# Section 12





# **Odour Management Plan**

Remondis JBT Ltd

West Line Industrial Estate

**Birtley** 

Chester Le Street

**County Durham** 

**DH2 1AU** 

Odour Management Plan

#### **Basis of report**

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## Issue and revision record

Revision	Date	Originator	Description of changes
V1 Initial draft	01/06/2024	Olive Compliance Ltd	New for permit application
V2			
V3			



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#### **REFERENCED DRAWINGS**

SITE LAYOUT PLAN 003

SITE RECEPTOR PLAN 004

**APPENDICES** 

APPENDIX 1 ODOUR REPORT FORM

APPENDIX 2 ODOUR COMPLAINT REPORT FORM

APPENDIX 3 ODOUR DIARY



Odour Management Plan

#### 1. Introduction

This Odour Management Plan (OMP) has been prepared in respect to the application for a Bespoke Environmental Permit Variation Application for Remondis Ltd, West Line Industrial Estate, Birtley, Chester Le Street, County Durham, DH2 1AU.

This document has been produced to support the site Environmental Management System including the site Fire Prevention Plan (FPP).

## 1.1 Scope

The Environment Agency guidance for odour management is provided by Technical Guidance Note H4 Odour Management - how to comply with your environmental permit published 4<sup>th</sup> April 2011.

This Odour Management Plan (OMP) has been prepared in accordance with the principles set out in this technical guidance document.

Appendices are included in line with recommended formats for odour reporting, complaints and an odour diary are included which are taken from the H4 document.

#### 1.1.1 Site Location

The site is located at West Line Industrial Estate, Birtley, Chester Le Street, County Durham, DH2 1AU.

The site is principally bounded as detailed in Table 1 below and Image 1 below.



<u>Image1 – Site Location and Immediate Surroundings</u>



#### Image 1 – Site Setting

Boundary	Description			
North	Commercial			
West	Rural/Agricultural			
South	Rural/Agricultural			
East	Rural/Agricultural			

## 2.0 Site Layout and Activities

## 2.1 Site Layout and Activities

The site currently operates under a Bespoke permit.

Remondis Ltd operates a Non-Hazardous Waste Management facility which covers the import, storage and treatment of construction and demolition wastes.

The site primarily hires various sized skips to households, industry, construction and demolition businesses with the aim to recycle their contents which generally include non-hazardous wastes, brick, rubble, metals, wood, plastics and cardboard.

Waste acceptance procedures and forms detailed within the EMS are detailed below.

- Waste Acceptance Procedure
- Waste Rejection procedure
- Waste Rejection Records

The majority of all loads are pre booked with the operations team to manage site capacity and to ensure material quality before arrival on site. Wastes are brought to site by the company haulage team as part of their waste management business.

Storage capacities and durations are shown in Table 3 of this document.

The majority of waste types accepted are not generally known to be odorous, they predominantly arise from commercial and industrial activities.

## 2.2 Site Management

The site will be supervised overall by the Site Manager supported by the qualified Technically Competent Manager (TCM). They are responsible for the general management of the site including the acceptance and handling of any potentially odorous wastes. Support is provided by the addition of trained nominated site personnel.

The Standard Operating Procedures for the site include considerations of emissions to the environment in all site activities, and site employees are made aware of their responsibilities under



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the Environmental Permit and the consequences for compliance of any incidents or abnormal releases.

Odour management training is provided for all operational employees via formal training sessions which are provided by internal trainers and external training companies as and when required.

Nominated employees will be trained on the odour scoring system and the monitoring point locations, to ensure that odour monitoring is scored on a consistent basis and trigger levels are understood.

The site management are committed to ensure that all relevant employees will be trained on the requirements of the OMP and follow-up refresher toolbox talks will be held periodically, no later than annually. The individual training plans for employees on site must record all training on the aspects of the OMP.

## 2.3 Site Operational Hours

The site operates according to the hours stated below;

Monday to Friday: 07:30 – 17:30hrs

• Saturday: 08:30 – 12:00hrs

Sunday/Bank/Public Holiday Closed

## 3.0 Odour Risk Assessment and Sensitive Receptors

## 3.1 Methodology

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

#### 3.2 Receptor Sensitivity

The below table (Table 2) shows the receptors that could potentially be affected by an odour impact within 1km of the site boundary.

Sensitive receptors considered include:

- Local schools, hospitals, nursing and care homes, residential areas, workplaces
- Local protected sites and species
- Local factories and other businesses
- Footpaths, public green space
- Homes, or groups of homes (such as villages or housing developments)
- Playing fields and playgrounds

The site is located within a commercial and industrial area bounded by surrounding residential and local businesses.

The nearest residential receptors are 0m south of boundary of the site. Drawing 004 identifies the site location and sensitive receptors.



## Table 2 – Local Receptors

Receptor	Receptor Type	Distance / Direction
Closed Landfill Site	Landfill (Closed)	0 – 625m N, NW
Zoemic Commercials	Vehicle Hire / Dealer	10m S
Rowletch Burn	Watercourse	10m E, NE, SE
Network Rail	Railway Line	30m E, NE, SE
Pallet Earth	Wood Crafter	30m W
Westline Distributors	Building Supplier	50m W
Komatsu	Manufacturers	75m E
Askern UK	Manufacturers	100m SW
Kerr Metals	Scrap Metal Recycling	150m SW
Tommy Wardle	Roofing Business	175m SW
O'Brien Demolition	Demolition Business	175m SE
Durham Road	Public Highway	400m E
Blue Barns Farm	Farm	400m NW
Marquis Motorhomes	Caravan Sales	450m E
Parker Hannifin	Manufacturers	450m E
Jewsons	Building Supplier	500m E
Lake	Watercourse	500m S
Birtley Golf Club	Leisure Activity	600m E
Ouston Village	Residential Properties	600 – 1000m W, NW, SW
Motorpoint Birtley	Car Sales	650m SE
Jet Garage (Birtley)	Petrol Station	700m NE
Birtley Swimming Centre	Leisure Centre	700m NE
Ouston Springs Farm	Farm	700m S
Birtley Township	Residential Properties	730 – 1000m E, NE, SE



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Morrisons Birtley	Supermarket	800m NE
Sapa Profiles	Manufacturers	880m SE
Barley Mow Primary School	Primary School	900m SE
Lord of Beamish Academy	School	1000m NE
Portobello Primary School	Primary School	1000m E
Sure Start Children Care Centre	Day Care	1000m SE
Shell Garage	Petrol Station	1000m SE
Heather House Care Home	Care Home	1100m SE
Appletree Grange Care Home	Care Home	1200m SE

## 4.0 Review of potential sources of odour

The following have been considered by the site as potential causes and sources of odour arising on site.

- Loading, unloading, and handling of wastes
- Waste acceptance
- Vehicle/Plant operations
- Waste processing turnaround
- Excessive volumes of waste
- Waste processing practices
- Poor housekeeping
- Inadequate site management or auditing
- Meteorological conditions

## 4.1 Waste types and storage timescales

Drawing 003 highlights the locations and site layout for all wastes stored on site.

Storage locations correspond with the Site Layout Plan for consistency between the other key management documents such as the Fire Prevention Plan.



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## 4.2 Potentially Odorous Wastes and Control Measures

An assessment of all incoming and treated waste types and odour risk has been conducted with the below management controls in place to reduce and mitigate against the risk of odour arising (Table 3).

Due to the nature of the waste no other measures are proposed at this time.

In the event that wastes are deemed to be odours waste management controls will be undertaken on accordance with EA Guidance (Non-hazardous and inert waste: appropriate measures for permitted facilities - 6. Emissions control - Guidance - GOV.UK (www.gov.uk)



Table 3 – Waste Assessment and Odour Controls

Combustible / Flammable Material	Form	Storage Dimensions (H x L x W = m3)	Max. Storage Time (Days)	Location and Odour Management Controls
Unsorted Mixed Waste – (Input)	Loose	3.5 x 10 x 5 = 175m3	3	Inside processing building.
				L-shaped segregation with concrete blocks and concrete wall panels and roller doors.
Potentially odorous				Monitor waste acceptance and waste quality inc duty of care.
				Daily monitoring for volumes not to be exceeded and contained within the bay.
				Ensure adequate rotation.
				Keep material at designated stockpile capacity.
				Neutraliser to be used when necessary.
				Consider weather when loading out.
				Remove any contaminates if found during inspections.  Operational planned storage time Aim 3days.
				Any contaminated packaging waste (waste with food/liquid residues) is rejected if detected upon receipt
				and inspection on site, or if found within loads, it is removed within 48 hrs (In line with Rejection
				Procedure.
				- Foccaute.
Pre-Sorted Mixed Waste (Oversized)	Loose	3.5 x 10 x 5 = 175m3	3	Inside processing building.
				L-shaped segregation with concrete blocks and concrete wall panels and roller doors.
Not odorous				Monitor waste acceptance and waste quality inc duty of care.
				Daily monitoring for volumes not to be exceeded and contained within the bay.
				Ensure adequate rotation.
				Keep material at designated stockpile capacity.
				Neutraliser to be used when necessary.
				Consider weather when loading out.
				Remove any contaminates if found during inspections.  Operational planned storage time Aim 3days.
				Operational planned storage time Alin Suays.



Pre-Sorted Mixed Waste	Loose	3.2 x 15 x 4.5 = 216m3	3	Inside processing building.
(Plant Feed)				
				U-shaped segregation with concrete legioblocks.
Not odorous				
				Building has roller doors to enclose activities and storage.
(Internal collection from				Monitor waste acceptance and waste quality inc duty of care.
processing plant)				Daily monitoring for volumes not to be exceeded and contained within the bay.
				Ensure adequate rotation.
				Keep material at designated stockpile capacity.
				Neutraliser to be used when necessary.  Consider weather when loading out.
				Remove any contaminates if found during inspections.
				Operational planned storage time Aim 3days.
				Operational planned storage time Aim Sdays.
				•
Process Residual Waste	Loose	2 x 6 x 6 = 72m3	3	Inside processing building.
(>50mm)				
				U-shape concrete panel bay.
				Building has roller doors to enclose activities and storage.
Potentially odorous				Daily monitoring for volumes not to be exceeded and contained within the bay.
				Ensure adequate rotation.
				Keep material at designated stockpile capacity.
				Neutraliser to be used when necessary.
				Consider weather when loading out.
				Remove any contaminates if found during inspections.
				Operational planned storage time Aim 3days.
Dun anna Danishval Marka		2 6 6 722	2	lacide accessive building II shows accessed accel bay.
Process Residual Waste	Loose	2 x 6 x 6 = 72m3	3	Inside processing building. U-shape concrete panel bay.
(<50mm)				Duilding has relieved ages to analysis activities and storage
Dotontially adarage				Building has roller doors to enclose activities and storage.
Potentially odorous				Daily monitoring for volumes not to be exceeded and contained within the bay.
				Ensure adequate rotation.
				Keep material at designated stockpile capacity.
				Neutraliser to be used when necessary.
				Consider weather when loading out.
				Remove any contaminates if found during inspections.



(Internal collection from processing plant)				Operational planned storage time Aim 3days.
UPVC	Loose	2 x 6 x 3 = 36m3	<1	Inside processing building. U-shape concrete panel bay.
Not odorous				
(Internal collection from processing plant)			Bay emptied each night	
Wood	Loose	2 x 6 x 3 = 36m3	<1	Inside processing building. U-shape concrete panel bay.
Not odorous				
			Bay emptied each night	
(Internal collection from processing plant)				
<8mm Fines – Inert	Loose	3.5 x 5 x 5 = 87.5m3	<1	External to processing building. U-shape legioblock bay.
Potentially odorous  (External collection from processing plant)			Bay emptied each night	Daily monitoring for volumes not to be exceeded and contained within the bay.  Ensure adequate rotation – moved weekly.  Keep material at designated stockpile capacity.  Neutraliser to be used when necessary.  Consider weather when loading out.  Remove any contaminates if found during inspections.  Max storage time – 1day
Aggregate – Inert	Loose	3.5 x 5 x 5 = 87.5m3	<1	External to processing building. U-shape legioblock bay.
Not odorous			Bay emptied each night	



(External collection from processing plant)		

Scrap Metal	Loose	30-yard container	3	2 x 30-yard waste containers.
Not odorous				
(External collection from processing plant)				
Rigid Plastic / Green Waste	Loose	1 x 4 x 3 = 12m3	<1	External to processing building. U-shape legioblock bay.
Potentially odorous			Bay emptied	Monitor waste acceptance and waste quality inc duty of care.  Daily monitoring for volumes not to be exceeded and contained within the bay.  Ensure adequate rotation – moved weekly.
(External collection from processing plant)				Keep material at designated stockpile capacity.  Neutraliser to be used when necessary.  Consider weather when loading out.
				Remove any contaminates if found during inspections.  Max storage time – 1day
Wood	Loose	2 x 4 x 3 = 24m3	<1	External to processing building. U-shape legioblock bay.
Not odorous				
(External collection from processing plant)			Bay emptied each night	



Green Waste (Bulk Storage Bay) Potentially odorous	Loose	3.5 x 8 x 7.5 = 210m3		External to processing building. U-shape legioblock bay.  Monitor waste acceptance and waste quality inc duty of care.  Daily monitoring for volumes not to be exceeded and contained within the bay.  Ensure adequate rotation — moved weekly.  Keep material at designated stockpile capacity.  Neutraliser to be used when necessary.  Consider weather when loading out.  Remove any contaminates if found during inspections.  Max storage time — 1 week
Wood	Loose	3.5 x 8 x 7.5 = 210m3	7	External to processing building. U-shape legioblock bay.
Not odorous				
(Bulk Storage Bay)				
UPVC	Loose	2 x 6 x 6 = 72m3	7	External to processing building. U-shape concrete block area.
Not odorous				
(Bulk Storage Area)				
WEEE	Loose	2 x 2 x 2 = 8m3	7	External to processing building. U-shape concrete block area.
Not odorous				
(Fridges)				



Tyres	Loose	2 x 2 x 2 = 8m3	7	External to processing building. U-shape concrete block area.
Not odorous				
	0	4 400 10		
Combustible Dusts	Contained	4 x 100 litre containers	3	External to processing building.
(Dust Extraction / Cleaning				Contained within sealed galvanized steel bins.
Unit).		= 400 litres MAX		
Not odorous				
Aggregate – Inert	Loose	3.5 x 5 x 5 = 87.5m3	<1	External to processing building. U-shape legioblock bay.
Not odorous				
			Bay emptied each night	
(External storage post				

#### 5.0 Other considerations

## 5.1 Meteorological

Fugitive odour releases are minimised by effective odour management procedures to lower the risk of significant nuisance at receptor locations in the vicinity of the site. However, certain circumstances (as discussed elsewhere in this plan) can cause an increase in the intensity, offensiveness, frequency and duration of any odorous release. The risk of such releases causing a nuisance to local receptors can be increased where local atmospheric conditions fail to dilute and disperse the emissions.

Extreme meteorological conditions that can promote the generation of odour and inhibit its effective dispersion (i.e. high temperatures and stable conditions) may result in an increased risk of impact at receptor locations.

#### **Prevailing Wind Direction**

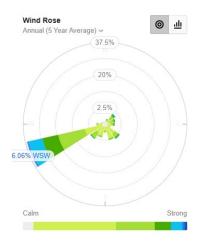
Using data from the Willy Weather App<sup>i1</sup>, wind data from the nearest weather station indicates the distribution of wind power by direction over a 10-year average.

Upon review of this data the prevailing wind directions are predominately south westerly in respect of the site, therefore the likelihood of odour being detected to the residential areas is very unlikely. Any odour is likely to be across farmland given the area's prevailing wind direction. This would not affect residential homes located south of the site.

Atmospheric conditions are unlikely to result in an odour occurring at the residential locations due to atmospheric dispersion and in conjunction with strict waste acceptance controls. However, odours will be monitored in accordance with this OMP.

The below rose diagram below shows the prevailing wind direction (Diagram 1).

Diagram 1 - Prevailing Wind Direction - Penton Fell Monitoring Station



<sup>&</sup>lt;sup>1</sup> Pelton Fell Wind Forecast, Durham DH2 2 - WillyWeather

#### 5.2 External local odour sources

There are other potential odour sources outside and within 1km radius of the site, which can produce unpleasant odours, which could be detectable within the vicinity of the site and the surrounding industrial estate.

- Manufacturing Activities northeast of the site have the high potential to produce strong odour which could be detected on or around the site through production processes.
- **Agricultural Activities** surrounding the site have the high potential to produce strong odour which could be detected on or around the site through land management.
- Permitted Activities located within 1km of the site could give rise to odour.

Within 1km of the site there is 1 regulated waste site which may give rise to odour due to their activities (Admec).

Offensive odours arising from external sources will be noted in the site diary. If a significant odour is noted as coming from any external facility, a decision will be made by the Technically Competent Manager or Operations Manager whether to report the odour to the Environment Agency and/or local authority.

## 6.0 Odour management and control measures

### 6.1 Site Operations

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

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

#### 6.2 Site infrastructure

All wastes are stored on a concrete impermeable surface or on hard standing.

Treatment of HCI wastes will be carried out internally, with exception of inert wastes through the wash plant and any additional treatment (crushing/screening).

Wastes are all stored externally are stored for short periods of time and in secure containment.

#### 6.3 Housekeeping

Daily inspections of plant and equipment are made as part of the daily vehicle checks, ensuring that they are kept free of any wastes and litter. Vehicle operatives will clean up such material on identification, placing material in the correctly designated storage stockpile. Daily plant inspection forms are used to record these checks.

Daily site inspections and general housekeeping of the site is also undertaken in order to minimise the potential for the build-up of waste and litter. These checks are recorded in the site inspection record.

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At the end of each working day a full clean down is conducted on all plant and equipment and working areas. This is recorded on the daily cleaning checklist, signed off by the Site Manager or TCM.

Bays and surfaces can be checked and cleaned easily to prevent the risk of any historic waste and odours building up.

All waste treatment conducted in Building 1 are accessible to allow visual inspection and cleaning.

Frequent site cleaning takes place on site covering essential daily housekeeping, monthly tasks and deep cleans of site infrastructure.

#### 6.4 Odour abatement

If odorous materials are detected on site, then an odour can be delivered via a portable spray backpack system, directly to affected wastes within stockpiles/containers within the building by staff with appropriate training, prior to removal off site. This product can also be utilised for cleaning storage areas.

Product support is given by the manufacturer, with a 10lt Container kept in stock onsite. Supplies of this product can be sourced within 48hrs.

#### **Product Information**

Airborne10 is the proprietary name for Surfactant Induced Absorption Technology (SIAT)

Airborne10 is a sophisticated blend of surfactants that when introduced into the flow of water alters the effective area or interface of the water droplet by something in the order of 500,000%, making the water droplet highly absorbent.

It achieves this by having its hydrophilic (water loving) end in the water droplet and hydrophobic (water hating) end of the out of the droplet and in the air, this is what draws particulates out of the atmosphere and absorb them within the water droplet. As a result of this absorption the droplet increases in weight and eventually falls to the ground where it naturally bio-degrades.

Airborne10 is a non-selective technology which means when atomised into the atmosphere in its water/chemical mix it will look to draw into the water droplet any airborne particulate.

Gas will be absorbed into the solute and bio-degrades when the droplet eventually drops to the ground. Dust will be removed from the air and bought down to the ground.

Bacteria and virus is put into status and rendered harmless.

## 6.5 Waste acceptance, handling and storage

#### 6.5.1 Pre-acceptance criteria

Waste pre-acceptance checks are in place in order to prevent the acceptance of unsuitable wastes which may lead to adverse reactions or uncontrolled emissions. This ensures their suitability for the site.

Waste must be properly characterised.

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All loads incoming and outgoing are booked in daily to ensure that storage limitations aren't exceeded.

The potential supplier for the following information will be requested:

- The source and types of waste;
- Composition & the quantity of the waste;
- Any pre-treatment that was carried out before the waste is dispatched;
- How long the waste can be held by the client before it is delivered to our facility;
- Transport conditions (types and size of vehicles can be used);
- Special handling requirements for the waste;
- Hazards of the waste: and
- EWC code of the waste.

This process will allow the company to determine the suitability of incoming waste prior to agree to accept any waste.

#### 6.5.2 Incoming waste procedures

Site waste acceptance procedures are in place to ensure that only wastes that are specified within the permit are allowed into the site. Wastes that are not permitted at the facility will be refused entry.

Due to the nature and source of waste types accepted, odorous wastes should not be accepted onto site.

All waste arriving on site, where the load will be visually checked by a site operative.

Malodorous wastes that are detected within in the incoming wastes, will be rejected and the weighbridge operator will advise the carrier of the reasons for the rejection, and will record the details of the load and the reason for rejection in the Site Diary and with a Rejection Note produced.

Once the Site Manager or site operative is satisfied that all documentation has been processed correctly, he will instruct the vehicle driver to enter the site to meet with a site operative.

Waste will not be accepted into site unless sufficient storage capacity exists and the site is adequately manned to receive waste. If plant and equipment are out of action due to any unforeseen circumstances for prolonged period, then the site will not accept any incoming materials.

Any non-permitted wastes (including malodorous wastes), which are found following deposit or during subsequent storage and treatment operations, will be removed within 48hrs.

The facility operates FIFO principle for the acceptance, sorting and removal of waste off site. The site FPP specifies and controls all waste storage timescales, no wastes will be stored in exceedance of the FPP timescales.

In addition, any materials brought to site in a 'warm' / steaming state will be refused entry and will be returned to the facility from where it came.

Toolbox talks on this issue / have been given to staff by the Site Manager and any issues will be raised with either the Facility Supervisor, or the Site Manager.

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Waste quantities will be continually monitored, and export haulage matched to meet or exceed import tonnages.

#### 6.5.3 Waste rejection

Rejected wastes will be deposited in the quarantine area provided for non-conforming wastes. In respect to significant loads, an investigation will be conducted and recorded in the site diary. Problem odorous wastes will be stored for no longer than 48 hours pending removal to a suitably permitted site.

The EA will then be contacted in the event of significant loads to agree a course of action where necessary.

#### 6.5.4 Waste processing and treatment

Incoming wastes are tipped upon receipt, visually inspected with some hand sorting of non-recoverable waste removed upon tipping.

All mixed waste is directed and deposited inside the waste processing building and within the 'waste input area'. Oversized items of waste deemed too large to be processed via the mechanical processing plant are removed by an item of mobile plant and placed on the opposite side of a fire wall and into the 'oversized stockpile'. They are then loaded onto articulated vehicles and removed from site.

The remainder of the mixed waste is then moved, again to the opposite side of a fire wall via mobile plant, to the 'plant feed stockpile' where it is fed into the processing plant by another item of mobile plant.

The mechanical process segregates the mixed waste into various fractions including, wood, scrap metal, inert materials (hardcore and <8mm fines), <50mm residual waste and >50mm residual waste.

#### 6.5.5 Waste storage

Low storage volumes and strict turnaround of wastes stored in accordance with the FPP will be observed.

Should contaminated or odorous wastes be identified these will be immediately quarantined.

Quarantined odorous wastes are removed within 48hrs.

The waste types accepted and treated defined within this document reduce the risk of any odours arising from general waste activities and storage.

#### 6.5.6 Tipping, loading and transport of wastes

Wastes are tipped into designated locations as specified by the FPP, the waste treatment building is fitted with shutter doors to prevent odour release out of hours or non-operational periods.

Wastes are then visually inspected upon receipt which allows for site management and operatives to make accurate waste assessment and odour assessment.

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

Identified odorous wastes may be subject to neutraliser treatment during loading prior to removal off site. Any loads materials noted to be odorous will be prioritised for offsite removal within 48hrs.

#### 6.5.7 Emergency and contingency measures

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

These further control measures are detailed in Table 4 below.

Table 4: Scenarios involving potential odorous issues, emergency and remedial actions

Problem / Scenario	Issue	Action
Odorous load arrives last thing at night after all export has ceased for the day.	Potential for overnight complaint	<ul> <li>Reload onto vehicle if possible.</li> <li>If not possible carry out heavy odour treatment and disinfect with neat product, cover with clean material to seal and remove next day first load.</li> </ul>
Exhaustion of odour treatment stock	Unable to operate odour suppression	<ul> <li>Ensure stocks are monitored monthly.</li> <li>Always ensure there is 10lt in stock, which is 8 weeks requirement.</li> <li>Lead in time is 3 working days for deliveries.</li> </ul>
Damage identified in bay structures	Holes can cause uncontrolled odour release points	<ul> <li>Ensure daily structural inspections are carried out.</li> <li>Maintenance is reactive with planned maintenance programmes in place.</li> <li>Call maintenance contractor and repair.</li> </ul>
Fire on Site	Access for emergency equipment  Management of the fire is the priority	<ul> <li>Raise alarm as per fire plan and contact Fire Marshall.</li> <li>Inform weighbridge to cease import of waste.</li> <li>All non-essential operatives to leave waste building and report to muster point.</li> <li>Weighbridge to inform all incoming hauliers of redirection to ensure site congestion is minimised for Emergency Services attendance.</li> <li>If localised small fire attack with fire equipment, only if deemed safe to do so.</li> </ul>
Failure of waste handling/processing equipment	Plant breakdowns Staff absence	<ul> <li>Cease import of waste to activities affected by failure until extent of the breakdown is known.</li> <li>Wastes are stored internally with roller doors to contain the risk of odour leaving the building.</li> <li>Divert wastes to the quarantine bay as an overflow measure.</li> <li>Monitor import volumes to ensure site storage capacity is not exceeded, allow import of waste only if confident of handling capacity, to ensure we can balance import / export ratio.</li> <li>Cease import when storage capacity is reached.</li> <li>Weighbridge to inform all incoming hauliers of redirection to alternative site to keep stock waste to a minimum.</li> <li>Service agreement with plant/equipment supplier to support with repair requirements.</li> <li>Utilise alternative equipment to carry out loading of existing waste.</li> </ul>
Haulage issues	Site storage capacity reached	<ul> <li>Cease import of waste until extent of the haulage problem is known and evaluated.</li> <li>Weighbridge to inform all incoming hauliers of redirection to alternative site to keep stock waste to a minimum.</li> </ul>



Remondis Ltd

## Odour Management Plan

Problem / Scenario	Issue	Action
	Incoming loads require redirection	<ul> <li>If traffic-based issues re-route vehicles to minimise impact prioritising older / odorous waste.</li> <li>Carefully monitor incoming waste capacity, to ensure the balance of import / export ratio.</li> <li>The company has relationships with an extensive network of waste management companies and suppliers. These contacts can also be drawn upon to temporary redirect wastes.</li> </ul>
Onward recycling/ disposal route problems	Destination is unable to accept materials	<ul> <li>Cease import of waste until extent of the delay for disposal is evaluated.</li> <li>Site management to inform all incoming hauliers of redirection to alternative site to keep stock waste to a minimum.</li> <li>Re-route vehicles to alternative landfill site minimise impact, prioritising any old / odorous waste.</li> <li>Ensure that no incoming waste is accepted until such time as offsite disposal is confirmed as available.</li> <li>Proactive treatment and monitoring of all waste for odour and infestation in anticipation of delay in removal from site.</li> </ul>
Employees issues	Shortage of responsible employees to deal with odour	<ul> <li>Implement holiday booking procedures to ensure that a trained member of employees responsible for odour issues is always on site during working hours.</li> <li>Training for nominated employees on odour issues to allow for stand-in, in the event of sickness of a designated odour controller.</li> <li>Provide a call-out register so that employees are aware of who will be on stand-by in the event of sickness or emergency.</li> <li>Implement agency support for long term staff absences.</li> </ul>



June 2024

## 7.0 Monitoring

## 7.1 Operational monitoring

The operator will monitor the emissions at source (on site) to ensure releases do not result in odour nuisance at sensitive receptors.

Monitoring includes both emissions monitoring, monitoring of odour and inspections of the process, to check that any potential odour emissions are being contained and controlled to meet the accepted standards of good practice in relevant guidance.

Monitoring can include the following:

- Proactive inspections and maintenance of plant equipment;
- Process monitoring;
- Daily sniff test;
- Meteorological data monitoring;
- Complaints monitoring; and
- Odour diaries from local residents.

## 7.2 Olfactory Monitoring

A site odour assessment is made daily to assess odours at the perimeter boundary and recorded in the Site Inspection Checklist.

Sniff testing will be carried out by trained competent staff.

The assessor should not: a) Smoke or consume strongly flavoured food or drink for at least 30 minutes before the assessment. b) Consume confectionary or soft drinks immediately before the assessment. c) Apply scented toiletries, such as perfumes or aftershave immediately before an assessment.

Should the monitoring conclude that a certain activity/waste is giving rise to odour which may migrate offsite, steps will be made to reduce the impact of this activity, which may include but is not limited to:

- quarantine and removal offsite to a suitably licensed facility;
- removal of waste to a more suitable area of the site prior to removal; and
- applying odour neutraliser to mitigate until removed off site.

#### 7.3 Weather conditions

Meteorological forecasts and conditions are monitored using most recent information from the metoffice website, to enable remedial actions to be taken, such as increased monitoring.

Meteorological data will be recorded in the daily diary as per the table below.



Odour Management Plan June 2024

#### Table 5 - Meteorological data

Monitoring Requirements	Frequency
Observed description of conditions: precipitation, drizzle, rain, sleet, snow, temperature, winds, etc	Recorded daily
Wind direction	Recorded daily

Additional monitoring will be conducted in the event the following weather conditions which could cause a potential on or off-site odour issue.

- High winds >30mph which could exaggerate an odour and wind direction southerly impacting local residents;
- Periods of hot weather exceeding 3 major dry days which could lead to water shortages, hosepipe bans and excessive odour;
- Flooding.

#### 7.3.1 Investigation and monitoring records

Daily records shall be maintained and include the following detail if applicable:

- Results of inspections and odour monitoring carried out by site personnel;
- If odour is identified what is the extent of odour how long has it been apparent? Is it arising from site operations;
- Weather conditions including wind speed and wind direction;
- Operational problems including date, time, duration, prevailing weather conditions and problem loads;
- Complaints received including address of complainant (if available);
- Details of corrective action taken, and any subsequent changes to operational procedures; and
- An evaluation of the effectiveness of control and abatement techniques used.

#### 7.4 Trigger level actions

All odour complaints will be investigated promptly, and appropriate remedial action will be taken if the complaint is substantiated e.g. remove odorous materials off site as soon as reasonably possible. Complaints will be recorded on the form found in Appendices 1.

Complaints to the EA will also be recorded and investigated. An olfactory assessment survey will be carried out from where the complaint was made and from any locations between the complainant/receptor and the site so that the complaint can be validated or rejected.

If odour is detected during routine olfactory monitoring and is judged to be moderate (Odour Intensity Rank 3) then the TCM (or nominated representative) is notified immediately and the olfactory survey will continue and attempt to determine the scope and extent of the odour, as follows:



- A suitable location downwind of the facility and potentially sensitive receptor at which the odour plume is unlikely to extend will be selected for assessment;
- Survey continues toward the site until an unpleasant odour is perceived; and
- Where odour is detected, this point is recorded, and reported to the TCM, who must take steps to reduce or prevent the odour spreading.
- If the source of the odour is anticipated to be from an external source, the survey will also progress away from the site boundary towards the potential source until an unpleasant odour is perceived (this will be carried out if the odour detected is unusual for the site e.g. an agricultural foul odour or smells from adjacent sites burning waste).

This will involve as necessary:

- A review of the site activities at the time of the olfactory survey;
- A review of the meteorological conditions at the time of the olfactory survey; and
- A review of the effectiveness of process operations and odour control procedures.

#### 7.4.1 Compliant investigation procedure

Once a complaint has been received and the details collected the matter will be reported to the appointed-on site odour controller, either the TCM on duty or Site Manager/or nominated site personnel.

The odour controller will carry out an investigation in accordance with the trigger level actions in section 8.4 to identify potential sources, where sources are identified, will request a rectification.

The site would normally consider the following as part of an incident investigation:

- Is the process under control? (Have we received exceptionally odorous wastes, for example? Have we had any breakdowns?)
- Have odour containment measures failed? (Has a door been left open, for example? Have odorous materials been stored outside a containment area? Have adverse conditions, such as weather, overwhelmed containment structures?)
- Have atmospheric conditions concentrated an odorous plume?

The odour complaint data will then be reviewed to assess the magnitude of exposure, to identify any patterns, which may help to identify likely cause of the problem.

#### 7.5 Review

After the complaint has been resolved, there will be a review to identify whether the site procedures and OMP were effective in dealing with the issue.

Where there are any improvements to be made, these will be identified to the Environment Agency and the any relevant procedures and OMP will be updated accordingly.



## 8.0 Complaints and External Liaison

The company recognises the importance of engaging with the people who may be affected by site activities. If an issue occurred where neighbours were affected by the activities, then the company would like to propose to use the following community outreach activities to engage with local community in order to understand the issues and provide detailed information about actions taken to mitigate any problems.

#### 8.1 Our community outreach activities

#### 8.1.1 Newsletter / leaflet

Leaflet explaining about site activities, remedial actions and information about complaining procedures. The company may choose to communicate with residents regarding any incidents or issues via this media.

#### 8.1.2 Website Information

Website update explaining about site activities, remedial actions and information about complaint procedures. The company may choose to communicate with residents regarding any incidents or issues via this media.

#### 8.1.3 Meeting with residents

In the event of a major incident or an issue which may lead to complaints regarding odour, the company will carry out a formal letter drop to inform local residents about the OMP and future improvements to the site and invite residents to contact us through the appropriate methods and/or to attend a public meeting regarding the issues on site.

This OMP will be updated to include actions and outcomes from any community engagement meetings.

The company will issue the odour diary form to residents who wish to participate in recording odour issues. A copy of the Odour diary is provided in Appendix 3. This information will be used to form the basis of discussion at community group meetings. Copies of the completed forms will be retained in the site records. A list of scores from residents participating in odour diaries will be summarised in future revisions of the OMP.

#### 8.2 Site contact

Members of the public are able to contact the company with any odour complaints about the facility by the following means.

 By telephone 01670 468 948 (Head Office) the contact number will normally be manned from Monday to Friday between the hours of 07:30 and 17:30. Outside of these hours, and on infrequent occasions during the above hours when an immediate reply cannot be made, there will be an answer phone service which is checked by the Operator to respond out of hours.



or

• By email to info@remondis.co.uk

These methods of contacting the site are displayed at the site entrance and on the company's website.

#### 9.0 Closure

This report has been prepared by Olive Compliance Limited (OCL) with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Remondis Ltd, no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from OCL.

OCL disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.



Odour Management Plan June 2024

# **APPENDICIES**

APPENDIX 1 ODOUR REPORT FORM

APPENDIX 2 ODOUR COMPLAINT REPORT FORM

APPENDIX 3 ODOUR DIARY



#### **APPENDIX 1**

#### **ODOUR MONITORING REPORT FORM**

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

#### Intensity (Detectability)

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

#### Location sensitivity (where odour detected)

Low (e.g. footpath, road)
Medium (e.g. industrial or commercial workplaces)
High (e.g. housing, pub/hotel etc



## Appendix 2 – 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 addre	ess:			
Weather conditions (i.e., dry, rain, fog,	snow):			
Temperature (very warm, warm, mild, if known):	cold or degrees			
Wind strength (none, light, steady, stro	ong, gusting):			
Wind direction (e.g. from NE):				
<ul><li>Complainant's description of odou</li><li>What does it smell like?</li></ul>	r:			
Intensity (see below):				
Duration (time):				
Constant or intermittent in this	s period:			
<ul> <li>Does the complainant have an comments about the odour?</li> </ul>	y other			
Are there any other complaints relating installation, or to that location? (either relating to the same exposure):				
Any other relevant information:				
Do you accept that odour likely to be fr activities?	om your			
What was happening on site at the tim occurred?	e the odour			
Operating conditions at time the odour	occurred			
(e.g. flow rate, pressure at inlet and preoutlet):	essure at			
Actions taken:				
Form completed by:	Date	Signed		



## Appendix 3 – ODOUR DIARY

Odour Diary		
Name		
Address		
Contact Number		
Date of Odour		
Time of Odour		
Location of Odour		
(if not at above address, inside or outside)		
Weather Conditions		
(rain, dry, fog, snow, etc)		
Temperature (very warm ,warm,		
mild, cold or exact temperature if known		
Wind Strength (none, light, steady, strong, gusting)		
Wind Direction (eg from NE)		
What does it smell like? How unpleasant is it?		
Do you consider this smell offensive?		
Intensity. How strong was it? (See below 1-6)		



How long did it go on for (time)	
Was it consistent or intermittent in this period?	
What do you believe the source/cause to be?	
Any actions taken or any other comments:	

## Intensity

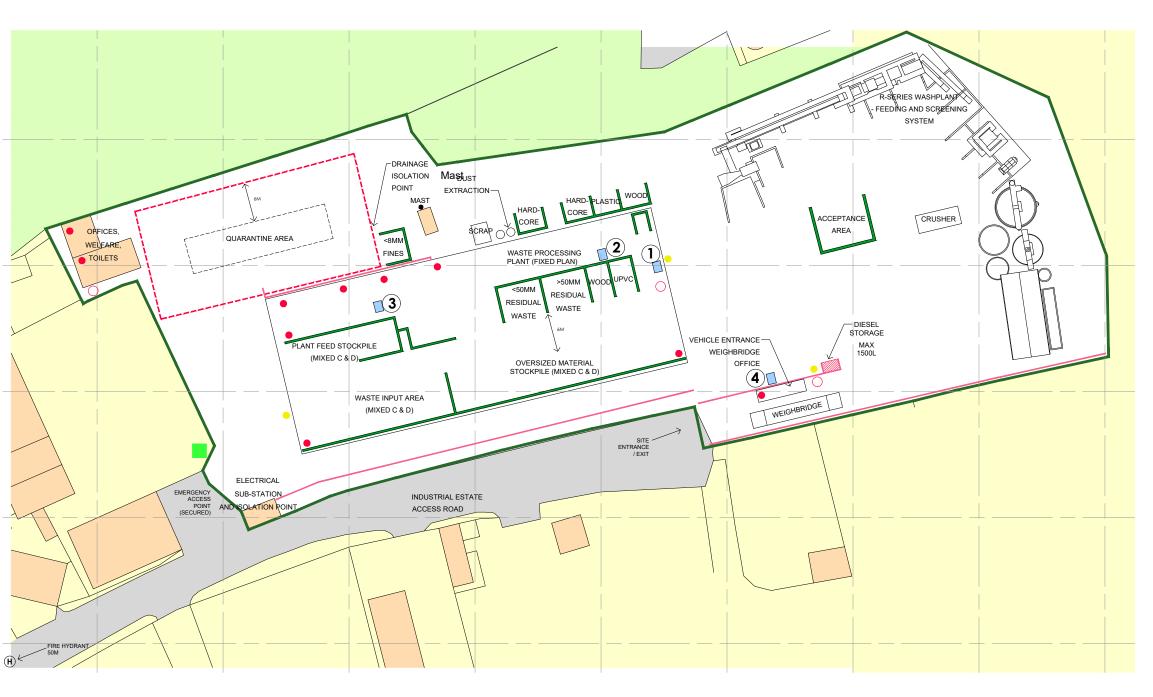
0 No Odour	4 Strong Odour
1 Very Faint Odour	5 Very Strong Odour
2 Faint Odour	6 Extremely Strong Odour
3 Distinct Odour	



Odour Management Plan

June 2024





NOTES DRAWING IS A SITE SCHEMATIC ANY ANOMALIES ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF OLIVE COMPLIANCE ORDNANCE SURVEY, (C) CROWN COPYRIGHT 2024. ALL RIGHTS RESERVED. LICENCE NUMBER 100022432 LEGEND PERMIT BOUNDARY (Q) QUARANTINE AREA SPILL KIT FIRE EXTINGUISHER FIRE HOSE  $\mathbf{H}$ EXTERNAL HYDRANT FIRE ASSEMBLY POINT LOCATION CONCRETE BLOCK / BARRIER DEMARCATION CONCRETE PANEL / BLOCK WALL (1) WEEE QUARANTINE **2** BATTERY QUARANTINE 3 ASBESTOS QUARANTINE GAS CYLINDER QUARANTINE



REMONDIS
WEST LINE INDUSTRIAL ESTATE, BIRTLEY, CHESTER LE STREET,
COUNTY DURHAM, DH2 1AU

PROJECT
EA Permit Application

DRAWING TITLE

SITE LAYOUT PLAN

DRAWING NUMBER
003

SCALE
1:750 @ A3

DATE
Compliance

0m 5m 10m 15m 20m 25r

IMS BIR EMS 004	ISSUE 01 REVISION 03	
QUALITY	ISO 9001:2015	
ENVIRONMENTAL	ISO 14001:2015	
HEALTH & SAFETY	ISO 45001:2018	

# BIRTLEY TRANSFER STATION FIRE PREVENTION PLAN



#### 2.2 Sensitive Receptors

2.2.1 A list of potentially sensitive receptors within a 1km radius of the site boundary are detailed in *Table 1* below;

Table 1 – Potential Sensitive Receptors within 1km of the site boundary

Ref:	Receptor	Receptor Type	Distance / Direction
1	Closed Landfill Site	Landfill (Closed)	0 – 625m N, NW
2	Zoemic Commercials	Vehicle Hire / Dealer	10m S
3	Rowletch Burn	Watercourse	10m E, NE, SE
4	Network Rail	Railway Line	30m E, NE, SE
5	Pallet Earth	Wood Crafter	30m W
6	Westline Distributors	Building Supplier	50m W
7	Komatsu	Manufacturers	75m E
8	Askem UK	Manufacturers	100m SW
9	Kerr Metals	Scrap Metal Recycling	150m SW
10	Tommy Wardle	Roofing Business	175m SW
11	O'Brien Demolition	Demolition Business	175m SE
12	Durham Road	Public Highway	400m E
13	Blue Barns Farm	Farm	400m NW
14	Marquis Motorhomes	Caravan Sales	450m E
15	Parker Hannifin	Manufacturers	450m E
16	Jewsons	Building Supplier	500m E
17	Lake	Watercourse	500m S
18	Birtley Golf Club	Leisure Activity	600m E
19	Ouston Village	Residential Properties	600 – 1000m W, NW, SW
20	Motorpoint Birtley	Car Sales	650m SE
21	Jet Garage (Birtley)	Petrol Station	700m NE
22	Birtley Swimming Centre	Leisure Centre	700m NE
23	Ouston Springs Farm	Farm	700m S
24	Birtley Township	Residential Properties	730 – 1000m E, NE, SE
25	Morrisons Birtley	Supermarket	800m NE
26	Sapa Profiles	Manufacturers	880m SE
27	Barley Mow Primary School	Primary School	900m SE
28	Lord of Beamish Academy	School	1000m NE
29	Portobello Primary School	Primary School	1000m E
30	Sure Start Children Care Centre	Day Care	1000m SE
31	Shell Garage	Petrol Station	1000m SE
32	Heather House Care Home	Care Home	1100m SE
33	Appletree Grange Care Home	Care Home	1200m SE

- 2.2.2 There are no hospitals within 1km of the site boundary, the nearest is Spire Washington Hospital located 2km South East of the site.
- 2.2.3 Sensitive receptors within 1000m of the site boundary are detailed in *Figure 1* below;

IMS BIR EMS 004	ISSUE 01 REVISION 03
QUALITY	ISO 9001:2015
ENVIRONMENTAL	ISO 14001:2015
HEALTH & SAFETY	ISO 45001:2018

# BIRTLEY TRANSFER STATION FIRE PREVENTION PLAN



Figure 1 – Sensitive Receptor Plan

