will be asked to give details of:

   a) the nature of the complaint;
   b) the time;
   c) how long it lasted;
   d) how often it occurs;
   e) Is this the first time the problem has been noticed; and
   f) what prompted them to complain.

4) The person completing the form will then, if possible, make a note of:

   a) the weather conditions at the time of the problem (rain, snow, fog etc.);
   b) strength and direction of the wind; and
   c) the activity or activities taken place on the site at the time the noise was detected, particularly anything unusual.

5) The reason for the complaint will be investigated and a note of the findings added to the report.

6) 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.

7) If the caller is unhappy about the outcome or unwilling to identify themselves the caller will be invited to contact the Environment Agency and or the Local Authority.

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