



WASTE MANAGEMENT

DERWENT RECYCLING CENTRE

DUST & EMISSION MANAGEMENT PLAN (DEMP)

VERSION NUMBER: 0.3

DATE: 18/03/2025

Change History / Document Review

Revision No.	Effective Date	Significant Changes	Previous Revision No.
0.1	14/08/24	Initial draft.	N/A
0.2	15/08/24	Minor grammatical amendment.	0.1
0.3	18/03/25	Updated Material Bay Plan, Dust Suppression System Layout drawings included (Figures 2.3 and 2.4) Revised Monitoring Report Form also included (Appendix F)	0.2

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1. Introduction

The site covers approximately 2.03 hectares or 5.01 acres. It is an existing industrial premises located on the North side of Derwent Way (Grid Reference SE 42122 02009) on the Wath West Industrial Estate, which is located to the North-West of Wath-Upon-Deerne and North of Rotherham. The site falls within the administrative area of Rotherham Metropolitan Borough Council.

The site fronts directly onto Derwent Way on its Southern border. Bordering the permitted area to the North is a belt of green land which includes a public footpath, beyond this are industrial units off Manvers Way. There are industrial premises neighbouring the site on the Eastern boundary. To the West of the permitted area is an extension of hard standing land.

There are no residential properties located within immediate proximity of the site. The nearest residential properties are on Moorbridge Crescent located west of the site on the west side of the Pontefract Road at a distance of 200m.

Access and egress for the site is situated directly from Derwent Way. There is also the option of accessing the site from Pontefract Road on the Western boundary.

The site currently comprises of staff and visitor parking, a platform weighbridge, a waste transfer station (WTS) building, HGV parking, container storage area, administration offices, and staff welfare facilities.

Having previously being used as a waste facility, the site benefits from internal surfaced roadways that provide access into the WTS building on its Northern façade.

The WTS building has a footprint of 816m² (or 8,783ft²) and is constructed from a steel portal frame with corrugated cladding. Access into the WTS building is via the Southern façade which is completely open. The floor of the WTS building is constructed from concrete.

The recycling facility benefits from an Environmental Permit (EPR/VP3693VS) currently allowing a maximum of 25,000 tonnes of wasted to be received on site per annum. It is intended to increase this to 75,000 tonnes per annum.

The site is not located in an Air Quality Management Area, this has been verified on the Defra website: <http://uk-air.defra.gov.uk/aqma/>

Section 3.1 of the current standard rules permit for the site issued by the Environment Agency stipulates;

3.1 Emissions of substances not controlled by emission limits

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

3.1.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
- (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

This DEMP was generated to meet the above conditions and in support of the application to vary the environmental permit. It will be integrated into the Environmental Management System for the site. A copy of this plan will be kept on site and will be used for reference by site staff, specifically those who operate fixed plant within the building and those who control movements of mobile plant and vehicles around the site.

There are no infrastructure or special controls related to dust required within the planning permission granted by Rotherham Metropolitan Borough Council.

It is highly unlikely due to the infrastructure in place, equipment installed and management techniques that there will be dust emissions beyond the permit border of the facility.

1.1 Sensitive Receptors

Table 1.1 below is a summary of the sensitive receptors local to the site boundary.

Table 1.1: Representative Sensitive Locations

Boundary of transfer station	Land use	Distance / Direction
Northern Boundary	Century Businesses Park (various)	52m / N
	KC Sofas	50m / NE
	Big Wild Thought	85m / NE
	Technical Print	110m / NE
	Manvers Way (A633)	145 / NE
	Old Moor Wetland Centre RSPB Reserve	250m / NE
Eastern Boundary	Dearne Lane	105m / E
	Industrial units on Dearne Lane	165m / E
	Knoll Beck River	355m / E
Southern Boundary	Nu-Con	50m / S
	Derwent Way	130m / S
	Ultimate Accident Repair	145m / S
	Life Skills Rotherham	255m / S
Western Boundary	Keyline Civils	50m / W
	Industrial units off Derwent Way	195m / W
	Recreational area	250m / WNW
	Moorbridge Crescent	260m / W
SSSIs	Old Moor Wetland Centre RSPB Reserve	>500m / NE

The most immediate receptors to the site for dust would be:

- the neighbouring businesses in all directions,
- users of Derwent Way and,
- natural habitats living within the deciduous strip of woodland to the north.

Figure 1.2 in the following pages shows the detail for sensitive receptors within 1,000km of the site.

NB: Please note that distances provided within the above table are the distances from the building and not from the site boundary, the reason for this is that this assessment was undertaken to support a Fire Prevention Plan for the site.

We have listed the type of receptor, the distance from the facility, the direction from the facility and a grid reference for each receptor.

We have listed travel routes as they have a potential to be affected if excessive dust emissions from the facility did occur. As we cannot comment on the health of users of the industrial estate site nor in any residents of properties within 1,000km we have listed them as receptors.

1.2 Meteorological Conditions

The closest meteorological station to the site is Sheffield weather station, which is located circa 10.4 miles (16.7km) South-South-West from the site boundary. Due to its locality this weather station is considered the most suitable in terms of reflecting weather patterns likely to be experienced at the site.

Data from the windfinder.com website is based on measurements taken annually; the prevailing wind direction is indicated in Figure 1.1 below.

The wind rose below shows that the prevailing wind direction is predominantly from the West and the South-East. This indicates that the wind will be blowing principally towards the industrial premises to the east of the site boundary and towards the hardstanding on the North-West of the same property owned by HMMW.

Figure 1.1: Wind rose showing the average wind direction & wind strength local to Derwent Recycling Centre (DRC)

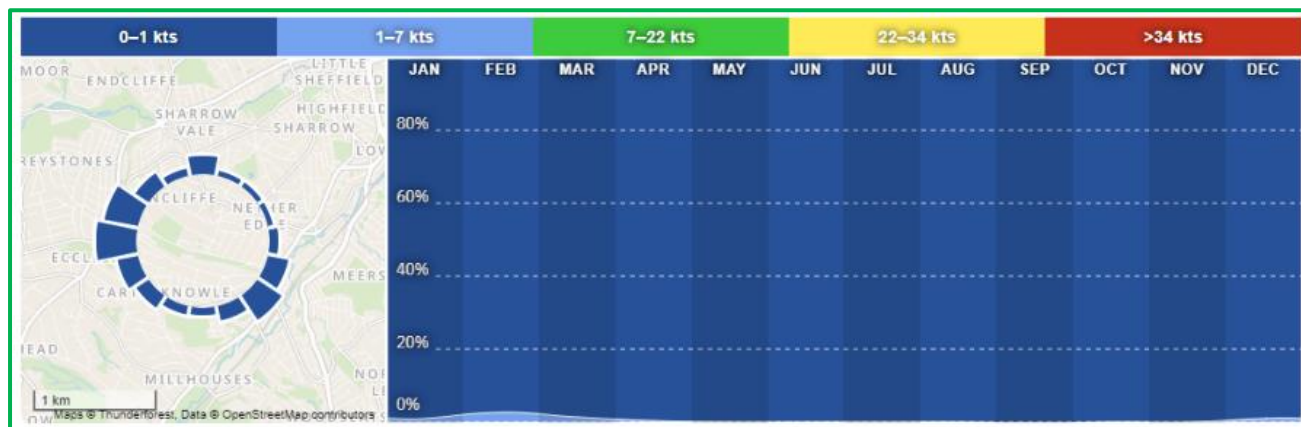
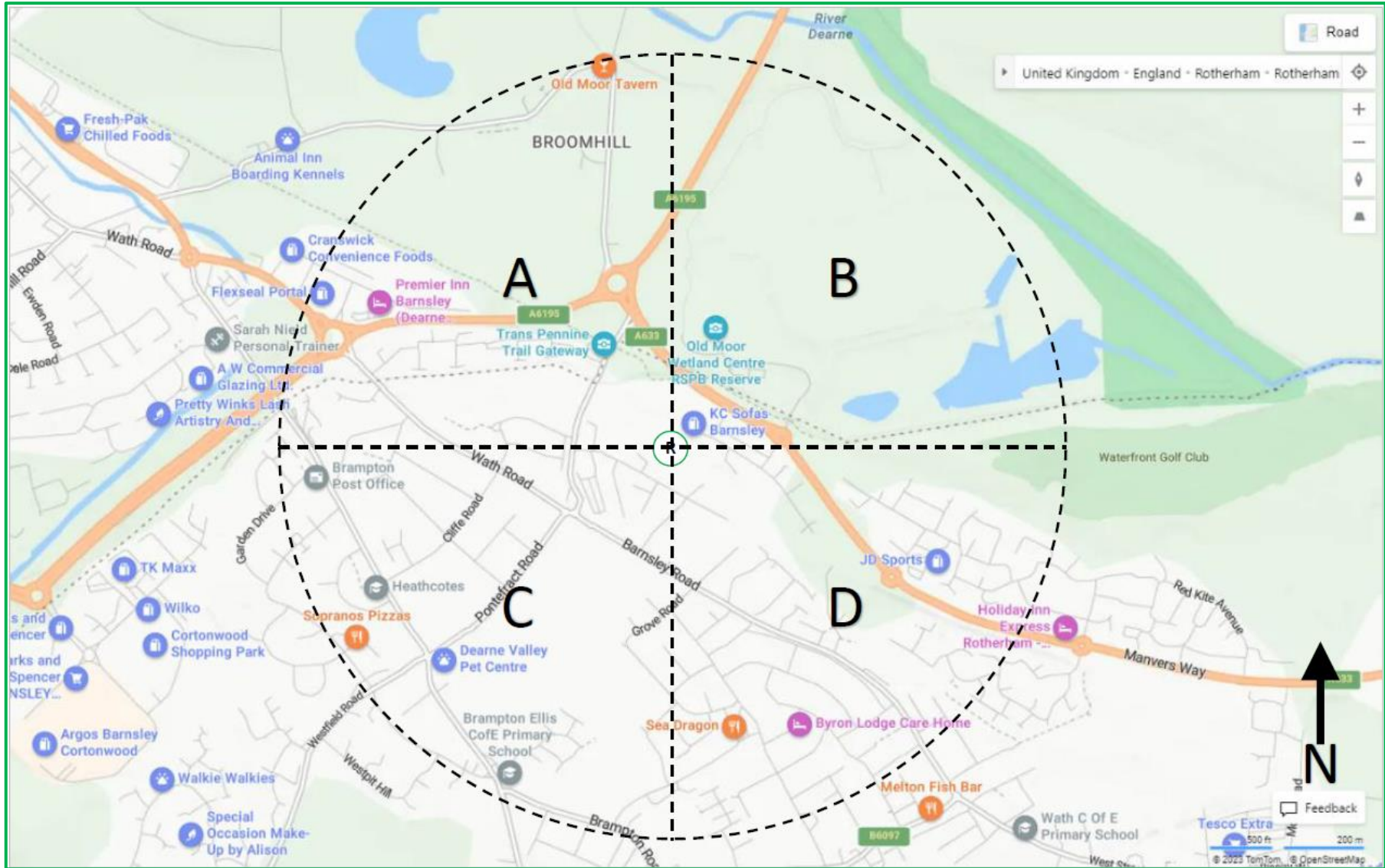


Figure 1.2: Local Sensitive Receptors within 1 km (DRC, SE63 6EX, Grid ref. SE 42122 02009)

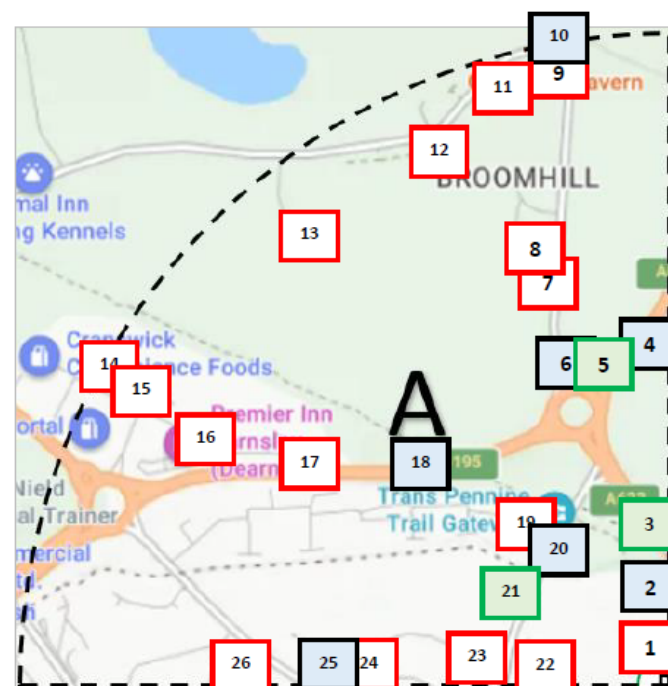




WA-IMS-ENV-EM-005_V0.3, DRC Dust & Emission Management Plan

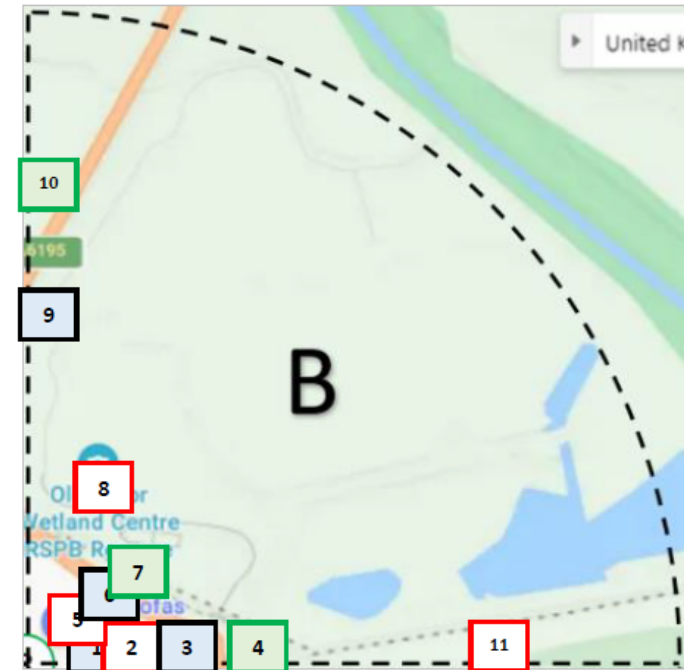
QUADRANT A

#	Receptor	Dist. M	Direction from site	Grid Reference
1	Century Business Park	52	North	SE 42115 02080
2	Manvers Way (A633)	165	North	SE 42125 02171
3	Old Moor Wetland Centre RSPB Reserve	200	North	SE 42129 02231
4	Dearne Valley Parkway (B6273)	555	North	SE 42113 02538
5	Recreational area	465	North-by-West	SE 41987 02456
6	Highgate	475	North-by-West	SE 41950 02450
7	Highgate, residential	605	North-by-West	SE 41931 02583
8	The Sidings, residential	700	North-by-West	SE 41910 02638
9	Old Moor Tavern	935	North-by-West	SE 41941 02930
10	Everill Gate Lane	960	North-by-West	SE 41929 02942
11	Leon Grant Clothing	940	North-by-West	SE 41836 02877
12	Everill Gate Lane, residential	850	North-by-West	SE 41770 02775
13	Willow Farm	805	North-West	SE 41590 02617
14	Cranswick Convenience Foods	990	West-North-West	SE 41243 02479
15	Flexseal Portal	900	West-North-West	SE 41290 02421
-	D L G Auto Services	900	West-North-West	SE 41290 02421
16	Premier Inn Barnsley (Dearne Valley)	775	West-North-West	SE 41403 02311
-	The Meadows, Brewers Fayre	775	West-North-West	SE 41403 02311
17	Valley Park Estate	690	West-North-West	SE 41605 02333
18	Dearne Valley Parkway (B6273)	490	North-West	SE 41784 02310
19	Kingfisher Drive, residential	300	North-West	SE 41898 02228
20	Pontefract Road	240	North-West	SE 41945 02197
21	Recreational area	250	West-North-West	SE 41887 02106
22	Industrial units off Derwent Way	195	West	SE 41925 02014
23	Moorbridge Crescent, residential	260	West	SE 41852 02009
24	Wath Road, residential	290	West	SE 41610 02021
25	Wath Road	580	West	SE 41530 02014
26	Chapel Avenue, residential	660	West	SE 41465 02027



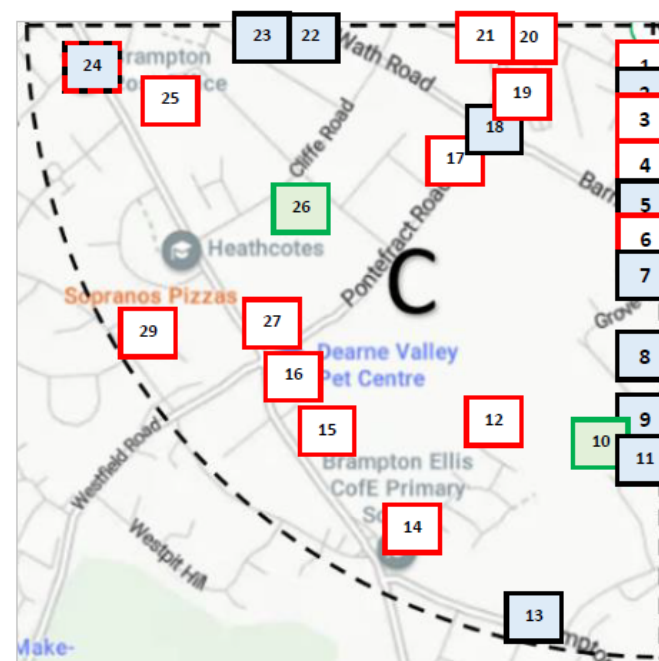
QUADRANT B

#	Receptor	Dist. M	Direction from site	Grid Reference
1	Dearne Lane	105	East	SE 42227 02006
2	Industrial units, Dearne Lane	165	East	SE 42284 02008
3	Manvers Way / Old Moor Ln, roundabout	255	East	SE 42371 02008
4	Knoll Beck, river	355	East	SE 42473 02010
5	K C Sofas	50	North-East	SE 42166 02050
-	Big Wild Thought	85	North-East	SE 42210 02061
-	Technical Print	110	North-East	SE 42197 02087
6	Manvers Way	145	North-East	SE 42222 02114
7	Old Moor Wetland Centre RSPB Reserve	190	North-East	SE 42249 02154
8	Old Moor Wetland Centre	245	North-North-East	SE 42190 02247
9	Dearne Valley Parkway (B6273)	600	North	SE 42125 02592
10	Recreational area	755	North	SE 42120 02773
11	Waterfront Golf Club	780	East	SE 42891 01997



QUADRANT C

#	Receptor	Dist. M	Direction from site	Grid Reference
1	Keyline Civils	50	South	SE 42135 01913
2	Derwent Way	130	South	SE 42133 01877
3	Ultimate Accident Repair	145	South	SE 42124 01866
4	Life Skills Rotherham	255	South	SE 42102 01756
5	Barnsley Road	335	South	SE 42121 01686
6	Barnsley Road, residentials	360	South	SE 42122 01669
-	Grove Road, residentials	360	South	SE 42122 01669
7	Grove Road	420	South	SE 42099 01582
8	Elliot Close & Browning Road	590	South	SE 42140 01423
9	Coleridge Road	675	South	SE 42108 01334
10	Recreation area	765	South	SE 42009 01273
11	Christchurch Road	850	South	SE 42114 01156
12	Ellis Grove, residentials	729	South-South-West	SE 42834 01335
13	Brampton Road	985	South-by-West	SE 41990 01042
14	Brampton Ellis CofE Primary School	880	South-South-West	SE 41773 01207
15	Brampton Road, residentials	825	South-West	SE 41606 01366
16	Dearne Valley Pet Centre	785	South-West	SE 41575 01446
-	Brampton MOT Centre	785	South-West	SE 41575 01446
17	Pontefract Road, residentials	375	South-West	SE 41831 01830
18	Pontefract Road	290	South-West	SE 41881 01872
19	Norham Plastics	215	West-by-South	SE 41929 01924
-	Semlo Fabrications	215	West-by-South	SE 41929 01924
20	Industrial units off Derwent Way	195	West	SE 41925 02014
21	Moorbridge Crescent, residentials	260	West	SE 41852 02009
22	Wath Road	585	West	SE 41503 02033
23	Dearne Road / Chapel Avenue	675	West	SE 41442 02042
24	Knollbeck Lane	870	West	SE 41243 01919
-	Brampton Post Office	870	West	SE 41243 01919
25	Brampton Cortonwood Infant School	740	West-by-South	SE 41395 01866
26	Recreation ground	655	West-South-West	SE 41563 01689
27	Paw 4 A Day School	785	South-West	SE 41527 01514
-	Squad Fitness	785	South-West	SE 41527 01514
-	The Bulls Head	785	South-West	SE 41527 01514
28	Westfield Road	830	South-West	SE 41502 01465
29	Sopranos Pizzas	925	South-West	SE 41329 01518



QUADRANT D

#	Receptor	Dist. M	Direction from site	Grid Reference
1	Dearne Lane	105	East	SE 42227 02006
2	Dollywood Cosmetics / Edit Surgery	270	East	SE 42381 01980
-	Tiny Tots Day Nursery	290	East	SE 42381 01980
3	Manvers Way	295	East	SE 42416 01981
4	Bauer	425	East-by-South	SE 42543 01913
5	Waterfront Golf Club	500	East	SE 42656 01990
6	Bow Wow Brigade	425	East-by-South	SE 42634 01871
-	Rotary Drive, residentials	425	East-by-South	SE 42634 01871
7	Costa Coffee / KFC / Bluebell Inn	640	East-South-East	SE 42702 01734
-	Greggs / JD Sports / Onyx Fish Bar	640	East-South-East	SE 42702 01734
8	Holiday Inn Express Rotherham	995	East-South-East	SE 42998 01582
9	Whitworth Lane, residentials	730	South-East	SE 42655 01524
10	football ground off Barnsley Rd)	575	South-East	SE 42528 01599
11	JET petrol garage	705	South-East	SE 52575 01466
12	Byron Lodge Care Home	805	South-South-East	SE 42549 01292
13	West Melton Primary School	960	South-by-East	SE 42347 01085
14	Premier, convenience store	715	South-by-East	SE 42274 01308
-	Marmareekas Grill / Sea Dragon, cafe	715	South-by-East	SE 42274 01308
15	Barnsley Road	340	South	SE 42109 01687
-	Barnsley Road, residentials	340	South	SE 42109 01687
16	Life Skills Rotherham	255	South	SE 42102 01756
17	Ultimate Accident Repair	145	South	SE 42124 01866
18	Derwent Way	130	South	SE 42133 01877
19	Keyline Civils	100	South	SE 42135 01913



Table 1.2: Sources of Dust and/or other Emissions

Company	Address	Type of Business	Distance from DRC site boundary (m)
Keyline Civils	Derwent Way	Building Material Supplier	0
Nu Con	Derwent Way	Concrete and concrete block production	0
-	A633	Busy public highway	130
Norham Plastics	Derwent way	Plastic injection moulding	50
Garden Shed UK	Derwent Way	Manufacturer of sheds and timber products	150

2. Operations at Derwent Recycling Centre

2.1 Waste Deliveries to Derwent Recycling Centre

The site is operating as a household, commercial and industrial waste transfer station and the total quantity of waste currently accepted onto the site is currently less than 25,000 tonnes per year. Permit variation will increase tonnage to less than 75,000 tonnes per year.

Segregated waste streams will be delivered into the site by 40 – 45 yard container hook lift vehicles or articulated lorries with ejector trailers. As the site develops, HWMW plan to accept mixed Local Authority material as well as the segregated waste streams. All containers and vehicles are contained or have sheeting systems to contain waste and reduce the risk of emissions occurring.

HWMW accepts that there will be a minimal amount of contamination within the mixed dry recyclables and source segregated wastes delivered into this site.

Upon entering the site, all waste delivery / collection vehicles will be checked-in at the weighbridge, upon satisfactory documents and acceptance, the waste vehicles will then be directed towards the applicable storage area. Site staff direct the waste vehicle towards the designated waste bay / tipping area, giving instruction to deposit or collect the load when it is safe to do so. The waste vehicle returns to the weighbridge via the designated route. Routing for the site is shown in Figure 2.2.

All waste is subject to being accepted as per our MRF & WTS Waste Acceptance procedure. This includes being rejected for the presence of non-acceptable or wrongly coded wastes, being odorous or dusty and, the presence of flies and of oversized wastes. Site staff have the option to reject and reload the material in its entirety, to quarantine the material pending further investigation or onward movement or to contain the material pending onward movement.

Predominantly the bulk of the waste accepted at this site is recycle from the surrounding HWRCs collected by HWMW, so the risk of receiving a dusty load is minimal and to date, we have not witnessed dust as an issue within any materials brought to site. This does not discount the likelihood of it happening in the future if for instance, the wrong material is loaded into a vehicle or if a vehicle is not tipped or cleaned out correctly after collecting other material.

If there are large plumes of dust witnessed when a load is being tipped or rejected, it will be quarantined or reloaded back onto the delivery vehicle. The MRF & WTS Waste Rejection Form will be completed, and the relevant customer / client informed. The decision to quarantine or reload material is taken by the Site Manager. Photographic evidence may also be taken (and screenshots of CCTV if required) in support of the waste MRF & WTS Waste Rejection Form.

We have the option to hose spray the quarantined or rejected material pending further movement. This will only be undertaken if the quarantined / rejected material poses a risk to site users or the surrounding area / environment. Spraying materials we receive on site is not common practice as the material generally received is not dusty.

The MRF & WTS Waste Acceptance procedure and the associated rejection form are shown in Appendix A.

Our vehicle fleet in and around Barnsley, Doncaster and Rotherham have an emission rating of Euro 6.

Within the site rules drivers delivering or collecting material are advised to give details about the load (this includes if it is dusty), travelling around the site as instructed, not exceeding speed limits, not overtaking on site, ensuring doors or tailgates are closed and that sheeting systems are used.

All materials are stored within individual bays for a maximum period of one month, before they are or sent out for onward treatment.

2.2 Overview of Waste Processing, Dust, and Other Emission Controls

The site has consent to operate on a continuous basis but, is currently only manned by operational staff between the hours of 08:00 and 17:00 Monday to Friday and occasionally to meet demand the site may operate out of these hours as well as, on Saturdays, Sundays, and Bank Holidays (this is to facilitate alternate working arrangements for HWMW and other third-party clients)

Details of the typical waste streams delivered into the facility are shown in table 2.1 below.

The following drawings are shown below:

- *Figure 2.1 - location of the facility*
- *Figure 2.2 - traffic management plan*
- *Figure 2.3 - material bay layout*
- *Figure 2.4 - WTS building dust suppression system layout*

Externally

All roads around the site are impermeable concrete or tarmac surfacing, the traffic management plan for the site is shown in Figure 2.2.

Within the entrance of the site there is a platform weighbridge, adjacent to this is the administration office and welfare facilities to the right. To the left of the weighbridge is the workshop building with access into the workshop around the first right hand corner of this building. Also, in front of the workshop access point is an area used for parking HWMWs HGVs. Beyond the welfare facilities and on the right is staff and visitor parking and, beyond this is an area currently used for (RoRo) container storage. In between the container storage area and the HGV parking area is a ramp which allows access down to the lower level which includes material storage bays and the WTS building. Beyond the WTS building is a large area of hardstanding land used for storage which is enclosed by fencing and large gated access from Pontefract Road.

All roadways and storage areas within the permitted / operational area will be surfaced with tarmac or concrete, laid to suitable falls to aid drainage.

Controlling vehicle speed around the site is managed by:

- site safety inductions,
- speed restrictions in around the facility and
- near miss reporting.

Speed in around the main building is prohibited to 5mph.

The site perimeter is fully secured through the provision of 2.4m high security palisade fencing, chain link fencing or concrete walls around the perimeter and a large steel-framed security gate (3m in height) at the entrance of the site. Both the fencing and gates are inspected, faults reported, arrangements to conduct repairs will be made and details will be recorded.

The security gates and all doors are locked when the site is not in use. In the unlikely event of unauthorised persons scaling the perimeter fence, access to the administration offices, welfare facilities and the workshop building is prevented with all access doors being closed and / or locked when the facility is unmanned.

We will consider micro netting if;

- (i) we receive any complaints regarding litter or dust,
- (ii) if we perceive there are emissions of litter or dust beyond the permit boundary and,
- (iii) if any of our control measures are not sufficient to prevent emissions of litter or dust beyond the permit boundary.

Materials stored outside are un-processed individual waste streams or mixed dry recyclate. These are contained in concrete bays which face away from prevailing winds to minimise wind-whipping of the stockpiled material. These bays are emptied frequently to minimise the risk of the stockpiles reaching the tops of the concrete walls.

These external bays x4 storage bays will be 9.6m wide by 10m deep and 5m high allowing for a waste pile height of 4m. The additional “freeboard” of 1m will contribute towards minimising wind whipping of the stored materials.

It should be noted that as well the bays facing away from prevailing winds the bays are protected from prevailing winds by the presence on the WTS building. During periods of windy weather, the double handling of waste i.e. pushing waste up in the bays will be kept to a minimum.

Road-sweeping around the site is currently outsourced and undertaken fortnightly by:

Beresford Sweeper Hire Limited,
35 Abbott Road, Alfreton,
Derbyshire, DE55 7HD.

Road-sweeping is currently done from outside the entrance gate and covering the upper area of the site. The Senior Operations Manager has the option to increase or decrease this frequency of road-sweeping depending on arising issues or changes in weather.

Operational staff complete housekeeping tasks daily around the site, these are recorded on the Housekeeping & Litter Picker Weekly Report which also defines the areas included. Operational staff complete daily Environmental checks which include the condition of the external roads, perimeter fencing, fuel store, site drainage, the loading bay area and weather conditions. Any issues found are dealt with as soon as it is safe and practical to do so. Confirmation that the checks have been completed, applicable findings and the resulting actions are recorded on the Environmental Log. In addition to this the Senior Operations Manager or Deputy also completes a weekly assessment of the site which includes emissions and complaints and records any findings.

The above forms are shown in Appendix E.

Internally

The WTS building is situated in the centre of the permitted area of the site, with a footprint of 51m x 16m (816m²) and is located on the northern facade. It is constructed with a steel portal frame and clad on three sides including the roof.

The internal bay walls will be positioned within the building providing x5 equal separate waste storage bays. The bays will be 7.2m deep, width of 9m and a waste pile height of 4m providing 259.2m² of storage capacity per bay.

All material storage bays will generally have a minimum freeboard space of 1m at separating walls.

The floor is constructed from concrete.

All material bays will be swept clear / cleaned out when emptied to minimise the risk of any putrescible material rotting, odours escalating and the accumulation of dust. When possible, the material bays will also be washed out. Evidence of these activities are recorded, and these records are retained on site.

Site staff complete housekeeping tasks in and around the main building, these

activities are recorded and retained on site. Predominantly the tipping areas are kept clean by the mobile plant operatives. Site staff will complete daily Environmental checks of the interior of the main building which include the condition of the internal working areas, the presence of pests, the welfare facilities, and the loading bay. Any issues found are dealt with as soon as it is safe and practical to do so. Confirmation that the checks have been completed, applicable findings and the resulting actions are recorded on the Environmental Log.

The above forms are shown in Appendix E.

Dust Suppression

Within the WTS building it is planned to install x6 Mist-Air fans. The position of the misting fans and the misting line are shown in Figure 2.4, they are as follows;

- Fan A1 - rear l/hand corner of the WTS building / Bay 2, facing the front of the building.
- Fan A2 - front l/hand corner of the WTS building, facing Bay 2.
- Fan B1 - second stanchion / upright on the front, facing Bay 3.
- Fan B2 - third stanchion / upright on the front, facing Bay 4.
- Fan C1 - fourth stanchion / upright on the front, facing Bay 5.
- Fan C2 - fifth stanchion / upright on the front, facing Bay 6.

The misting fans have a total of 90 ceramic tipped ultra-fine misting nozzles which create a fine fog for dust suppression within the tipping and processing areas. The system runs on timed programs, we also have the option to run the system manually from the base unit.

We have the capacity to introduce further misting fans if required.

The system would be installed, commissioned, and is serviced by:

Mist-Air Dust Suppression Limited,
Hillcrest, Penybont, Owestry,
Shropshire, SY10 9JF

Detail and benefits of a Mist-Air system is provided in Appendix B.

The Mist-Air system also suppressors odours as well as dust and we also have the option of using additives (masking agents and / or anti-bacterial additives) in the dosing system to control odours if they were to escalate inside the main building.

In addition to the Mist-Air system, it is intended to install a Mist-Tech firefighting system at strategic location within the right-hand corner of the WTS building. This can be used to if required to dampen down internal and external floors to prevent dust. The positioning of this system with the 60m hoses enables dust suppression at all points of the site where materials are tipped and stored.

Details of the system can be found in Appendix G.

Table 2.1: Maximum estimated waste types that will be brought into DRC each week.

European Waste Code (EWC)	Product Description	Tonnes / week	Destination at the facility				Process	Risk of dust emissions beyond boundary
			WTS building	External storage bays	RoRo Skip Area	Workshop		
20 01 39	Plastic bottles	2.5	✓				Bulked for transfer to other facilities for processing	Low
20 01 01	Fibres (paper & cardboard)	25	✓				Bulked for transfer to other facilities for processing	Low
15 01 01	Cardboard	50	✓				Bulked for transfer to other facilities for processing	Low
20 03 01	MDR (Mixed Dry Recyclate)	225	✓				Bulked for transfer to other facilities for processing	Low
20 01 38	Wood	150		✓			Bulked for transfer to other facilities for processing	Low
20 01 39	Hard plastic	65		✓			Bulked for transfer to other facilities for processing	Low
17 01 07	Inert	300		✓			Bulked for transfer to other facilities for processing	Low
20 02 01	Green waste	425		✓			Bulked for transfer to other facilities for processing	Low
15 01 04	Mixed cans	0.5			✓		Awaiting transfer to other facilities for processing	Low
15 01 07	Glass bottles	10			✓		Awaiting transfer to other facilities for processing	Low
16 01 03	Tyres	5			✓		Awaiting transfer to other facilities for processing	Low
20 01 40	Ferrous metal	45			✓		Awaiting transfer to other facilities for processing	Low
20 01 40	Non-ferrous metal	1				✓	Segregated into different grades before being transferred out to off-takers.	Low
Total		1,326.5	Tonnes					

**The above tonnages are only estimations and are based on contracted and uncontracted tonnages and seasonal variations.*



Figure 2.1: Facility Location

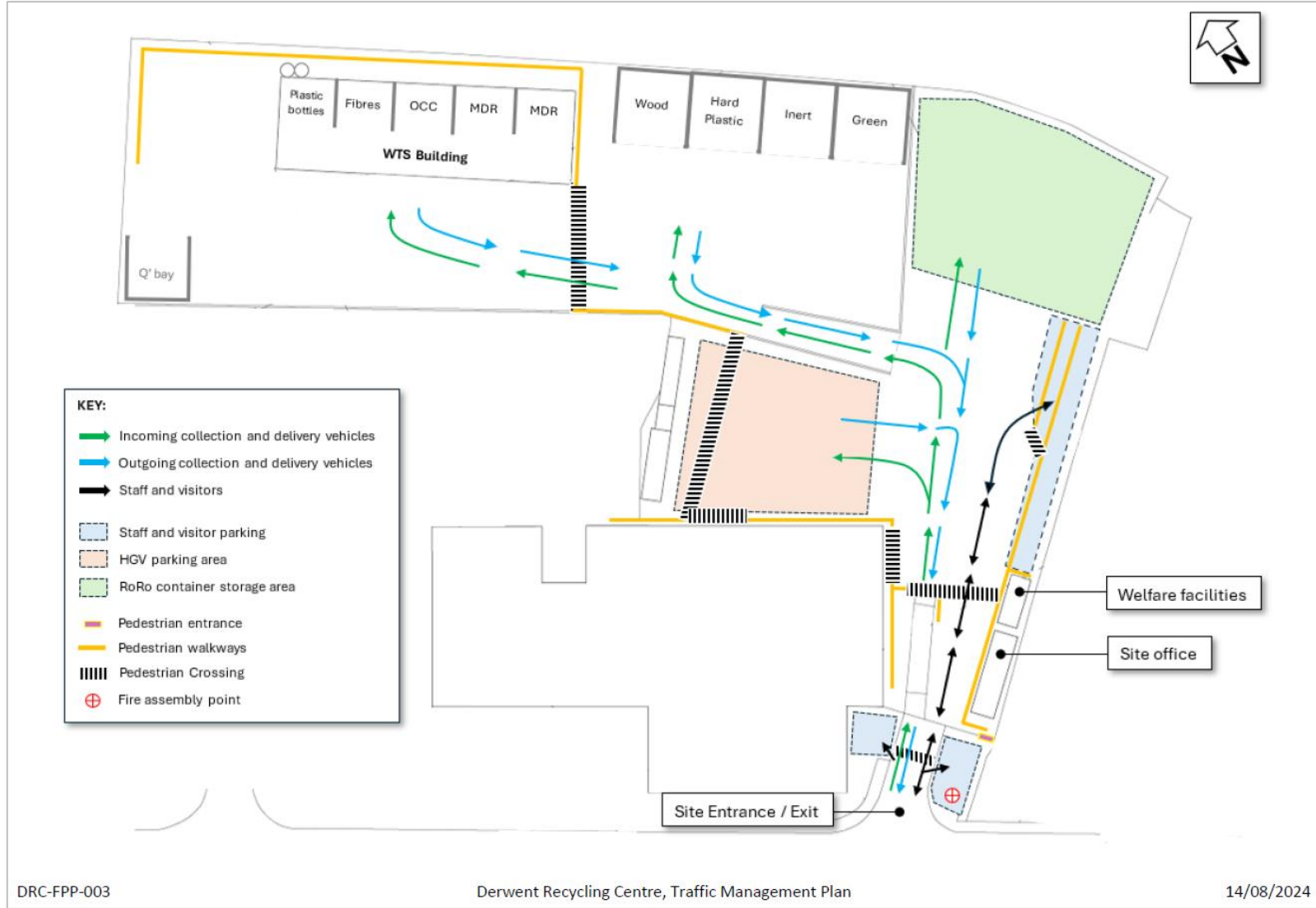


Figure 2.2: Traffic Management Plan

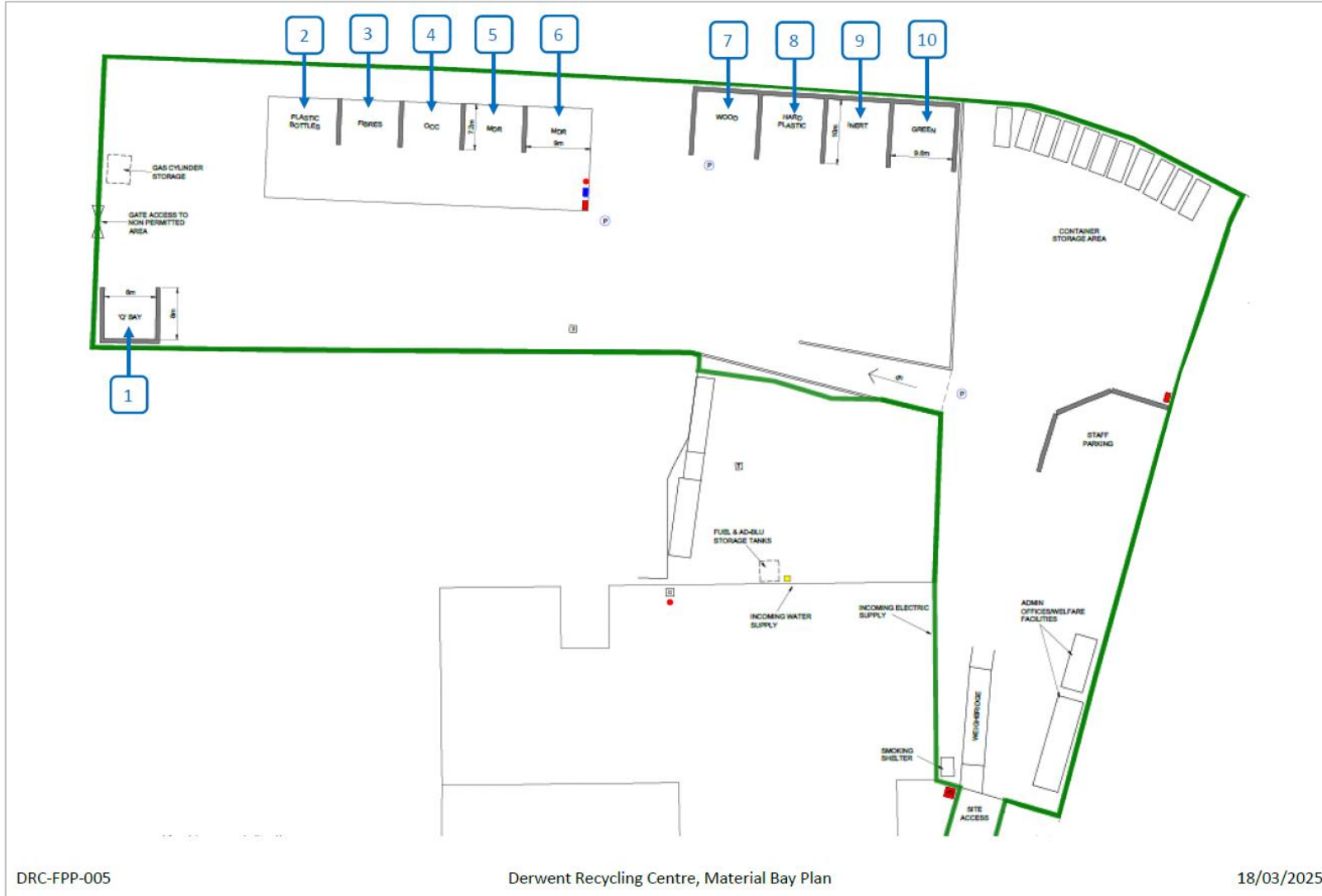


Figure 2.3: Material bay layout

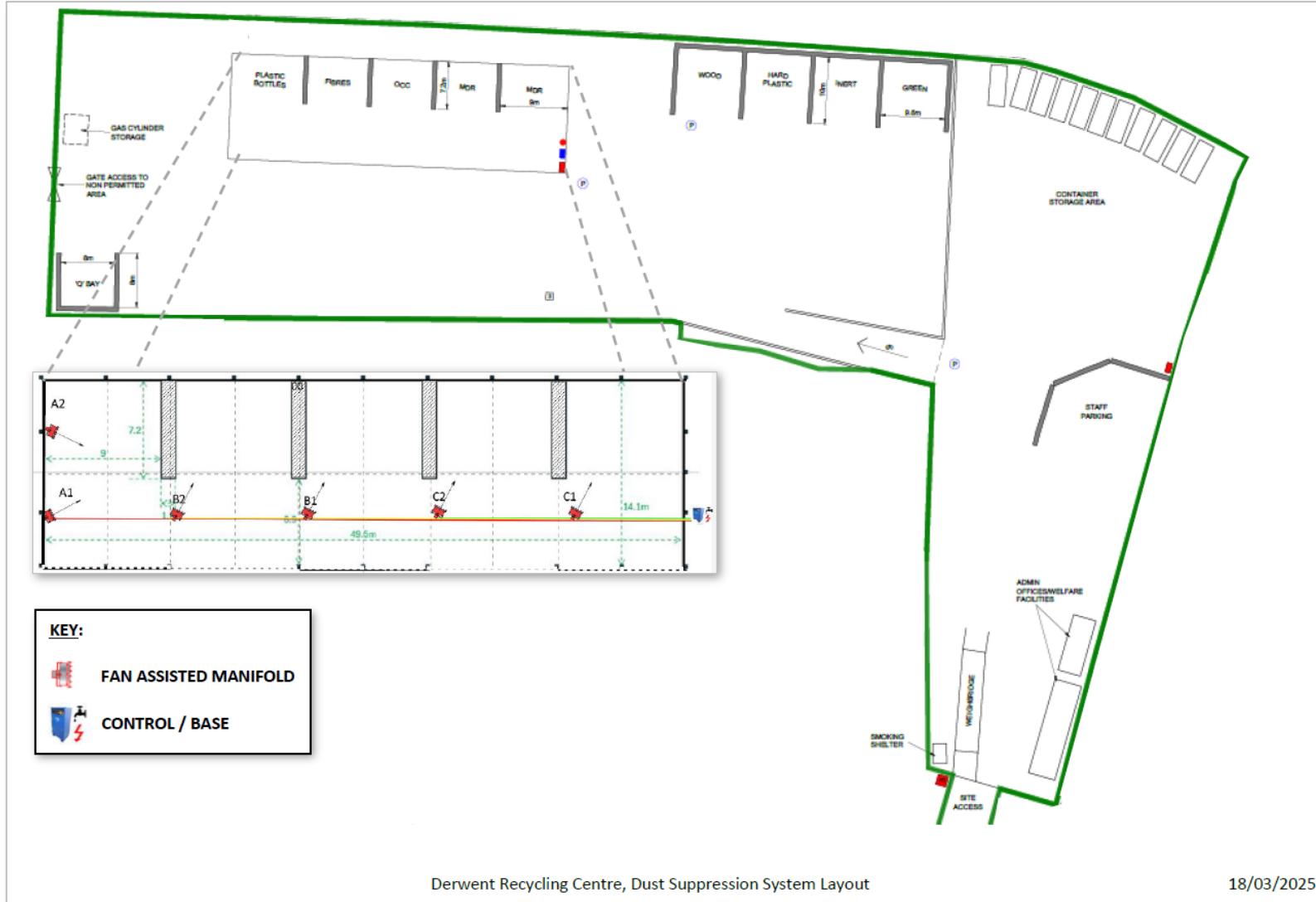


Figure 2.4: Dust Suppression System Layout

2.3 Mobile Plant and Equipment.

Nitrogen Dioxide gas is a by-product of internal combustion engines, and the site uses several items of plant with internal combustion engines. The following table lists the type, mobile and emission ratings for the mobile plant and equipment used on site:

#	Description	Make	Model	Emissions Rating	Leased / Owned
-	Telescopic Waste Handler	JCB	560	Tier 4	Arnold Plant
-	Tracked Material Re Handler	JCB	160	Tier 4	H W Martin

NB: the above plant detail was recorded on 08/07/2024.

The telescopic waste handler is leased through Arnold Plant who provide scheduled servicing and maintenance as per the manufacturer's specification. They are used mainly for the movement of loose material but can be quickly adapted to handle pallets or bales by interchanging the appropriate attachments.

The 360 and the telehandlers on site use diesel as fuel. Our diesel is confirmed by our supplier as being ultra-low sulphur.

All mobile plant operatives have had been trained in the safe and efficient use of all mobile plant.

All mobile plant used on site is checked before use, this includes ensuring that the mobile plant is clean. This is recorded on an Operator Plant Check / Defect Sheet. All mobile plant is also cleaned down at the end of each shift, the acceptance that this is done is completed via a tool-box talk.

Scheduled maintenance is also undertaken on all mobile plant and this includes being jet washed down before various other component cleaning and greasing activities inside the main building. This is recorded on a Mobile Plant Maintenance form.

The Operator Plant Check / Defect sheet and the weekly Mobile Plant Maintenance form are all shown in Appendix D.

3. Dust and Particulate (PM₁₀) Management

3.1 Responsibility for Implementation of the DEMP

This DEMP was established by the Compliance Manager with input from the Senior Operations Manager and the Director.

The Senior Operations Manager is responsible for reviewing the DEMP and making sure that DEMP is followed on Site.

This DEMP will be reviewed as and when required and, when:

- there are changes to the site layout or infrastructure,
- when there are any changes to the immediate surroundings areas outside the permit boundary,

- with the introduction or changes to fixed or mobile plant equipment or
- with the introduction of new grades of materials accepted on site.

A Deputy Manager will follow the DEMP in the absence of the Senior Operations Manager.

The Senior Operations Manager, nominated Deputy Manager and site staff will read through this DEMP in its entirety when it is issued and when it is amended in the future. Record of this will be retained on site and included in the Training Matrix for the facility.

3.2 Sources and Control of Fugitive Dust/Particulate Emissions

Potential Sources

- Vehicles entering and / or leaving the site with mud on wheels and tracking dust on to or off the site.
- Debris falling off lorries which arrive uncovered.
- Vehicles and plant moving around the site kicking up dust.
- Road vehicles tipping waste and telescopic waste handlers moving waste.
- Waste stored in bays.
- Surfaces around the site.
- Loading waste materials back on to vehicles.
- Particulate emissions from the exhaust of vehicles, plant and machinery on site.

Further detail on how we intend to break the source-pathway-receptor model for each of these potential sources is shown in the below Tables 3.1 and 3.2.

Table 3.1: Source-Pathway-Receptor Routes

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Mud	Tracking dust on wheels and vehicles, then mud dropping off the vehicles when dry	Choose from table 1.1 above	Visual soiling, also consequent resuspension as airborne particulates	Remove mud before vehicles leave site. Long haul road ensures residual mud drops off before vehicle reaches public highway. Road sweeper completes full clean of site every fortnight.
Debris	Falling off lorries or from containers	Choose from table 1.1 above	Visual soiling, also consequent resuspension as airborne particulates	Cover lorries and containers before entering or leaving facility. Long haul road ensures residual mud drops off before vehicle reaches public highway. Road sweeper completes full clean of site every fortnight.
Tipping and storage wastes in the open	Atmospheric dispersion	Choose from table 1.1 above	Visual soiling and airborne particulates	Large bays / 1m freeboard to shield piles from wind whipping. Bays are close to the building and open part of bays facing away from prevailing winds and from wind whipping. Tipping area at low level to prevent some winds.
Tipping, storage, and sorting of waste inside buildings	Escape from buildings and subsequent atmospheric dispersion	Choose from table 1.1 above	Visual soiling and airborne particulates	All loose materials inside the building facility are contained in concrete bays. Automatic dust suppression system in place.
Vehicle exhaust emissions	Atmospheric dispersion	Choose from table 1.1 above	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength. Daily pre-use checks. Regular servicing and maintenance.
Non road going machinery exhaust emissions	Atmospheric dispersion	Choose from table 1.1 above	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength. Shift pre-use checks on all mobile plant. Regular servicing and maintenance.

Table 3.2: Measures that will be used on site to control dust/particulates (PM₁₀) and other emissions

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Preventative Measures			
Enclosure within a building	Creating a solid barrier between the source of dust and particulates and receptors is likely to be the most effective method of control, provided that the building entrances and exits are well managed.	Very effective despite costs and the high potential for disruption to already operational sites. Ensure that procedures are in place to manage the building and its integrity.	This will be used all the time within the WTS building.
Site / process layout in relation to receptors	Locating particulate emitting activities at a greater distance and downwind from receptors may reduce receptor exposure, provided that emissions from the source are not dispersed over significant distances.	May be worthwhile in combination with other measures to reduce dust and particulate generation. If at all possible, discuss at pre-application and prior to site design if the activity is known to be cause lots of dust and particulates. For existing sites this will require the operator to think about moving the site around or proposing temporary areas in inclement weather.	This will be used all the time. If the facility develops in any way then this will be taken into consideration in the design phase.
Site speed limit, 'no idling' policy and minimisation of vehicle movements on site	Reducing vehicle movements and idling should reduce emissions from vehicles.	Easy to implement as part of good practice. Should be identified clearly in the site management system and implemented as appropriate measures.	These speed controlling measures and reducing plant idling time will be used all the time.
Minimising drop heights for waste.	Minimising the height at which waste is handled should reduce the distance over	Relatively easy to implement at many sites.	This will be used all the time.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Covered skips / storage vessels.	which debris, dust and particulates could be blown and dispersed by winds. Enclosing processes will further reduce dispersion.	These steps should be identified clearly in the site management system and implemented as appropriate measures.	
Good house-keeping	Having a consistent, regular housekeeping regime that is supported by management, will ensure site is regularly checked and issues remedied to prevent and remove dust and particulate build up.	Easy to implement and requires minimal equipment. Encourages a sense of pride and satisfaction amongst the staff which promotes vigilance and a positive culture. Staff should target the areas not caught by the road sweeper and other cleaning apparatus. Details on the frequency, job roles and areas covered should be documented here.	This will be used all the time. Site Manager will decide when not to do this outside the facility – for example if it is not safe to do so due to icy conditions.
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	Relatively easy to implement at many sites. Should be identified clearly in the site management system and implemented as appropriate measures.	This will be used all the time.
Easy to clean concrete impermeable surfaces	Creating an easy to clean impermeable surface, using materials such as concrete as opposed to unmade (rocky or muddy) ground within the site and on site haul roads. This should reduce the amount of dust and particulate generated at ground level by vehicles and site activities.	Considered good overall based on dust and particulate reduction but potentially costly and disruptive to retrofit. For sites that have concrete surfaces ensure there are maintenance and cleaning procedures in the management system and they are implemented.	This will be used all the time. The whole area used for the waste operation is fully concreted.
Minimisation of waste storage heights and volumes on site	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. Reducing storage volumes should reduce	Likely minimal return on potentially costly layout changes. The amount of waste that can be managed on site without causing dust and particulate pollution should be identified in the	This approach will be used all the time.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
	the surface area over which particulates can be mobilised.	management system and may have to be reduced if it is considered an appropriate measure.	
Remedial Measures			
On-site sweeping	<p>Sweeping could be effective in managing larger debris, dust and particulates but may also cause the mobilisation of smaller particles.</p> <p>Road sweeping vehicles damp down dust and particulates whilst brushing and collecting dust and particulates from the road surface, particularly at the kerbside.</p> <p>This may generate dust and particulate movement that may become a Health and Safety issue if the filters and spray bars on the sweepers are not maintained.</p>	Easy to apply but less effective than other measures.	This will be done on a fortnightly basis by a third-party contractor.
Water suppression with hoses & water jets	Damping down of site areas using hoses can reduce dust and particulate re-suspension and may assist in the cleaning of the site if combined with sweeping.	<p>Quite water intensive. Possibility for rainwater harvesting from the WTS building roof.</p> <p>Maintenance should be covered in the management system and procedures.</p>	This will be undertaken as and when required.
Water suppression with mist sprays	Installation of mist sprays around sites, at building entrances/exits and within buildings at point source emissions like conveyors, trommels etc. It can also assist in the damping down of dust and	Very effective at controlling point source emissions of dust and particulates. Can be installed to conveyors and areas where waste is dropped. 'Halo' rings can be fitted to conveyor drops on concrete crushers and screeners to minimise dispersion.	This will be used inside the building.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
	particulates, therefore, reducing emissions from site.	<p>Not effective for use at site boundaries.</p> <p>Uses less water than water bowser</p> <p>Maintenance should be covered in the management system and procedures.</p>	

3.3 Other considerations

Water usage/ availability:

This site is located on a large industrial estate and water to the site is primarily used for the hygiene facilities on site and the intended Mist-Air system (which is low volume usage)

Our estimated average daily usage for the site 2.38m³.

There are no issues with water supply to the site.

There is the potential to utilise the roof area on the WTS building to harvest rainwater. Given the area of the roof at 816m² and the average rainfall for the region, it is possible to capture around 685m³ litres of water per annum. This captured rainwater would be applied to dust mitigation such as a mobile water bowser and possibly the flushing of onsite toilets.

Details of the mobile water bowser are shown in Appendix H.

3.4 Enclosure of Waste Processing & Storage Areas

Mixed waste and segregated waste materials are delivered into the site by HWMW, Local Authority and third-party contractors. Segregated materials are predominantly bulked for onward transfer.

The WTS building will be enclosed on three sides to contain any dust and shelter from prevailing winds.

Outside of the WTS building there will be 4 bays for the acceptance of un-processed materials. These materials will be enclosed on three sides and face away from the prevailing wind to reduce wind-whipping.

Some materials brought into the site will be stored within Roll-on Roll-off containers (RoRos) pending the transfer to a second HWMW site or third party for processing. In most cases these containers will not be tipped and will remain sheeted during transit.

3.5 Visual Dust Monitoring

Due to the following factors, we believe the risk of dust emissions beyond our site permit boundary to be low:

- The materials we accept on site should be clean and free from dust.
- We do not treat wood, aggregates, soils, ashes or similar materials.
- All materials delivered to site are in enclosed or sheeted vehicles.
- We have speed restrictions around the facility and inside the main building.
- All trunk roads and roads up to the main building are impermeable surface.
- The waste operation area is fully concreted.
- We have a minimum freeboard of 1m on all bays to reduce the risk of wind-whipping.

- All waste is tipped on the lower level to further reduce wind-whipping.
- Material stockpiles are kept to a minimum.
- The northern boundary of the site is surrounded by a line of mature vegetation.
- The site boundary is inspected daily, and any required actions implemented.
- Operational staff litter pick and clean around the outside of the site.
- Road-sweeping is undertaken fortnightly on the haulage roads inside the site boundary and externally across the front of the building.

We will however, include visual dust monitoring of the site perimeter on the daily walk around of the site by the Senior Operations Manager (or Deputy) as waste acceptance to the site is predominantly Monday to Friday. Dust monitoring will be completed on Monday through to (and including) Friday. The Environmental Log can be seen in Appendix E.

Weather conditions will be recorded in the Environmental Log and site diary.

The strength of local winds (weather conditions) can be found using the internet;

- <https://www.bbc.co.uk/weatherde55>
- <https://www.metoffice.gov.uk/weather/forecast>

As the south boundary of the site is the only part of the site with direct neighbouring businesses (Nu Con and Keyline), the person undertaking the daily walk around will look for dust plumes going towards the site boundary.

Any reports of dust around the site (that have the potential to leave the site) from site staff, site users or interested parties external to the site will be recorded in the Environmental Log, the Director will be informed, additional monitoring will be undertaken and any additional measures (such as dampening down or additional third-party contractor road sweeping) agreed and implemented.

Additional monitoring will be recorded on the Dust Monitoring Report Form and the findings reported directly to the Director, this can be seen in Appendix F.

3.6 During a Drought

During a drought the overriding principle will be (i) to liaise with the local water authority to ensure we are complying with any drought order restrictions and (ii) to liaise with the Environment Agency to ensure we are taking appropriate measures to try and control emissions beyond the site permit boundary.

We will however:

- increase monitoring around the site to twice per day (this will be completed at lunch and late afternoon to cover the hottest periods of the day),
- ensure that a 5mph speed restriction around the site is adhered to,

- increase the frequency of road-sweeping on site and on the external road across the front of the building (Beresford Sweeper Hire have confirmed that they are able to 'dry sweep' if they have drought order restrictions applied by the local water authority),
- increase the use of the Mist-Air system within the building if required,
- we will use a 'pull along' water (dust suppression) bowser around the facility (and external roads if required) which will always be kept on site and,
- if for any reason the 'pull along' water bowser is inoperable and if our secondary / back-up water bowser at our Head Office is not available, we will source a hired bowser to use on site. Details of some hire companies are listed in the below table.

<i>Company</i>	<i>Location</i>	<i>From DRC in miles</i>	<i>Telephone number</i>
Smiths Equipment Hire Ltd	Morley, Leeds, LS27 7JP	38	0113 487 8555
Garic	Bury, Lancashire, BL9 8GD	65	0330 094 8060
Cross Plant Hire	229 Whalley Rd, Shuttleworth, Ramsbottom, Bury BL0 0ED	75	0161 401 0000
Enduramaxx Ltd	Baston, Peterborough, PE6 9PT	95	01778 562 810
Ace Plant	Old Stratford, Milton Keynes, MK19 6LA	91	01908 562 191

4. Particulate Matter Monitoring

We purchased this site in late 2023 and to date we have received no substantiated complaints from any interested parties regarding dust generated by our permitted site activities therefore we believe we do not need to undertake any particulate matter monitoring.

If a complaint does occur, we will investigate the complaint and make a decision on the any remedial actions or additional measures thereafter and seek guidance from the Environment Agency if it is required.

Analysers

N/A.

4.1 Monitoring Location

N/A.

4.2 Operation of the PM Monitoring Equipment

N/A.

4.3 Quality Assurance/Quality Control and Record Keeping

N/A.

4.4 Equipment and Data Management

N/A.

4.5 Reporting of Data

We have checked our current environmental permit and we can confirm that there are no specified wastes being treated outside of the building.

We are confident that we have taken appropriate measures to reduce the amount of dust generated by our activities and that we are not creating any emissions beyond our site boundary.

We will however report data to the Environment Agency as and when it is requested and / or agreed.

4.6 Additional Detailed Monthly Reporting

N/A.

5. Actions when alarm is triggered.

N/A.

6. Reporting and Complaints Response

The Senior Operations Manager will deal with complaints and will formally acknowledge the complainant within 2 working days of the complaint being reported to site.

The Senior Operations Manager will liaise with the complainant on a weekly basis until such time that any resulting actions and / or required works have been completed.

If control measures fail and a repeat complaint is received regarding the same issue, the complaint will be escalated to a Director who will (i) take responsibility for liaising with the complainant, (ii) will establish a Working Group to include the Senior Operations Manager, a Compliance Manager and a Site Operative and, (iii) will agree any short term corrective actions and any long term preventative actions.

The National Plant Manager will be included in the Working Group if it is deemed necessary by the Director and if any resulting actions will need their input or approval.

The decision to cease site operations (as a result of repeat complaints or due to the potential health risks for site users as a result of high winds) will be approved by the Director under advice from the Senior Operations Manager, Compliance Manager and our Health Safety Department.

The Environment Agency will be notified accordingly.

6.1 Engagement with the Community

The immediate neighbours to our site (Nu Con and Keyline) have been contacted by our Senior Operations Manager who has passed on his details and who is the primary contact for our facility.

6.2 Reporting of Complaints

All complaints from interested parties will be recorded on our Dust and Odour Complaint Form by the Senior Operations Manager (or by the Director if the complaint is escalated) This form is shown in Appendix C.

If the decision has been made to review findings or improvement measures at a later date, the Senior Operations Manager (or by the Director if the complaint is escalated) will record this on the form.

Findings from the investigations and any remedial actions will be recorded on the form and details will be fed back to the complainant.

Records of any complaints made about the facility will be kept for at least 3 years.

6.3 Management Responsibilities

All complaints from interested parties regarding the possible emission of dust from the site will be investigated primarily by the Senior Operations Manager who will inform the Director and the Compliance Manager of the complaint.

Findings from the investigation and any remedial actions will be agreed by a Director.

All complaints together with the results of the investigations and any remedial actions will be included within the H.W Martin Waste monthly Management Review Meetings.

6.4 Summary

The main purpose of this Dust & Emission Management Plan is to address the risk caused by the increased tonnage delivered into the site.












The aims of this DEMP are:

- to identify if any site-generated dust is leaving the boundary of the site,
- to identify if on-site dust management methods are effective or whether they need to be reviewed and / or improved.

This DEMP will form part of the Environmental Management System for the site and it will be integrated into the EMS as a formal document. A copy of this DEMP will be kept on site, enabling ease of reference by site staff.

APPENDICES

Appendix A: MRF & WTS Waste Acceptance and Rejection form

<p style="text-align: center;">  H.W. MARTIN WASTE LTD. POLICY & PROCEDURE INTEGRATED MANAGEMENT SYSTEM ISO 9001:2015, 14001:2015 & 45001:2018 </p>	<p style="text-align: center;">  H.W. MARTIN WASTE LTD. POLICY & PROCEDURE INTEGRATED MANAGEMENT SYSTEM ISO 9001:2015, 14001:2015 & 45001:2018 </p>																				
<p>Policy & Procedure Title</p> <p style="text-align: center;">MRF & WTS WASTE ACCEPTANCE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #008000; color: white;">Name</th> <th style="background-color: #008000; color: white;">Title</th> <th style="background-color: #008000; color: white;">Signature</th> <th style="background-color: #008000; color: white;">Date</th> </tr> </thead> <tbody> <tr> <td style="background-color: #008000; color: white;">Author</td> <td style="background-color: #008000; color: white;">K Brough</td> <td style="background-color: #008000; color: white;"></td> <td style="background-color: #008000; color: white;">14.02.2023</td> </tr> <tr> <td style="background-color: #008000; color: white;">Reviewer</td> <td style="background-color: #008000; color: white;">D Nortcliffe</td> <td style="background-color: #008000; color: white;"></td> <td style="background-color: #008000; color: white;">14.02.2023</td> </tr> <tr> <td style="background-color: #008000; color: white;">Authoriser</td> <td style="background-color: #008000; color: white;">R Akers</td> <td style="background-color: #008000; color: white;"></td> <td style="background-color: #008000; color: white;">14.02.2023</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="background-color: #008000; color: white;">Effective Date:</td> <td style="background-color: #008000; color: white;">Sep 2022</td> </tr> <tr> <td style="background-color: #008000; color: white;">Review Date:</td> <td style="background-color: #008000; color: white;">As required</td> </tr> </table>	Name	Title	Signature	Date	Author	K Brough		14.02.2023	Reviewer	D Nortcliffe		14.02.2023	Authoriser	R Akers		14.02.2023	Effective Date:	Sep 2022	Review Date:	As required	<p>1. PURPOSE The purpose of this policy and procedure (P&P) is to establish a formal process to be followed when accepting waste materials at our Materials Recycling Facilities and Waste Transfer Stations.</p> <p>2. INTRODUCTION The company has an established process for accepting waste materials; this P&P formalises the process in order that it can be followed consistently and effectively by our site staff. This policy and procedure (P&P) also ensures the Company is meeting the criteria set out in the waste Duty of Care code of practice.</p> <p>3. SCOPE The P&P applies to all waste materials received at our Materials Recycling Facilities and Waste Transfer Stations. Company activities that may give rise to receiving such waste materials comprise:</p> <ul style="list-style-type: none"> The management and operation of HWRCs (Household Waste Recycling Centres, also known by other names such as tips, civic amenity sites etc.) The management and operation of MRFs (Materials Recycling Facilities) The management and operation of WTSs (Waste Transfer Stations) The management of commercial / trade waste by Premier Waste Recycling The treatment of Local Authority MDR (Mixed Dry Recyclate) <p>4. DEFINITIONS</p> <p>4.1 D.O.C Duty of Care - our legal responsibility to ensure that we produce, receive, store, transport and dispose of our waste without harming the environment.</p> <p>4.2 Environmental Permit A type of licence that is required if from a result of your activity, you pose a risk of (i) causing an emission which could result in pollution to air, water or land, (ii) increased flood risk or (iii) which could adversely affect land drainage.</p> <p>4.3 HWRC Household Waste Recycling Centre - a permitted facility that accepts waste from the public and (in some cases) from a commercial business on behalf of a local authority.</p> <p>4.4 Load The contents of any vehicle which is intended to be deposited at the Materials Recycling Facility.</p>
Name	Title	Signature	Date																		
Author	K Brough		14.02.2023																		
Reviewer	D Nortcliffe		14.02.2023																		
Authoriser	R Akers		14.02.2023																		
Effective Date:	Sep 2022																				
Review Date:	As required																				
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- 4.5 Local Authority**
An administrative body in local government, sometimes referred to internally as the client or council.
- 4.6 MRF**
Materials Recycling Facility - a permitted facility that accepts and treats / separates mixed waste materials from commercial businesses or Local Authorities (councils)
- 4.7 Waste Exemptions**
Required for a waste operation that is exempt from needing an Environmental Permit. Similar to a permit, waste exemptions still have specific limits and conditions that the holder must operate within.
- 4.8 Waste Transfer Station**
A facility where municipal waste is delivered into for baling, shredding, sorting and / or storage before sent on for further treatment or disposal.

5. RESPONSIBILITIES

Business Support Manager (Compliance): responsible for assisting the Operations Director in organising the safe removal of non-conforming waste from site in the absence of the compliance Manager.

Director: responsible for authorising the issue of Integrated Management System (IMS) policies and procedures of H.W Martin Waste and controlled documents directly related to the Waste company's transport activities.

Compliance Manager: responsible for assisting the Operations Director in organising the safe removal of non-conforming waste from site and, for advising the Environment Agency of any possible emissions beyond the site's permit boundary as a result of any non-conforming wastes.

Machine driver (tele-handler operator): responsible for checking all tipped waste materials for non-conforming waste and for communicating this to the weighbridge operator.

Operations Director: responsible for overall day-to-day activities for our HWRCS, MRFs and WTSs and for communicating the details of any waste rejections to the relevant Local Authority or customer.

Site / Operations Manager: responsible for completing the MRF & WTS Waste Rejection Form in a timely fashion and for sending this (together with any supporting information) to the Operations Director and Compliance Manager.

Also responsible for communicating any potential risk of emissions (such as odour and pests) beyond the sites permit boundary to the Operations Director and the Compliance Manager.

Weighbridge Operator: responsible for ensuring the waste description is correct in the documentation supplied by the producer and holder for all materials received on site and, for communicating details of any non-conforming waste to the Site / Operations Manager.

6. SPECIFIC PROCEDURE

The content or specification of 'conforming' waste materials to be received at the MRF or WTS is agreed at the start of a contract and / or during the contract extension process.

Wastes will only be accepted when the site is operational and when staff are present to inspect the material tipped.

The delivery of waste materials from our HWRCS or commercial customers delivered into our MRFs or WTSs will be agreed in advance and these waste materials should be as described / agreed.

When any waste arrives on site, the associated documentation will be checked by the Weighbridge Operator to ensure the waste description is correct and that it is an accepted waste included in the site's Environmental permit or registered waste exemptions. Materials that cannot be accepted will be rejected from site.

Conforming wastes will be stored in the relevant bay and bulked ready for onward transfer for processing or for treatment / processing on site or will be loaded directly into the line for treatment / processing.

In the event that a non-conforming (unauthorised) waste is identified within Local Authority material by site staff during load discharge / offloading, then the following action will be taken:

- The load will be segregated from other materials in an isolation area or quarantine bay.
- Site staff will inform the Weighbridge Operator and Site / Operations Manager.
- The Site / Operations Manager will take photographic evidence and complete the MRF & WTS Waste Rejection Form before sending this information over to the Compliance Manager and Operations Director.
- Any non-conforming waste likely to cause an emission beyond the site's permit boundary (such as odour or pests) will be communicated to the Environment Agency by the Compliance Manager.
- The isolated / quarantined load will be made available for inspection by the Local Authority, and (where applicable) the Environment Agency on request.
- An appropriate disposal route will be agreed with the Local Authority and / or the Environment Agency before it is transferred to a permitted treatment or disposal facility.

If non-conforming (unauthorised) waste is found within a load of material delivered to site and it is possible to safely remove this waste material, it will be placed in an isolation area or quarantine bay. The customer or Local Authority and the relevant Contract Manager will be informed before suitable arrangements are made to remove this non-conforming (unauthorised) waste material from site.

Completed MRF & WTS Waste Rejection Forms and any supporting information (such as pictures, documentation, and emails) will be retained by the Company for a minimum of 2 years for non-hazardous wastes and 3 years for hazardous wastes.

7. FORMS/TEMPLATES TO BE USED

WA-IMS-ENV-FO-007, MRF & WTS Waste Rejection Form

8. INTERNAL AND EXTERNAL REFERENCES

8.1 Internal References

Alfreton Recycling Centre Site Management Plan
Leeds Materials Recycling Facility Management System
Monument Park Site Management Plan
Sandbach Management Plan

8.2 External References

Environment Agency code of practice & guidance:

- Waste duty of care: code of practice (accessible version) - GOV.UK (www.gov.uk)
- Waste acceptance procedures for deposit for recovery - GOV.UK (www.gov.uk)

9. CHANGE HISTORY / DOCUMENT REVIEW

Revision no.	Effective Date	Significant Changes	Previous Revision no.
1.0	09.09.2022	Initial issue / revision	N/A
2.0	14.02.2023	Title of document amended, minor amendments to content to include 'WTS' reference and Monument Park, the inclusion of managing PWR commercial waste in section 3, Sandbach & Management Plans included in section 8.1.	1.0

WA-IMS-ENV-PR-006_V2.0

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MRF & WTS
Waste Rejection Form

Site Receiving Waste

ARC DRC Leeds MRC Monument Park Sandbach

Details of the Load

Delivery date Time of delivery

Name of Customer

Material delivered in

Haulier | Vehicle registration

Reason for Rejecting Waste

Legal : Waste type, presence of non-conforming waste

Legal : Waste description, wrongly coded & non-acceptable

Environmental : Presence of hazardous waste material

Environmental : Presence of dusty waste material

Environmental : Presence of odorous waste material

Environmental : Presence of files or vermin in the waste

Operational : Presence of oversized waste material

Other :

Comments:

Delivery Driver Details

Name Signature

Person Completing this Form

Name Signature

Please ensure photographic evidence is taken and that this form together with the photographs and any weighbridge ticket generated are passed over to the Compliance Manager and Operations Director ASAP.

WA-IMS-ENV-FO-007_V3.0

01.11.2023

Appendix B: Mist-Air dust and particulate suppression system.



t: +44 (0)1691 828 487 f: +44 (0)1691 828 487 e: info@mist-air.co.uk



mist-air® Stainless steel fan assisted misting manifolds are fitted to the roof trusses to direct mist to precisely the right areas when required, but positioned well out of the way of personnel, equipment and vehicles.



Mist Air Base Unit

The controls are mounted on the front panel of the Base Unit but remote switches, PIRs, radio control or no volt signals from your machinery are optional extras.

The Base Unit, pipe work and manifolds can all be electronically trace heated and insulated for protection down to -27 degrees centigrade.

The Base Unit has the facility to sanitise the whole system instantly, including pipe work and manifolds with a completely safe biocide, ensuring that no bacteria can be harboured within the system, i.e. Legionella, Weils disease.

The system can be set to an *auto pause* program for each circuit. This enables each area to not only work independently from each other with a standard on/off switch; but also come on for time periods suitable for your operation,

Saving on Water & Power.



www.mist-air.eu



Silica Reduction

Air sampling tests taken in a Brick factory throughout the works at various points. Independently replicated and confirmed by the Environment Agency

(Mg/cu.m)	Without Suppression	With Mist-Air Suppression	Difference	Improvement
Total dust				
Dehacker 1	2.4	0.5	1.9	79 % reduction
Dehacker 2	2.5	0.2	2.3	92 % reduction
Dehacker 3	4.2	0.5	3.7	88 % reduction

(Mg/cu.m)	Without Suppression	With Mist-Air Suppression	Difference	Improvement
Total respirable silica				
Dehacker 1	0.23	0.04	0.19	83 % reduction
Dehacker 2	0.56	0.03	0.53	94 % reduction
Dehacker 3	0.76	0.04	0.72	95 % reduction
Extruder 1	0.17	0.07	0.1	89 % reduction
Dehacker 6	0.17	0.02	0.15	88 % reduction

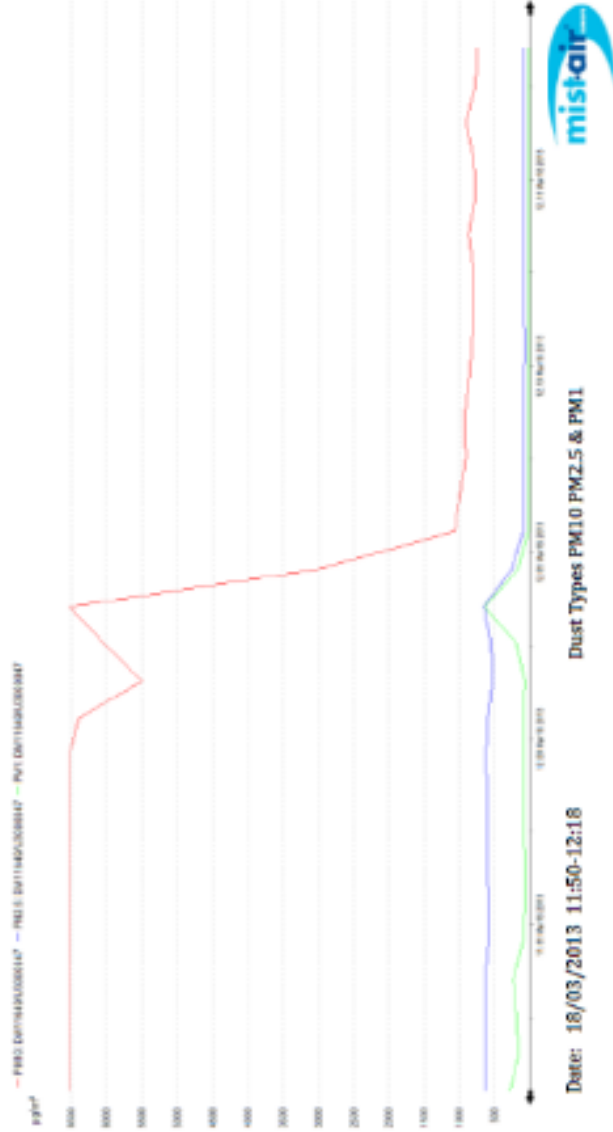




t: +44 (0)1691 828 487 f: +44 (0)1691 828 487 e: info@mist-air.co.uk

Dust Monitoring Results.

The below graph is of dust levels in a Material Recycling Facility. The Dust monitor was left to run continually for 30mins. 15mins with the mist-air® system switched off and 15mins with our system on.



Date: 16/03/2013 11:50-12:18

Dust Types PM10 PM2.5 & PM1

PM10s particles ($\mu\text{g}/\text{m}^3$) Reduced by 88.5%

PM2.5s particles ($\mu\text{g}/\text{m}^3$) Reduced by 88.3%

PM1s particles ($\mu\text{g}/\text{m}^3$) Reduced by 97.6%



The advantage of the mist-air® system is that:

- One Base Unit controls the whole system
- It uses very little water
- Does not need a water storage tank
- Requires no compressor
- Helps Prevents the risk of Flash explosions in contaminated air
- Everything stays dry; stock, machinery and floors so no slip hazards
- Independent circuits which are infinitely controllable
- Timed intermittent operation when required on any circuit
- Additives dosing system to control odours and flies
- Sanitizing system to purge the whole system against Legionella etc.
- Life expectancy 25 + years
- Corrosion warranty 20 years
- All wetted parts are manufactured from stainless steel or non-ferrous materials so there can be no corrosion within the system
- All electronics controlled by Smart Wire SWD state of the art solid state electronics
- The whole system can be trace heated and insulated for protection down to -27° Celsius.
- There is *no other system available* offering this fineness of fog particles with this degree of reliability, flexibility, and effectiveness!!





System description and operating limitations...

Dust control.

Mist-Air is designed to remove respirable dust from the air space and help prevent flash explosions. It achieves this by coming into contact with the fine dust particles as they form and make them sink so they don't stay in the air. These sinking particles will of course land on the first obstruction they meet.

Large quantities of dust forming quickly, i.e. tipping biomass etc. into hoppers, will require more space and time to achieve this.

Mist-Air is not a total panacea. It doesn't make large dust clouds disappear or clean up mechanical spills but acts like an invisible barrier, preventing the movement of fine dust away from the working area and preventing it migrating from buildings.

This quotation contains a rough drawing showing the layout of the plant, to which we add the position of fan assisted manifolds and static manifolds based on experience of what we consider will achieve best dust suppression for the customer.

The customer has the opportunity at this point to ask for changes if he doesn't think the layout is correct, so that the drawing and the quotation can be altered to reflect these changes. Movement of manifolds after the installation is chargeable.

After installation, the customer may want to decrease or increase the number of nozzles in a particular manifold to produce the desired amount of fog for each area, this is the responsibility of the customer as is the replacement of dirty or broken nozzles. This is not covered under warranty.

Humidity

During operation, this system does not normally cause any wetting to floors or stock, but during times of high humidity, i.e. Precipitation, early mornings, thunder storms, the air can reach up to 98%, humidity therefore adding mist to this saturated air may cause dampness and condensation to floors, and cold metalwork in un-heated buildings.

The system is fitted with intermittent timers for each circuit, so in times of high humidity it makes sense to set the system to deliver fog intermittently to keep just sufficient humidity in the air without causing dampness.

Fog suppression is not a precise art and its effect can be altered from day to day by the fluctuations in dust volumes, temperature, humidity, and wind speed / direction.

It may be necessary to increase or decrease the number of nozzles fitted in the fans as the seasons change.

Cooling

In hot weather the mist absorbs latent heat and gases within the building, which then rises to the eaves.

Suitable ventilation must be provided in the eaves, to allow the hot mist to escape and evaporate, thereby

allowing evaporative cooling. Failure to do this may turn the building into a Sauna bath and causing the air to become heavy and contaminated, particularly if there are heavy fumes in the air from machinery, or brick kiln etc.

Frost protection

The Base Unit is fitted with automatic frost protection.

We recommend that any pipe work and misting manifolds exposed to low temperatures are trace heated and insulated however the nozzles are normally fitted with non-drip valves, and these are can be removed to allow a small amount of water within the misting manifold to drain out to prevent any frost damage in the winter if the trace heating option is not required or ordered.



Appendix C: Dust and Odour Complaint Form

Emissions Complaint Form



** Please tick appropriate box*


Dust
 Litter
 Noise
 Odour


Complainant Details	
Name of Complainant	
Address	
Contact Tel	
Contact Email	
Date of Complaint	
Complaint Details	
Investigation Details	
Investigation carried out by	
Position	
Date & time investigation carried out	
Weather conditions	
Wind direction and speed	
Investigation findings	
Feedback given to Environment Agency and/or local authority	
Date feedback given	
Feedback given to complainant	
Date feedback given	
Review and Improve	
Improvements needed to prevent a reoccurrence	
Completion date of improvements	
If different insert reason for delay	
Does an emission management plan need to be updated	
Date that the plan was updated	
Closure	
Site / Operations Manager review date	
Site / Operations Manager signature to confirm no further action required	

WA-IMS-ENV-FO-005_V4.0

14.02.2023

Appendix D: Mobile Plant





OPERATOR PLANT CHECK / DEFECT SHEET 291464

Site: <u>PERMENT</u>	Date: <u>15-4-24</u>	Plant Number: <u>MX08</u>
Make: <u>TCB</u>	Model: <u>160</u>	Shift: <u>DA/S</u>

Defect Check	Defect Rating:	Comment To Explain Severity of Defect
--------------	----------------	---------------------------------------

	TICK FOR NO DEFECT	Red	Amber	Green	MARK X FOR DEFECT
Operation of Brakes (mark amber for squealing brakes)	✓				
Reversing Alarm / Camera working	✓				
Steps, Hand Rail, Seat	✓				
Mirrors in position / effective	✓				
Operation of Steering	✓				
Fire Extinguisher available / pressurised	✓				
Beacons working	✓				
Operation of the horn	✓				
Damage to Attachment / secure pins	✓				
Effective wheels or Tyres	✓				
Load Indicator functioning	✓				
Tools correctly functioning	✓				
Wheel Nuts secure	✓				
Engine / coolant Fluid Levels / leaks	✓				
Hose/Ram Leaks, Damage	✓				
Washer, defroster and wipers functioning	✓				
Gas fittings (Gas FLT only)	NA				
Door Hinges & Catches	✓				
General Bodywork and Glass	✓				
Seat Belts	✓				
Road Lights & work lights	✓				
Mast, Chains and Forks (Forklift only)	✓				

Increased Points

Other faults

Name & Signature: S. P. B. [Signature]

Checked by Site Manager:

DATE

Machine Hours End:

Machine Hours Start: 6:57

Total Hours:

<input type="checkbox"/>	SAFETY CRITICAL. MACHINE MUST NOT BE OPERATED WITHOUT ADDITIONAL CONTROLS IN PLACE (AS AGREED WITH THE CONTRACTS MANAGER).
<input type="checkbox"/>	SAFE TO OPERATE BUT ATTENTION REQUIRED TO MACHINE WITHIN A REASONABLE TIME PERIOD (Action to be Recorded)
<input type="checkbox"/>	SAFE TO OPERATE ATTENTION REQUIRED AT NEXT SERVICE

Site Supervisor/Manager to ensure all safety defects are attended to and noted below

Site Supervisor/Manager to detail all repair work carried out

Date	Repair work carried out	Company	Signature

THIS SHEET MUST BE COMPLETED BEFORE OPERATING THE MACHINE

IF ANY DEFECTS ARE RECORDED ON THE ENCLOSED FORM THEN THE PLANT DEPARTMENT MUST BE CONTACTED AND A RECORD MADE AGAINST THE DEFECT

Appendix E: Housekeeping



Derwent Recycling Centre



Environmental Log - week commencing:

/ /

Daily Check List	Inspected by:	M	T	W	T	F	S	S	Comments & Actions	Completed by (Initial)
Condition of external & internal roadways <i>(Clean, free of litter and no excessive amounts of dirt / mud)</i>	Site Manager / Foreman or deputy									
Perimeter fencing and gate, barriers <i>(Operational & inspection for damage)</i>										
Weighbridge <i>(Clean, any damage or wear)</i>										
Weathfare facilities <i>(Clean offices, toilets, canteen etc.)</i>										
Fuel storage <i>(No leaks & sufficient stock)</i>										
Oil storage area <i>(No leaks, correct storage & sufficient stock)</i>										
Fire safety <i>(Fire fighting equipment in place and unused)</i>										
Spill kits <i>(In place & full)</i>										
Site Drainage <i>(Free of pooling, blockages etc.)</i>										
Storage bay push walls <i>(Free of damage & intact)</i>										
Penstock valve <i>(Clear / free for access)</i>										
Pest control <i>(Not an excessive presence of flies, rats etc.)</i>										
Weather condition (windy, heavy rain, icy) <i>(Details recorded in site diary)</i>										
Dust <i>(Acceptable level, not generating a nuisance)</i>										
Noise <i>(Acceptable level, not generating a nuisance)</i>										
Odour <i>(Acceptable level, not generating a nuisance)</i>										

Additional Comments: _____

Appendix F: Dust Monitoring Report Form

Dust Monitoring Report Form

	Date					
	1	2	3	4	5	6
Location of monitoring <small>(Location shown on page 2)</small>						
Time of monitoring						
Weather conditions <small>(Sunny, dry, damp etc.)</small>						
* Temperature <small>(Cold, mild, warm, hot and / or degrees if known)</small>						
* Wind strength <small>(None, light, steady, strong or mph, if known)</small>						
* Wind direction <small>(from the N, NE, E etc.)</small>						
Duration <small>(of monitoring in minutes)</small>						
Is there dust generated or not ?						
Is site generated dust likely beyond the site boundary ?						
Is the source evident ?						
* Receptor sensitivity <small>(see below)</small>						
Comments or observations <small>Please use the back of this page for further comments if required</small>						
Completed by: (Please print name)					

*** Temperature, wind strength and wind direction can easily be established by using the internet if required:**
www.bbc.co.uk/weather
www.metoffice.gov.uk/weather/forecast

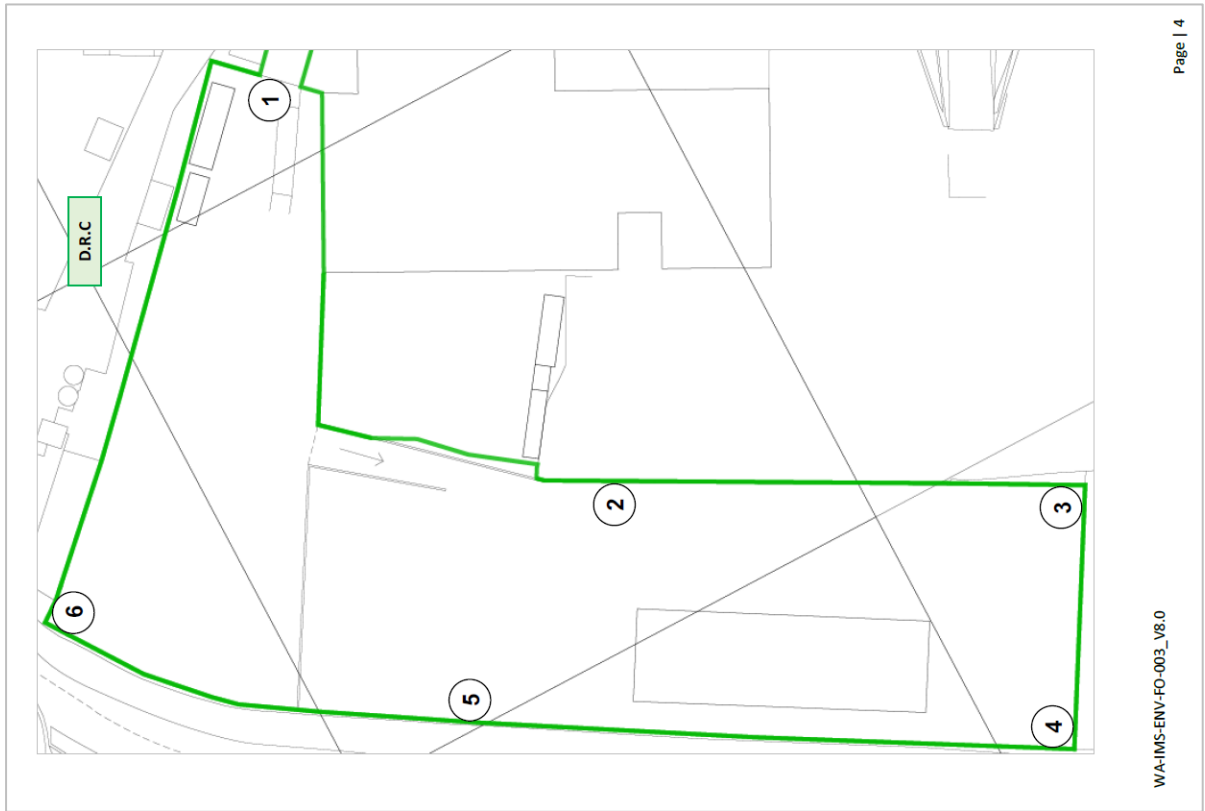
*** Receptor Sensitivity**

- L - Low (e.g., footpath or road)
- M - Medium (e.g., industrial premises)
- H - High (e.g., housing, hotel, park etc.)

Report all findings to the Operations Director (HWM) or Depot Manager (PWR)

WA-IMS-ENV-FO-003_V8.0

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APPENDIX G: Mist-Tech – Fire Fighting Equipment



Angloco Mist-Tech Fire Fighting Equipment



Mist-Tech products from Angloco provide optimum firefighting performance using the latest advances of water mist technology. High quality mist is produced by the unique designs and technology of the branches and lances and not simply by forcing high pressure water through a very small hole.

Instead Mist-Tech products use water collision technology that provides a more consistent droplet size and higher efficiency mist, without the inherent problems and risks associated with ultra-high pressure systems. More of the water turns to steam, there is less entrained air and the user has greater thermal protection.

Our range of lances and branches have now been complemented by a Chimney Lance, an Eco Mist Lance, an Angled Lance, vehicle mounted/trolley CAFS systems, along with diesel and battery versions of the VMS 2000. UK brigades and training centres have tested Angloco Mist-Tech products and have achieved fantastic results. They have since purchased the lances and branches to be added to their normal appliances.

This new range of Misting /CAFS Fire Fighting Equipment can operate as a misting system only producing high efficiency water mist or switched over to foam, if required, produces CAFS. The foam is not pre-mixed so will stay ready for use without degrading for many months and is therefore suitable for use with fully biodegradable foams. However, many have found in the majority of tests that the mist will work very well alone, even on smaller class B fires without any foam or additives being used.

Features and benefits of the Angloco Mist-Tech branches and lances.

- High efficiency using minimum amounts of water/foam
- Reduced consequential water damage
- Mist is produced by the design and technology of the branch, not by forcing high pressure water through a very small hole
- Traditional style branch in its appearance and feel
- Operating pressure remains at a safe level
- There is a minimum of entrained air in the fluid stream, because of reduced velocity, resulting in reduced risk of spreading burning debris
- Consistent water droplet size
- Low recoil/reaction force at the branch
- Quick knock-down effect on flammable liquids
- Control of burning gases by rapid cooling
- Less blocking



Angloco Mist-Tech Mist Jet Branch A408 & High Flow A409



The standard flow A408 and the high flow A409 branches will give 61 litres of mist and 90 litres of mist respectively at 25 bar.

Lots of uniformed micro droplets that very effectively take the heat out of a fire and keep the fire fighter cool behind a wide 11 metre stream of mist.

In tests the A408 extinguished and cooled a fully involved car fire with only 60 litres of water. It extinguished an 80 litre fuel tray with temperatures measured at 700 plus degrees with 40 litres of water and no foam.

The branches look and feel like any other branch your crews may have now so no extra operational training is required to use them.

Follow the links on page one to see the branches and lenses being used in live fire situations.

Angloco Ltd Station Road, Dalfy, West Yorkshire WF17 5TA. T: +44 (0)1924 233890 F: +44 (0)1924 233895



Angloco



Technical Information

Models	: A408/A409/A409R/A409CR
Type	: Mist-Jet
Extinguishing agent	: Water
Minimum pressure	: 40 bar
Recommended pressure	: 25 bar
Flow rate in Mist Mode	: A408 - 61 L/min & A409 90 L/min (at 25 bar)
Flow rate in Jet Mode	: A408 - 122 L/min & A409 140 L/min (at 25 bar)
Maximum discharge distance in Mist Mode	: ~11m (at 20bar)
Maximum discharge distance in Jet Mode	: ~17m (at 20bar)
Connection	: 1" BSP
Integrated Filtration	: Yes

Model	Pressure (bar)							
	5	10	15	20	25	30	35	40
A408	28	36	44	52	61	72	80	89
A409	40	51	65	76	90	106	125	134

No: Our products are constantly being developed and improved, therefore we reserve the right to change the technical specifications without prior notice

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Main advantages of high efficiency Water Mist:

- Rapid extinguishing
 - Water saving
- Safe for use on or around humans & animals
 - Safe on electrical fires
- Minimal collateral damage / no flooding risk
 - Superior cooling
 - No thermal shock
- Safe for the user due to mist barrier between fire and operator
 - Environmental friendly

NB/ Our products are constantly being developed and improved, therefore we reserve the right to change the technical specifications without prior notice.



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APPENDIX H: Mobile Water Bowser

Enduramaxx Agricultural Water Bowser - 300 to 750 Litres

