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**CELLSAFEUK Limited, Round Croft Works,
Field Street, Willenhall, West Midlands, WV13 2PN**

Application for Bespoke Environmental Permit

Dust Emissions Management Plan (DEMP)




09 February 2026

Our Reference: CELLSAFEUK Ltd-DEMP-RP06-Final, Rev B



Waste And Industry Compliance Ltd

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DRAWINGS

Drawing 'Indicative Site Layout and Storage-DW01'

1:300 @ A3

Drawing 'Sensitive Receptors-DW03'

1:12,000 @ A3

1 SITE DETAILS

- 1.1.1 This Dust Emissions Management Plan (DEMP) has been prepared on behalf of CELLSAFEUK Limited (**the Operator**) for Round Croft Works, Field Street, Willenhall, West Midlands, WV13 2PN (**the Site**). It has been prepared in accordance with Government guidance 'Control and monitor emissions for your environmental permit' (<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit>) and Environment Agency guidance 'How to comply with your environmental permit (April 2011).
- 1.1.2 The Operator seeks a bespoke Environmental Permit for the Site to authorise the receipt, storage, shredding, separation and recycling of up to 3,120 tonnes per annum of non-hazardous alkaline batteries. The facility will treat up to 10 tonnes per day of wastes for recovery.
- 1.1.3 Although the Site will only accept batteries classed as non-hazardous, the Environment Agency stated during enhanced pre-application consultations on 19 December 2025:
- "When non-hazardous batteries are treated – and in this case shredded – it changes the nature of the waste and creates hazardous waste. The content of batteries 'black mass' is hazardous due to the metals and chemistry of the materials, so where batteries are not hazardous pre-shredding we do need to consider any subsequent treatment of the shredded battery material."*
- 1.1.4 The Environmental Permit application has been prepared in accordance with guidance on:
- Appropriate measures for Batteries Waste batteries: appropriate measures for permitted facilities - GOV.UK
 - Non-hazardous and inert waste: appropriate measures for permitted facilities - GOV.UK
 - Chemical waste: appropriate measures for permitted facilities - GOV.UK
 - Treating metal waste in shredders: appropriate measures for permitted facilities – Gov.UK.
- 1.1.5 The Site incorporates a series of fully enclosed and roofed steel portal framed and metal clad buildings fitted with roller shutter vehicular access doors and pedestrian access doors. The floor of all the buildings comprises impermeable concrete slab. There are no drainage outlets inside the buildings, i.e. they are fully sealed.
- 1.1.6 All wastes will be stored and processed inside the buildings.
- 1.1.7 Alkaline batteries will be subject to pre-acceptance and acceptance procedures, including visual inspection, with acceptable and permitted loads off loaded by forklift truck and stored in a series of fireproof concrete bays located inside the Goods Inwards building. Following unloading and storage in the Goods Inward building, batteries will be processed as follows:

- Transferred by forklift truck from the 'Goods Inward' building to the Picking Station building, where materials will be unloaded into a reception hopper, which feeds a conveyor and picking station. All batteries will pass along the conveyor. Site operatives will be positioned either side of the conveyor and will visually inspect each battery. Any contraries or inadvertently received non-permitted batteries will be manually removed and stored in a quarantine skip for removal from site to an authorised facility.
 - Acceptable batteries will be discharged from the end of the conveyor and stored in palletised containers, which will be transferred by forklift truck to the Processing building.
 - Inside the Processing building, batteries will be fed into a feed hopper and onto a shaker bed, where any dirt or other fine material will be 'shaken off' and captured in a sealed container located below. Clean batteries will then transfer up an inclined conveyor to a shredding plant, where they will be shredded and screened, with 'black mass' material captured in sealed 60 litre containers. Remaining material will transfer via conveyor to a drum magnet for ferrous metal separation into a sealed 0.6m³ container, before passing to an eddy current separator for capture of brass pins and any other non-ferrous metal. Remaining residual materials such as paper, plastic etc will be stored in a sealed container.
- 1.1.8 Non-hazardous and hazardous waste will be stored separately. Black mass will be stored in sealed and lidded 60 litre containers. Lids will be kept closed except when black mass is being loaded into the container.
- 1.1.9 An external yard in front of the building and within the Site boundary comprises a combination of concrete and tarmac surfacing. A weighbridge and weighbridge office will be installed at the Site, to the immediate west of the buildings.
- 1.1.10 The Site is secured by a combination of 2.4 metre high steel mesh and palisade security fencing and lockable security gates at the Site entrance. CCTV cameras are installed for added security, both inside the buildings and on the external yard to provide continuous cover of the entire site, including all waste storage and processing areas.
- 1.1.11 The proposed Environmental Permit boundary is shown on Drawing 'Indicative Site Layout and Storage', DW01.
- 1.1.12 The requirement for a DEMP is to ensure that all reasonable measures to mitigate against the dispersion of fugitive emissions are undertaken by reviewing the potential source of dust and emissions from Site activities and to assess the impact these may have on identified sensitive receptors in the vicinity.
- 1.1.13 This DEMP provides an assessment of the production of fugitive emissions relating to waste handling operations at the Site and aims to identify potential sources of dust emissions, the associated potential impacts along with detailed measures to be implemented to mitigate dust and particulate matter.

1.2 THE SITE

- 1.2.1 The Site is located on Round Croft, off Field Street, Willenhall, Walsall. It is located in a mixed industrial and residential area.
- 1.2.2 The Site is accessed via the public highway on Round Croft, to the immediate north of the facility, beyond which is the Keys Doctors Surgery, the Salvation Army Church and residential properties. Field Street is located to the immediate east, beyond which are industrial units. Commercial and industrial land is located to the immediate south, including Gilberts Bar and Function Room. Residential properties are to the north, off Round Croft and Pinson Road.
- 1.2.3 The nearest residential properties are circa 16m northwest on Round Croft, 23m southeast on Field Street, 30m west on St Stephen's Avenue, 60m north on Pinson Road, 64m south on Wolverhampton Street and 70m east on Gomer Street.
- 1.2.4 There are no European Sites, i.e. Special Protection Areas (SPA), Special Conservation Areas (SAC) or Ramsar Sites within 2km of the Site.
- 1.2.5 There are no Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Biosphere Reserves, Marine Conservation Zones, Ancient Woodlands or Scheduled Monuments within a 2km radius of the site boundary.
- 1.2.6 Waddens Brook, Noose Lane, (Fibbersley) Local Nature Reserve (LNR) is circa 667m northwest of the Site. The Natural England designation <https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1009312> describes the LNR as *"one of the best wetland sites in Walsall and has wet grassland, wildflower meadows, marshes and ponds. It is a good site for amphibians, and has over 20 species of birds and over 200 species of plants recorded."*
- 1.2.7 The nearest area of Priority Habitat is circa 121m northwest of the Site, namely a large area of Woodpasture and Parkland BAP Priority Habitat and Deciduous Woodland.
- 1.2.8 There are areas of Priority Habitat Coastal and Floodplain Grazing Marsh circa 335m south southwest and 376m west of the Site. There are other areas of Priority Habitat northwest of the Site, including Deciduous Woodland circa 673m distant, Coastal and Floodplain Grazing Marsh circa 752m distant and Good quality semi-improved grassland circa 836m distant.
- 1.2.9 All of Walsall metropolitan borough area was designed as an Air Quality Management Area (AQMA) for nitrogen dioxide (NO₂) on 1 April 2006 (1 hour and annual mean). It was declared an AQMA due to excessive levels of nitrogen dioxide exceeding national annual and hourly air quality objectives. This was primarily driven by high pollution levels from vehicle emissions along the M6 motorway corridor, major A-roads, and town centre congestion. The nearest nitrogen dioxide monitoring station is located circa 3.12 km northeast of the Site, circa 65 m from the nearest trafficked road and 700 m from the M6 motorway. The Site is circa 3km from the M6 motorway at the closest point.
- 1.2.10 Walsall metropolitan borough area has not been designated an AQMA for Particulates.

1.2.11 Sensitive receptors are shown on Drawing 'Sensitive Receptors', DW03.

1.3 SITE RESPONSIBILITY OVERVIEW

1.3.1 The Site Manager or, during periods of absence, other Director or the Technically Competent Person will have overall responsibility for ensuring that potentially dusty emissions arising from the Site are minimised and that all process controls are managed/maintained. Adequate staffing levels will be maintained at all times to ensure the effective operation of the facilities.

2 LEGISLATION AND POLICY

2.1 EUROPEAN DIRECTIVES

2.1.1 European Union (EU) air quality legislation is provided within Directive 2008/50/EC, which came into force on 11th June 2008. This Directive consolidated previous legislation which was designed to deal with specific pollutants in a consistent manner and provided new Air Quality Limit Values (AQLVs) for particulate matter with an aerodynamic diameter of less than 2.5µm. The consolidated Directives include:

- Directive 1999/30/EC - the First Air Quality "Daughter" Directive - sets ambient AQLVs for nitrogen dioxide (NO₂), oxides of nitrogen (NO_x), sulphur dioxide, lead and particulate matter with an aerodynamic diameter of less than 10µm (PM₁₀);
- Directive 2000/69/EC - the Second Air Quality "Daughter" Directive - sets ambient AQLVs for benzene and carbon monoxide; and,
- Directive 2002/3/EC - the Third Air Quality "Daughter" Directive - seeks to establish long-term objectives, target values, an alert threshold and an information threshold for concentrations of ozone in ambient air.

2.1.2 The fourth daughter Directive was not included within the consolidation and is described as:

- Directive 2004/107/EC - sets health-based limits on polycyclic aromatic hydrocarbons, cadmium, arsenic, nickel and mercury, for which there is a requirement to reduce exposure to as low as reasonably achievable.

2.2 UK LEGISLATION

2.2.1 The Air Quality Standards Regulations (2010) came into force on 11th June 2010 and transpose EU Directive 2008/50/EC into UK law. AQLVs were published in these regulations for seven pollutants, as well as Target Values for an additional five pollutants.

2.2.2 Part IV of the Environment Act (1995) requires UK government to produce a national Air Quality Strategy (AQS) which contains standards, objectives and measures for improving ambient air quality. The most recent AQS was produced by the Department for Environment, Food and Rural Affairs (DEFRA) and published in July 2007. The AQS sets out

Air Quality Objectives (AQOs) that are maximum ambient pollutant concentrations that are not to be exceeded either without exception or with a permitted number of exceedances over a specified timescale. These are generally in line with the AQLVs, although the requirements for the determination of compliance vary.

2.2.3 Table 1 presents the AQOs for PM₁₀.

Table 1: Air Quality Objectives for PM₁₀

Pollutant	Air Quality Objectives	
	Concentration (µg/m ³)	Averaging Period
PM ₁₀	40	Annual mean
	50	24-hour mean, not to be exceeded on more than 35 occasions per annum

3 BASELINE

3.1 BACKGROUND POLLUTANT CONCENTRATIONS

3.1.1 Existing air quality conditions in the vicinity of the Site were identified in order to provide a baseline for assessment. These are detailed in the following Sections.

3.1.2 Predictions of background pollutant concentrations on a 1 km by 1 km grid basis have been produced by DEFRA for the entire United Kingdom to assist Local Authorities in their review and assessment of air quality. The Site is located in 1km x 1km grid square NGR: 395500, 297500 (SO 95500 97500). Data for this location was downloaded from the DEFRA website (<https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2018>) for the purpose of the assessment and is summarised in Table 2.

Table 2: Background Pollutant Concentration Predictions

Pollutant	Predicted Background Pollutant Concentration (µg/m ³)		
	2023	2024	2025
NO ₂	12.99397 µg/m ³	12.5537 µg/m ³	12.15321 µg/m ³
PM ₁₀	13.268968 µg/m ³	13.207741 µg/m ³	13.14652 µg/m ³

3.1.3 According to DEFRA's Background Air Pollution Mapping Data, background emission concentrations in the locality of the Site since 2023, have been, and are predicted to be, below air quality standards. National air quality objectives and European Directive limits and target values stipulate that concentrations of PM₁₀ measured at 24-hour mean levels should not exceed 50 µg/m³ for more than 35 times a year. NO₂ concentrations should not exceed 40µg/m³ when measured on an annual mean basis. Based on background concentrations, as tabulated above in Table 2, the air quality at the Site itself and in the vicinity is unlikely to exceed these parameters.

3.2 PREVAILING WINDS

Statistics on wind direction and wind speed are based on observations taken from the nearest weather station at Cosford/Albrighton (c. 18km west northwest of the site) between November 2009 and January 2024, which indicates that prevailing winds originate predominantly from the south, southwest and west. The wind rose data is shown in Figures 1 and 2 below. The location of the Cosford/Albrighton weather station has similar topography to the Site, i.e. located in area of predominantly flat land.

Figure 1: Rose diagram showing annual prevailing wind direction and location of Cosford/Albrighton Weather Station

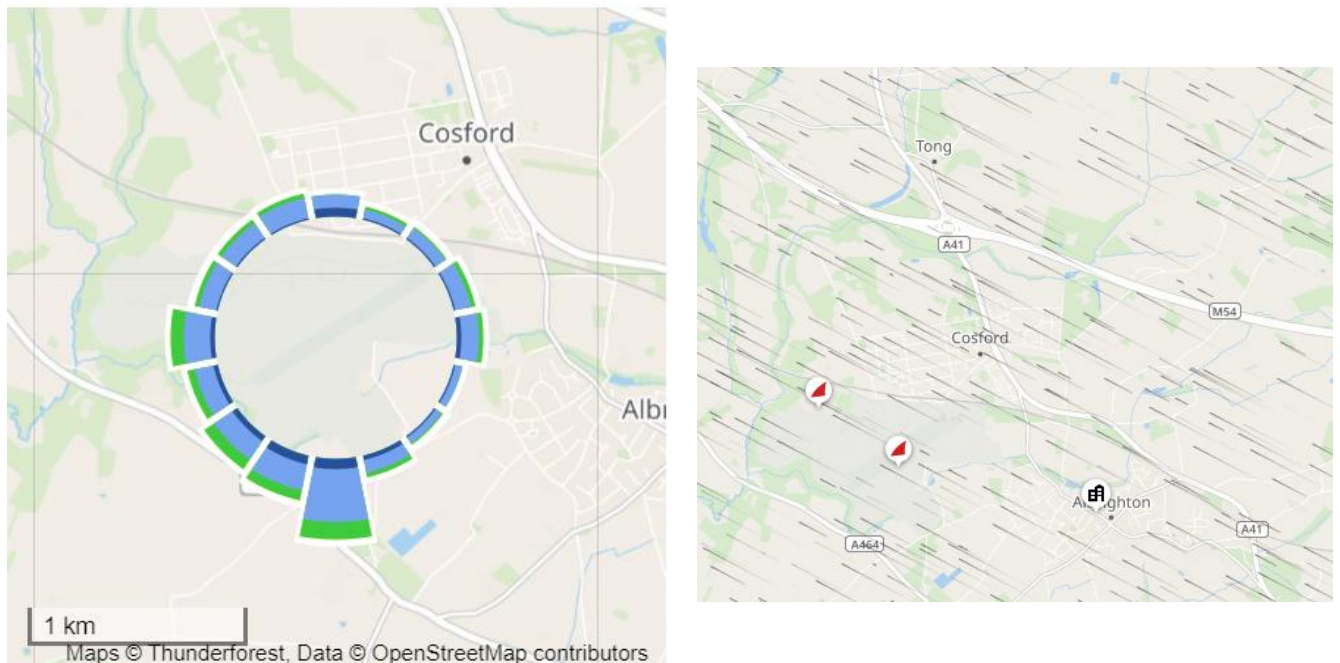
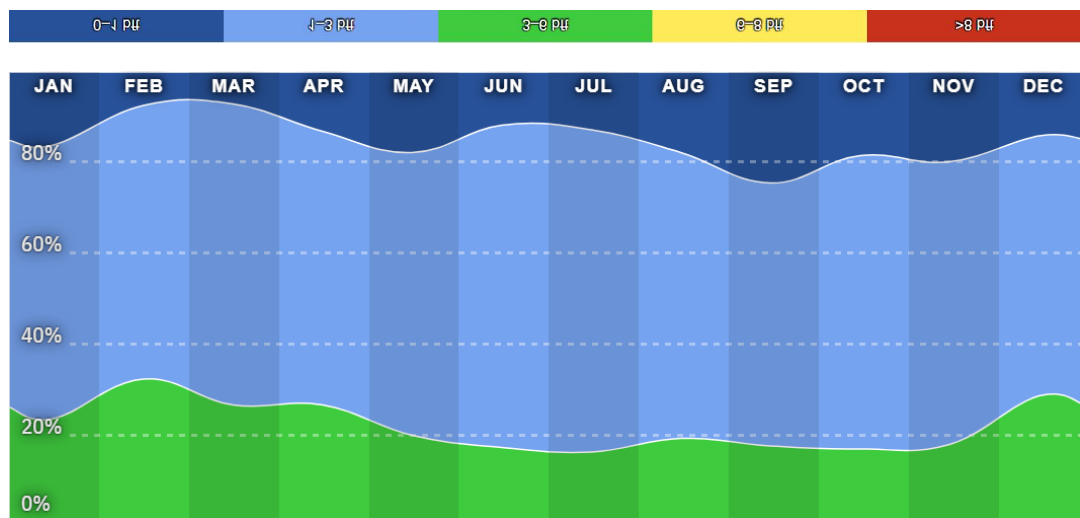


Fig. 2 Monthly wind direction and strength distribution



4 SENSITIVE RECEPTORS

- 4.1.1 Sensitive receptors at potential risk from any dust emissions at the Site are shown on the Drawing 'Sensitive Receptors', DW03 and are listed in Table 3 below.
- 4.1.2 In terms of predicted exposure risk, levels have been determined via a qualitative assessment which evaluates the likelihood of exposure to dust emissions based on the receptors' proximity to the Site and the location of the sensitive receptors in regard to the prevailing wind direction as shown in Figure 1.
- 4.1.3 Generally, a 1km radius reflects the maximum potential distance that dust could reasonably be expected to cause affects in extreme meteorological conditions without any mitigation measures in place. Institute of Air Quality Management (IAQM) Guidance on the Assessment of Mineral Dust Impacts for Planning (May 2016) states that "it is commonly accepted that the greatest impacts will be within 100m of a source and this can include both large (>30 µm) and small dust particles. The greatest potential for high rates of dust deposition and elevated PM10 concentrations occurs within this distance. Intermediate-sized particles (10 to 30 µm) may travel up to 400m, with occasional elevated levels of dust deposition and PM10 possible. Particles less than 1µm have the potential to persist beyond 400m but with minimal significance due to dispersion." Environment Agency guidance on 'Monitoring of Particulate Matter in Ambient Air Around Waste Facilities' states that large particles (>30 µm) responsible for most dust annoyance mostly deposit within 100m of the source, intermediate-sized particles (10–30 µm) are likely to travel up to 200–500m and smaller particles (<10 µm) can travel up to 1 Km from the source.
- 4.1.4 Due to the high number of sensitive receptors, not all residential properties and local businesses etc are individually assessed, as there are several thousand locations within the assessment distance. Table 3 assesses the most proximate receptors within each category to provide information on the highest level of risk that would be encountered. Where mitigation measures demonstrate that the level of dust risk is low at the selected sites, it can be assumed that risk would also be low at more distant sites.

Table 3: Distance to Selected Sensitive Receptors

Receptor	Type of Facility	Distance (m) & Direction from Site	Overall Exposure Level Without Mitigation	Comments
Medical				
Keys Doctor's Surgery	Medical	50m NE	High	The receptor is downwind of the prevailing wind direction is in close proximity, i.e. within 100m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Croft Surgery	Medical	180m E	Medium/High	The receptor is downwind of the prevailing wind direction and in relatively close proximity, i.e. within 250m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Lockfield Surgery	Medical	180m E	Medium/High	The receptor is downwind of the prevailing wind direction and in relatively close proximity, i.e. within 250m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Schools				
Tiny Talents Pre-School	Pre-School	68m S	High	Although the receptor is upwind of the prevailing wind direction is in close proximity, i.e. within 100m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
ABC Day Nursery	Nursery School	590m SE	Low/Medium	The receptor is upwind of the Site and is relatively distant at over 500m.
Saint Giles Church of England Primary School	School	686m E	Low/Medium	Although the receptor is downwind of the prevailing wind direction, it is relatively distant, i.e. over 500m from the Site.
Tip Top Day Nursery	Nursery School	700m SW	Low/Medium	The receptor is upwind of the Site and is relatively distant at over 500m.
Fibbersley Park Primary Academy	School	800m N	Low	Although the receptor is downwind of the prevailing wind direction it is distant at over 750m from the Site.
Care Homes				
Inglenook Residential Homes	Care Home	325m N	Medium	The receptor is downwind of the prevailing wind direction and within 500m of the Site. It is important that the dust control

Receptor	Type of Facility	Distance (m) & Direction from Site	Overall Exposure Level Without Mitigation	Comments
				measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Woodthorne Care Home	Care Home	407m NNE	Medium	The receptor is downwind of the prevailing wind direction and within 500m of the Site. It is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Manor House Retirement Home	Retirement Home	851m E	Low	Although the receptor is downwind of the prevailing wind direction it is distant at over 750m from the Site.
Dignus Care - Ebenezer House	Learning Disabilities	982m SE	Low	The receptor is upwind of the prevailing wind direction and is distant, i.e. over 750m, from the Site.
Kingsway Care Home	Care Home	998m SE	Low	The receptor is upwind of the prevailing wind direction and is distant, i.e. over 750m, from the Site.
Residential				
Round Croft	Residential	16m NW	High	The receptor is in close proximity, i.e. within 100m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Field Street	Residential	23m SE	High	Although the receptor is upwind of the prevailing wind direction is in close proximity, i.e. within 100m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
St Stephen's Avenue	Residential	30m W	High	Although the receptor is upwind of the prevailing wind direction is in close proximity, i.e. within 100m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Pinson Road	Residential	60m N	High	The receptor is downwind of the prevailing wind direction is in close proximity, i.e. within 100m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.

Receptor	Type of Facility	Distance (m) & Direction from Site	Overall Exposure Level Without Mitigation	Comments
Wolverhampton Street	Residential	64m S	High	Although the receptor is upwind of the prevailing wind direction is in close proximity, i.e. within 100m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Gomer Street	Residential	70m E	High	The receptor is downwind of the prevailing wind direction is in close proximity, i.e. within 100m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Croft Street	Residential	100m NE	High	The receptor is downwind of the prevailing wind direction is in close proximity, i.e. within 100m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Peel Close	Residential	110m SSE	Medium/High	Although the receptor is upwind of the prevailing wind direction, it is in relatively close proximity, i.e. within 250m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Park Avenue	Residential	158m W	Medium/High	Although the receptor is upwind of the prevailing wind direction, it is in relatively close proximity, i.e. within 250m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Dartmouth Avenue	Residential	162m NNE	Medium/High	The receptor is downwind of the prevailing wind direction and in relatively close proximity, i.e. within 250m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Summer Street	Residential	192m WSW	Medium/High	Although the receptor is upwind of the prevailing wind direction, it is in relatively close proximity, i.e. within 250m of the Site. Therefore it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Stafford Street	Residential	213m E	Medium/High	The receptor is downwind of the prevailing wind direction and in relatively close proximity, i.e. within 250m of the Site. Therefore it is

Receptor	Type of Facility	Distance (m) & Direction from Site	Overall Exposure Level Without Mitigation	Comments
				important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Aston Road	Residential	269m W	Medium	Although the receptor is upwind of the prevailing wind direction, it is within 500m of the Site. Therefore, it is important that the dust control measures detailed in this DEMP are implemented to control fugitive emissions from the Site.
Designated Habitats				
Woodpasture and Parkland BAP	Priority Habitat	121m NW	Low/Medium	Receptor is over 100m distant from the Site. At this distance it is considered unlikely that dust emissions would have a significant impact on fauna and flora associated with the Priority Habitat.
Deciduous Woodland	Priority Habitat	121m NW	Low/Medium	See above
Coastal and Floodplain Grazing Marsh	Priority Habitat	335m SSW	Low	Receptor is upwind of the site and relatively distant, at over 250m from the Site. It is unlikely that dust emissions would have a significant impact on fauna and flora associated with the Priority Habitat.
Coastal and Floodplain Grazing Marsh	Priority Habitat	376m W	Low	Receptor is upwind of the site and relatively distant. Dust emissions are unlikely to have a significant impact on fauna and flora associated with the Priority Habitat.
Waddens Brook, Noose Lane, (Fibbersley) LNR	Local Nature Reserve	667m NW	Low	See above
Deciduous Woodland	Priority Habitat	673m NW	Low	See above
Coastal and Floodplain Grazing Marsh	Priority Habitat	752m NW	Low	See above
Good quality semi-improved grassland	Priority Habitat	836m NW	Low	See above
Industrial and Commercial				
Ivan's Autos	Industrial	15m E	High	The receptor is downwind of the prevailing wind direction and is in very close proximity to the Site. Therefore, it is important that the mitigation measures set out in this DEMP are implemented to minimise any potential dust impacts on employees or visitors to the facility or the cleanliness of the building etc.

Receptor	Type of Facility	Distance (m) & Direction from Site	Overall Exposure Level Without Mitigation	Comments
AJ Tyre Service	Industrial	15m NE	High	The receptor is downwind of the prevailing wind direction and is in very close proximity to the Site. Therefore, it is important that the mitigation measures set out in this DEMP are implemented to minimise any potential dust impacts on employees or visitors to the facility or the cleanliness of the building etc.
Gilberts Bar and Function Room	Commercial	24m S	High	Although the receptor is upwind of the prevailing wind direction, it is in close proximity to the Site. Therefore, it is important that the mitigation measures set out in this DEMP are implemented to minimise any potential dust impacts on employees or visitors to the facility or the cleanliness of the building etc.
Jeffreys Doors & DIY Store	Commercial	26m SE	High	Although the receptor is upwind of the prevailing wind direction, it is in close proximity to the Site. Therefore, it is important that the mitigation measures set out in this DEMP are implemented to minimise any potential dust impacts on employees or visitors to the facility or the cleanliness of the building etc.
Bloxwich Environmental Services Ltd	Industrial	30m NE	High	The receptor is downwind of the prevailing wind direction and is in close proximity to the Site. Therefore, it is important that the mitigation measures set out in this DEMP are implemented to minimise any potential dust impacts on employees or visitors to the facility or the cleanliness of the building etc.
A & M Ductwork Ltd	Industrial	42m E	High	The receptor is downwind of the prevailing wind direction and is in close proximity to the Site. Therefore, it is important that the mitigation measures set out in this DEMP are implemented to minimise any potential dust impacts on employees or visitors to the facility or the cleanliness of the building etc.
Beamo Ltd	Industrial	123m SW	Medium High	Although the receptor is upwind of the prevailing wind direction, it is relatively close proximity. Therefore, it is important that the mitigation measures set out in this DEMP are implemented to minimise any potential dust impacts on employees or visitors to the facility or the cleanliness of the building etc.

Receptor	Type of Facility	Distance (m) & Direction from Site	Overall Exposure Level Without Mitigation	Comments
Willenhall Auto Service	Industrial	137m SSW	Medium High	Although the receptor is upwind of the prevailing wind direction, it is relatively close proximity. Therefore, it is important that the mitigation measures set out in this DEMP are implemented to minimise any potential dust impacts on employees or visitors to the facility or the cleanliness of the building etc.
The Garage Willenhall	Industrial	150m SW	Medium High	Although the receptor is upwind of the prevailing wind direction, it is relatively close proximity. Therefore, it is important that the mitigation measures set out in this DEMP are implemented to minimise any potential dust impacts on employees or visitors to the facility or the cleanliness of the building etc.
Railway				
Railway Line	Railway	323m S	Low	Upwind of the prevailing wind direction. Dust is unlikely to cause any significant impacts to railway infrastructure at this distance, and trains will quickly travel beyond the proximity of the Site, meaning exposure time is likely to be very short. Rail personnel maintain the line in proximity to the Site would have longer periods of occupancy. Dust control and mitigation measures set out in this DEMP will be implemented to minimise impacts on the railway and sensitive receptors.
Other				
Salvation Army Church	Church	68m N	Medium/High	The church is in close proximity to the Site but any potential exposure time of parishioners or visitors is likely to be relatively limited due to the length of services etc.
St Stephen's Church	Church	78m SSW	Medium/High	The church is in close proximity to the Site but any potential exposure time of parishioners or visitors is likely to be relatively limited due to the length of services etc.
Willenhall Memorial Park	Parkland	140m N	Medium	The park is in relatively close proximity to the Site but any potential exposure time of visitors is likely to be relatively limited and transient.

5 WASTE MANAGEMENT

- 5.1.1 The Site will receive up to 3,120 tonnes per annum of non-hazardous alkaline batteries (AA and AAA) for treatment and recycling. Treatment will consist of sorting, shredding, screening, magnetic separation and eddy current separation of materials. The maximum quantity of batteries processed per day will be 10 tonnes.
- 5.1.2 The Environment Agency has confirmed that when non-hazardous batteries are shredded it changes the nature of the waste and creates hazardous waste. The content of batteries ‘black mass’ is hazardous due to the metals and chemistry of the materials.
- 5.1.3 Non-hazardous and hazardous wastes will be stored separately and not mixed.
- 5.1.4 The list of proposed wastes at the Site is detailed in Table 4 below, together with their associated dust emission risk under ‘normal’ operational conditions and without mitigation or control measures being applied.

Table 4: Proposed Wastes

Waste Code	Description	Dust Emission Risk Without Mitigation
16	Wastes not otherwise specified in the list	
16 06	Batteries and accumulators	
16 06 04	alkaline batteries (except 16 06 03)	Low/Medium
20	Municipal wastes (household waste and similar commercial, industrial	
20 01	Separately collected fractions	
20 01 34	batteries and accumulators other than those mentioned in 20 01 33	Low/Medium

5.2 WASTE PRE-ACCEPTANCE PROCEDURES

- 5.2.1 Waste pre-acceptance procedures will ensure that only compliant waste types are accepted. Customers delivering waste to the Site will be required to provide the Operator, in advance, with all necessary information/documentation to satisfy the requirements of the Duty of Care and the Waste (England and Wales) Regulations 2011 (see below).
- 5.2.2 The Operator will check pre-acceptance documentation from suppliers to ensure that only permitted waste streams are approved for delivery to the Site. Non-permitted wastes or other unsuitable wastes, e.g. inherently dusty wastes, will not be accepted. Pre-acceptance documentation will record:
- The waste description;
 - The European Waste Classification (EWC) code;
 - The source and nature of the waste, including its physical form, i.e. solid;
 - Any special handling measures;

- Any potential risks to process safety, occupational safety and the environment;
- Details of the waste producer (name, address and contact details);
- Where the waste holder is not the producer, details of the waste holder (name, address and contact details);
- Information on the nature and variability of the waste production process and the waste;
- Age of the waste;
- An estimate of the quantity to be received in each load and in a year.

5.2.3 Checks will also be made to establish whether the haulier is a Registered Waste Carrier or has a valid exemption from registration. Only registered carriers or those who are lawfully exempt from registration will be permitted to use the Site.

5.3 WASTE ACCEPTANCE PROCEDURES

5.3.1 Waste will not be accepted if for any reason there is insufficient storage capacity available or if the Site is inadequately manned. This is to ensure that all waste is managed effectively to prevent pollution or loss of amenity.

5.3.2 Site staff will be suitably trained and will follow documented procedures. The Operator will examine the waste descriptions of incoming waste loads and the information will be checked against the previously supplied pre-acceptance documentation, six figure European Waste Catalogue Code(s) and other details on the Waste Transfer Note or season ticket (as appropriate) and against the waste types permitted by the Environmental Permit.

5.3.3 Every delivery of waste will be recorded, detailing the date of the transaction, weight, waste type, registered carrier, Waste Transfer Note number, vehicle registration and other pertinent information against a unique reference number. It will allow for tracking of wastes, the generation of reports and waste returns, as well as providing comprehensive, auditable information.

5.3.4 Incoming waste loads will be received in sealed and lidded containers on pallets or in Dolav bins with integral design for lifting by forklift truck. Waste loads will be unloaded by forklift and delivered into the Goods Inward building for storage in dedicated fireproof concrete bays. This will help to ensure the cleanliness of batteries is maintained, the risk of dust emissions is minimised and that wastes are processed on a first in first out basis.

5.3.5 A visual inspection of the waste loads will be made during unloading to ensure that only permitted batteries are received.

5.3.6 Any discrepancies found as a result of the checks detailed above will result in the vehicle being detained whilst some, or all, of the following supplementary management decisions are taken:

- Referral to a Technically Competent Person (TCP) on site;

- Referral to the waste producer to confirm the nature of the waste load;
- Referral to the waste carrier's base;
- Referral to the Environment Agency;
- Redirection of delivery vehicle off site, to a suitably authorised facility; and
- If the waste container has been offloaded and deposited in the Goods Inward building and the delivery vehicle has left the Site, non-permitted or unsuitable batteries will be transferred to a secure quarantine skip for temporary storage, prior to off-site removal either to the waste producer or suitably authorised facility. All quarantined wastes will be stored in a sealed and lidded container.

5.4 NON-CONFORMING WASTE

- 5.4.1 Any loads arriving at the Site which contain non-permitted wastes or dusty materials or a significant amount of contrary material shall be rejected prior to unloading. In the unlikely event that a vehicle inadvertently deposits non-permitted batteries or an inherently dusty load or a large amount of contrary material, it will be re-loaded where possible. Where the vehicle has already left the Site, the non-permitted waste or contrary material will be stored in a lidded quarantine container at the Site, pending removal of the material to the waste producer or authorised facility. Any waste materials dispatched off site to an authorised facility, will be removed in accordance with the Duty of Care. A Registered Waste Carrier will be used.
- 5.4.2 Material rejected from the Site shall be issued with a record stating why, when and from which contract the waste was provided. This record shall be held on Site for the Environment Agency to inspect.

5.5 WASTE STORAGE

- 5.5.1 Palletised containers of authorised batteries will be transferred by forklift truck from the delivery vehicles to the Goods Inwards building for storage prior to processing. Although the batteries are unloaded from the delivery vehicles on the external yard, batteries are delivered in dedicated and sealed battery bins, which contain any inadvertent dust.
- 5.5.2 The building is roofed and fully enclosed, which will prevent the release of fugitive dust emissions during storage. In addition, the Goods Inwards building will incorporate 4 x fireproof bays, made of concrete 'lego' blocks. Each bay will comprise a rear push wall and two side walls. The use of 4 bays means that stock can be processed on a first in, first out basis by emptying bays in sequence, i.e. the bay containing the longest deposited waste will be emptied and the batteries processed first, before the bay with the next longest deposited waste is emptied and processed etc.
- 5.5.3 Batteries will be transferred by forklift truck from the 'Goods Inward' building to the Picking Station building, which is roofed and fully enclosed. Materials will be unloaded into a reception hopper, which feeds a conveyor and picking station. All batteries will pass along

the conveyor.

- 5.5.4 Site operatives will be positioned either side of the conveyor and will visually inspect each battery. Any contraries or inadvertently received non-permitted batteries will be manually removed and stored in a quarantine skip for removal from site to an authorised facility.
- 5.5.5 Acceptable batteries will be discharged from the end of the conveyor and stored in palletised containers, which will be transferred by forklift truck to the Processing building for physical treatment to recover recyclable components.

5.6 WASTE TREATMENT

- 5.6.1 The Processing building is also roofed and fully enclosed. Batteries delivered into the building will be fed into a feed hopper and onto a shaker bed, where any dirt or other fine material will be 'shaken off' and captured in a sealed container located below. Clean batteries will then transfer up an inclined conveyor to a shredding plant, where they will be shredded and screened, with 'black mass' material captured in sealed 60 litre containers. Remaining material will transfer via conveyor to a drum magnet for ferrous metal separation into a sealed 0.6m³ container, before passing to an eddy current separator for capture of brass pins and any other non-ferrous metal. Remaining residual materials such as paper, plastic etc will be stored in a dedicated sealed container.
- 5.6.2 The external doors to the Processing building will be kept closed to prevent the release of fugitive dust to the external environment during treatment operations, i.e. the loading of batteries into reception hopper, transfer and operation of physical shaker bed, shredding plant and separation operations. Plates 1 and 2 below show the battery processing plant.

Plate 1 – Battery Processing Line– Looking Towards Northern End of the Processing Building



Plate 2 – Battery Processing Line– Looking Towards Southern End of the Processing Building



- 5.6.3 A mobile dust extraction and filtration system will be installed above the shredder feed area to capture any airborne dust or particulates released during operation. The system will consist of a high-efficiency extraction hood connected to a portable filter unit equipped with multi-stage filtration, including a HEPA or equivalent final filter capable of achieving 99.9% particle capture efficiency for fine dust. The extraction point will be located directly above the 30 cm feed opening on the shredder lid, ensuring containment of any dust generated during the shredding process.
- 5.6.4 The dust extraction and filtration system does not require the building to operate under negative pressure to work efficiently. The HEPA system has been designed to capture 99.97% of airborne particles that are 0.3 microns or larger, including dust. It is not considered necessary to operate the buildings under negative pressure. Maintenance and cleaning of the HEPA filter is detailed in Section 5.7 below.
- 5.6.5 Separated and stored components will be transferred to the Goods Out building, where they will be stored in fireproof concrete bays pending their removal from the Site to authorised off-site facilities. The Goods Out building is also roofed and fully enclosed.
- 5.6.6 The Goods Out building will incorporate 4 concrete ‘lego’ block fireproof bays. All containers will be either sheeted or lidded to prevent any inadvertent dust emissions (the 60 litre containers for black mass storage will be lidded, with the lids be kept closed during storage). All waste storage skips and containers will be removed by Registered Waste Carrier to authorised facilities in accordance with the Duty of Care and Waste Transfer Note procedures for non-hazardous wastes and Consignment Note procedures for hazardous waste. Non-hazardous and hazardous wastes will be stored separately and not mixed.

5.7 MAINTENANCE AND CLEANING OF THE HEPA FILTER

- 5.7.1 The HEPA filter system will be fitted with individual differential pressure controls to signal when the filter (or bank of filters) needs to be replaced. A visual check will also be put in place to ensure the plant is functioning efficiently.
- 5.7.2 Each bank of filters will be inspected by a trained operative on a weekly basis initially. The operative will carry out the following checks:
- Visual check of the filter containment system (frames) for any signs of leakage or damage.
 - Check the pressure drop across each filter module ensuring that the recommended pressure drop across the filter does not fall below 600 Pa. This will be carried out using a handheld digital instrument.
 - Where the pressure drop falls below the recommended value, the operative will either replace the module filter immediately or put in to place a time when the filter can be replaced (note that the system will be designed with a 15% over capacity to allow for a number of filters to be blocked without reducing the overall efficiency required to maintain a negative pressure within each production compartment).
 - Under no circumstances will an attempt be made to unblock a blocked filter.
 - The operative will check the filter access door and, if necessary, tighten the closure fittings.
 - After changing a filter, the operative will inspect the filter containment access door gasket and make a note of the condition of the gasket. Gaskets will be replaced as necessary to maintain the tightness of the seal and ensure the integrity of dust capture and containment.
- 5.7.3 All site operatives will be trained in dust avoidance and good housekeeping measures. All operatives will be expected to comply with the operational guidance procedures in place for dust avoidance and dust housekeeping. Operatives will also be given training (both in-house and externally) on this specific topic, as well as training in the understanding and safe use of and basic maintenance of the HEPA filtration equipment that will be in place.
- 5.7.4 The HEPA filters cannot be cleaned. Where the pressure drop in a filter module falls below 600 Pa this requires the unit to be replaced with a new filter module. To protect the operative when changing the filters and prevent fugitive emissions of dust, an 'operator safe' bag-in – bag-out filter changing system (BIBO) is included with the filter containment system.
- 5.7.5 All used filters will be disposed of in accordance with the Hazardous Waste (England and Wales) Regulations 2005. A Hazardous Waste Consignment Note will be raised for the removal of used filters, which will be in accordance with the Duty of Care to an authorised hazardous waste facility.

5.8 MOBILE PLANT

- 5.8.1 The only mobile plant used at the Site is the forklift truck, which is a Linde H25 model. The forklift truck EU Stage V (2016/1628/EU) emission standards. They are known for low pollutant emissions, low noise levels, and high fuel efficiency.

5.9 HOUSEKEEPING

- 5.9.1 Housekeeping measures include daily visual inspection of the Site, with a detailed weekly inspection undertaken by the Site Manager or other Directors and Technically Competent Person.
- 5.9.2 The Site will be swept during the course of the working day and at the end of the working day to ensure it is left clean and tidy both during and outside of operational hours. Additional sweeping and cleaning will take place if noticeable waste, dust or fluff accumulation is present or if there is the potential for associated emissions from the Site.
- 5.9.3 Waste storage bays will be completely emptied and swept, including the corners, at least once per month. This will prevent the accumulation of any dusts or debris at the Site.
- 5.9.4 Site sweeping will be carried out by site operatives under the supervision of the Site Manager, other Directors or the Technically Competent Person.

6 DUST CONTROL MEASURES

6.1 WASTE ACCEPTANCE PROCEDURES

- 6.1.1 The waste acceptance procedures detailed in Sections 5.2 and 5.3 above will be the initial method of preventing inherently dusty loads being accepted at Site. The requirements for waste producers to provide pre-acceptance documentation that includes identification of any potential risks to the environment, including from inherently dusty wastes, will help to identify any potential loads that should be rejected from the Site prior to delivery.
- 6.1.2 All incoming wastes will be received in sealed and lidded containers, such as Dolav bins, which will prevent any dust emissions from waste loads during transfer to the Site.

6.2 WASTE STORAGE AND PROCESSING INSIDE THE BUILDINGS

- 6.2.1 All wastes will be stored and processed inside the buildings, which are fully enclosed and fitted with vehicular access roller shutter doors and pedestrian access doors.
- 6.2.2 The potential for significant dust emissions arises solely from the shredding and downstream separation of batteries. The use of a HEPA filter, designed to capture 99.97% of airborne particles that are 0.3 microns or larger, ensures the risk of dust emissions is negligible. In addition, the doors to the Processing building (including roller shutter door) are kept closed during shredding and processing operations, which further helps to prevent emissions to the external environment. Consequently, the roller shutter doors are not fast action, as this is deemed unnecessary. Neither are they fitted with PVC strips. In the

- unlikely event that additional dust control measures are required, roller shutter doors and PVC strips will be installed, as appropriate.
- 6.2.3 There are no vents in the building roof etc, therefore there are no associated emission points to the external environment.
- 6.2.4 The building floors comprises sealed concrete. The external yard comprises a combination of engineered concrete and tarmac surface. Delivery vehicles access the external yard directly from the public highway on Round Croft. There is no requirement for vehicles to drive over unmade roads or surfaces or for wastes to be stored and processed on unmade land.
- 6.2.5 The Site operates on a first in first out basis to ensure that wastes are received, processed and dispatched in order of receipt.
- 6.2.6 Housekeeping measures include daily visual inspection of the Site, with a detailed weekly inspection undertaken by the Site Manager or other Directors and Technically Competent Person. Dust will be visually monitored by trained site operatives, as a minimum on a daily basis, at the location points shown on Drawing 'Indicative Site Layout and Storage', DW01.
- 6.2.7 The Site will be swept during the course of the working day and at the end of the working day to ensure it is left clean and tidy both during and outside of operational hours. Additional sweeping and cleaning will take place if noticeable waste, dust or fluff accumulation is present or if there is the potential for associated emissions from the Site.
- 6.2.8 Waste storage bays will be completely emptied and swept, including the corners, at least once per month. This will prevent the accumulation of any dusts or debris at the Site.
- 6.2.9 Additional sweeping and cleaning will take place:
- During periods of dry weather, which may give rise to dusty conditions;
 - During daily site inspections if noticeable dust accumulation is present or if there is the potential for dust emission from the Site.
- 6.2.10 The purpose of the sweeping and cleaning will be to ensure that dust emissions do not escape the Site boundary.
- 6.2.11 A hose reel will be installed at the Site and used to dampen any areas or wastes that have the potential to give rise to dust emissions, e.g. during hot and dry weather.
- 6.2.12 In the unlikely event that mud or dust is identified as an ongoing issue, a road sweeper can be sourced from a local supplier.
- 6.2.13 In the event that circumstances beyond the control of the Operator (such as the breakdown of critical plant on site or the closure and general non-availability of sites that the recycled and processed materials are sent to) result in the quantity of waste building up to levels approaching the maximum authorised in the permit, alternative authorised facilities will be sought as a matter of urgency to ensure that waste levels are quickly controlled and materials do not give rise to dust emissions.

6.3 MATERIAL EXPORTED OFF-SITE

- 6.3.1 All recycled and dispatched materials from the Site will be in suitably enclosed containers such as sealed and lidded or sheeted skips and containers to control the potential for dust emissions during transfer off site.
- 6.3.2 Material rejected from the Site will be issued with a record stating why, when and from which contract the waste was provided. This record is held on Site for the Environment Agency to inspect.

6.4 PLANT MAINTENANCE

- 6.4.1 Site infrastructure and plant will be inspected regularly for damage and wear by the Site Manager or other Director or other suitably trained person. Records of these checks will be maintained in accordance with the EMS. All maintenance on the plant is programmed into the company's Planned Preventative Maintenance (PPM) system which will generate work orders for up-coming maintenance and logs when that maintenance has been completed.
- 6.4.2 Trained maintenance staff can be called on to effect plant repairs quickly where required. Typically plant repairs can be undertaken within one working day, depending on the availability of spares.

6.5 TRAINING

- 6.5.1 All site personnel working at the facility will be subject to a formal documented training programme in accordance with the Operator's procedures and EMS. Matters relating to the control of dust and the prevention of dust emissions from the Site form part of this core training programme for all individuals. Additional training is also provided for personnel required to complete subjective visual dust monitoring.

6.6 COMMUNITY LIAISON

- 6.6.1 CELLSAFEUK Ltd will operate an open-door policy and members of the public are welcome to contact the Site to discuss any issues with the site management team. Prior arrangement will be made with site personnel, where possible, for any site visit that may be required.
- 6.6.2 Site contact details and 24 hours contact number are shown on the Company website. Direct feedback to site is encouraged at all times in relation to any perceived issues associated with operational activities.

6.7 CONTINGENCY ARRANGEMENTS

- 6.7.1 Contingency arrangements are available at short notice to divert incoming waste loads or transfer wastes already received at the Site to other suitably authorised facilities should the need arise.
- 6.7.2 Incidents that may cause contingency arrangements to be implemented include:

- Extreme weather that prevents vehicles or staff safely reaching the Site or compromises the operational efficiency of the facility;
- If the Site reaches a capacity where further waste loads cannot be received without compromising operational efficiency or compliance with the Environmental Permit;
- Identification of a waste load that is unacceptable for receipt or may cause dust levels that cannot be adequately controlled;
- Any major incidents such as fire or flooding which prevent or compromise the safe and efficient operation of the Site.

6.7.3 It is proposed to store water in a 1,000 litres IBC for dust suppression use in the event of drought conditions and the unavailability of mains supply. As all waste will be stored and processed inside the buildings, the risk of dust emissions to the external environment is considered low.

6.7.4 In reality the requirement to implement contingency measures is only likely to arise infrequently, if at all. However, contingency arrangements will be maintained throughout the life of the Site as a necessary safeguard.

6.8 EMERGENCY

6.8.1 In the event of a site emergency, the Site Manager and other Directors will be notified without delay. The emergency measures will be implemented as a priority to mitigate the incident, as appropriate.

6.9 SITE INSPECTIONS

6.9.1 The Site Manager or other Director or other suitably trained person will undertake both daily and weekly dust inspections of the Site. The daily inspections will include the waste storage and processing areas inside the buildings. The weekly inspections will be recorded and include the external perimeter area of the Site.

6.9.2 Monthly management meetings will include a review of current and planned site operations with respect to their potential for generating any dust emissions. Identified actions arising from the meetings and responsibilities for their completion will be recorded.

7 DUST AND EMISSIONS MANAGEMENT

7.1 RESPONSIBILITY FOR IMPLEMENTATION OF THE DEMP

7.1.1 The Site Manager or, in his absence, other Directors will oversee the implementation of the DEMP and ensure that the methods detailed within this document provide effective dust mitigation.

7.1.2 Where the responsible individual is unavailable to supervise the implementation of dust

suppression measures, a suitably experienced site operative will be allocated responsibility.

- 7.1.3 If dust and particulate emissions are observed following the use of the dust suppression measures outlined above, the DEMP will be reviewed and measures such as a fixed suppression systems considered.
- 7.1.4 Amendments of the DEMP to reflect any potential improvements will be made during the review process.
- 7.1.5 The Site Manager has been assessed in the implementation of site control measures and is deemed proficient to execute and review this DEMP.
- 7.1.6 During the induction process, all staff members will be trained in the dust suppression measures outlined in this DEMP. Refresher training will be provided in the scenario where additional dust suppression measures have been introduced to ensure staff remain competent.
- 7.1.7 The DEMP will be reviewed at least annually or following any adjustments in operations which have the potential to increase the level of exposure to surrounding sensitive receptors.

7.2 SOURCES AND CONTROL OF FUGITIVE DUST EMISSIONS

- 7.2.1 Detailed below are examples of potential sources of fugitive dust and particulate emissions associated with all the operations and activities at the Site:
- 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;
 - Unloading and loading of wastes;
 - Waste storage and processing activities;
 - Site surfaces (i.e. the ground, plant and equipment);
 - Loading any inadvertently accepted non-permitted wastes back on to vehicles for removal off-Site to authorised facilities;
 - Particulate emissions from the exhaust of vehicles/plant/machinery on site.
- 7.2.2 It is considered unlikely that high wind speeds will cause significant dust emissions at the Site, as all waste loads are stored and processed inside the buildings. However, should wind speeds become so great that they are a risk to the environment or personnel then measures will be implemented to cease waste deliveries and close the Site.
- 7.2.3 Meteorological Office predictions and recordings of local weather data

(<https://www.metoffice.gov.uk/>) will be reviewed by the Site Manager or other Directors to allow forward planning. Weekly observations of weather conditions, including wind speed, direction and temperature, will be made so that site operations can be rearranged to adapt to changing conditions where necessary.

7.2.4 Table 5 below details the measures to be applied to the Site for each of the sources outlined above to break the source-pathway-receptor routes.

7.2.5 Preventative and remedial measures to integrate on the Site to alleviate potential fugitive dust and particulate emissions are tabulated in Table 6 below. These are grouped in terms of cost (low or medium) and can be used individually or in conjunction.

Table 5: Source-Pathway-Receptor Route

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Mud	Tracking dust on wheels and vehicles. Mud dropping off wheels/vehicles when dry	Neighbouring residential and industrial areas in the vicinity of the Site and other sensitive receptors identified in Table 3	Visual build-up and soiling of dust and particulates, also consequent resuspension into the air column	<ul style="list-style-type: none"> The bases of all the Site buildings comprise sealed concrete throughout. The external yard comprises a combination of engineered concrete and tarmac. Vehicles access the Site directly off Round Croft on to the external yard. There is no requirement for vehicles to drive over unmade ground. Any accumulation of mud or dust at the Site, e.g. on the external yard area or entrance to the facility, will be cleaned by sweeping. Water will be sprayed using a hose to dampen down any potentially dusty emissions. In the unlikely event that mud or dust is identified as an ongoing issue, a road sweeper can be sourced from a local supplier.
Debris	Falling off lorries	As above	Visual build-up and soiling of dust and particulates, also consequent resuspension into the air column	<ul style="list-style-type: none"> Waste alkaline batteries (i.e. AA and AAA) will be delivered to the Site in sealed and enclosed big bags or in sealed and lidded skips and containers. Alkaline batteries are not inherently dusty. Efficient and prompt unloading of vehicles by forklift truck and transfer of wastes into the Goods In building, which is fully enclosed and fitted with a roller shutter vehicular access door and separate pedestrian door. All areas subject to regular housekeeping. Where debris is identified as an ongoing issue a road sweeper can be provided from a local road sweeper hire company.
Vehicles and plant moving	Atmospheric dispersion	Surrounding sensitive receptors	Airbourne particulates	<ul style="list-style-type: none"> The external yard comprises engineered surfaces. Vehicles will be unloaded by forklift truck, with palletised big bags, skip and containers transferred into the Goods In building for storage, prior to processing. Vehicles will not be required to drive over any unpaved areas. Therefore, dust generation which may impact surrounding sensitive receptors will be minimal. The Site operates a 10 mph speed limit. Slow vehicle speeds reduce the amount of dust that is kicked up during vehicle movements. All areas, vehicles, plant and machinery are subjected to regular housekeeping and removal of loose particles.

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Unloading, storage and processing of wastes	Atmospheric dispersion	Surrounding sensitive receptors	Visual soiling and dispersion of airborne particulates	<ul style="list-style-type: none"> Wastes are not tipped at the Site, they are unloaded by forklift truck from the delivery vehicle on the external yard, after it exists the weighbridge. The forklift transfers wastes into the Goods Inward building, where materials are deposited into the appropriate storage bay. Occasionally batteries may be unloaded by hand (e.g. small containers storing batteries that have been delivered in vans). All waste storage and processing will take place in roofed and fully enclosed buildings. Shredding and separation operations will take place in the Processing building. The doors of the building will be kept <u>closed</u> during waste treatment operations to prevent the fugitive release of dust and minimise any potential for noise emissions. A mobile dust extraction and filtration system will be installed above the shredder feed area to capture any airborne dust or particulates released during operation. The system will consist of a high-efficiency extraction hood connected to a portable filter unit equipped with multi-stage filtration, including a HEPA or equivalent final filter capable of achieving 99.9% particle capture efficiency for fine dust. Recyclables recovered from the battery processing operations will be stored in sealed and lidded containers or in sheeted skips prior to removal from the Site to authorised facilities. The Goods Out building is roofed and fully enclosed. It is highly unlikely that incoming waste loads will be dusty and pre-acceptance and acceptance checks are designed to prevent the delivery of any dusty loads. However, should dusty materials be inadvertently received at the Site they will be stored in a sealed and lidded quarantine container or dampened down with water. All plant and equipment are inspected prior to and after use for dust and debris build-up. Plant are regularly cleaned down after use to prevent the accumulation of dust and loose material. All plant used on Site is maintained and serviced in accordance with manufacturers' guidelines and service agreements. Waste batteries are not inherently dusty. A hose reel will be installed and used to spray water to control dust emissions from waste storage and processing areas and the external yard, where necessary.

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
				<ul style="list-style-type: none"> Water will be stored in a 1,000 litres IBC for emergency use for dust suppression in the event of drought conditions and/or unavailability of mains water supply.
Site surfaces	Atmospheric dispersion	Surrounding sensitive receptors	Airbourne particulates	<ul style="list-style-type: none"> All site surfaces are engineered. There is no unmade ground.
Off-site removal of non-permitted waste	Atmospheric dispersion	Surrounding sensitive receptors	Airbourne particulates	<ul style="list-style-type: none"> Any dusty waste requiring quarantine before removal from the Site will be sprayed with water to suppress potential dust emissions during handling and transferred to a sealed and lidded skip or container for priority removal from the facility to an authorised site.
Exhaust emissions	Atmospheric dispersion	Surrounding sensitive receptors	Airborne particulates	<ul style="list-style-type: none"> Regulatory controls and best-practice measures to minimise source strength. Plant will be switched off when not in use. Delivery and collection vehicles will be required to switch engines off while unloading and loading where possible.

Table 6 Measures used on site to control Dust/Particulates (PM₁₀)

Abatement Measure	Description / Effect	Overall consideration and implementation
Low-Cost Options		
Site layout in relation to receptors	External area comprises a combination of engineered concrete and tarmac surfaces. Buildings incorporate engineered concrete floors throughout.	Wastes will be stored and processed inside the buildings, which are fully enclosed. All waste treatment processes will be undertaken inside the Processing building. The use of fully enclosed buildings and paved external areas are an integral part of the Site design and provide a high level of abatement. The infrastructure and layout of the Site will ensure adequate dust control.
Site speed limit, 'no idling' policy and minimisation of vehicle movements on site	Reducing vehicle movements and idling should reduce emissions from vehicles. Enforcement of a speed limit may reduce re-suspension of particulates by vehicle wheels.	Site speed limit of 10mph will be enforced. Vehicle engines will be switched off when not in use, to minimise any idling.

Abatement Measure	Description / Effect	Overall consideration and implementation
Minimising drop heights for waste.	Minimising the height at which waste is handled should reduce the airborne generation of debris, dust and particulates.	Wastes are not tipped at the Site. They will be off loaded by forklift truck or by hand and transferred to the appropriate storage bay inside the Goods In building. Shredded and separated batteries are conveyed into sealed containers. All conveyors are located inside the Processing building. The drop heights into containers and at the end of the conveyors are minimised, which helps to minimise any potential dust emission and noise.
Medium Cost options		
Hosing of vehicles on exit	May remove some dirt, dust and particulates from the lower parts of vehicles although unlikely to be necessary as all areas of the Site incorporate engineered pavement.	As a preventative measure to reduce the deposition of dust and loose material off site. However, the requirement to do this is unlikely as all wastes delivered to the Site are off loaded by forklift truck. Site surfaces are also engineered. Recyclables removed from the Site are transferred in lidded containers or sheeted skips etc.
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 dispersed. Reducing storage volumes should reduce the surface area over which particulates can be mobilised.	The majority of the waste material will not be stockpiled over long periods of time prior to processing on site for recycling or recovery and off-site supply to customers. Wastes will be processed on a first in first out basis to ensure all materials are processed and removed from the Site within a maximum period of 2 months (i.e. from receipt of battery to removal of recyclates).
Ceasing operation during high winds and/or prevailing wind direction	During periods of elevated wind speeds the deposit and processing of wastes within the buildings should still ensure that dust emissions are suitably controlled and minimised.	During periods of elevated wind speeds the deposit of wastes inside the buildings will ensure that dust emissions are suitably controlled and minimised. It is unlikely that operations will need to cease due to high winds, as waste storage and processing will be carried out inside the buildings. Recycled wastes will be stored in sealed and lidded containers or in sheeted skips, which will protect the waste from wind exposure. However, should wind speeds become so great that they are a risk to site personnel, local residents, neighbouring businesses and the environment then measures will be implemented to cease waste deliveries and close the Site. A hose reel will be installed at the Site and water applied to any potentially dusty areas during dry and dusty conditions.

Abatement Measure	Description / Effect	Overall consideration and implementation
<p>On-site sweeping</p>	<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>	<p>As stated above, sweeping will form part of the general housekeeping of the Site to minimise the build-up of loose material and thus the generation of potential dust.</p>
High-Cost Options		
<p>Installation of an air extraction system and bag filter inside the building.</p>	<p>The installation of an active dust extraction system to bag filter or other capture technology is deemed unnecessary due to the minimal dust generation at the Site.</p>	<p>It is considered that the infrastructure and measures detailed above will provide a high level of dust control at the Site. An active dust extraction system to bag filter or other capture technology would only be considered by the Operator if the existing infrastructure is not able to adequately control dust emissions.</p>

7.3 VISUAL DUST MONITORING

- 7.3.1 Visual dust monitoring will be carried out as part of the routine daily inspections with any relevant observations recorded and retained on-site. As a minimum, visual dust monitoring will be undertaken on a daily basis from the locations shown on Drawing 'Indicative Site Layout and Storage', DW01.
- 7.3.2 All plant will be inspected on a daily basis and cleaned after use, as appropriate, in order to prevent the accumulation of dust and loose materials.
- 7.3.3 Informal dust monitoring comprising of operational staff remaining vigilant for observable dust and will be carried out during the operational process. In the unlikely event that significant or uncontrollable dust emissions are identified, operations will cease, and the Site boundary will be examined to ensure emissions are not dissipating towards sensitive receptors. Dampening down of the source of any fugitive emissions will be undertaken before operational processes resume.
- 7.3.4 Due to the levels of abatement measures to be integrated on the Site as detailed above, the likelihood of emissions impacting on the identified sensitive receptors is considered low. Therefore, no other form of dust monitoring is proposed for the Site.
- 7.3.5 In the unlikely event that dust emissions are identified as an issue, a hose will be used on the external yard and, if required, inside the buildings.
- 7.3.6 Any complaints received about dust or particulate emissions will be logged in accordance with the Environmental Management System. Mitigation measures will be implemented, as appropriate, to ensure a high level of control. The Site Manager (in consultation with the other Directors) will review the mitigation measures and monitoring techniques detailed in this DEMP in order to reduce exposure levels and inhibit emissions dispersing from the Site. In this scenario, quantitative techniques will be considered as a monitoring process.
- 7.3.7 Senior Management will review dust monitoring results as part of their monthly audit and site inspections. The Operator is committed to the following as part of the Site's EMS and this DEMP:
- Continual improvement;
 - Minimising the risk of pollution incidents and preventing any significant impacts to sensitive receptors, including detriment to local amenity;
 - Operate the Site in accordance with all the latest regulatory guidance;
- 7.3.8 Meeting environmental objectives, including dust control, independent of the Environmental Permit.

8 COMPLAINTS

8.1 PROCEDURES IN THE EVENT OF A COMPLAINT

8.1.1 Any complaints about the Site, e.g. from members of the public, local residents, neighbouring businesses, visitors, staff and regulatory bodies, including the Environment Agency, will be reported to the Site Manager and other Directors who are responsible for site management.

8.1.2 The following actions will be taken on receipt of an external complaint:

- The responsible person receiving the complaint at the Site will immediately record the key details, initiating the investigation process. Details will be entered on the Complaint Report Form, see below. The form sets out the key information that should be recorded at this time in order to facilitate further suitable investigation.
- The Site Manager and other Directors will be informed of the complaint as soon as possible, including the location, time and date of the complaint being lodged.

Complaints Record	
Who made the complaint?	
Name:	
Address:	
Phone No:	
Date and time of complaint	
What caused it?	
Was anyone else aware of this? If so who	
What was the source of the problem, what went wrong? If source is unknown contact a suitably qualified person to investigate.	

What have you done to make sure it won't happen again?	
Was there any significant pollution – for example oil entering a surface water drain?	
If there was then you must notify EA Have you done so? You must also notify the local EA Office via email or letter.	Yes/No/not applicable Date and Time: EA Incident number:
Please print name and sign:	

8.1.3 In recognising that some complaints can be transient and short-lived, timely notification of complaints directly from the complainant or Environment Agency is imperative to allow for appropriate investigation. If the complaint occurs more than 12 hours before notification is provided to the Operator, it may not be possible to substantiate the complaint or pinpoint the cause. The Operator will, however, contact the complainant where possible, review any operations at the time which had the potential to cause the complaint and complete and record a comprehensive complaint investigation. For complaints received within 12 hours of the incident the following actions will be undertaken:

- The Site Manager or other Director or other suitably trained person will visit the complaint location as soon as possible, with the aim of undertaking monitoring within 2 hours if this is possible within the working day. The Site Manager or other Director or other suitably trained person will subjectively determine the presence or absence of the cause of the complaint. Opportunities to meet the complainant to discuss the matter directly will be pursued, wherever possible.
- If the cause of complaint is present, the key 'FIDOR' criteria will be assessed at the complaint location, as follows:
 - Frequency – is the cause of the complaint, intermittent or persistent; is there a history of complaints at this location?
 - Intensity – is the cause of complaint faint, moderate, strong, or very strong?
 - Duration – how long is the cause of complaint present at this location?
 - Offensiveness – provide a description of the cause of complaint; is it high, moderate, or low offensiveness?
 - Receptor sensitivity - is the cause of complaint present at a remote or highly sensitive location; is it localised or widespread?

- 8.1.4 The Site Manager or other Director or other suitably trained person will subsequently undertake the following further assessment process:
- Review of the operations at the Site prior to and at the time of the complaint;
 - Review of the environmental control systems prior to and at the time of the complaint;
 - Review of the previous complaint history at the location identified.
- 8.1.5 Where a significant complaint is substantiated by the Site Manager or other Director or other suitably trained person, the Operator will contact the Environment Agency to discuss the incident as soon as possible following receipt of the complaint details, allowing sufficient time for the above investigation to be completed, and within a maximum target response period of 24 hours from complaint receipt. If the necessary contact details are available and direct feedback has been requested the Operator will also contact the complainant directly to discuss the issue, the findings of the subsequent investigation and any actions arising.
- 8.1.6 Once actions have been completed the Site Manager or other Director or other suitably trained person will visit the complaint location to ensure that the cause of complaint has subsided.

8.2 MITIGATION MEASURES IN THE EVENT OF A SUBSTANTIATED COMPLAINT

- 8.2.1 In the event of a substantiated dust complaint, the investigation undertaken by the Site Manager or other Director or other suitably trained person will incorporate detailed assessment of the Site infrastructure and waste operations against the specific requirements of the facility dust controls set out above, to determine any diversion away from 'normal' site operating conditions.
- 8.2.2 Key items for consideration will be as follows:
- Material inputs – change in waste type, volume, dust characteristics;
 - Mechanical breakdown – e.g. of processing plant or delays in waste handling;
 - Procedural failure (human error);
 - Short-term abnormal weather patterns – wind direction, temperature, inversions, etc;
 - Abnormal operating conditions – temporary highly dusty activities.
- 8.2.3 Upon identification of the likely dust source(s), the appropriate corrective and preventative measures will be identified and implemented under the direction of the Site Manager or other Director or other suitably trained person. Additional support and technical expertise will be provided by internal / external technical specialists, as required.
- 8.2.4 Where necessary, the DEMP requirements will also be reviewed in order to ensure it continues to represent 'all appropriate measures'.

8.3 TIMESCALES

- 8.3.1 In the event that it proves impracticable to carry out adequate remedial measures within one working day, the Site Manager or other Director or other suitably trained person will notify and agree with the Environment Agency the proposed actions and the timescales for their completion as a programme of works.

9 REVIEW AND AUDIT

- 9.1.1 The Operator maintains a Non-Conformance Register, which includes the date of the incident, who reported the incident, a description of the incident, who investigated the incident, what were the actions or outcomes of the investigation (including any mitigation measures) and whether the incident has been addressed and closed or is still ongoing.
- 9.1.2 The Non-Conformance Register will be reviewed each month as part of the monthly management meetings. Any complaints about amenity issues such as dust, odour or pests will be discussed and actions suggested and agreed to ensure improvements are made and the likelihood of such incidents reduces going forward.
- 9.1.3 The Operator will undertake an annual audit of the EMS and the Non-Conformance Register (including complaints history). The purpose is to ensure the Site is:
- Continually improving;
 - Minimising the risk of pollution incidents and preventing any significant impacts to sensitive receptors, including detriment to local amenity;
 - Operated in accordance with the latest regulatory guidance;
 - Meeting environmental objectives independent of the Environmental Permit.
- 9.1.4 This DEMP will also be formally reviewed at annual intervals in order to ensure the stated management controls and conditions continue to reflect best available techniques and the operational requirements/sensitivities at the Site, which may change over time.
- 9.1.5 An updated copy of the DEMP will be submitted to the Environment Agency following review, as required. Where the Operator recognises the requirement for the immediate implementation of changes to the DEMP to prevent or reduce significant dust emissions, measures will be put in place to prevent any pollution or harm.
- 9.1.6 If, on review of the performance of the facility, the Operator and/or the Environment Agency propose to seek revision of this plan, then the following course of action will be undertaken by both parties:
1. In potentially critical circumstances where the Operator recognises the requirement for the immediate implementation of changes to the DEMP to prevent or reduce significant dust emissions, these changes will be discussed with the Environment Agency without delay but may be actioned by the Operator, as necessary.

2. Where the Operator proposes changes to the DEMP that involve a more strategic and/or phased approach rather than a need for immediate implementation, a formal proposal will be submitted by the Operator to the Environment Agency setting out the specific issues arising from document review, and the options/issues requiring the Operator's further attention following Environment Agency approval. The Environment Agency will review the Operator's submission/updated DEMP and confirm they are satisfied with the proposed changes. The agreed required changes will then form the future 'appropriate measures' for the Site with regard to dust management and control.

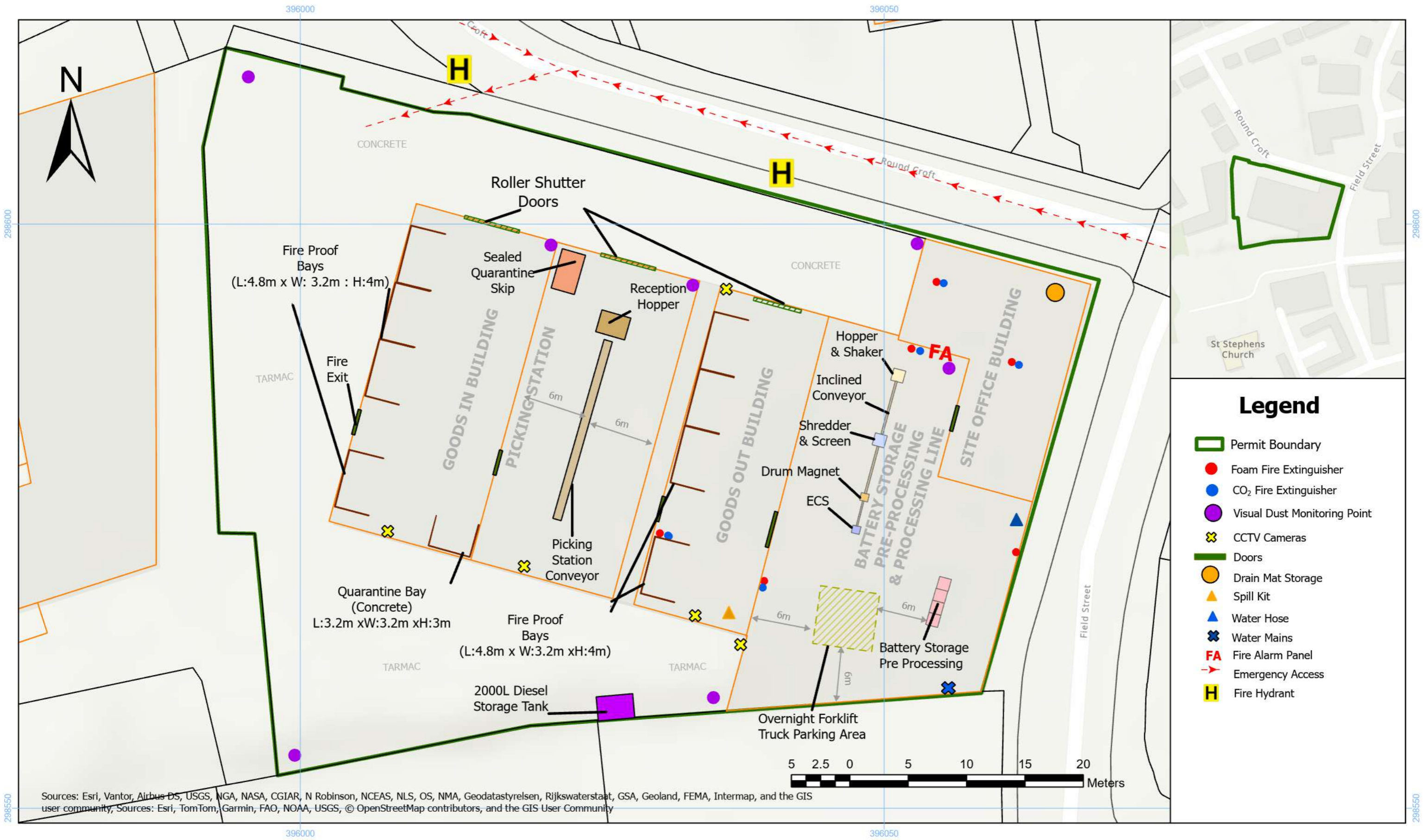
9.1.7 Where changes to the DEMP are proposed by the Environment Agency, these will be discussed with the Operator setting out the Environment Agency's clear expectation from the changes, in addition to timescales for their implementation. It is recognised that these changes may range from matters that require immediate implementation to those that may be implemented over an extended timeframe. The Operator will undertake the identified changes in accordance with the timescales proposed for the work, at which point the updated 'appropriate measures' will take effect.

10 RECORDS

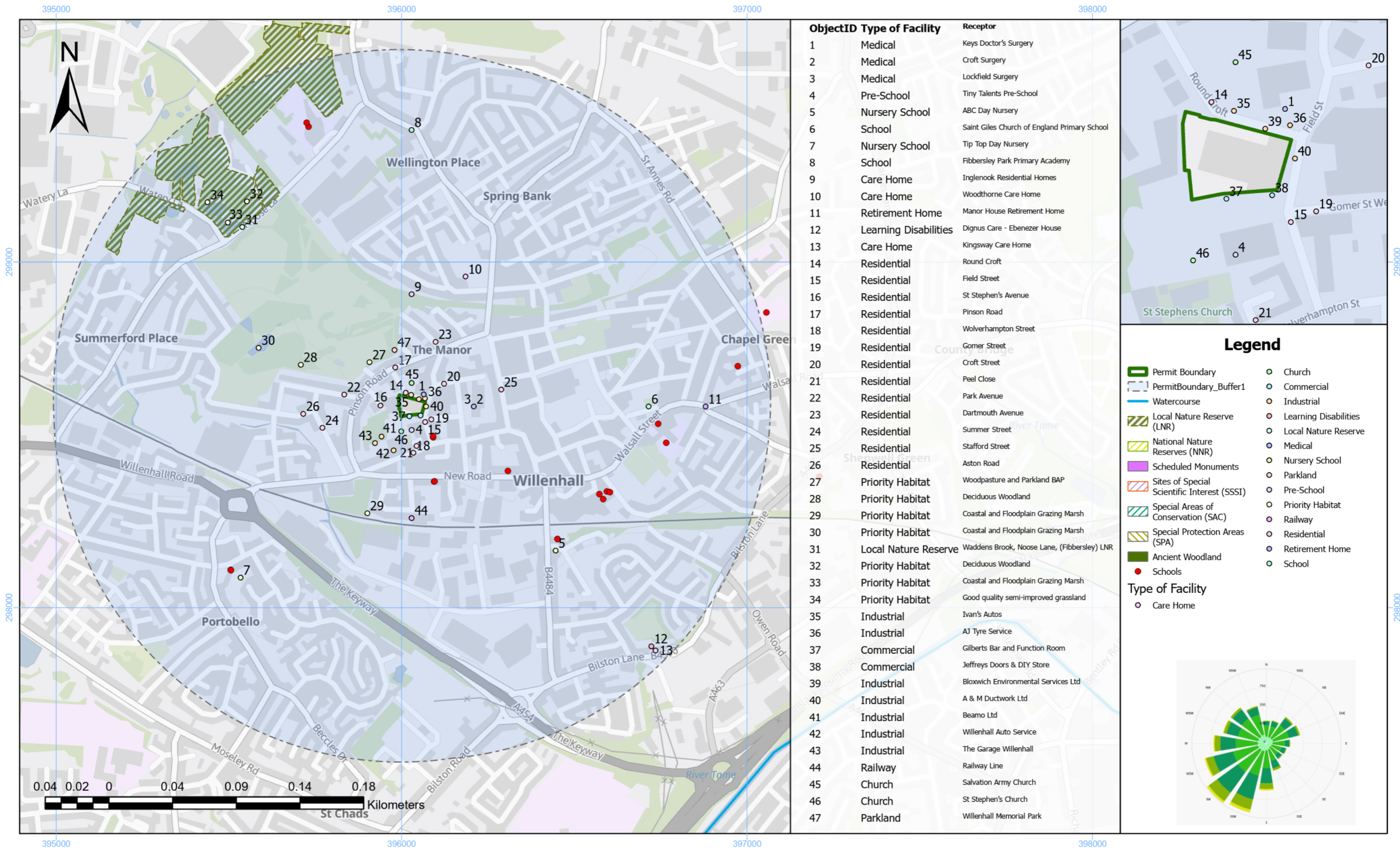
10.1.1 Records will be kept in accordance with the Environmental Permit and the requirements of this DEMP.

10.1.2 Records will include:

- Details recorded during the weekly site inspections by the Site Manager or other Director;
- Copies of any completed Complaint Reporting Forms (including mitigation measures), in the event of a complaint;
- Incidents of any dust issues recorded on site at any time (i.e. not just during daily and weekly inspections).



<p>Title: Indicative Site Layout and Storage</p>	<p>Date: 12/02/2026</p>	<p>Page Size: A3</p>	<p>Drawing Number: CellSafeUK-SiteLayout-DW01</p>	<p><small>Author: S. Barnes. Contains OS data © Crown copyright [OS OpenMap Local][2025]. UKPLanningMap ref:1288002. All Dimensions to be checked on site and not scaled from this drawing. This drawing is not for construction. This document and its design is copyright of Waste & Compliance Ltd. and should not be reproduced in part or whole without permission. It shall be read in conjunction with accompanied consultant documents and associated project documents. All services to be checked on site and not scaled from this drawing.</small></p>
<p>Site Location: Units 1, 2 & 3 Round Croft, Field Street, Willenhall, West Midlands, WV13 2NP</p>	<p>Version: FINAL</p>	<p>Scale: 1:300</p>	<p>Grid reference: SO 96033 98587</p>	



Title: Sensitive Receptors	Date: 29/12/2025	Page Size: A3	Drawing Number: CellSafeUK-Receptors-DW03	<small>Author: S. Barnes. Contains OS data © Crowncopyright [OS OpenMap Local][2025]. UKPLanningMap ref:1288002. All Dimensions to be checked on site and not scaled from this drawing. This drawing is not for construction. This document and its design is copyright of Waste & Compliance Ltd. and should not be reproduced in part or whole without permission. It shall be read in conjunction with accompanied consultant documents and associated project documents. All services to be checked on site and not scaled from this drawing.</small>
Site Location: Units 1, 2 & 3 Round Croft, Field Street, Willenhall, West Midlands, WV13 2NP	Version: FINAL	Scale: 1:12000	Grid reference: SO 96033 98587	