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WASTE RESOURCE MANAGEMENT



**WALSALL COUNCIL**

**MIDDLEMORE LANE WTS AND HWRC**

**DUST MANAGEMENT PLAN**

**JUNE 2024**

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**DUST MANAGEMENT PLAN**

**JUNE 2024**

**PREPARED BY:**

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DRAWINGS	TITLE	SCALE
BR10255-002	Proposed Permit Boundary	1:500@A0

## DOCUMENT CONTROL

The following table is used to track changes and updates to the dust management plan

Version	Issued	Changes	Approvers Initials
1. (Original)	[AUGUST 2023]	N/A	KH (WA LLP)

## **1 INTRODUCTION**

- 1.1.1 Walsall Council proposes to develop a combined Waste Transfer Station (WTS) and Household Waste Recycling Centre (HWRC), including commercial waste recycling centre (referred to as 'small traders' scheme') at Middlemore Lane, Aldridge, Walsall.
- 1.1.2 The WTS will accept up to 125,000 tonnes per year of non-hazardous & hazardous household, commercial and industrial waste, and the HWRC will accept up to 55,000 tonnes per year of household and similar commercial and industrial waste. Treatment of wastes will be limited to manual sorting, separation or compaction.
- 1.1.3 This Dust Management Plan has been developed to identify the site-specific source of potential dust emissions, set out the pathways and nearby receptors, and provide detailed information about the appropriate measures that will be used to manage risk and prevent dust emissions as far as practicable.
- 1.1.4 The site is located north of Middlemore Lane on the former McKechnie Brass Limited factory. It is bounded to the north by Daw End Branch canal, to the south by Middlemore Lane and to the west by Dumblederry Lane and existing commercial premises. Section 2 provides a summary of the nearby sensitive receptors and potential local contributors to emissions of dust.
- 1.1.5 One of the main risks of emissions from the combined WTS and HWRC will be from the acceptance of wastes with the potential to produce dusty emissions. Section 3 identifies the potential sources of emissions of dust associated with the site activities.
- 1.1.6 Permitted waste types do not include wastes with a high potential to produce dusts, and most WTS activities will be undertaken in an enclosed building. Section 4 provides details of the emissions control measures that will be employed and how the emissions will be monitored.
- 1.1.7 As set out in Section 5, the site will operate an Environmental Management System (EMS) accredited to ISO14001. The EMS sets out the operator's measures in place to minimise the risk of environmental harm from site activities and facilitate continuous improvement. The section outlines the site's complaints procedures and staff responsibilities.

## 2 SITE SETTING

### 2.1 Site Location

2.1.1 Middlemore Land HWRC and WTS is located on Middlemore Lane, Aldridge, northeast of Walsall. The site's nearest postcode is WS9 8DL, centred around grid reference NGR SK 04914 00815. A site layout plan, development boundary and permit boundary (shown in green) are shown on Drawing No BR10255-002.

2.1.2 The site is located on an industrial estate, with the surrounding area to the north and west predominantly industrial and commercial units. The land use east and south of the site is predominantly residential.

### 2.2 Sensitive Receptors

2.2.1 The nearest residential properties are located approximately 170m northeast of the Site on The Briars cul de sac. There is a field located 90m east of the site currently used for sports recreation purposes.

2.2.2 A number of designated habitat receptors have also been identified within 2km of the site, including Stubbers Green Bog SSSI located 630m to the north, Swan Pool & The Swag SSSI 1,200m to the north, and Jockey Fields 1,800m to the north. Local Nature Reserves (LNR) Hay Head Wood, and Cuckoo's Nook and the Dingle are located 1,600m and 1,650m south of the site, respectively, each containing areas of designated ancient woodland. Park Lime Pits LNR is located approximately 1,600m west of the permit boundary. Further ancient woodland is located approximately 750m northeast at Leigh's Wood. There are no further designated habitats or European sites within 2km of the permit boundary.

2.2.3 Table 2.1 below provides a list identifying the sensitive receptors within 1km of the site, which have the potential to be affected by emissions of dust.

Table 2.1: List of Receptors within 1km		
Receptor	Distance from Site	Direction
<b>Protected Sites / Designated Sites</b>		
Stubbers Green Bog SSSI	627 m	North
<b>Water</b>		
Wyrley and Essington Canal – Daw End Branch	5 m	North
Unnamed Drain to The Swag	650 m	North West
The Sway (Pool)	975 m	North West
Unnamed Pool (Leighs Wood)	775 m	North East
Unnamed Sluice and culvert	50 m	East
Unnamed Drain along railway	150 m	South
<b>Residential</b>		
Pool Green Housing Estate	190 m	South

Table 2:1: List of Receptors within 1km		
Receptor	Distance from Site	Direction
Aldridge (The Briars)	170 m	North East
Rushall	780 m	West
<b>Commercial / Industrial</b>		
Linley Lodge Industrial Estate	150 m	West
Red House Industrial Estate	0m	South and East
Beacon Trading Estate	75 m	East
WestPoint Industrial Estate	20 m	South West
Anchor Brook Business Park	35 m	North
BP Garage (Middlemore Lane)	15 m	South
Businesses on Leighswood Road	310 m	East
<b>Schools</b>		
Little Rascals Day Nursery	550 m	North East
The Old Railway House Children's Nursery	465 m	South East
Leighswood School	850 m	North East
Cooper & Jordan C of E School	1 km	East
Aldridge School	700 m	South South East
<b>Carehomes</b>		
Alder House Retirement Home	350 m	East North East
Coleman Lodge	630 m	East
Old Rectory Gardens	925 m	East
The Hawthorns	950 m	East
<b>Healthcare</b>		
Northgate Medical Centre	400 m	South East

2.2.4 The Daw End Branch Canal and local deciduous woodland are sensitive as they may be damaged by emissions of dust from the site. Emissions of dust may harm plants via smothering. Dust may also cause respiratory issues for local human populations if inhaled, as well as causing a nuisance when deposited.

2.2.5 The facility has been designed to prevent emissions of dust and minimise potential impacts on nearby sensitive receptors.

## 2.3 Local Contributors of Emissions

2.3.1 The Site is located within the eastern extent of an industrial estate, which has a number of commercial and industrial occupants operating in proximity to the proposed operations.

2.3.2 Table 2.2 identifies sites within 1km of the proposed WTS and HWRC, which have the potential to generate emissions of dust, including waste operations and mineral extraction sites.

- 2.3.3 There are two waste transfer stations located on Westgate, which is a road to the northwest of the site within the wider industrial estate. A Household Waste Amenity Site is currently located to the northeast of the site, also within the industrial estate, though that may be replaced once this new HWRC is permitted. Atlas Quarry, used for the extraction of Etruria Marl, sits on the northern periphery of the industrial estate, northwest of the site.

Table 2.1: Local Contributors of Emissions within 1km				
Operator Name	Address	Site type	Permit Number	Distance
Walter & Sons Waste Management Limited	Aldridge House, Aldridge House, Westgate, Aldridge, Walsall, West Midlands, WS9 8EX	SR2016 No 6: 75kte Household, Commercial & Industrial WTS + treatment	<a href="#">HB3908TZ</a>	0.2 km northwest
Ibstock Brick Ltd	Atlas Quarry, 175 Stubbers Green Rd, Walsall WS9 8BL	Quarry (clay/marl)	N/A	0.4 km northwest
Biffa G S Environmental Limited	Aldridge Waste Transfer Station, Westgate, Aldridge, Walsall, West Midlands, WS9 8YH	Household, Commercial & Industrial WTS	<a href="#">PP3896FN</a>	0.5 km West
Suez Recycling And Recovery UK Ltd	Merchants Way H W S, Merchants Way, Aldridge, Walsall, West Midlands, WS9 8SW	Household Waste Amenity Site	<a href="#">BB3203ZZ</a>	0.5 km Northeast

- 2.3.4 There are several sites operating similar activities to those proposed at Middlemore Lane within the local industrial setting. There is also a quarry operation less than 400m north of the permit boundary. The new activities therefore pose very limited additional risk to local receptors.
- 2.3.5 The procedures outlined in this plan have been developed with due consideration to the proximity of local sensitive receptors with the aim of preventing any particulate emissions beyond the permit boundary as far as reasonably practicable. Appropriate measures will be employed to mitigate the risk of dust emissions causing cumulative impacts on nearby receptors.



### **3 POTENTIAL SOURCES OF DUST EMISSIONS**

#### **3.1 Permitted Activities**

- 3.1.1 The site will operate a combined Waste Transfer Station (WTS) and Household Waste Recycling Centre (HWRC), which will include a small traders' scheme handling a selection of waste streams from commercial operators similar to what would be expected from households.
- 3.1.2 The WTS will accept wastes collected through the Council's services, primarily consisting of household waste collections, with secondary streams from grounds maintenance and street sweepings services. Household waste streams will be mixed residual waste (black bin waste), garden waste, mixed dry recycling waste and material collected through bulky waste collections. The facility has been designed with capacity and capability to accept future segregated waste streams, for example food waste.
- 3.1.3 The WTS will be primarily housed in a purpose built, enclosed building to the northwest of the development site. External bays have been allocated for the storage of suitable materials.
- 3.1.4 The HWRC will be located in the east of the development site, and the small traders' scheme will be located to the south of the WTS. All waste delivered to the HWRC and small traders' scheme will be stored in appropriate containers. The majority of storage will be provided by RoRo skips for separate collection of different material streams. Suitable fully sealed or caged container provision will be provided as appropriate (i.e. for liquid wastes, WEEE, asbestos and dry recyclates).
- 3.1.5 In the WTS, waste will be stored in waste delivery bays consisting of concrete push walls and impermeable surfaces which direct liquids to foul sewer. The entrances and exits to the WTS building will be raised to provide additional bunded capacity, for example for the containment of firewater.

#### **3.2 Point-Source Emissions**

- 3.2.1 There will be no point-source emissions of dust from the HWRC activities.
- 3.2.2 There will be two point-source emissions to air from the WTS building associated with the exhaust of the ventilation and air treatment system, which will be designed to remove and abate odour and dust originating from within the building. Further details on the system are provided in section 4.
- 3.2.3 There are no further point-source emissions to land, air and/or water.

### 3.3 Fugitive Emissions Sources

- 3.3.1 There will be a risk of fugitive emissions of particulates from dry wastes with the potential to generate dust (for example soils, aggregates, street sweepings) however this risk will be significantly limited by prohibiting the acceptance of excessively dusty loads.
- 3.3.2 There is also a risk of dust being generated from dry mud deposits on site roads, however the whole site will benefit from impermeable surfacing, including site roads, significantly limiting the potential for the generation of mud.
- 3.3.3 Emissions from the WTS operations will be further limited by containment of the operation within an enclosed building. Section 4 provides the control measures that will be implemented at the site to prevent the risk of dust emissions beyond the site boundary.

## **4 MANAGEMENT OF DUST EMISSIONS**

### **4.1 Control Measures**

- 4.1.1 Stringent control measures, as set out within this plan, will ensure that emissions of particulates are prevented as far as possible, minimising the risk of polluting emissions of dust and bioaerosols beyond the permit boundary.
- 4.1.2 Permitted waste types acceptable at the site do not include excessively dusty materials. Strict waste acceptance procedures will be operated at the site (as set out in the Operating Techniques documents supporting the permit application), which will ensure prohibited materials are not accepted. Waste received at the WTS will be subject to waste pre-acceptance to ensure wastes arriving are acceptable under the permit conditions. At the HWRC and Small Traders' scheme, site operatives will supervise the unloading of all wastes and will only allow permitted waste types to be deposited.
- 4.1.3 Excessively dusty wastes arriving at the site will be prohibited from tipping and rejected from site. Loads rejected from site will be redirected to the site of origin or an appropriately permitted facility. Any non-conforming waste identified as being deposited on the site, including excessively dusty loads, will be removed from site at the earliest opportunity. The non-conforming material will be isolated and where appropriate and moved to the waste quarantine area prior to being sent to an appropriately permitted site for further treatment or disposal.
- 4.1.4 All vehicles carrying potentially dust producing wastes to or from the site will be required to be sheeted or covered.
- 4.1.5 At the HWRC, wastes will be stored in concrete bays or metal containers. These will shield wastes from wind and prevent any dusty materials from becoming airborne. Containers containing potentially dusty wastes may be covered, if appropriate to prevent dust emissions.
- 4.1.6 WTS operations will be undertaken within the enclosed WTS building. Entrances and exits to the WTS have fast acting roller shutter doors which will remain closed other than when vehicles are entering or exiting the building. This will shield waste from wind and entrainment of particles in the air, and prevent escape of dusty emissions from the WTS building. The WTS's ventilation and air treatment system will hold the building under slightly negative pressure, further preventing the escape of dust and particulates.

- 4.1.7 The ventilation system will provide extraction on either side of the building directing air via two exhaust vents. The system will be designed to abate emissions to air through particulate filtration to EU 8 standard and a carbon filter, treating the total volume of extracted air. The system will be designed to ensure the maximum dust concentration in the exhaust air shall be less than 5mg/m<sup>3</sup> and will provide a minimum three (3) air changes per hour.
- 4.1.8 The Waste Transfer station shall also be fitted with a dust suppression system comprising of fan assisted rotary atomisers, allowing stockpiles to be dampened if appropriate, for example during hot weather where there is a risk of dry wastes generating dusty emissions that may escape the WTS building. The water supply to the atomisers will be via a tank and feed pump.
- 4.1.9 Waste stored in external bays will be limited to appropriate waste types and will not include light or dusty wastes that have the potential to be wind-blown; wastes in external bays will not exceed bay capacity and will be kept within the footprint of the bay and not above the height of the bay wall. Hoses will be available on site and may be used to dampen waste stockpiles in external bays in the event of hot or windy weather, when a risk of dust emissions beyond the permit boundary is identified. During strong winds, in the unlikely event dusty emissions are observed to be causing potential pollution beyond the site boundary, operations may be temporarily suspended until the emissions are mitigated effectively.
- 4.1.10 Site roads will be kept clean and in good condition to prevent build-up of mud and other dirt which can cause dusty emissions when dry. Hardstanding will be swept as necessary using brushes or the road sweeper to keep operational areas and site roads clean. Facilities will be provided to wash down vehicles leaving the site as necessary.
- 4.1.11 Daily inspections of the site will include an assessment of emissions of visible dust. Should there be any dust observed escaping the site boundary, the source will be investigated, and mitigation measures will be implemented.
- 4.2 Monitoring of Emissions
- 4.2.1 The Site will be operated in accordance with stringent written procedures, benefitting from appropriate infrastructure and storage to effectively prevent and control emissions resulting from site activities.
- 4.2.2 An Amenity and Accident Risk Assessment has been provided with the permit application, detailing the source, pathway and receptors of environmental risks

resulting from site operations and the necessary appropriate measures to prevent or minimise resulting impacts.

- 4.2.3 The Site will be inspected on a daily basis by a trained operative to identify any issues of concern, including dust, odour, litter and the conditions of site infrastructure such as roads, drainage and buildings. These inspections will include observation of the WTS's ventilation exhaust vents and the site boundary.
- 4.2.4 The dust filtration system serving the WTS building will be maintained in accordance with the manufacturer's recommendations and spare media will be kept on site to ensure it can be quickly changed if the media is saturated or damaged.
- 4.2.5 Dust filters are monitored constantly via a filter pressure drop indicator to ensure they are operating effectively. If there is an excessive pressure drop that indicates the filter is no longer working as expected, an alarm will sound on the control panel and the filter media will be replaced.
- 4.2.6 If potentially polluting dust emissions are detected during visual monitoring inspections or by site operatives during general operations, this will be brought to the attention of the site manager (or other person with necessary authority), recorded in the site log, and steps will be taken to reduce any further risk of visible dust. Any detected emissions will be dealt with immediately and the incident recorded to prevent future emissions.
- 4.2.7 Any issues noted will be addressed by site management and the appropriate level of remedial action agreed, with the detail of the action recorded. Records of all monitoring inspections will be made in the site diary.

## **5 SITE MANAGEMENT**

### **5.1 Environmental Management System**

5.1.1 The site will operate under Walsall Council's ISO 14001 accredited Environmental Management System, developed in accordance with the Environment Agency's Guidance Develop a management system: environmental permits. The EMS covers:

- Quality Management;
- Environmental Management;
- Health and Safety Management;
- Training;
- Maintenance; and
- Environmental permit and other environmental legislation and requirements.

5.1.2 Staff at the facility will be trained to carry out checks during their work to spot any actual or potential occurrences of spillages, leaks or other events, malfunctions and the like that could cause emissions to air, water or ground. These will be immediately reported to site management and appropriate remedial action carried out.

### **5.2 Emergency Events**

5.2.1 In the event of equipment or infrastructure failure that causes risk of excessive emissions of dust, repairs will be undertaken promptly. If necessary to prevent dust emissions, operations will cease and will not recommence until the damage or failure has been rectified, and it is safe to operate without causing undue risk to human health or the environment.

5.2.2 A site specific Fire Prevention Plan has been provided with the permit application and will be available on site, detailing the procedures to prevent and minimise environmental emissions, including particulates, in the event of a fire.

5.2.3 Contact details for emergency third party contractors will be set out in the Environmental Logbook.

### **5.3 Complaints**

5.3.1 In the event that any complaints are received, details of the complaint will be recorded in the Site Diary and potential sources or occurrences on site will be investigated. Records of all complaints and remedial action taken shall be recorded.

- 5.3.2 On receipt of a complaint, the complaint log (Appendix 1) will be completed. Details of the complaint will be noted, and an immediate investigation will be carried out. The investigation will identify the potential dust source and the issue will be mitigated as soon as possible.
- 5.3.3 Details of the investigation and any action taken will be reported back to the complainant within one working day, unless the complainant has chosen to be anonymous or has requested not to be contacted.
- 5.3.4 Any complaints will be investigated, and mitigation taken as necessary to resolve the complaint. If a pattern of complaints is evident, such as 3 or more complaints being received within a period of 6 hours, the site operations will cease immediately (if deemed appropriate by the site manager) and will not restart until the situation has been resolved, as demonstrated by the dust inspections.
- 5.3.5 The results of the complaint investigation and the measures taken to resolve the complaint will be made available to the Regulator upon request.
- 5.3.6 Additional mitigation will be employed as and when necessary to resolve the complaint(s). This will as a minimum include increased frequency of water suppression at dust-generating sources.
- 5.4 Distribution and Training
  - 5.4.1 A physical copy of the Dust Management Plan will be kept on site at all times and made available to site staff. The Plan shall be made available to the Regulator on request.
  - 5.4.2 Where site operatives have responsibilities under the environmental permit, they will be trained and familiarised with the mitigation actions required for their role. The training will make the employee aware of the wider dust management controls active at the site. Suitable training may include a site-specific toolbox talk and annual refresher sessions.
  - 5.4.3 The Site Manager will ensure that each employee and subcontractor at and/or arriving at the site are familiar with the control measures and procedures outlined in this plan and are aware of their individual role in reducing dust emissions. Personal protective equipment shall be provided as necessary for employees and visitors.

## 5.5 Review and Responsibility

- 5.5.1 The operator will nominate appropriate members of staff to enforce the measures within this Plan. This will, as a minimum, include the Site Manager and/or site supervisor and any further staff who carry out day-to-day activities around the site.
- 5.5.2 Site operations will be audited internally and externally on an annual basis. This will confirm compliance with the written procedures, including this Dust Management Plan. Audits will allow for a review of progress and the setting of targets for continuing improvement over the coming year.



## **APPENDIX 1**

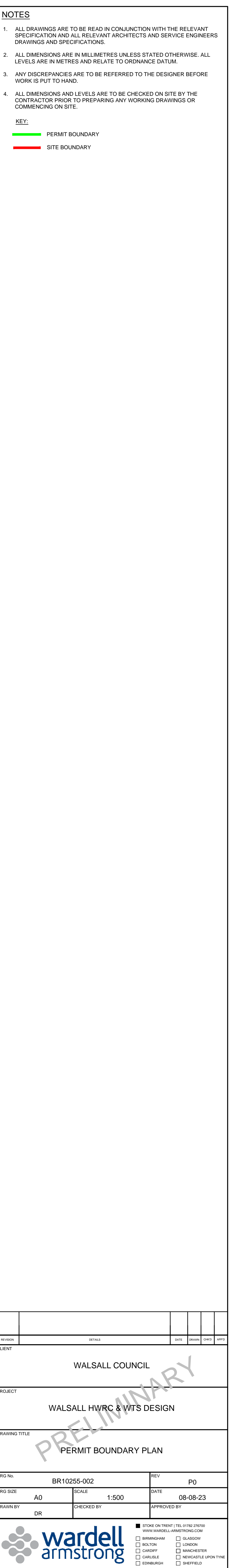
### **Complaint Log**

### Complaint Form

Time and date	
Name and address (or general location) of Complainant	
Telephone number of complainant	
Type of complaint	<input type="checkbox"/> Dust <input type="checkbox"/> Noise <input type="checkbox"/> Odour <input type="checkbox"/> Other
Date and time emission was detected by complainant/registered	
Location of potential emissions sources and survey locations	
Description of emission (visible deposits on road? Airborne dust?)	
Weather conditions during survey (e.g. Rain/fog/wind etc.).	
Temperature	
Wind direction	
Details of investigation and action taken	
Survey completed by:	

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