

Odour Emissions Management Plan

Prepared on Behalf of:

Britaniacrest Recycling Ltd

Site Name:

Little Orchard Farm

Reigate Road

Hookwood

Surrey

RH6 0HJ

Environmental Permit Reference:

BP3390EB

DOCUMENT CONTROL SHEET

Site:	Reigate Road
Project:	Bespoke Permit Variation Application
Title	Odour Emissions Management Plan
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1. Introduction

1.1 Reasons for an Odour Emissions Management Plan

- 1.1.1 The site currently operates under a Bespoke Environmental Permit BP3390EB (A9 Special Waste Transfer Station), which imposes the following condition:

“Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.”

- 1.1.2 The site has been operational since 1994 when the Permit was granted with no complaints received or adverse events reported in relation to dust emissions from the site. Hence the Environment Agency has not found it necessary to require production of an Emissions Management Plan. Nevertheless, the permitted activities are subject to a odour emissions management regime contained within the Environmental Management System reviewed by the Environment Agency during regulatory inspections, as well as having an ISO14001 Management System accreditation.
- 1.1.3 This Odour Emissions Management Plan has been produced in response to support this application, which seeks to vary the existing Bespoke Permit.
- 1.1.4 The application seeks to extend the current permitted boundary, to increase the annual throughput of wastes that can be managed onsite, enable the management of all wastes outside of a building (currently wood & inert management authorised) and to include some additional waste types due to regulatory changes imposed by the Environment Agency.
- 1.1.5 Reference has been made to the following documents:
- *Control and monitor emission of your environment Permit (February 2016) Environment Agency.*
 - *Environment Agency Technical Guidance Note H4-Odour Management.*

1.2 Objectives of this Odour Emissions Management Plan

- 1.2.1 This Odour Emissions Management Plan demonstrates appropriate measures to prevent or minimise the release of Odour emissions from the additional waste related operations for which the Bespoke Permit is being sought such that they do not cause pollution.
- 1.2.2 To achieve these objects, this Odour Emissions Management Plan includes a risk assessment and then identifies the following:
- Controls in place to prevent the generation of Odour;
 - Measures in place to control Odour emissions should they arise;
 - Ongoing monitoring to assess effectiveness of these controls; and
 - Measures to monitor conditions onsite and the locality on a preventative basis.
- 1.2.3 All applicable staff members will be trained on the requirements of this Odour Emissions Management Plan by a Responsible Person by use of toolbox talks that will explain the requirements of the document & what is required of them in the event that an odour is identified with refresher training (i.e., a toolbox talk) completed as required to ensure sufficient understanding of the requirements and everyone will have ready access to this Management Plan.
- 1.2.4 The site is operational Monday to Friday (7:00am-17:00pm) and Saturday (7:00am-12:00pm), with wastes received on a daily basis.
- 1.2.5 This Odour Emissions Management Plan will be stored within the Site Office adjacent to the permitted area.

2. Site Setting

2.1 Location

2.1.1 The operation is located off Reigate Road, with commercial & industrial activities (South-East/East/North) and a number of open fields and woodland surrounding the site (West/North-West/South-West). The nearest residential receptor is over 100 metres from the operation and not within the prevailing wind direction (Southeast). We would note that the site has been operational since 1994 when the original Permit was issued without any complaints relating to the operation. The site is adjacent to a number of open fields, an Ancient Woodland, and Deciduous Woodland (Priority Habitat Inventory) designations, which is to the northwest/southwest/south of the site.

2.2 Designated Environmentally Sensitive Sites

2.2.1 There are no European Designated Sites such as Ramsar, Protection Areas, Biosphere Reserve, Special Areas of Conservations within 1000 metres of the site. However, the site is adjacent to an Ancient Woodland and Deciduous Woodland (Priority Habitat Inventory) designations, which is to the northwest/southwest/south of the site as evidenced in [Figures 1/2](#). Furthermore, the site is not within an AQMA area for the management of PM₁₀ Pollutants, but for NO_x Pollutants, as evidenced in [Figure 3](#).

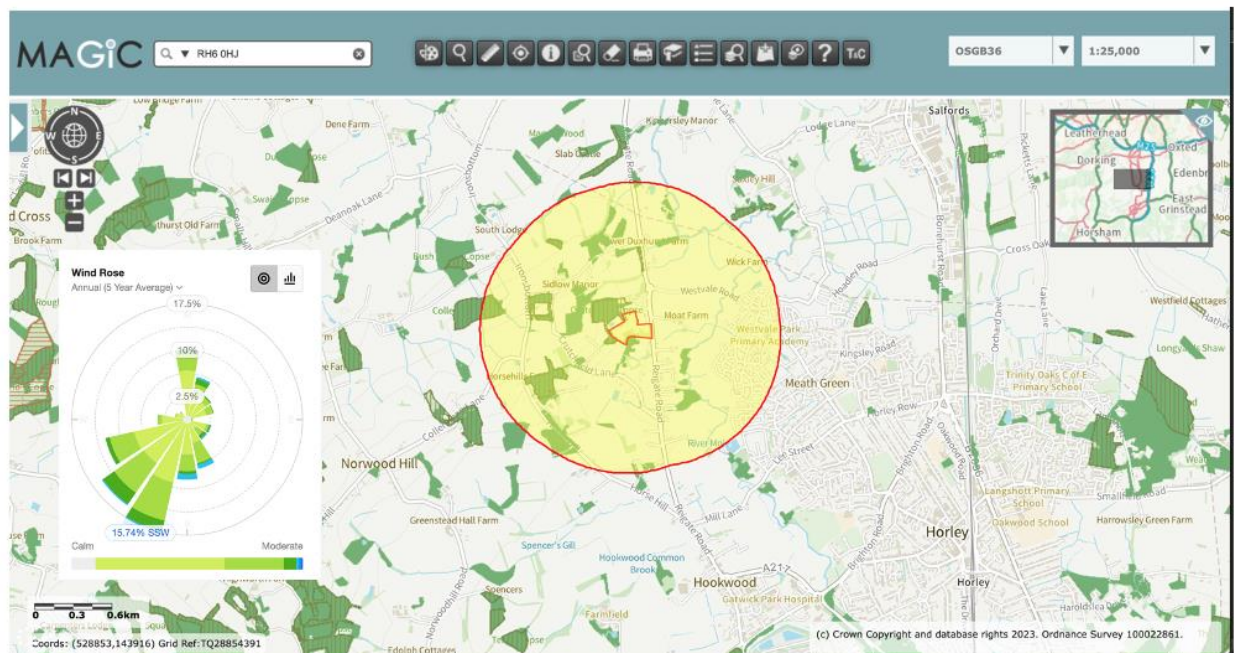


Figure 1: Map Showing Proposed Application Site with Wind Vectors Superimposed.

2.3 Air Quality Management Area

2.3.1 The site is located within an Air Quality Management Area for PM10 & NOx designated pollutants as evidence in [Figure 2](#) below.

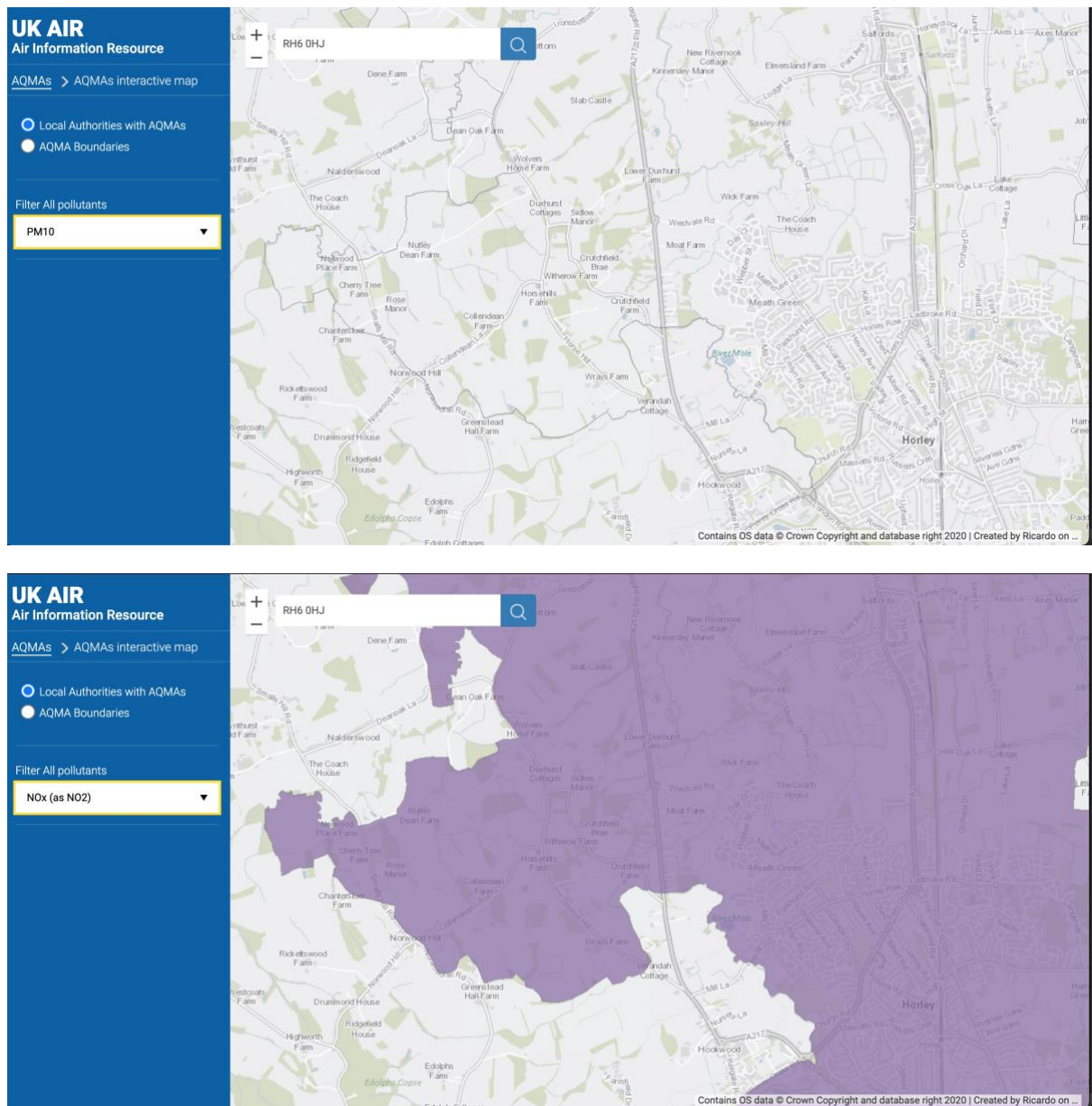


Figure 2: Application Site in Relation to Air Quality Management Designations.

2.3.2 The principal objective is to ensure that odour emissions if they arise are controlled at source and contained within the permitted boundary.

2.4 Wind Vector

2.4.1 The most important climatic parameters governing the generation and dispersal of Odour are:

- Wind speed which can potentially affect Odour entrainment and the distance it may travel; and
- Wind direction which determines the broad transport of emissions and the sector of the compass into which the emissions are dispersed.

2.4.2 Figure 3 below shows the overall wind patterns with the prevailing wind direction to the Northeast as illustrated below. Willy Weather sources its wind information from various weather models produced by the Met Office. The wind rose provides a long-term graphical view of how wind speed and directions are distributed in Hookwood Surrey. In determining the potential primary receptors (as detailed in Section 2.5 those within the North-East and adjacent (not properties owned by the Operator) have been included to factor in any fluctuations of the data that has been reviewed.

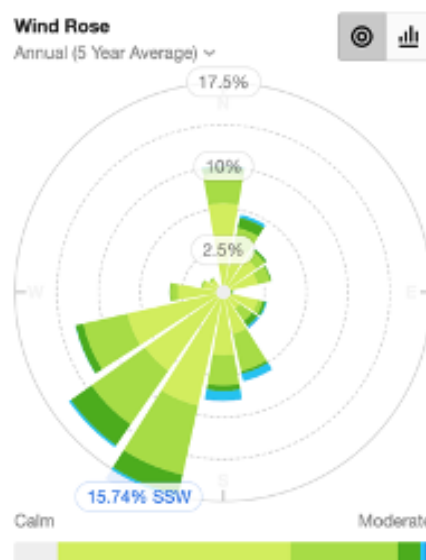


Figure 3: Hookwood Surrey (Overall Data Set 5 Year Average) Wind Vectors.

2.5 Potential Local Receptors

2.5.1 A screening exercise has been undertaken to identify possible receptors in the vicinity of the site. A 1000-metre buffer zone has been applied, as this is stated criterion under the Environment Agency Bespoke Application Guidance.

2.5.2 Possible receptors are indicated in [Figure 4](#) (overleaf) and listed in [Table 1](#) below:

Table 1: Possible Receptors, Distance & Direction from Proposed Operation

Receptor Reference	Receptor Description	Direction From Site	Approximate Distance From Site Boundary (Metres)	Wind Directional Travel Percentage % (Overall Meteorological Office Figures)
1	Crutchfield Copse (Ancient Woodland/Deciduous Woodland Priority Habitat)	Northwest South Southwest	Adjacent	3.30 9.47 4
2	Crutchfield Copse (Ancient Woodland/Deciduous Woodland Priority Habitat)	West Southwest	Adjacent	0.74 4
3	Deciduous Woodland Priority Habitat	South	Adjacent	9.47
4	Infrastructure Reigate Road	East	Adjacent	4.03
5	Residential (Owned by the Operator)	Northwest	Adjacent	3.30
6	Pond (Controlled by Operator)	Northwest	Adjacent	3.30
7	Lower Duxhurst Farm Deciduous Woodland Priority Habitat	North	516	8.15
8	Sidlow Manor	Northwest	454.1	3.30
9	Collendean Copse (Ancient Woodland/Deciduous Woodland Priority Habitat)	Northwest	828.4	3.30
10	Horsehill Farm	Southwest	733	4
11	Westvale Park Primary Academy	East	931.3	4.03
12	Residential	East	817.6	4.03
13	Residential	East	875.7	4.03
14	River Mole	East	448.6	4.03
15	Moat Farm/Zeena's Plant Nursery	East	217.2	4.03
16	Wick Farm	Northeast	860.8	14.20
17	Residential	Southeast	107	1.33
18	Thames Water Utilities	Southeast	991.4	1.33
19	Crutchfield Farm	Southwest	336.5	4
20	Commercial/Industrial	North	98.7	8.15
21	Knox Motors (Ancient Woodland/Deciduous Woodland Priority Habitat)	Northwest	603.4	3.30
22	Commercial/Industrial	South	82.7	9.47
23	Precious Pets Horley	Southwest	704.5	4
24	Commercial/Industrial	Southwest	673	4
25	Commercial/Industrial	Northeast	357.8	14.20
26	Greenacres Kennel	North	803.1	8.15
27	Commercial & industrial	North	935.8	8.15
28	Road Infrastructure (Irons Bottom)	Northwest	640.3	3.30
29	Road Infrastructure (Horsehill)	Southwest	876	4
30	Road Infrastructure (Crutchfield)	Southwest	335	4
31	Wrays Farm	Southwest	967.4	4
32	Wrays Wood (Ancient Woodland)	Southwest	596.2	4
33	Religious Grounds	South	604.4	9.47
34	Witherow Farm	Southwest	365.2	4
35	Deciduous Woodland Priority Habitat	Southeast	258.7	1.33

2.5.3 It is considered that the primary receptors listed below are most likely to be affected by potential Odour emissions generated at the Site. The list reflects those receptors within the predominant wind direction (i.e., east-northeast) and within proximity:

- Crutchfield Copse (Ancient Woodland/Deciduous Woodland Priority Habitat)
(Adjacent Northwest/South/Southwest Reference 1)
- Crutchfield Copse (Ancient Woodland/Deciduous Woodland Priority Habitat)
(Adjacent West/Southwest Reference 2)
- Deciduous Woodland Priority Habitat
(Adjacent South Reference 3)
- Reigate Road (Infrastructure)
(Adjacent East Reference 4)
- Commercial/Industrial Activities
(Distance 98.7 North Reference 20)
- Residential
(Distance 107 metres Southeast Reference 17)

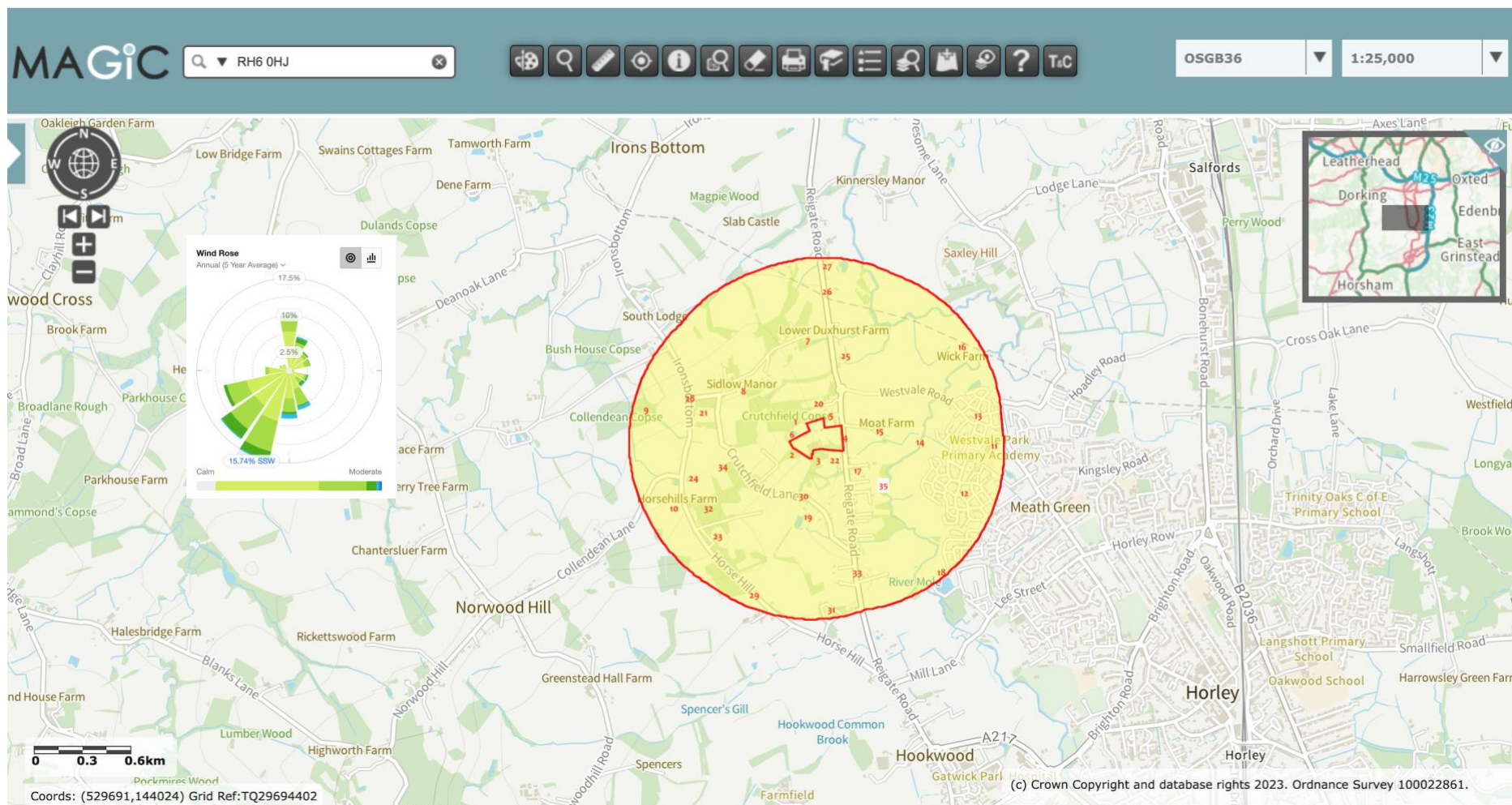


Figure 4: Possible Receptors Identified within 1000m of the Application Site (Magic)

3. Odour Risk Assessment

3.1.1 The Environmental Management System & governing Environmental Permit Conditions will be monitored to ensure ongoing compliance with the Environment Permit. The Environmental Management System (including supporting Documentation) is underpinned by a Risk Assessment, which has identified the following operations as having the potential to give rise to Odour emissions:

1. Delivery of Waste Material
2. Deposit of Waste Material;
3. Processing of Waste Material (Including the Production of Non-Waste Products);
4. Storage of Materials
5. Loading of Materials

3.2 Sources, Pathways, Receptors & Risk Management Measures

Hazard	Source	Pathway	Receptor	Probability of Exposure	Consequence	Magnitude of Risk	Risk Management	Residual Risk
Release of Particulate Matter (Odours)	Odour from Delivery of Wastes	Air Transportation then inhalation	Receptors listed in Table 1 & Primary Receptors Detailed in Paragraph 2.5.3	Low	Low	Medium	<p>Vehicles are sheeted during the transportation of all waste materials to the proposed site.</p> <p>Drivers follow strict pre-acceptance inspections to ensure no malodorous wastes are delivered to site. If the load is judged to be too malodorous the driver will contact the weighbridge office for further instruction on transporting the waste to another waste management facility (if deemed necessary).</p> <p>In the event of Odour generation, follow procedures detailed within Table 6. Odour Management Action Levels escalating as necessary (OEMP Document).</p> <p>Odour Suppression Equipment: Hoses/Mobile Suppression Units /Suppression Cannons</p> <p>Wind conditions will be monitored & Operations may cease until conditions improve.</p>	Low
	Odour from Deposit of Wastes	Air Transportation then	Receptors listed in Table 1 & Primary Receptors	Low	Low	Medium	Wastes are deposited in the Waste Acceptance area (depending on material composition & type), is constantly monitored during the	Low

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		inhalation	Detailed in <u>Paragraph 2.5.3</u>				<p>unloading process.</p> <p>Waste Management areas benefit from numerous buildings (including the main processing building), landscaping bunding and concrete retaining walls (where necessary) as well as suppression equipment that all act as a physical barrier to the transmission of odour.</p> <p>In the event that malodorous wastes are inadvertently accepted, they will be isolated within an enclosed skip and removed from the site within 48 hours of arrival.</p> <p>In the event of Odour generation, follow procedures detailed within <u>Table 6</u>. Odour Management Action Levels escalating as necessary (OEMP Document).</p> <p>Odour Suppression Equipment: Hoses/Mobile Suppression Units /Suppression Cannons</p> <p>Management complete daily spot checks of the Depot, which includes the identification of malodorous wastes.</p> <p>Wind conditions will be monitored & Operations may cease until conditions improve.</p>	
	Odour from Processing of Wastes	Air Transportation then	Receptors listed in <u>Table 1</u> & Primary	Low	Low	Medium	Management complete daily spot checks of the Depot, which includes the identification of malodorous	Low

		inhalation	Receptors Detailed in <u>Paragraph 2.5.3</u>				<p>wastes.</p> <p>Waste Management areas benefit from numerous buildings (including the main processing building), landscaping bunding and concrete retaining walls (where necessary) as well as suppression equipment that all act as a physical barrier to the transmission of odour.</p> <p>In the event that malodorous wastes are identified during the processing operations, they will be isolated within an enclosed skip and removed from the site within 48 hours of arrival.</p> <p>In the event of Odour generation, follow procedures detailed within <u>Table 3</u>. Odour Management Action Levels escalating as necessary (OEMP Document).</p> <p>Odour Suppression Equipment: Hoses/Mobile Suppression Units /Suppression Cannons</p> <p>Wind conditions will be monitored & Operations may cease until conditions improve.</p>	
	Odour from Storage of Waste	Air Transportation then inhalation	Receptors listed in <u>Table 1</u> & Primary Receptors Detailed in <u>Paragraph 2.5.3</u>	Low	Low	Medium	<p>Management complete daily spot checks of the Depot, which includes the identification of malodorous wastes.</p> <p>Waste Management areas benefit from numerous buildings (including</p>	Low

							<p>the main processing building), landscaping bunding and concrete retaining walls (where necessary) as well as suppression equipment that all act as a physical barrier to the transmission of odour.</p> <p>Storage time limits as specified in the submitted Fire Prevention Plan Document.</p> <p>Ongoing monitoring and inspection of wastes stored within the Depot.</p> <p>In the event that malodorous wastes are identified whilst being stored onsite, they will be isolated within an enclosed skip and removed from the site within 48 hours of arrival.</p> <p>In the event of Odour generation, follow procedures detailed within <u>Table 6</u>. Odour Management Action Levels escalating as necessary (OEMP Document).</p> <p>Odour Suppression Equipment: Hoses/Mobile Suppression Units /Suppression Cannons</p> <p>Wind conditions will be monitored & Operations may cease until conditions improve.</p>	
	Odour from Loading of Wastes	Air Transportation then inhalation	Receptors listed in <u>Table 1</u> & Primary Receptors Detailed in	Low	Low	Medium	<p>Only competently trained operatives complete loading operations to ensure they are carried out efficiently and effectively.</p> <p>Waste Management areas benefit</p>	Low

			Paragraph 2.5.3				<p>from numerous buildings (including the main processing building), landscaping bunding and concrete retaining walls (where necessary) as well as suppression equipment that all act as a physical barrier to the transmission of odour.</p> <p>Management complete daily spot checks of the Depot, which includes the identification of malodorous wastes.</p> <p>Vehicles are sheeted during the transportation of all waste materials to the proposed site.</p> <p>Loading of materials conducted within the confines of the site perimeter.</p> <p>In the event of Odour generation, follow procedures detailed within <u>Table 6</u>. Odour Management Action Levels escalating as necessary (OEMP Document).</p> <p>Odour Suppression Equipment: Hoses/Mobile Suppression Units /Suppression Cannons</p> <p>Wind conditions will be monitored & Operations may cease until conditions improve.</p>	
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4. Odour Management & Control

4.1.1 The site operates on the basis that prevention of Odour emissions in the first instance are more effective than implementing Odour emission response actions/procedures such as operation of the suppression equipment (powered misting hoses/misting system). It is primarily controlled by good waste acceptance procedures (i.e., to avoid odorous waste being deposited within the facility) and good operational practice through effective implementation and monitoring of this Odour Emissions Management Plan.

4.2 Potentially Odorous Wastes

4.2.1 Based on the strict waste acceptance procedures implemented and the types of wastes accepted, processed, and stored at the site, the potential for odour emissions to be generated is considered very low. Potentially odour emissions could be generated via waste acceptance and through the degradation of wastes during storage, however it is not anticipated that wastes will be stored for sufficient periods with the correct conditions for degradation to commence.

Table 2: Potentially Odorous Wastes

Waste Description (Potentially Odorous Materials)	Applicable EWC Codes	Odour Risk Potential	Handling/Processing Arrangements	Maximum Quantity at Any Time (Tonnes)	Maximum Storage Time	Maximum Storage Time (In the Event of Odour Identification)
Mixed C&D & C&I/ Mixed Municipal Wastes (Waste Acceptance Area)	17 09 04 20 03 01 19 12 12	Medium/High	Deposited, sorted (manual/mechanical), and shredded externally	1000	1 Month	72 Hours
RDF	19 12 10	Medium/High	Specification material shredded & baled to produce RDF	500	1 Month	72 Hours
Biodegradable Wastes (Food Wastes Potential to Generate Odours)	02 01 03 02 01 07 20 01 08 20 02 01 20 03 02	Medium/High	Accepted, sorted (manual/mechanical), and stored within the building & external storage bays.	500	1 Month	72 Hours
Bulky Wastes	20 03 07	Low	Deposited, sorted, and shredded externally.	500	1 Month	72 Hours
Wood	02 01 03 02 01 07 03 01 05 03 03 01 15 01 03 17 02 01 17 02 04 19 12 07 20 01 38 20 01 37 20 02 01	Medium	Deposited, sorted, and shredded externally.	1000	1 Month	72 Hours
Paper/Cardboard (If Soaked in Water)	03 03 07 03 03 08 15 01 01 19 12 01 20 01 01	Medium/High	Accepted, sorted (manual/mechanical), and stored within the building & external storage bays.	500	1 Month	72 Hours
Plastic	02 01 04 07 02 13 12 01 05	Low	Deposited, sorted, and shredded externally.	500	1 Month	72 Hours

	15 01 02 16 01 19 17 02 03 19 12 04 20 01 39					
Plasterboard (If Soaked in Water)	17 08 02	Medium/High	Accepted, sorted (manual/mechanical), and stored within the building & external storage bays.	500	1 Month	72 Hours
Glass (If Contaminated with Food Wastes)	10 11 03 10 11 11 10 11 12 15 01 07 16 01 20 17 02 02 17 02 04 19 12 05 20 01 02	Medium/High	Accepted, sorted (manual/mechanical), and stored within the building & external storage bays.	500	1 Month	72 Hours
Soil & Hardcore	01 01 01 01 01 02 01 03 06 01 03 09 01 04 08 01 04 09 01 04 11 01 04 12 01 04 13 02 04 01 10 01 24 10 11 12 10 12 08 10 13 14 15 01 07 17 01 01 17 01 02 17 01 03 17 01 07 17 02 02 17 03 02 17 05 04 17 05 08 19 01 19 12 12 05 19 12 09 20 01 02 20 02 02	Medium/Low	Accepted, sorted (manual/mechanical), and stored within the building & external storage areas (inert processing area) Screened and storage of soils and crushing of hardcore into WRAP Compliant Aggregate Products & Soil Produces.	500	3 Months	72 Hours
Metals	01 02 10 02 01 10 12 01 01 12 01 02 12 01 03 12 01 04 15 01 04 16 01 17 16 01 18 17 04 05 17 04 07 19 01 02 19 10 01 19 12 02 19 12 03 20 01 40	Low	Accepted, sorted (manual/mechanical), and stored within the building & external storage areas/containers.	500	3 Months	72 Hours

4.2.2 Odour Intensity Scale

Table 3: Odour Intensity Scale

Score	Intensity
0	No Detectable Odour
1	Very Faint Odour
2	Faint Odour
3	Distinct Odour
4	Strong Odour
5	Very Strong Odour
6	Extremely Strong Odour

4.2.3 Hedonic Tone Scale

Table 4: Hedonic Tone Scale

Score	Intensity
4	Very Pleasant
3	Pleasant
2	Moderately Pleasant
1	Mildly Pleasant
0	No Odour/Neutral
-1	Mildly Unpleasant
-2	Moderately Unpleasant
-3	Unpleasant
-4	Very Unpleasant

4.3 Waste Acceptance Arrangements

- 4.3.1 Wastes are delivered to the site consistency during operational hours (e.g., hourly), which are delivered in skips, roll on roll off bins, caged vans, and large collection vehicles.
- 4.3.2 The site will implement strict waste acceptance procedures, which will ensure that no odorous wastes are delivered to the facility. Driver's will inspect every load prior to collection and will notify the Site Office in the event of potentially odorous load being identified. The Site Office will then confirm what the Driver should do and if the load is going to be completely rejected or if the wastes will be deposited at another waste management facility. The Site Office will liaise with the Driver and Customer regarding the agreed arrangements.
- 4.3.3 Business terms and conditions will be clearly stated before any skip/container is delivered to a customer's site and will be clearly stated to any third-party companies that deposit wastes within the proposed site.
- 4.3.4 All non-hazardous wastes (i.e., potentially odorous wastes) are deposited within the Waste Acceptance Area. If odorous wastes are identified within incoming wastes, it will be identified, isolated, and removed within 72 hours of isolation.
- 4.3.5 In the event of a third-party customer delivering wastes to the facility it will be on the discretion of Senior Management if the wastes will be rejected immediately (i.e., reloading will take place) or if the wastes will be isolated and removed within 72 hours.

4.3.6 In the event of odorous emissions being identified the suppression equipment (locations as shown in Appendix DEMPE) will be activated to control emissions levels whilst the isolation of the wastes takes place and if required to control emissions pending the removal of the material.

4.4 Processing

4.4.1 The building is not enclosed; therefore, no air ventilation systems are present.

4.4.2 It is not anticipated that the mechanical processing of wastes will result in odour emissions being generated from the operation.

4.4.3 In the event of odorous emissions being identified the suppression equipment (locations as shown in Appendix DEMPE) will be activated to control emissions levels whilst the isolation of the wastes takes place and if required to control emissions pending the removal of the material.

4.4.4 If necessary, operations giving rise to odour will cease until the material has been isolated and conditions improve (i.e., the intensity has reduced).

4.5 Material Storage

4.5.1 Materials are removed daily in sheeted vehicles, ensuring a steady turnover, and avoiding the build-up of material.

4.5.2 First In First Out Procedure:

- Operatives will deposit all 'new' incoming wastes at the front of any accumulation.
- Operatives must load all collection vehicles with the oldest materials first (accumulations at rear of bay), therefore materials at the back of the bay will be loaded in the first instance (i.e., a first in first out policy);
- Skips/Containers once full are removed from site, with no residual materials remaining once they have been removed, which will ensure no older materials are left onsite for a prolonged period.
- Operatives will inspect designated bays/receptacles that have been emptied prior to commencing refilling (i.e., visual inspections).

4.6 Housekeeping Arrangements

- 4.6.1 Operatives adopt good housekeeping practices and will clean the operations areas daily via the handheld brooms and sweeping completed by mechanical equipment, which will ensure the surfaces are clean/tidy, with all waste materials located within their piles/locations.
- 4.6.2 Operatives conduct daily visual inspections of the public highway, the site access road and the sites internal surfaces and surfaces are cleaned as required (Public Highway immediately and internally as soon as possible, but by the end of the working day).
- 4.6.3 The concreted area is a completely sealed surface and has been laid to fall so all surface water run-off will be directed to the sealed catchment tank.

Table 5: Cleaning Arrangements

Cleaning Arrangements	Frequency	Responsibility	Supervision
Housekeeping (Road Sweeper)	Daily	Operatives	Yard Manager
Concrete Surfacing	Daily	Operatives	Yard Manager
Storage Bays/Receptacles	Monthly	Operatives	Yard Manager

5. Odour Suppression Equipment

5.1.1 The procedure for deploying the Odour suppression system is as follows:

Proactive

1. **Check site conditions for Odour potential risk (hourly inspections by onsite operatives as a minimum);**
2. When preparing to accept deliveries, moving, or loading materials ensure the suppression equipment is ready for deploy if required (i.e., identification of an offensive smell); and
3. Be prepared to suspend operations giving rise to excessive Odour, isolate and contain wastes within an enclosed skip & remove within 24-48 hours.

Reactive

1. **In the event of Odour emissions being amber or red (as detailed within Table 2) enact the following procedures;**
2. Deploy Odour suppression equipment, isolate and contain wastes within a enclosed skip;
3. Notify the Site Office that odorous material must be removed from the site within 24-48 hours;
4. Record the incident on a Odour Assessment Form in (Appendix OEMPB), the file for which is located within the site office; and
5. Report incident to the Management or Supervisor for further investigation.

Table 6: Odour Management Action Levels

Action Level	Operation Conditions	Onsite Procedures
	Normal Operating Conditions	Ongoing monitoring by all site personnel for potential odorous smells/emissions (Intensity >2). Hourly inspections undertaken by Operatives and on-going monitoring by Senior Management. Suppression Equipment ready for deployment.
	Odour emissions arising from within the operation	Odour (i.e., subjective smell detected by onsite personnel) Intensity >2 identified; suppression equipment deployed, contain odorous wastes within enclosed skip pending removal. Incident recorded within Odour Assessment Form <u>Appendix OEMPB</u> .
	Odour emissions escaping the site boundary.	Odour (i.e., Intensity >2 identified) suppression equipment deployed, contain odorous wastes within enclosed skip pending removal. Incident recorded within Odour Assessment Form <u>Appendix OEMPB</u> .

6. Monitoring

6.1 General

6.1.1 A thorough monitoring schedule will be implemented to assess the effectiveness of the controls put in place to prevent the escape of Odour emissions causing an adverse impact.

6.1.2 In addition, the following are also included in the monitoring schedule:

- Process controls;
- Odour releases;
- Transport through the atmosphere; and
- Impacts

6.1.3 Furthermore, the following are also included in the monitoring schedule:

- Compliant response;
- Site, pathway, and community monitoring undertaken by official bodies; and
- Detailed record keeping and reporting.

6.1.4 Monitoring Point Descriptions are detailed below:

Table 7: Odour Monitoring Points

Ref	Receptor Type	Address	Approximate Distance From Site Boundary
R1	Operation	Processing/Storage Area	N/A
R2	Operation	Processing/Storage Area	N/A
R3	Operation	Processing/Storage Area	N/A
R4	Residential Area	Reigate Road	107
R5	Commercial/Industrial Activities	Moat Farm	217.2
R6	Crutchfield Copse	Woodland Boundary	N/A
R7	Crutchfield Copse	Woodland Boundary	N/A
R8	Infrastructure Road	Reigate Road	100

6.1.5 Routine daily subjective Odour (factory) assessments are conducted at locations within the site boundary as shown in ([Appendix OEMPD](#)). The assessor will walk slowly along the site boundary and breathe normally. The assessor will stand still at the identified monitoring locations and inhale deeply facing upwind where possible.

6.1.6 Specific attention to the following points of detail shall be noted:

- The assessor should not smoke or consume strongly flavoured food or drink for at least an hour before the assessment is carried out;

- The consumption of confectionary or soft drinks should be avoided immediately before the during the assessment.
- Perfumes/deodorants or any other strong scented toiletries should not be applied immediately before or during and assessment.
- If the monitoring personnel has a cold or sore throat that inhibits the ability to detect odours, then alternative personnel will be utilised. If this is not possible then the assessor's condition should be noted in the assessment report and site diary.

6.1.7 The procedure for undertaking an Odour assessment is detailed in Appendix OEMPA.

6.1.8 If odour is detected in this manner, then sensitivity should be recorded as 2 (faint). If odour is detected while walking, the intensity should be recorded as at least 3. Criteria for assessing odours detected are detailed below.

Intensity

- No detectable odour
- Very faint odour
- Faint odour
- Distinct odour
- Strong odour
- Very strong odour
- Extremely strong odour

Extent (assuming odour detectable, if not then o)

- Local and impersitent (only detected during brief periods when wind drops or blows)
- Impersitent as above but detected away from site boundary.
- Persistent but fairly localised
- Persistent and pervasive up to 50m from site boundary
- Persistent and widespread (odour detected >50m from site boundary)

Sensitivity (assuming odour detectable, if not then o)

- Remote (no housing, commercial/industrial premises, or public area within 500m)
- Low sensitivity (no housing etc. within 100m of area affected by odour)
- Moderate sensitivity (housing etc. within 100m of area affected by odour)
- High sensitivity (housing etc. within area affected by odour)
- Extra sensitive (complaints arising from residents within area affected by odour)

6.1.9 In the event of Odour emissions being identified beyond the permitted boundary during the operational day, a Responsible Person will go to each of the identified monitoring locations identified within Appendix OEMPD.

6.1.10 On reporting results, additional observations as detailed in the odour assessment form (Appendix OEMPB) are recorded. Abnormal site operating conditions at the time of the survey e.g., maintenance to process equipment will also be recorded.

The classification system for odour parameters is detailed below and attached to the Odour Assessment Report (see (Appendix OEMPA)).

- 6.1.11 If an Odour assessment indicates that Odour present has arisen from the site recently, an assessment of the site processes will be carried out to trace the source of the identified Odour so that appropriate corrective action can be taken. This will include deployment of the Odour suppression system if odour is still present.
- 6.1.12 This feedback loop will ensure that corrective and preventative measures are in place if such conditions arise in the future.
- 6.1.13 In the event of on-site emissions sources being identified, or as a result of any assessments made by the Environment Agency and/or Local Authority Environmental Health Officers, the site management will be informed, and the appropriate corrective and preventative measures taken.

7. Complaints

- 7.1.1 The intention will be to ensure all complaints are responded to within 72 hours of being received, depending on when the complaint is received. A Complaint Log Form ([Appendix OEMPC](#)) will be completed as soon as the complaint is received and actioned as required.
- 7.1.2 The Operator will engage with the wider community as often as possible in order to alleviate against negative site perception. The Company Directors will ensure that the publicly accessible website is maintained and contains all the necessary contact information so members of the public can contact the site. Furthermore, a noticeboard will be erected outside of the site that will provide contact information to anyone that requires it, which will include an emergency contact for out of hours concerns/issues.
- 7.1.3 In order that the veracity of any Odour complaints can be substantiated it is imperative that the site is immediately informed either by the complainant themselves or by the Environment Agency or Local Authority. The site telephone number is clearly displayed at the site entrance and residents are encouraged to immediately contact the site and/or Environment Agency in the event of any off-site Odour that might be attributable to site operations being detected.
- On receipt of an Odour complaint, a Responsible Person will visit the location of reported event to determine Odour presence/absence, Odour characteristics and intensity. The time of the complaint will be correlated with on-site activities – the site diary will be checked for ‘abnormal’ site operations/conditions at the time of the complaint.
- 7.1.4 The details will be recorded on the Complaint Log Form ([Appendix OEMPC](#)).
- 7.1.5 The duration of the Odour release to which a substantiated complaint relates will be recorded in the Site Diary and Complaint Log Form ([Appendix OEMPC](#)).
- 7.1.6 Site management will be advised, and details of the Odour complaint recorded on the Log Forms ([Appendix OEMPC](#)) in addition to complaint validation results and any corrective and preventative actions taken in response to the complaint.
- 7.1.7 In the event of an odour complaint or odour being identified beyond the site boundary the Environment Agency will be notified (i.e., the local officer will be contacted via email in the first instance).

8. Contingency Plans

Table 8: Contingency Measures

Eventuality	Procedures/Measures
Contingency Planning in the event of a fire	<p><u>Measures could include: -</u></p> <ol style="list-style-type: none"> 1. The site will cease all operations and will not accept any further waste material (contact appropriate customers/contractors if necessary) until FRS arrives. 2. Employees will be advised of the situation. 3. Enact fire procedures as detailed within FPP. 4. The site will only reopen once FRS has advised it is safe to do so. 5. Fire damaged waste will be processed as appropriate. If this is not possible then it will be stored in the isolation facility and then removed from site.
Flooding	<p><u>Measures could include: -</u></p> <ol style="list-style-type: none"> 1. The affected area will be isolated. 2. The site will cease all operations and will not accept any further waste material (contact appropriate customers/contractors if necessary) 3. Employees will be advised of the situation. 4. Contact wastewater Management Company to remove water accumulated on the impermeable site surfacing.
Absences	<p><u>Measures may include: -</u></p> <ol style="list-style-type: none"> 1. Hiring in temporary workers to ensure sufficient staff coverage of operations onsite. 2. Temporality require Drivers to complete onsite tasks/jobs as well as completing day-to-day collections/deliveries. 3. Suspend or delay collection of containers/skips to enable staff to be distributed to essential area and prevent the build-up of wastes if sufficient staff members aren't present
Accident	<p><u>Measures may include: -</u></p> <ol style="list-style-type: none"> 1. The affected area will be isolated and an appointed 'first aider' will be contacted to attend to any injured party. 2. If necessary, the emergency services will be contacted. 3. A Responsible Person will decide on a case-by-case basis if cessation of operations around the affected area and reception of waste is necessary until the appropriate emergency services have arrived. 4. A Responsible Person will complete an Accident Investigation Report.
Supply Chain Failure (Including Transportation Shortages)	<p><u>Measures could include: -</u></p> <ol style="list-style-type: none"> 1. Confirm current storage times for materials accumulated onsite. 2. Increase monitoring of material stockpiles onsite. 3. Contact outlets for the specified stream and arrange transportation. 4. If the outlet is not receiving the specified waste stream, contact other outlets. 5. Conduct investigations into potential alternative outlets if potential outlets are not accepting specified streams. 6. Require cessation of deliveries until further notice and potential transportation to alternative sites.
Breakdowns (Mechanical Equipment)	<p><u>Measures could include: -</u></p> <ol style="list-style-type: none"> 1. Immediate isolation of the affected machinery. 2. External contractors notified to complete repairs. 3. Hire in relief equipment in interim if needed. 4. Reschedule material despatch to align with scheduled repairs and or relief machinery availability. 5. Suspend or delay collection of containers/skips to enable equipment to be up and running
Queuing Trucks & Lorries	<p><u>Measures could include: -</u></p> <ol style="list-style-type: none"> 1. Banksman/Senior Management to take immediate control of the situation to manage traffic arrangements; 2. Vehicles would be directed to park within the wider site (external yard) and directed as required.

9. Odour Emissions Management Plan Review

9.1.1 This plan will be reviewed on a regular (annual or as frequently as required) basis as part of the operation of the Site Environmental Management System. This will include:

- Review of any complaints received, and remedial action taken.
- Review of reported incidents of Odour release to establish effectiveness of mitigation measures.
- Recommendation on additional measures to be implemented as appropriate.

Appendix OEMPA: Odour Assessment Procedure

Routine assessments can be used to build up a picture of the impact odour that might emanate from the site could have on the surrounding environment over time. You can develop ‘worst case’ scenarios by doing assessments during adverse weather conditions or during particularly odorous cycles of an operation. Ideally, you should use the same methodology to follow up complaints.

Please note:

- Staff normally exposed to the odours may not be able to detect or reasonably judge the intensity of odours off-site. You might be better off using office staff or people who have not recently been working on the site to do this.
- Anyone who has a cold, sinusitis, or a sore throat, is likely to underestimate the odours.
- To improve (or to check) data quality, you can get two people to do the test independently at the same time.
- Those doing the assessment should avoid smoking, strong food, or drinks, including coffee, for at least half an hour beforehand. They should also avoid strongly scented toiletries and deodorisers in the vehicle used during the assessment.

Where you test will depend on:

- whether you are responding to a complaint;
- whether you are checking your state of compliance at sensitive receptors;
- whether you are trying to establish the source of an odour;
- wind direction.

The assessment will involve someone walking along a route around the site perimeter checking at the identified monitoring points ([Appendix OMP D](#)).

Also keep a note of any activities beyond the site boundary that could be the source of the odour, contribute to the odour, or be a confounding factor.

Appendix OEMPB: Odour Assessment Form

Odour Assessment Form										
Start Time Of Check		AM		PM	Finish Time		AM		PM	
Duration (Of Check)										
Location Of Check If Not On Site										
Weather Conditions	Dry		Rain		Fog		Snow		Other	
Temperature	Hot		Very Warm		Warm		Mild		Cold	
Wind Strength	None		Light		Steady		Gusting		Strong	
Wind Direction From	North		NE		E		SE			
	S		SW		W		NW			
Intensity	0 No Odour present	1 Very Faint Odour	2 Faint Odour	3 Distinct Odour	4 Strong Odour	5 Very Strong Odour	6 Extremely Strong odour			
Odour Detection	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Point 7			
Intensity (Using Above Scale)										
How Far Was It Travelling										
Is The Source Evident?										
If Yes-Name It										
Any Other Comments Or Observations										

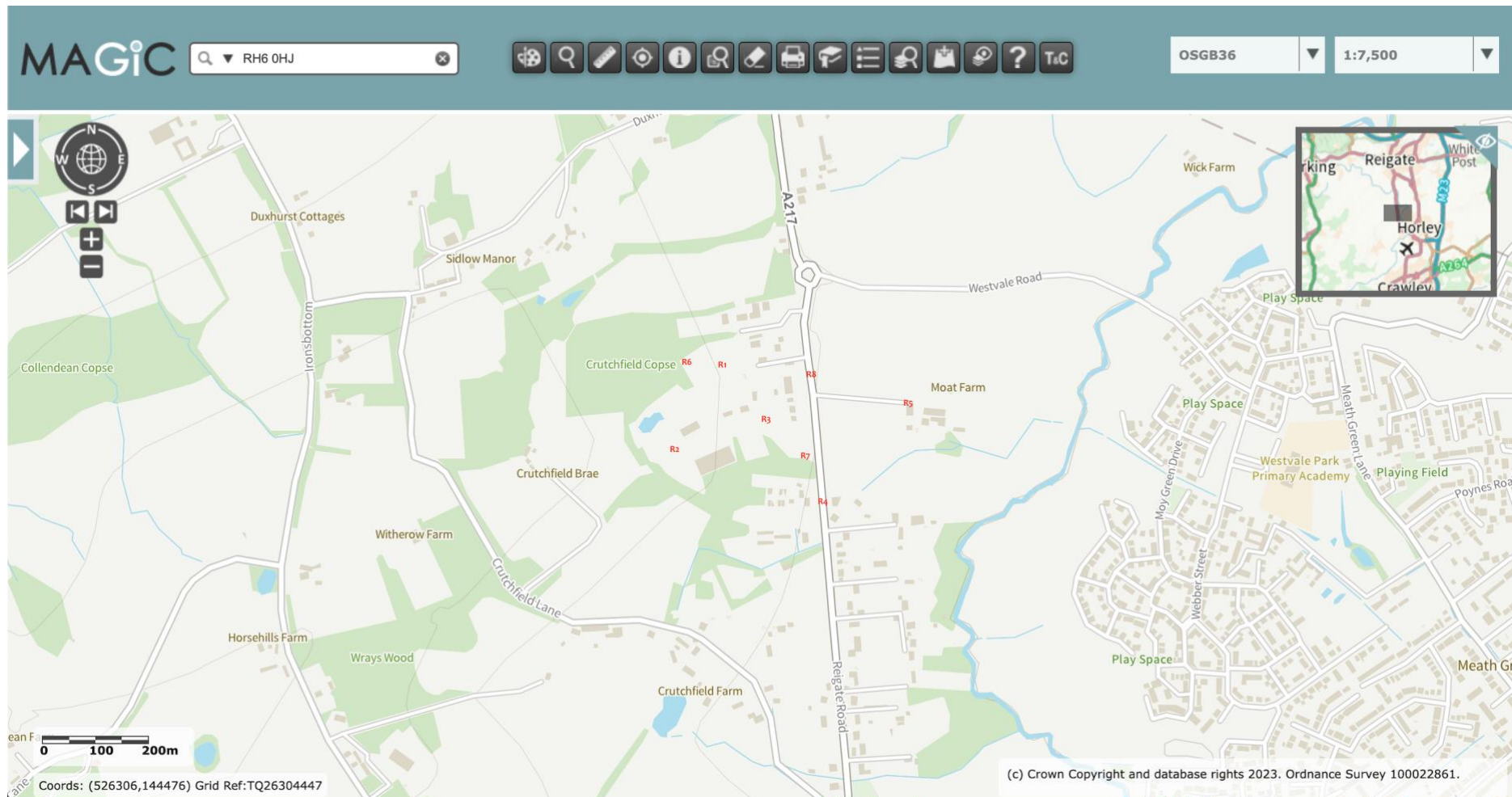
Appendix OEMPC: Odour Complaint Form

ODOUR COMPLAINT REPORT FORM		
Time and date of complaint:	Name and address of complainant:	
Telephone number of complainant:		
Date of odour:		
Time of odour:		
Location of odour, if not at above address:		
Weather conditions (i.e., dry, rain, fog, snow):		
Temperature (very warm, warm, mild, cold or degrees if known):		
Wind strength (none, light, steady, strong, gusting):		
Wind direction (eg from NE):		
Complainant's description of odour:		
o What does it smell like?		
o Intensity (see below):		
o Duration (time):		
o Constant or intermittent in this period:		
o Does the complainant have any other comments about the odour?		
Are there any other complaints relating to the installation, or to that location? (either previously or relating to the same exposure):		
Any other relevant information:		
Do you accept that odour likely to be from your activities?		
What was happening on site at the time the odour occurred?		
Operating conditions at time the odour occurred (eg flow rate, pressure at inlet and pressure at outlet):		
Actions taken:		
Form completed by:	Date	Signed

Intensity

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

Appendix OEMPD: Monitoring Point Locations



Site: Reigate Road

Project: Bespoke Permit Variation Application

Document Title: Odour Emissions Management System v1.0 22.07.23

Appendix OEMPE: Odour Suppression Equipment Locations

