ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES LAND AND PROPERTY MINING AND MINERAL PROCESSING MINERAL ESTATES WASTE RESOURCE MANAGEMENT

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VALENCIA WASTE MANAGEMENT LTD

FOXHALL LANDFILL, SUFFOLK - APPLICATION TO VARY PERMIT NUMBER EPR/BW2943IG

ODOUR MANAGEMENT PLAN

OCTOBER 2023





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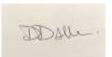
ODOUR MANAGEMENT PLAN

OCTOBER 2023

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APPENDICES

Appendix 1 Odour Survey Log Sheets

DRAWINGS	TITLE	SCALE
FOX-MRF001	Materials Recycling Facility Layout	1:500 @ A3
ST20399-002	Foxhall MRF Receptor Plan	1:10,000 @ A3

Document Control

Issue Date	Version	Prepared By	Key Changes
September 2023	1	DDA (Wardell Armstrong)	Original



1 INTRODUCTION

- 1.1 General
- 1.1.1 Wardell Armstrong have been instructed to prepare an application to vary the permit for Foxhall Landfill near Brightwell, Suffolk. The site is operated by Valencia Waste Management Ltd (Valencia) under permit number EPR/BW2943IG/V004.
- 1.1.2 This Odour Management Plan has been prepared as part of the application and relates to operation of the MRF.
- 1.1.3 This document outlines the methods by which Valencia will systematically assess, reduce and prevent potentially odorous emissions form Foxhall Material Recycling Facility. It provides the explicit list of 'appropriate measures' required for effective odour management and control, and serves to aid the decision making process on the choice of controls, general site design and operational practice in line with current industry best practice. The Odour Management Plan (OMP) is a working document with the specific aim of ensuring that:
 - all potential odour sources are identified;
 - odour impact is considered as part of routine inspections;
 - odour is primarily controlled at source by good operational practices, the correct use and maintenance of plant, and operator training;
 - all appropriate measures are taken to prevent, or where that is not reasonably practicable, to minimise odorous emissions to air from the installation that may be considered offensive at locations outside of the installation boundary;
 - people outside of the site are not exposed to levels of odour that would result in annoyance; the risk of unplanned odour releasing incidents or accidents that would result in annoyance is minimised;
 - the risk of unplanned odour releasing incidents or accidents that would result in annoyance is minimised; and
 - site developments take into account odour potential and potential impacts from work carried out.



- 1.1.4 This OMP has been prepared in accordance with Environment Agency guidance:
 'Control and Monitor your Emissions¹' and 'H4 Odour Management How to Comply with your Environmental Permit²'.
- 1.1.5 This document should be read in conjunction with internal Valencia site management documentation, including Valencia Policies and Procedures. This plan will be used in conjunction with other documents that form part of Valencia's Environmental Management System to ensure that the new activities are managed in a way that prevents or at least minimises pollution.

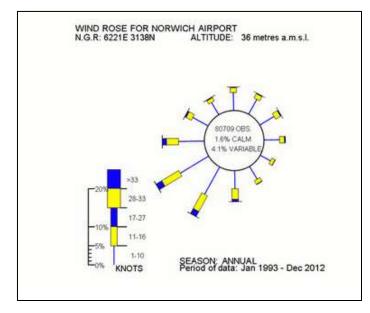
¹ <u>https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#odour</u> ² <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/296737/geho0411btqm-e-e.pdf</u>



2 SITE SETTING AND SENSITIVE RECEPTORS

2.1 Site Setting

- 2.1.1 The Material Recycling Facility (MRF) is located within Foxhall landfill permit boundary. The National Grid Reference for the Site is TM 24547 43865.
- 2.1.2 The MRF is located to the east of Foxhall landfill, and is accessible via a track off Foxhall Road to the north of the site.
- 2.1.3 The MRF is situated in open countryside 8km to the east of Ipswich Town Centre. The Site is bounded to the southeast by the A12 dual carriage way and to the north by Foxhall Road. To the western side of the site is woodland and to the south of the Site the land slopes down into the Mill River Valley.
- 2.1.4 Airfield climate data available from the Met Office³ indicates the predominant wind direction at the closest airfield, Norwich Airport, is from the southwest, as shown on the wind rose below.



Met Office Website⁴ Wind Rose for Norwich Airport based on data from January 1993 to December 2012

³ <u>Airfield Climate Statistics - Met Office</u>

⁴ Airfield Climate Statistics - Met Office



2.2 Sensitive Receptors

2.2.1 The sensitive receptors within 2km of the MRF are listed in Table 3.1 below. Drawing ST20399-002 also shows receptors within 1km of the MRF.

Table 2.1: Sensitive Receptors within 2km of the Site							
Receptor	Receptor Type	Distance/Direction					
Brightwell Storage/ Brightwell Corner Agricultural Store	Commercial	175m, east					
Brightwell Hill Plantation	Environmental	260m, southeast					
Deciduous woodland	Protected species	260m, southeast					
Pond	Environmental	370m, south					
Residential property	Residential	370m, northeast					
St John The Baptist's Church	Leisure	470m, southeast					
Openreach Telecommunications school	School/Commercial	512m north					
Mill River	Environmental	540m, south					
Sheep Drift Farm House	Residential	610m, northeast					
Martlesham Heath Residential area	Residential	610m, north					
Martlesham Heath Residential area	Residential	610m, north					
Foxhall Recycling Centre	Commercial	630m, west					
Street Farm Cottage	Residential	660m, southwest					
Dukes' Hill Wood	Environmental	700m, west					
Ipswich Packaging Services	Commercial	700m, north east					
A2-M Ltd. Fence contractor	Commercial	725m, north east					



Table 2.1: Sensitive Receptors within 2km of the Site							
Receptor	Receptor Type	Distance/Direction					
Tillio Race Prep Ltd, Car body shop	Commercial	750m northeast					
Sheep Drift Cottage	Residential	860m, northeast					
Lewis Cottage	Residential	940m, southwest					
Ipswich Heaths SSSI	Protected habitat	950m, northwest					
The Stables Coffee Shop and Sandwich Bar	Commercial	960m, north east					
Birchwood Primary School	School	1.3km, north					
Nursery cottages	Residential	1.3km, northwest					
Hall cottage	Residential	1.4km, west					
Playing field	Leisure	1.5km, northwest					
Foxhall Hall	Residential	1.5km, west					
Foxhall Court	Care home	1.7km, northwest					
Newbourn Springs SSSI	Protected habitat	1.7km, east					
Waldringfield Pout SSSI	Protected habitat	1.8km, northeast					

- 2.2.2 The closest residential receptor is a property which lies 370m to the northeast. Beyond that lies Sheep Drift Farm and Sheep Drift Cottage, some 610m from the Site. The closest commercial and industrial receptor is Brightwell Corner Agricultural Store and Storage Barns, located 160m to the east of the Site.
- 2.2.3 The closest protected habitat is Ipswich Heaths SSSI, the closes point is approximately950m northwest from the Site.
- 2.2.4 The majority of sensitive receptors are located more than 200m away, and it is likely that odour would dissipate before reaching them and is not expected to cause a nuisance.



2.2.5 Nevertheless, controls measures will be in place to ensure that any potential odour issues are prevented and minimised as far as possible.



3 ON SITE SOURCES OF ODOUR AND CONTROL MEASURES

3.1 Facility Layout

- 3.1.1 The MRF layout is shown on drawing FOX-MRF001 Material Recycling Facility Layout.
- 3.1.2 The MRF building is steel clad with an impermeable base. The walls will be constructed with block work concrete and offer containment of emissions. The building footprint is rectangular measuring 30m x 38m, and this has an approximate floor area of 1,140m².
- 3.1.3 The MRF will have two vehicle entrances and exits which will be fitted with fast acting roller shutter doors and maintained in accordance with the manufacturer's instructions. Manual operation of the roller doors will be possible in the case of power failure to ensure containment of odours, dust and noise inside the building.
- 3.2 Process Description
- 3.2.1 The operation of the MRF will serve the receipt of mixed household, industrial and commercial wastes which will be sorted to separate wood and metals for recovery. Some materials such as bricks, stones and glass may be recovered for use as landfill cover or road maintenance. Residual waste will be placed in the landfill for disposal.
- 3.2.2 The sorting of wastes will be via a picking line which is located within the MRF building. Separated wastes will be stored in dedicated bays.
- 3.2.3 The annual throughput of the MRF will be no more than 100,000 tonnes per year.
- 3.3 Waste Transfer Odour Controls
- 3.3.1 In line with current industry best practice, the odour controls set out in the sections below will be used as the 'appropriate measures' where possible to prevent and minimise odour.
- 3.3.2 Site Management will have responsibility for ensuring that potentially odorous emissions arising from the MRF are minimised. Adequate staffing levels will be maintained at all times to ensure the effective operation of the MRF.
- 3.4 Identification of Potential Odour Sources
- 3.4.1 The waste management activity undertaken involves the short term, temporary storage and sorting of waste delivered into the MRF.
- 3.4.2 Foxhall Landfill operates in accordance with a separate Odour Management Plan which remains unchanged.



- 3.4.3 Under 'normal' operating conditions, municipal solid waste is considered to have a moderate odour potential. Odour potential may be affected by the age of the waste received.
- 3.4.4 Onward transfer of waste will be on a first in, first out basis and within 72 hours of arrival at the site. Waste in the MRF will be kept to a minimum at any one time. Waste storage bays will be entirely emptied of waste during collections, to ensure that old waste is not left within the facility.
- 3.4.5 In addition to the potential sources specified above, there are also potential offsite sources of odour. These include emissions from the adjacent waste management activities carried out at Foxhall Recycling Centre, which is operated by Suffolk County Council and located approximately 630m to the west from the MRF. The Recycling Centre is located at the entrance to the Site, just off Foxhall Road.
- 3.4.6 There is also potential for odour emissions from agricultural activities in the surrounding area, for example, land spreading.
- 3.5 Containment of Activities
- 3.5.1 The MRF activities are carried out inside of the MRF building.
- 3.5.2 Vehicles arriving to the MRF will be enclosed as far as possible. Waste is unloaded from delivery vehicles and loaded into articulated vehicle trailers within the enclosed MRF building. The period of time between unloading and loading of wastes will be minimised wherever possible.
- 3.6 Odour Management Sprays
- 3.6.1 Odour management sprays are not used at Foxhall MRF. The requirement to use odour neutralising agents around sensitive areas of the Site or during specific activities remains subject to ongoing review by the Site Management Team.
- 3.7 Waste Reception and Storage
- 3.7.1 All waste received at the site is initially assessed by the weighbridge operator to ensure it complies with the waste transfer note description and the permitted waste types for the facility. Any unauthorised waste that has not been unloaded will be refused access to the site. Further details of waste acceptance procedures are contained within Valencia's waste acceptance procedure.



- 3.7.2 Most waste is transported to the MRF in enclosed waste delivery vehicles. Waste shall be discharged from the delivery vehicle directly onto the floor within the MRF building and consolidated by mobile plant after visual inspection.
- 3.7.3 Most incoming waste will be from commercial and industrial sources. Waste types received at the site should not exhibit significant malodourous properties under normal operating conditions.
- 3.7.4 Where it is necessary to receive potentially odorous materials at the site (such as old/wet waste on an infrequent basis) the waste will be loaded onto the next available vehicle, ensuring that odorous waste is sent for recovery or disposal promptly and thus removing the potential for an odorous emission.
- 3.7.5 Normal storage at the MRF will be around 350 tonnes.
- 3.8 Removal of Waste from Site
- 3.8.1 Onward transfer of waste will be on a first in, first out basis controlled by efficient use of the space within the MRF and the sequential acceptance of waste into specific bays/storage areas. Waste will be rotated and the oldest waste will be removed first and the bays will be emptied entirely in rotation to ensure that no residual waste remains in the bays. Once an economically viable load has built up, waste will be removed from site.
- 3.8.2 Waste transport vehicles removing the waste from the site will be loaded and sheeted within the enclosed MRF to create containment of the waste prior to leaving the MRF building. Waste movements between the MRF and landfill will be on dumpers which, containing low odour potential non-combustible waste, will be unsheeted.
- 3.9 Planned Temporary Odorous Activities
- 3.9.1 If it is necessary to undertake planned temporary actions that have an associated high risk of significant off-site odour (e.g. removal of odorous unauthorised waste from site), site management will contact the Environment Agency and any high risk potential receptors prior to such actions commence to advise them of:
 - the operation being undertaken;
 - the reason(s) for doing so;
 - planned additional odour mitigation measures;
 - timescales for completion.



- 3.9.2 Consideration will be given to the prevailing weather conditions when undertaking such activities in order to minimise any potential off-site odour impact.
- 3.9.3 'Unplanned' temporary odorous activities, for example in the event of a site emergency, will be addressed immediately in accordance with the Action Plan set out in Section 5 below.
- 3.10 Plant and Equipment
- 3.10.1 The site management will ensure that sufficient plant and equipment is maintained at the facility to adequately handle all delivered waste in an efficient and, wherever possible, odour free manner.
- 3.10.2 All plant and equipment shall be maintained in good working order and in accordance with the supplier's or manufacturer's recommendations. Plant operators shall be responsible for daily and weekly vehicle checks of their respective machines. Any defects shall be reported to the site management promptly and rectified as soon as possible. Records will be retained on the operator maintenance and defect sheets.
- 3.11 Surface Water and Leachate Management
- 3.11.1 The MRF building will include impermeable flooring draining to a sealed drainage system. Any potential process water generated within the MRF building is collected by the building's impermeable surface and contained within the sealed sump within the MRF, although very little limited process water or leachate is expected.
- 3.11.2 The sump will be emptied as necessary, that is when it is approaching full or where it has been identified as a source of odour.
- 3.12 Housekeeping
- 3.12.1 Site roads, the yard and the MRF floor will be swept at regular intervals to prevent the accumulation of dusty or muddy material. General housekeeping will be undertaken daily and checks will be carried out to ensure smooth and efficient running of the site.
- 3.12.2 Mobile plant will be subject to regular inspections to ensure waste does not accumulate on the machine.
- 3.12.3 Site infrastructure will be inspected for damage and wear by site management or an appointed responsible person at pre-defined intervals.
- 3.12.4 In the event that residue of a particularly odorous waste remains on the floor of the MRF, wash down of the affected area will be carried out. Dirty water from the process



will be contained in the MRF's contained drainage system and removed to an appropriately permitted facility.

- 3.13 Training
- 3.13.1 All Valencia personnel working at the facility will be subject to a formal documented training programme in accordance with company procedures. Matters relating to site environmental management and control form part of this core training programme for all individuals.
- 3.13.2 Where possible odour assessments will be made by office staff, others not working directly with the waste or staff arriving on site for the day. Consideration will be given to the use of a third party specialist where odour issues have been identified.
- 3.13.3 Where a third party contractor is used the preferred standard for specialist monitoring contractors completing subjective odour surveys will be a formal assessment for odour sensitivity and detection threshold at a specialist facility in order to demonstrate suitability for this subjective monitoring role (i.e. a calibrated nose).
- 3.14 Community Liaison
- 3.14.1 Valencia operates an open-door policy and members of the public are welcome to visit the site to view operations and to discuss any issues with the site management team at prearranged times. Valencia also organise the Community Liaison Group and formal meetings are scheduled at intervals agreed with the local community. Site odour performance and community feedback would be included as a routine agenda item.
- 3.14.2 Site contact details and emergency (out-of-hours) numbers are shown on the site identification board and Company website and are provided to the Community Liaison Group.
- 3.14.3 Direct feedback to the site is encouraged at all times in relation to any perceived issues associated with operational activities.
- 3.15 Emergency Response
- 3.15.1 Valencia's Emergency Response Procedure is made available to all site staff. In the event of a site emergency, the site management will be notified without delay. The relevant action for odour control will be implemented by the responsible person(s).



4 ODOUR MONITORING

4.1 Meteorological Conditions

- 4.1.1 A correctly installed, calibrated and maintained meteorological station is located at the nearby Foxhall Site Office and is set up to measure and record weather conditions (including atmospheric pressure, wind speed and wind direction at regular automated intervals).
- 4.1.2 In promoting proactive management of the risks arising at the site, site management will also maintain an awareness of the local weekly weather forecast.
- 4.2 Regular Inspection/Olfactory Monitoring
- 4.2.1 All MRF personnel are responsible for reporting any odour problems. The site management will be notified immediately of any detected odours that are considered to have potential to give risk to an off-site odour impact.
- 4.2.2 The site management will ensure that routine inspections are made of the waste in the MRF building during operational periods in order to identify any odour sources and if necessary to establish whether any odours are discernible at the perimeter of the site.
- 4.2.3 All staff responsible for assessing odour will receive training from the site management on the odour inspection procedure.
- 4.2.4 In the event that the MRF operation gives rise to persistent and repeated off site odour which causes a nuisance to neighbouring sensitive receptors, an inspection programme will be established and will be undertaken as follows;
 - 1) The responsible person will visit each of the specified site boundary monitoring locations.
 - 2) The responsible person will stand still and breathe deeply facing upwind for a period of up to 1 minute.
 - 3) If odour is detected, but can only be detected in this manner, the odour 'intensity' should be recorded as 2 (faint). If odour is detected while walking or breathing normally, the intensity should be recorded as at least 3 (moderate).
 - 4) The site management will be notified immediately of any detected odours that are assigned an on-site odour intensity >3. This will trigger a supplementary off-site odour survey at any downwind off-site potential receptors.



5) Observations including time, date, weather conditions, odour type, location, intensity, extent and sensitivity, will be recorded on the Odour Survey Log Sheet (Appendix I). 'Abnormal' site operating conditions at the time of the survey e.g. infrastructure refurbishment etc. should also be recorded.



5 ODOUR ACTION PLAN

- 5.1 Odour Complaint Investigation
- 5.1.1 The following actions will be taken on receipt of an external odour complaint.
- 5.1.2 The responsible person receiving the complaint at the site will initially record the key details on Valencia's Incident Management System (IMS) in accordance with Valencia's Complaints, Feedback and Requests Procedure. Key information will be recorded at this time in order to facilitate further suitable investigation.
- 5.1.3 Site Management will be informed of the odour complaint as soon as possible, including the location, time and date of the complaint being lodged (where available).
- 5.1.4 In recognising that odour can be transient and short-lived, timely notification of odour complaints directly from the complainant and/or the Environment Agency is imperative to allow for appropriate investigation. If the odour complaint occurred more than 12 hours before notification is provided to Valencia, it may not be possible to fully investigate or substantiate the complaint. Valencia will, however, complete and record a complaint investigation, as set out below, as appropriate.
- 5.1.5 If the complaint is received within 12 hours of the incident, site management (or an appointed representative) will visit the complaint location as soon as practicable in order to subjectively determine odour presence or absence. Opportunities to meet the complainant to discuss the matter directly will be pursued, wherever possible provided the complainant is happy to do so.
- 5.1.6 If an odour is present at the complaint location, the key 'FIDOL' criteria will be assessed as follows:
 - **Frequency** is the odour intermittent or persistent; is there a history of complaints at this location?
 - Intensity is the odour faint, moderate, strong, or very strong?
 - Duration how long is the odour present at this location?
 - **Offensiveness** provide a description of the odour; is it high, moderate or low offensiveness?
 - Location is the odour present at a remote or highly sensitive location; is the odour plume localised or widespread?
- 5.1.7 See also 'Classification Systems' in Appendix 1.



- 5.1.8 The Site Management will subsequently undertake the following further assessment process:
 - review the operations at the site prior to and at the time of the complaint;
 - review of the environmental control systems operative prior to and at the time of the complaint;
 - review of the meteorological conditions (wind speed/wind direction/rainfall/atmospheric pressure) prior to and at the time of the complaint to establish whether a pathway can be established between the site and the complainant;
 - review of the previous complaint history at the location identified.
- 5.1.9 The odour complaint will be substantiated (or otherwise) by the site manager (or appointed representative) in accordance with the following (in order of priority):
 - the Environment Agency has visited the complaint location and has provided confirmation that the odour exists, is significant and is attributable to Foxhall MRF;
 - 2) the site management (or appointed representative) has visited the complaint location and has provided confirmation that the odour exists, is significant (based on the FIDOL assessment above) and is attributable to Foxhall MRF.
- 5.1.10 Valencia will contact the Environment Agency to discuss any substantiated complaint incident as soon as possible following receipt of the details, allowing sufficient time for the above investigation to be completed. The target response period during the normal working week is 48 hours from complaint receipt. If the necessary contact details are available and direct feedback has been requested, Valencia will also contact the complainant directly to discuss the issue, the findings of the subsequent investigation and any actions arising.
- 5.2 Action Plan
- 5.2.1 Odour 'non-conformances' may be determined at the site as follows:
 - receipt of an odour complaint that is attributable to the MRF;
 - detection of significant off site odour that relates to the Foxhall MRF during routine odour surveys.



- 5.2.2 In the event that either of the above odour 'non-conformances' are determined at the site, the following actions shall be taken.
- 5.2.3 *Responsible person(s):* Valencia's primary point of contact will be the site management for the facility on all matters associated with site operations and environmental performance. In the event that the site management is unavailable or non-contactable, the contingency management staff to be contacted will be as follows:
 - second call to: Operations Manager
 - thereafter: Valencia's Environment Team.
- 5.2.4 Actions:
 - 1) The site management will be informed.
 - 2) Thereafter the site management will co-ordinate with (where appropriate):
- *Externally:* Environment Agency Officer (alternatively the central Environment Agency call centre if outside of working hours)
- Internally: Senior Manager, Environment Team, Site Staff
 - 3) If the incident relates to receipt of an external complaint, an investigation will be completed in accordance with Section 5.1 above.
 - 4) If not previously undertaken, the site management (or appropriate responsible person) will undertake an investigation in order to determine the likely cause(s) of the off-site odour. Upon identification of the likely odour source(s), the appropriate corrective and preventative measures will be identified, as detailed above in Section 5.1.

Key items for consideration will be as follows:

- material inputs change in waste type, volume, odour characteristics;
- waste reception hall building integrity, housekeeping;
- failure of external utility supply electrical;
- mechanical breakdown pumps;
- procedural failure (human error);
- short-term abnormal weather patterns wind direction, temperature, inversions; and,



- abnormal operating conditions temporary odorous activities.
- 5) Upon identification of the likely odour source(s), the appropriate corrective and preventative measures will be identified and implemented under the direction of the site management. Additional support and technical expertise will be provided by internal/external technical specialists, as required.
- 6) In the event that sustained or significant plant or process failure occurs, waste feedstock material will be diverted to alternative off-site facilities. In extreme conditions, operations will temporarily cease through close liaison with the Environment Agency.
- 7) This OMP will be reviewed in line with Section 6, below, in order to ensure it continues to represent 'all appropriate measures'.
- 5.3 Timescales
- 5.3.1 In the event that it proves impracticable to carry out adequate remedial measures within 5 working days, the site management will agree with the Environment Agency the proposed actions and the timescales for their completion.
- 5.4 Records
- 5.4.1 Details of odour 'non-conformances' including subsequent investigations, timescales and remedial measures taken, and notifications of the relevant internal and external bodies shall be recorded by the site management on the IMS or Daily Site Log as appropriate, and copies shall be maintained within the site office.
- 5.5 Additional Supportive Odour Monitoring
- 5.5.1 The requirement for (and frequency of) additional supportive odour monitoring will be agreed between the site management and the Environment team. This may include, but not be limited to:
 - on-site subjective odour inspections;
 - site perimeter subjective odour inspections; and
 - off-site subjective odour inspections.



6 DOCUMENT AUDIT AND REVIEW

- 6.1 Review Requirement and Timescale
- 6.1.1 While operations continue at the site that could give rise to the generation of odour, this Odour Management Plan will be formally reviewed at minimum bi-annual intervals to ensure it continues to reflect the ongoing site status and associated sensitivity/risk.
- 6.1.2 Any required changes to the conditions set out within this document will be formally agreed with the Environment Agency prior to their implementation.
- 6.2 Audit
- 6.2.1 The processes described in the document will be audited by Valencia in accordance with the Company's auditing procedures.
- 6.3 Review and Plan Update
- 6.3.1 This management plan sets out the appropriate measures Valencia will undertake in controlling any odours or potentially odorous activities from the facility. If, on review of the performance of the facility, Valencia and/or the Environment Agency propose to seek a revision of this plan, then the following course of action will be undertaken by both parties.
 - 1) In potentially critical circumstances where Valencia recognises the requirement for the immediate implementation of changes to the management plan to prevent or reduce significant odorous emissions, these changes will be discussed with the Environment Agency without delay but may be actioned by Valencia ahead of formal agreement with the Environment Agency.
 - 2) Where Valencia proposes changes to the management plan that involve a more strategic and/or phased approach, rather than a need for immediate implementation, a formal proposal will be submitted by Valencia to the Environment Agency setting out the specific issues arising from document review, and the options/issues requiring Valencia's further attention following Agency approval. The Environment Agency will review Valencia's submission/updated management plan and confirm they are satisfied with the proposed changes. Where possible, the response should be within 28 days of receipt of Valencia's submission. The agreed required changes will then form



the future 'appropriate measures' for the site with regard to odour management and control.

3) Where changes to the management plan are proposed by the Environment Agency, these will be discussed with Valencia setting out the Environment Agency's clear expectation from the changes in addition to timescales for their implementation. It is recognised that these changes may range from matters that require immediate implementation to those that may be implemented over an extended timeframe. In each case, the required changes will be discussed with Valencia and an appropriate action plan agreed. Valencia will (wherever possible) undertake the identified changes in accordance with the timescales proposed for the work, at which point the updated 'appropriate measures' will take effect.



APPENDIX 1

Odour Survey Log Sheets

Appendix I – Odour Survey Log Sheets

On-Site Odour Survey Log

Sheet Survey Ref No:

Site: Foxhall MRF Date of Monitoring:.....

Conducted by:

Routine Survey/Complaint Investigation (*delete as appropriate*)

Weather Conditions (please note conditions at start and end of survey, if different)

Descripti	n Wind Directio	n Wind Force ¹	Temperature (°C)	Atm Pressure (mb)	Ground Conditions	Air Stability ²

¹ Referenced to the Beaufort wind scale from 0/1 = calm/light air to 8/9 = gale/strong gale

² Referenced to Pasquill stability categories from A = very unstable to F/G = very stable

Location	Location	Time	Intensity*	Odour Description		Extent	Sensitivity	Suspected	Source VWM	Comments
Code					Offensiveness			Source	Controlled (Y/N)	
									(1/10)	

*See attached 'Classification Systems' for additional information.

OFF-SITE ODOUR SURVEY LOG

Site: Foxhall MRF Date of Monitoring:

Conducted by:

Routine Survey/Complaint Investigation (delete as appropriate)

Weather Conditions (please note conditions at start and end of survey, if different):

	Description	Wind Direction	Wind force ¹	Temperature (°C)	Atm Pressure (mb)	Ground Conditions	Air Stability ²
Start							
End							
¹ Referenced to the Beaufort wind scale from 0/1 = calm/light air to 8/9 = gale/strong gale ² Referenced to Pasquill stability categories from A = very unstable to F/G = very stable							

Off-Site Odour Survey Log

Location Code	Location name	Time	Intensity	Odour Description	Odour Offensiveness	Extent	Sensitivity	Suspected Source	Source VWM Controlled (Y/N)?	Comments
Use Classi	l ification scheme below		<u> </u>	<u> </u>	1	1	1		1	<u> </u>

Appendix I – Classification Systems

Meteorological Data

The Beau	ufort Wind So	cale							
Force	Description	Description		Observation					
0	Calm		Smoke rise	es vertical	ly		0		
1	Light air		Smoke drif	ts in wind	direction; wind vanes not moved		1-3		
2	Light bree	eze	Wind felt o	n face, lea	aves rustle; wind vanes moved		4-7		
3	Gentle br	eeze	Leaves an	d small tw	igs in constant motion		8-12		
4	Moderate	breeze	Raises dus	st and pap	per; small branches are moved		13-18		
5	Fresh bre	eze	Small leafy	v trees sw	ayed; medium branches moved		19-24		
6	Strong br	Strong breeze		Large branches moved; umbrellas used with difficulty					
7	Near gale	Э	Whole tree	Whole trees moving; walking against wind inconvenient					
8	Gale		Twigs brea	Twigs break off trees; walking generally impeded					
9	Strong ga	ale	Slight strue	Slight structural damage occurs					
Assessme	nt of Pasquill	Stability Cate	gories						
Surface w	ind speed	Sunshine			Night Time				
m.p.h.		Strong	Moderate	Slight	Thickly overcast or >1/2 cloud cove	<3/8 cloud	cover		
<4.5 A		A	A-B	В	-	G			
4.5-6.7 A-I		A-B	В	С	E	F			
6.7-11.2 В		В	B-C	С	D	E			
11.2-13.4		С	C-D	D	D	D			
>13.4		С	D	D	D	D			

Notes:

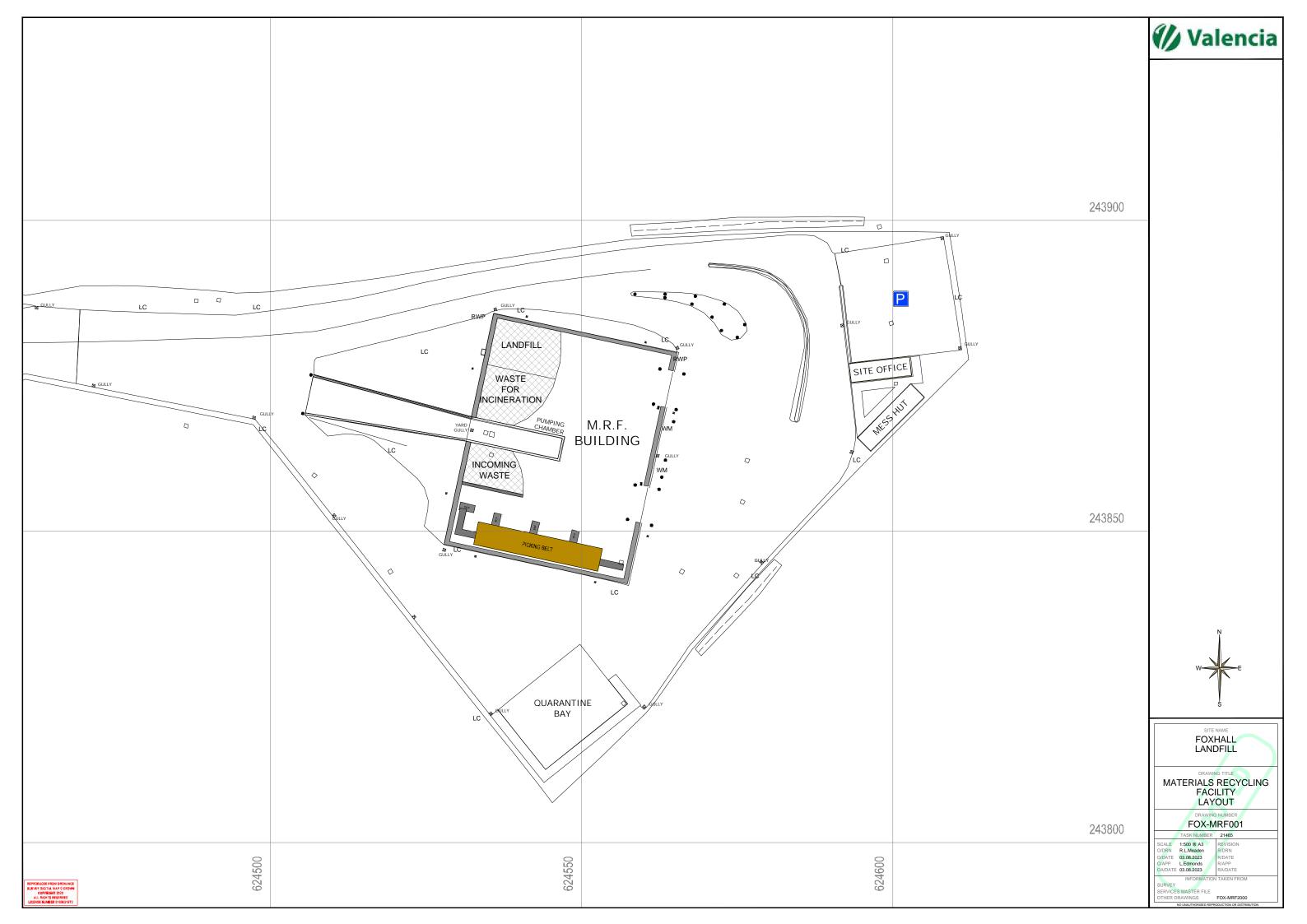
- ٠
- Strong sunshine corresponds to a sunny midday in midsummer Slight sunshine corresponds to a sunny midday in midwinter "Night time" is defined as the period one hour before sunset to one hour after dawn Wind speed should be estimated by reference to the Beaufort scale Pasquill categories are from A = very unstable to F/G = very stable •
- •
- •

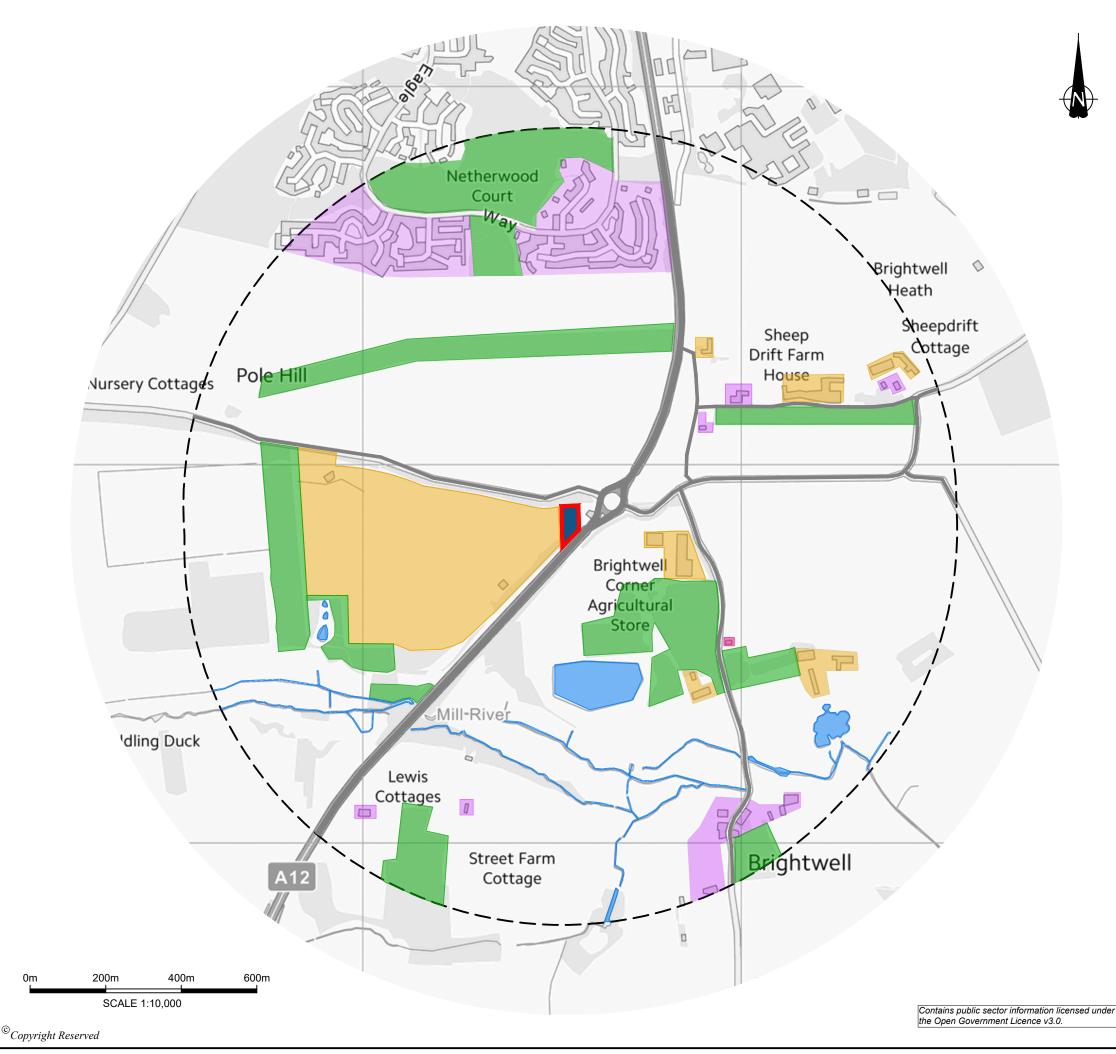
Odour Character Key

Descriptors	Value	Intensity				
A - acidic	0	No detectable odour				
B - acrid	1	Very Faint odour - need to stand still, face the wind and inhale to detect				
C - agricultural	2	Faint odour				
D - ammoniacal	3	Distinct odour - detectable when walking & breathing normally				
E - cabbagey	4	Strong odour				
F - dustbin	5	Very strong odour				
G - eggy/sulphurous	6	Extremely strong odour				
H - fruity						
I - landfill gas	Value	Extent				
J - mains gas	1	Local and transient - only detected for brief periods at the site boundary when the wind drops or blows				
K - oily	2	Transient - as 1, above, but detected away from the site boundary				
L -putrid	3	Persistent but fairly localised				
M - pungent	4	Persistent and pervasive up to 50m away from site boundary				
N - rotten	5	Persistent and widespread - detected >50m away from site				
0 - sickly						
P - sour	Value	Sensitivity				
Q - sweet	Low	e.g. footpath, road				
R - compost	Medium	e.g. industrial of commercial workplaces				
	High	e.g. housing, pub / hotel				
	Value	Offensiveness				
	1	Less/potentially offensive				
	2	Moderately offensive				
	3	Most/highly offensive				



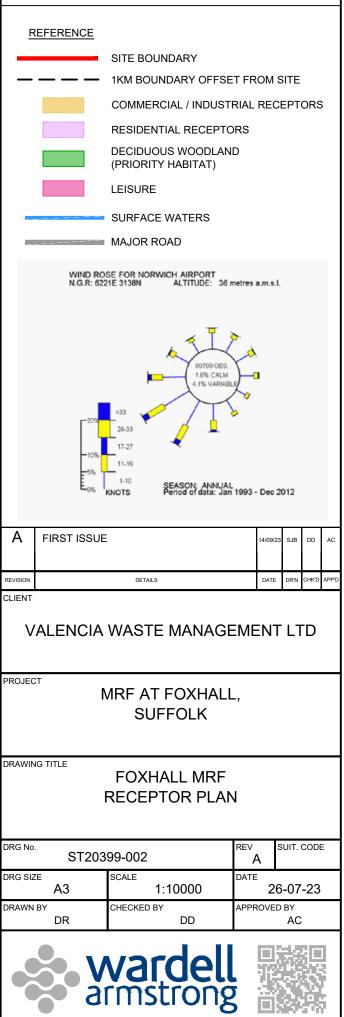
DRAWINGS





^{\\}WA.LOCAL\PROJECTS\ST\ST20399 - MRF AT FOXHOLES SUFFOLK\03 - DESIGN\AUTOCAD\ST20399-002-A RECEPTOR PLAN.DWG





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