













# ODOUR ASSESSMENT MANAGEMENT PLAN (OAMP)

NON-FERROUS METALS RECYCLING FACILITY

LAND OFF GRETTON BROOK ROAD, CORBY, NORTHAMPTONSHIRE

**DMP METALS LIMITED** 

OCTOBER 2020





0.0	dour Assessment Management Pla	ın
Corby	DMP Metals Ltd	D016-02

Revision/Version	Comments	Author	Date
1	Final Draft	СТ	August 2020
2	Amendments – Duly Making	CS	October 2020
3	Amendments – Duly Making	GH	October 2020
4	Amendments – Duly Making	GH	October 2020

#### **Contents**

1	INTRODUCTION	2
2	IDENTIFICATION OF SENSITIVE RECEPTORS	3
3	SITE DESCRIPTION	4
3.1	Operational Hours	4
3.2	Site Layout	4
3.3	Maximum capacity of operation	4
3.4	Permitted waste codes	4
4	IDENTIFICATION OF ODOUR SOURCES	5
5	ASSESSMENT OF LIKELIHOOD OF ODOUR	6
6	MANAGEMENT AND CONTROL OF ODOUR	6
6.2	Feedstock control	7
6.3	Process control	8
6.4	Further management techniques	8
7	COMPLAINTS PROCEDURE	9
7.1	Odour Complaint Management Plans	9
7.2	Odour complaint investigation	10
7.3	Action plans	11
7.4	Liaison and document review	12
7.5	Document review requirement and timescale	13

# **Appendices**

**APPENDIX 1: SITE LOCATION AND SENSITIVE RECEPTORS** 

**APPENDIX 2: PROPOSED SITE LAYOUT** 

**APPENDIX 3: ODOUR COMPLAINT REPORT FORM** 

**APPENDIX 4: WEEKLY ODOUR SNIFF TESTING FORM** 

#### 1 INTRODUCTION

- 1.1.1 DMP Metals has recently submitted a Planning Application to change the use of site at Kirby Hall Estate, Corby Road, Gretton Corby Northamptonshire, NN17 3AS to enable the construction and commissioning of a non-ferrous metal processing plant. The plant will target contaminated non-ferrous metals that have previously been removed from RDF and SRF materials and has therefore already been subject to some form of processing and will be compacted prior to transportation. The maximum contamination rate is of circa 30% which shall mainly comprise ferrous metals, plastics, cardboard and other packaging, materials. The material may also be lightly contaminated with the residual contents of the cans mainly soft drinks, beer and in some cases possibly small traces of tinned food contents.
- 1.1.2 DMP will design and construct a plant that will process the feedstock to produce a high-quality Zorba (aluminium) product at circa 4 tonnes per hour on a single line, which will operate initially on a single shift of 2,000 hours per year. There is an option to extent to two shifting once the plant has been proven. The process for increasing the value of the material is based around fine shredding to release the properties trapped in or attached to each element of the non-ferrous material.
- 1.1.3 The volumes of materials to be processed by the non-ferrous metals' facility shall be 16,000 tonnes per annum.
- 1.1.4 The material will all be delivered directly to a covered storage area where it will either be processed immediately or if necessary, moved to the repurposed tunnel area to dedicated covered storage bays. Volumes of unprocessed material to be stored on site shall be strictly controlled with a maximum allowed of 480m3. Similarly, the maximum volumes of processed material will not exceed 480m3, resulting in the total volume of materials on site at one time never exceeding 960m3.
- 1.1.5 At the facility, the waste material to be treated will generally be non-ferrous metal. Seventy percent of material arriving on site are likely to be aluminium drinks cans mixed with ferrous materials, plastics, cardboard and other packaging, materials. The material may also be lightly contaminated with the residual contents of the cans mainly soft drinks, beer and in some cases possibly small traces of tinned food contents. This is not expected to give rise to any significant odour issues and therefore is unlikely to result in any detectable odours outside of the controlled storage bays or processing area.

- 1.1.6 DMP will limit the times that waste material is stored at site, maximum of 2 days or worst case 7 day (plant breakdown scenario) means the likelihood of strong odours being generated is extremely unlikely.
- 1.1.7 DMP has also employed the services of an Odour Management Consultant and have prepared an Odour Model aimed at demonstrating that it is extremely unlikely that any significant odour will be generated. This model could be validated with an odour monitoring study once the site is operational.
- 1.1.8 However, DMP considers that as an added precaution it is prudent to develop a robust Odour Assessment Management Plan (OAMP) that sets out the standards that could be implemented for measuring and controlling odours in the extremely unlikely event of complaints from nearby receptors.
- 1.1.9 It is expected that full implementation of all operational procedures relating to the site and feedstock materials detailed in this and other Management Plans will ensure that the site does not cause an odour nuisance.
- 1.1.10 The Site Manager is responsible for ensuring that the site is operated in accordance with all Management Plans. This includes checks to ensure that all assessments required by each procedure are completed at the proposed frequencies, recorded in the appropriate manner and any required remedial actions have been completed in a timely manner. Failure to undertake these assessments will be deemed a non-conformance.
- 1.1.11 The OAMP will be updated periodically and following any substantial changes to the plant and equipment required on site.

#### 2 IDENTIFICATION OF SENSITIVE RECEPTORS

- 2.1.1 The are no residential properties within close proximity of the site.
- 2.1.2 At present, the closest dwellings are those being constructed within Priors Hall Park to the South and beyond the Horizon Building (a data centre). These properties are over 450 metres from the site, as indicated in the figure in Appendix 1.
- 2.1.3 Outline planning permission is now being sought for Priors Hall Park Zones 2 & 3, to the east of the site and South of Kirby Lane (East Northamptonshire Council Application No. 19/01219/OUT). Whilst the application does not include a final development layout, development areas are indicated within the application, with the closest proposed residential development areas approximately 260 400 metres to the east of the site, as indicated in the figure in Appendix 1.

## **3 SITE DESCRIPTION**

## 3.1 Operational Hours

- 3.1.1 The site would be operational between:
  - Monday to Friday 06:00 22:00 hours.
  - Saturday 06:00 13:00 hours.
  - No working on Sundays, Bank and Public holidays.
  - Deliveries to the site would be made during normal working hours, with no deliveries permitted
  - before 07:00 hours.

### 3.2 Site Layout

- 3.2.1 The site layout is indicated in Appendix 2.
- 3.2.2 The recycling operations will be carried out within the existing buildings on the site. Deliveries of material would be unloaded within the central covered area and then moved immediately for processing or storage within the repurposed IVC tunnels. The main building will house the recycling and recovery plant. The reclaimed materials stored in the Northern end of the IVC tunnels, as indicated in Appendix 2.

## 3.3 Maximum capacity of operation

Types of wastes	Quantities per annum	Storage at any one time
Contaminated non-ferrous metal	16,000 Tonnes	480m3
Processed non-ferrous metal (c.70%)	11,200 Tonnes	160m3
Processed ferrous metal (c.5%)	800 Tonnes	160m3
Processed residual waste (c.25%)	4000 Tonnes	160m3

#### 3.4 Permitted waste codes

3.4.1 The facility will handle the following waste types - European Classification:

EWC Code	Description
02 01 10	waste metal
12 01 03	non-ferrous metal filings and turnings
15 01 04	metallic packaging
16 01 18	non-ferrous metal
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
19 01 02	ferrous materials removed from bottom ash
19 10 02	non-ferrous waste
19 12 03	non-ferrous metal
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11

#### 4 IDENTIFICATION OF ODOUR SOURCES

- 4.1.1 The plant will target contaminated non-ferrous metals that have previously been removed from RDF and SRF materials and has therefore already been subject to some form of processing and will be compacted prior to transportation. The maximum contamination rate is of circa 30% which shall mainly comprise other ferrous metals, plastics, cardboard and other packaging, materials. The material may also be lightly contaminated with the residual contents of the cans mainly soft drinks, beer and in some cases possibly small traces of tinned food contents
- 4.1.2 There is a low risk that the incoming wastes could be odorous.
- 4.1.3 It is unlikely that the waste streams contain sufficient levels of food and liquid waste materials that would produce significant odours.
- 4.1.4 Other sources of odour in the vicinity of the site include:
  - Agricultural fields which border the site
  - Livestock farms
  - Food processing factory (Roquette)

- Landfill site at Weldon
- Corby Sewage Treatment Works

## 5 ASSESSMENT OF LIKELIHOOD OF ODOUR

- 5.1.1 The generation of odours from the new non-ferrous recycling facility is extremely unlikely. The waste material to be treated will generally be nonferrous, with material arriving on site likely to be predominantly aluminium drinks cans mixed with ferrous materials, plastics, cardboard and other packaging, materials. The material may also be lightly contaminated with the residual contents of the cans mainly soft drinks, beer and in some cases possibly small traces of tinned food contents. This is not expected to give rise to any significant odour issues and therefore unlikely to result in any detectable odours outside of the controlled storage bays or processing area.
- 5.1.2 The total volume of material to be processed is limited and therefore the volume of material containing food residues will be very small.
- 5.1.3 Incoming wastes will be inspected by a competent operator on delivery to ensure they do not contain high volumes of contamination from food waste or exhibit strong or unexpected odour.
- 5.1.4 Waste will only be stored for a short period of time prior to processing and recovered materials will be removed from site shortly afterwards.
- 5.1.5 Material will be processed on a first in / first out basis to ensure storage times are minimised.
- 5.1.6 Bays will be regularly emptied to ensure feedstock residues do not build up and exceed normal storage times.
- 5.1.7 The processing hall has a dust extraction system to prevent dust build up in the building. The plant will be run to empty at the end of each day to remove any material from the treatment equipment. Regular maintenance and cleaning will ensure no build-up of material in the plant nor the building.

#### 6 MANAGEMENT AND CONTROL OF ODOUR

6.1.1 Assessment of the site operations and waste types indicates a very low risk of the site causing odour problems. To monitor the operations, the operator will complete daily / weekly 'odour sniff testing form' as shown at Appendix 4 to this OAMP.

- 6.1.2 The daily/weekly assessment will include a scoring matrix for the intensity of any odours identified from the site operations.
- 6.1.3 If a distinct odour (3) is identified at the site boundary then investigations will be undertaken to establish the source and actions taken to address the matter.
- 6.1.4 The following key factors are of relevance in controlling and minimising odour emissions:

#### 6.2 Feedstock control

- 6.2.1 Ensuring that the feedstock, derived principally from the RDF and SRF waste treatment process, is delivered to the site in accordance with our Waste Acceptance Criteria. This is key to minimising odours generated on site, especially at the start of the process. Waste contracts detailing conforming and non-conforming waste streams are put in place at the commencement of the contract. Material which does not conform to the Waste Acceptance Criteria will be rejected on arrival. This material will be quarantined awaiting collection from the supplier if it cannot be reloaded immediately.
- 6.2.2 Multiple storage areas are defined to support the rotation of the feedstock to ensure the maximum volumes and the specified storage time limits are fully met. This will prevent the build-up of material in the reception and storage area which then has the potential to give rise to potential odorous emissions.
- 6.2.3 The table in section 3 details maximum volumes of waste to be received and stored at the facility on an annual basis, the maximum storage time period and sets the upper level for the maximum volume to be stored in the designated bays at any time.
- 6.2.4 The feedstock is considered to have an extremely low potential to give rise to any detectable odour emission. However, if feedstock is identified as having a strong odour (4) then action will be undertaken to mitigate the issue. This could include rejecting the incoming load, quarantining for collection by supplier, spraying to neutralise the odour, processing immediately and timely removal of treated products.
- 6.2.5 When new waste streams are sought, the potential for odour emissions from these feedstocks will be taken into consideration and the site management will ensure that this does not result in any measurable change in the operation of the site with respect to the odour risk assessment.

#### 6.3 Process control

- 6.3.1 The most important parameters in maintaining effective management and control of the metal recovery process will be the controls implemented in the delivery of the feedstock. Rejection of out of specification material is a key part of this process.
- 6.3.2 Material stockpiles will be minimised in the storage area. Feedstock rotation will ensure that the oldest materials will be treated first.
- 6.3.3 The tipping area between the processing building and the storage tunnels is enclosed with a roof and a gale breaker door on one end. The planning application provides for the construction of a steel profiled aluminium clad permanent wall to be installed to replace the gale break door.
- 6.3.4 Stockpiles will be further inspected prior to material being fed into the processing plant. If checks identify the stockpiles as having a strong odour (4) action will be taken to mitigate the problem. This could include removal to the quarantine area for collection by supplier, spraying to neutralise the odour, processing immediately and timely removal of treated products.
- 6.3.5 The plant is designed to process a small volume of material at any one time to avoid build up within the treatment process and spillages from conveyors.
- 6.3.6 Processed materials will drop into appropriately sized bags or skips. These are regularly removed to the storage area and removed from site as soon as a full load is achieved. If the treated material in the storage area is identified as having a strong odour (4) then additional haulage will be quickly arranged to remove material from site at the earliest opportunity.

# 6.4 Further management techniques

- 6.4.1 In the unlikely event of odour issues being identified, appropriate management and control measures will be implemented to ensure that odorous materials are identified and managed to ensure that the site does not cause a nuisance.
- 6.4.2 Measures that could be adopted include:
  - The objective of the operations staff is to prevent odour from arising by minimising storage volumes and the duration of the period that the feedstock is stored on site.

- This objective will be delivered by undertaking regular detailed inspections of all incoming waste and any stored waste for odorous materials or for materials that may have the potential to lead to odours if not processed immediately. Problem loads will be isolated, sprayed and may be immediately rejected from site. This would be followed up with discussions with waste producers to ensure there are no repeat incidents. Notably feedstock will be sourced from several reputable suppliers. The process plant will not rely on a single supplier, thus ensuring that should the situation arise where it becomes necessary to reject feedstock from one supplier the process can continue to be operated. This ensures that issues with out of specification materials can be dealt with promptly and effectively before it impacts on the operations of the facility.
- Regular inspections of waste stockpiles during each shift. Spray equipment available to treat any problem areas. Residual waste (contaminated material) is to be stored in bulk bags and will be removed form site every 2 days hence mitigating and reducing any risk of odour
- Regular inspection of the plant and equipment. Any build-up of waste or dust would be cleared as soon as possible, and the cause of the problem identified and rectified.
- Where possible, external doors to the facility to remain closed.
- The site manager will ensure that daily boundary walkdowns are performed by competent operators to record any detectable odours. A record of observations and actions implemented to mitigate any observed odours will be maintained.

#### 7 COMPLAINTS PROCEDURE

# 7.1 Odour Complaint Management Plans

- 7.1.1 Odour monitoring will be conducted in accordance with Environment Agency document "How to comply with your Environmental Permit" and H4 Odour Management guidance.
- 7.1.2 Should a complaint be received in relation to odour from the operation of the facility, the site manager (or other appointed person) will fully inspect the site, with the aim of identifying the source of the complaint.
- 7.1.3 The following actions will be taken on receipt of an external odour complaint:
  - Any complaints received at the site will be logged on an odour complaint report form (Appendix 3). The Environment Agency will be informed immediately that a complaint has been received.

• The operations manager will be given the details of the odour complaint as soon as possible including the location, nature, time, and date of the complaint.

## 7.2 Odour complaint investigation

- 7.2.1 If complaints relate to a current odour, a sniff test will be conducted by competent office-based site personnel in the area from which the complaint is received in order to assess the presence/absence of any odours, and the odour characteristics and intensity. Where possible the likely cause of the odour will be identified. This shall include offsite investigations if necessary.
- 7.2.2 Where complaints are retrospective it may only be possible to undertake a desk study to review plant operating conditions at the time of the complaint, wind direction, abnormal operating conditions etc and produce a status report to support close out of the complaint.
- 7.2.3 For all complaints, reference will be made to the site activities ongoing at the time of the complaint and the Daily Inspection Forms reviewed and further onsite investigations conducted to determine whether any abnormal operations are/were occurring (failure in odour critical plant, notable odours identified, process parameters out of optimal range etc).
- 7.2.4 The following key potential causes of abnormal odour emissions will be investigated:
  - Has waste arriving at the site from sources been correctly assessed by the reception building staff once tipped?
  - Are there any unusual characteristics evident in the waste on-site (age, condition, etc)?
  - Is waste reception, preparation and materials processing being undertaken as normal?
  - Are/were the Dust extraction systems working in the processing building at the time?
  - Are/were unloading, shredding, processing, or loading activities causing odour release?
  - Are/were there any unusual activities taking place off-site e.g. agricultural operations?
- 7.2.5 Once the cause has been established, appropriate actions (see below) will be immediately implemented, and actions devised to prevent a recurrence of the incident.
- 7.2.6 In all cases the data from the onsite weather station from the time of the complaint will be reviewed and forwarded to the Environment Agency in addition to details of any unusual events conducted onsite.
- 7.2.7 Feedback will be given to complainants on the findings of these investigations if they are known, and a summary will be provided of any remedial measures taken to rectify odour problems and ensure that the problem has been suitably resolved. The complainant will be asked if the perceived problem is still

occurring to measure any improvement achieved. In the unlikely situation that a significant odour event has occurred, that can be directly attributed to the operation of the site, an apology will be issued as appropriate and a commitment given to try and prevent further occurrences.

- 7.2.8 The Operations Manager will submit a short factual response to the Environment Agency; detailing the complaint(s) received, the investigations conducted, the findings of those investigations, whether the complaint was substantiated, any remedial measures implemented and any ongoing improvement actions to be implemented with a target period of seven days from receipt of the complaint.
- 7.2.9 Complaint trend analysis will be conducted to identify any trends and patterns in complaints to assist in identification of possible causes and solutions.
- 7.2.10 Records of all complaints, subsequent investigations, and remedial actions will be kept for at least five years. The Operations Manager shall ensure they are readily retrievable and maintained as fit for retention. As applicable, records will be stored in accordance with the GDPR Act 2018.
- 7.2.11 The site manager (or other appointed person) will visit the complainant's property within 1 working day of the complaint being received. Any problems identified with the plant will be shared and remedial measures discussed.
- 7.2.12 If it is possible to identify an area of the plant being a potential source, remedial measures would be taken to control the odour. This could include spraying the area by site operations or calling in a specialist contractor; isolating waste stockpiles; cleaning up spilled materials; removal of material from site; discussions with waste producer.
- 7.2.13 Upon completion of any remedial works, the complainant would be contacted to ensure that the measures taken had resolved the issue.
- 7.2.14 A record of all complaints received, and the measures taken would be held on site and made available to the Local Planning Authority and Environment Agency for inspection upon request.

# 7.3 Action plans

- 7.3.1 If an odour complaint is proven to be justified and attributable to site odours, or a 'non-conformance' occurs, a defined action plan (below) will be implemented. The following odour 'non-conformances' have been identified for the site:
  - a) Abnormal odour emissions occur.

- b) Significant odour is detected onsite that is believed to pose a risk of offsite odour impact.
- 7.3.2 If any of the above occurs, the following actions shall be taken:
  - If not previously undertaken, a walk-around of the entire site and a review of the Daily Inspection Form will be conducted to identify the likely cause(s) of the odour.
  - Upon identification of the likely odour source(s), appropriate corrective and preventative measures shall be identified and implemented, depending on the outcome of the investigations. The measures will consider, but not be limited to:
    - Suspension of receipt of highly odorous waste in the reception area and closure of doors until excessively odorous wastes are processed or removed from site. Suspension of future receipt of the waste stream until confirmed acceptable.
    - o Inspection and cleaning of storage areas where material of concern had been located.
    - o Implementation of corrective actions to restore parameters to desired levels.
- 7.3.3 Details of any odour 'non-conformances' including the nature of the incident, results of investigations, action taken and any required amendments to the OAMP will be made available to the Environment Agency on request.

#### 7.4 Liaison and document review

- 7.4.1 DMP will ensure that established clearly defined and accessible communication channels are set up for residents to report odour issues. These will include:
  - Contact details (including telephone number and address), displayed on the main site notice board (positioned at entrance to site).
  - Ability for residents to report odours in person at the site weighbridge.
  - Website giving relevant contact details: email, telephone, postal address etc.
  - Contact details will include an emergency "out of hours" contact number for use when the site is unmanned.
- 7.4.2 It is not anticipated that the process shall generate any odours that are likely to be detected beyond the boundary of the site. Therefore, it is not considered necessary to establish any formal local liaison group We will continue to review the requirement for re-establishing these meetings.
- 7.4.3 Where routine complaints are received, residents will be asked to complete odour diaries (Appendix 3), the results of which will be reviewed to identify trends such as key odour exposure times and locations.

Any trends identified will be used to focus the daily site inspections and weekly sniffing exercises, and the site operations/meteorological conditions at these times reviewed.

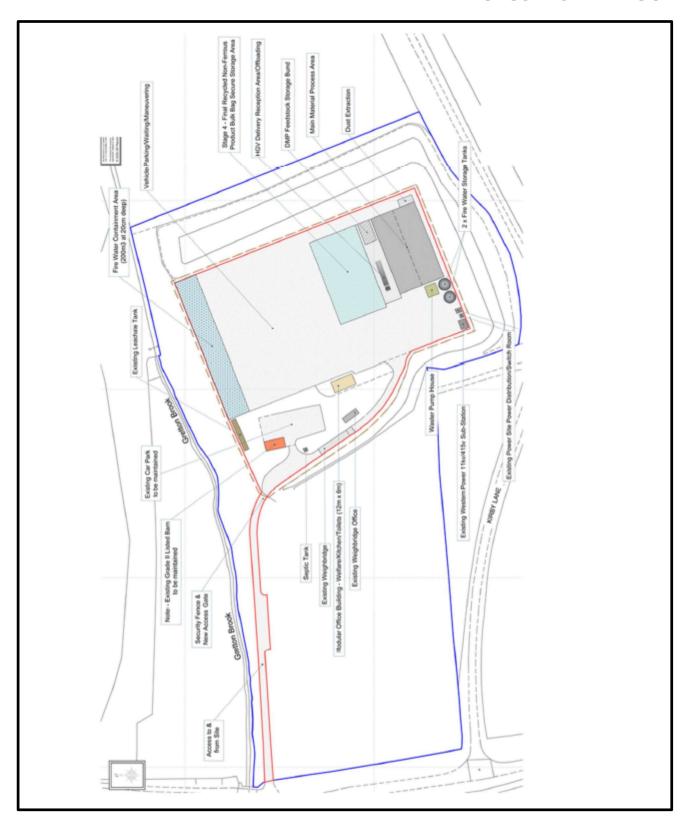
## 7.5 Document review requirement and timescale

- 7.5.1 This odour assessment management plan is a living document and will be formally reviewed on an annual basis as a minimum to ensure that the controls described are effective and reflect best available techniques. In addition, the OAMP will be reviewed following any relevant changes in site operations or procedures that are likely to have implications from an odour generation/impact perspective.
- 7.5.2 Any required changes to the conditions set out within this document shall be formally agreed with the Environment Agency prior to implementation.

**APPENDIX 1: SITE LOCATION AND SENSITIVE RECEPTORS** 



## **APPENDIX 2: PROPOSED SITE LAYOUT**



## **APPENDIX 3: ODOUR COMPLAINT REPORT FORM**

DMP Metals – Kirby Lodge	Non Ferrous Metals Reprocessing Site – o	dour complaint f	form
Time and date of complaint:	Name and address of complainant:		
Telephone number of comp	olainants:		
Date of odour:			
Time of odour:			
Location of odour, if not at	above address:		
Weather conditions (i.e., d	ry, rain, fog, snow):		
Temperature (very warm, v	varm, mild, cold or degrees if known):		
Wind strength (none, light,	steady, strong, gusting):		
Wind direction (e.g. from N	IE):		
Complainant's description	of odour:		
What does it smell like?			
Atmospheric pressure:			
Intensity (see below):			
Duration (time):			
Constant or intermittent in	this period:		
Does the complainant have	any other comments about the odour?		
	aints relating to the installation, or to that or relating to the same exposure):		
Any other relevant informa	tion:		
Do you accept that odour l	ikely to be from your activities?		
What was happening on sit	e at the time the odour occurred?		
Operating conditions at tim	ne the odour occurred		
(eg flow rate, pressure at in	nlet and pressure at outlet):		
Actions taken:		I	
Form completed by:		Date	Signed

Intensity	3 Distinct odour	
0 No odour	4 Strong odour	
1 Very faint odour	5 Very strong odour	
2 Faint odour	6 Extremely strong odour	

# **APPENDIX 4: DAILY/WEEKLY ODOUR SNIFF TESTING REPORT FORM**

Assessor details			Meteorological details		
Name			Wind speed		
Date			Wind direction		
Start/finish time			Temperature (°C)		
Signature			Cloud cover (%)		
			Pressure (Pa)		
Site activities ongoing at tin	ne of assessment		Precipitation		
Sketch a plan showing whe	re the tests were ta	ken, and potential	odour source(s)		
Sniff test observations					
Location (map reference point)	Intensity (0-6)	Constant or intermittent, persistent?	Receptor sensitivity (High, medium, low)	What does it smell like?	Is source evident? / Other comments



# **GP PLANNING LTD**

Mr Christian Smith DipTP MRTPI MCMI Miss Maureen Darrie BSc (Hons) MRTPI

Registered in England Number 6019666











Registered Office: iCon Innovation Centre, Eastern Way, Daventry, Northamptonshire, NN11 0QB