

ENVIRONMENTAL MANAGEMENT SYSTEM

ALBRIGHT TRANSFER STATION LIMITED

**Dust & Emissions Management Plan (DEMP)
Reference: ATS-DEMP-V2**

Version 2 Dated 6.3.2025

UNIT 6 ALBRIGHT INDUSTRIAL ESTATE

RAINHAM

ESSEX

RM13 9BU

DOCUMENT CONTROL SHEET

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1. Introduction

1.1 Purpose

The purpose of these procedures is to guide staff and contractors in the safe conduct of their duties in a manner which controls the environmental impacts of the company's operations, with specific reference to dust management.

The Environmental Permit EPR/YP3891NY was originally issued on 13 November 1998. It has been subject to several variations.

In 2020, the environmental Permit was varied and consolidated.

In 2024, the permit was varied to make the following changes.

- Change the Permit Boundary
- Add Washing as a specified activity
- Increase the annual throughput from 75,000 tpa to 150,000 tpa
- Consolidate DP3896NH into the main permit YP3891NY
- Add the following waste codes:
 - 170204* Wood containing or contaminated with dangerous substances
 - 170301* Bituminous mixtures containing coal tar
 - 191206* Wood containing dangerous substances
 - 200137* Wood containing dangerous substances

To support the 2024 variation, a Dust and Emissions Management Plan (DEMP) was prepared. Version 1 was approved by the Environment Agency and remains the approved DEMP used on the site.

This version of the DEMP has been prepared to demonstrate the dust control measures to be implemented to support an application to add hazardous waste treatment to the permit.

The following activities are required:

- Section 5.3 Part A (1) (a) Disposal or recovery of hazardous waste with a capacity exceeding 10tpd involving: ii) Physico-Chemical Treatment
- Section 5.6 Part A(1) (a) Temporary storage of hazardous waste within a total capacity exceeding 50 tonnes

The permit also seeks to increase the annual throughput to 300,000 tonnes per annum, with no more than 50,000 tonnes of hazardous waste being received each year.

1.2 The Operator

The operator has been involved with waste management for many years and has developed the site progressively since 1998.

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The company has an excellent track record with compliance and operator performance.

1.3 Scope

These Operational Procedures cover:

- Operations involving non-hazardous waste
- Physical treatment of non-hazardous waste

The procedures relate to the permitted activities at Unit 6 Albright industrial estate, Rainham, Essex, RM13 9BU.

There is an existing MRF building for processing mixed skip waste and a wash plant for treating construction and demolition waste. Dust management associated with these activities has already been approved. This document includes reference to those activities, but the primary purpose of this document is to demonstrate the dust management measures applicable to the hazardous waste treatment facility.

1.4 Management System

The Management System covers all aspects of operations and aims to effectively manage the impacts of the business on the environment.

All EMS documents will be kept in the site office.

1.5 Site Location

The procedures relate to the permitted activities at Unit 6 Albright industrial estate, Rainham, Essex, RM13 9BU.

The site is in an established industrial estate, surrounded by other heavy industrial uses including waste management and steel fabrication.

The nearest residential properties are approximately 160m north of the site, adjacent to the mainline railway and sewage treatment works. The houses are separated from the site by a large industrial building and other industrial occupants. The proposed hazardous waste treatment facility will be approximately 200m from these receptors.

The nearest ecological designations are:

- Inner Thames Marshes Site of Special Scientific Interest
- Rainham Marshes Local Nature Reserve

These are 280m south east of the site.

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There is a Local Wildlife Site associated with Rainham Creek and the land around the Sewage Treatment Works. Rainham Creek is also a migratory route for protected fish (this is taken from the EA's Conservation Screening Report). The site is approximately 60m from Rainham Creek. The creek is separated from the site by an industrial building and other industrial occupants.

The site is located within the London Borough of Havering. The entire borough was designated as an Air Quality Management Area for NO₂ (nitrogen dioxide) and PM10. The source is cited as being road transport (unspecified).

The nearest monitoring station is Havering – Rainham. This is a locally managed automatic monitoring station (HV1). This is located at the junction of Upminster Road South and the A1306.

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2 Operations

2.1 Waste Deliveries to Site

For skip waste, all customers will be notified about the waste acceptance procedures and will be provided a list of wastes that are not permitted at the site. The prohibitive list includes asbestos, fluorescent tubes, paint and aerosols, clinical and medical waste, oils, and hazardous waste. Customers will also be informed that dusty waste is not permitted.

Any plasterboard must be bagged and placed on the top of the skip.

The operator will request details about the nature of the waste to be collected.

The site will predominantly accept mixed construction waste (EWC170904). Skip waste is a mixture of waste generated through construction and refurbishment projects. It can contain cardboard, light plastic, rigid plastic, wood, metal, textiles (carpets, curtains), furniture, bricks, concrete, soils and garden waste.

On rare occasions, a skip could contain single waste streams, for example wood, or garden waste, or furniture.

The skip waste is processed through the existing MRF and this will not change as a result of this variation. The procedures will remain the same.

In addition, the operator may collect waste generated from demolition and excavation work, which could include soils, hardcore, concrete. These wastes will be collected separately. The non-hazardous waste materials will be processed to produce a variety of construction materials including recycled and secondary aggregates and soil and soil substitutes. Treating includes screening and washing. There is a bespoke wash plant on site which is used to separate aggregates. The wash plant activity will not change as a result of this variation.

The hazardous waste operations will involve treating hazardous construction and demolition waste, by screening soils to remove the stone content. The activity will take place within a new building.

Table 1 provides the list of wastes that could generate dust.

2.2 On Site Waste Acceptance

All drivers of vehicles delivering waste to the site will be instructed to sheet or otherwise contain their loads. Signage will be displayed at the site entrance reminding drivers of the need to un-sheet vehicles after arrival at the site and to sheet vehicles before leaving the site. CCTV cameras are provided at the site and are used to review compliance with the requirements in respect of the sheeting of vehicles.

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Non Hazardous Waste

The driver will arrive at the site and provide Waste Transfer Notes to the site office. For mixed skip waste, the driver will then be directed to the MRF building. The vehicle will be unsheeted once inside the building. The waste will be visually checked as it is unloaded to ensure that the waste is acceptable.

The driver will check the vehicle wheels before exiting the building and will use the hose and brush if required.

For loads containing soils, sand, etc, the driver will be directed to the reception bay for the wash plant. The driver will check the vehicle wheels before exiting the site.

Hazardous Waste

For the hazardous waste, there will be a separate process for pre-acceptance and on-site acceptance. In summary the procedures include:

- Pre-Acceptance
 - Waste classification
 - Characterisation (nature of process producing waste)
 - Sampling and Analysis
 - Composition
 - Handling requirements
 - Hazard properties
 - EWC code
 - Define treatment and disposal route
 - Creation of unique tracking reference
- On site Acceptance
 - Booked Arrival Time
 - Hazardous Waste TCM / chemist on site to oversee delivery
 - Capacity checks on site
 - Vehicle waiting, load inspection, checking/sampling
 - Traffic control
 - Checking paper
 - Compliance checking/testing

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- Failure of sample meeting compliance checks – quarantine procedure
- Waste Transfer/Consignment Note
- Update Waste Tracking Record

The waste acceptance will be overseen by a chemist. There will be a laboratory on site for characterisation and compliance checking.

The proposed site layout showing the location of the treatment building is shown on Drawing Number ATSL-FL-INF-01. The waste activities within the treatment building have been set out on Drawing No. ATSL-FL-HAZ-01.

The hazardous waste building has been designed and orientated to offer the maximum protection against the prevailing south westerly wind. The building is 12m to the eaves, with a maximum pitch height of 15.5m. The building will be constructed using 5m high concrete walls topped with steel cladding.

The building will be accessed on the eastern elevation for unloading waste.

The southern elevation will be used to access the separated waste stockpiles and storage bays. This elevation will be open with a dust spray curtain provided.

Any incidents of non-conformance will be recorded in the Non-Permitted Waste Form EMS-FR-01 and corrective action taken.

2.3 Overview of Waste Processing and Dust Controls

The site layout is shown on Drawing No ATSL-FL-LAY2025-01. The waste codes set out in Table 1 provide the main list of waste to be accepted and assign a risk category for dust.

For mixed waste, the waste processing activities will continue as currently operated. The waste processing equipment was a bespoke designed and installed by Kiverco. It comprises a shredder, trommel, screener and picking station. This system is operated inside the building with existing dust suppression. There have been no dust complaints or issues associated with this system.

The wash plant is a bespoke system, designed and installed by Turmec.

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Table 1 –Wastes Accepted at the Site that could generate Dust

EWC Code	Description	Area in Site	Treatment Activities
17 01 02	Bricks	Reception Area Wash Plant	Stored and treated through wash plant.
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances	Hazardous Waste Building	Screened to separate soils and concrete and bricks
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	Main MRF Building	Screened and separated.
17 05 03*	Soil and stones containing hazardous substances	Hazardous Waste Building	Screened to remove stone content.
17 05 04	Soils and Stones	Reception Area Wash Plant	Stored and treated through wash plant.
17 09 03*	Soil containing hazardous substances	Hazardous Waste Building	Screened to remove stone content.
17 09 04	Mixed construction and demolition waste other than those mentioned in 170901, 170902 and 170903	Reception Area Wash Plant	Stored and treated through wash plant.
20 02 02	Soil and stones	Reception Area Wash Plant	Stored and treated through wash plant.

The entire operational area is concreted.

The incoming mixed non hazardous waste will be deposited within the MRF building. This is an existing building, and these operations will not change as a result of this permit variation.

The wash plant is a bespoke system that uses water to separate aggregates and soils. This is a wet process, and the operations will not change as a result of this permit variation.

The hazardous waste operations will take place in a new building with an impermeable surface and sealed drainage.

Waste Treatment

The existing waste treatment operation is carried out inside a building and will not change as a result of this variation.

The Wash Plant treats and grades aggregates. The incoming waste will be mixed construction waste (soils, clays, stones, sand, aggregates).

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The processes undertaken in the washing plant comprise screening and sieving, washing, flotation, settlement and filtration. The washing plant consists generally of the following equipment:

- Input hopper
- Wet sieve
- Sword washer (gravel washing system)
- Hydrocyclone unit (sand cleaning and separation)
- Dewatering screens
- Sedimentation tank
- Sieve belt press
- Generator
- Pumps
- Conveyors
- Process water storage tank
- Silt storage tank

The wash plant operation will not change as part of this variation.

Waste Storage

Waste, including waste which will be treated in the washing process, will be stored at the site in a series of storage bays of concrete construction.

The control measures include the use of dust suppression to dampen stockpiles, roadways and site operational areas to minimise the potential for release the of particulate matter through the action of the wind, mechanical sweeping of the site access road and concrete surface of the site, controls on waste acceptance, sheeting of incoming loads, application of site speed limits, control of stockpile storage heights and wheel cleaning facilities for vehicles leaving the site.

A dust spray system designed to dampen waste stockpiles hence minimise the release of particulate matter through the action of the wind will be installed at the site for the storage bays receiving waste. The waste is processed in a wet system, which will keep separate materials damp.

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The waste handled in the washing plant will be either moist or wet hence the potential for fugitive emissions of dust and particulates during processing is low. Although the outputs from the washing process will be either moist or wet, dust suppression will be applied as necessary to the stockpiled processed materials if the materials dry sufficiently to increase significantly the risk of release of particulate matter. This would include the use of hoses or mobile spray units.

Dust suppression will be applied at the feed hopper as necessary during the loading of waste into the washing process.

Raw Materials

Water is used for the washing process. Start-up water will be supplied initially from a surface water holding tank. Process water is held in a storage tank. Water is recycled in the washing process. Should it be necessary to replace water lost by uptake in the solid outputs from the process, water will be transferred from the process water storage tank. Any excess wash water will be re-used on site for dust suppression.

Flocculant additives are used in the washing process to facilitate solids separation and sedimentation. Flocculants which are received in liquid form are generally received in IBCs and are stored in the original IBC within a metal bund. Flocculants which are received as granular solids are generally received in 25kg bags and are stored in their original packaging within a metal bund. The flocculants are transferred from the storage area directly into the process tanks as required.

Process description

The washing process involves the separation of coarse sand and/or gravel particles from the finer silt particles and separation of the lighter organic fraction (for example plastic and wood which may be present as a minor component of the input waste) from the heavier gravel and stones. Waste is transferred within the washing plant using open conveyors and enclosed pipework.

Waste is transferred to the feed hopper of the washing plant by loading shovel or excavator. From the input hopper the material falls on a series of wet sieves of different mesh sizes (10mm, 20mm and 40mm) where the material is separated into coarse fractions which pass to a gravel washer and a fine fraction which passes to a cyclone. In the gravel washer the coarser material fraction is cleaned, light organic materials such as wood are removed and any residual fine material is washed off the coarse gravel. Gravel is screened and separated from the washer and deposited into a container or deposited directly onto the concrete surface and is then transferred to a storage area. Fine material separated from the gravel is transported back to the wet sieve.

From the wet sieve the separated sand/silt mixture falls into a tank and is pumped to the cyclone. In the cyclone the sand and the silt are separated. The sand is dewatered and deposited into a container or deposited directly onto the concrete surface and is then transferred to a storage area. The silt is transferred to a sedimentation tank and following settlement is pumped to a belt press for dewatering. The dewatered silt is deposited into a

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container or deposited directly onto the concrete surface and is then transferred to a storage area.

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3. Dust and Particulate Management

3.1 Responsibility for Implementation of the DEMP

The Technically Competent Manager (TCM) has responsibility for ensuring these procedures are adhered to which includes communication with staff and contractors, and the provision of adequate training.

The Technically Competent Manager is responsible for updating and re-issuing these procedures as necessary and ensuring all staff are trained in new procedures. The TCM will be the main point of contact for ensuring implementation of this plan. In their absence, the Site Supervisor will be responsible for implementation.

All staff will be trained in these procedures. All staff will be trained to a standard which enables them to perform the responsibilities. The TCM is responsible for delivering training and maintaining records. Training is reviewed on an annual basis.

A record of staff training will be kept for each staff member which includes inductions to new processes and procedures as needed.

If there are any changes to the operation which affect the dust management at the site, the TCM will carry out revised training and update the Management Plan accordingly.

The DEMP will be reviewed on an annual basis or sooner if requested by the EA. It will also be updated if the operator changes the operation.

3.2 Sources and Control of Fugitive Dust/Particulate Emissions

The following are potential sources of dust emissions:

- Vehicles entering and/or leaving the site with mud or debris on their wheels – low-medium probability due to onsite controls.
- Waste unloading (Reception Area) – medium probability of dust generation.
- Loading process plant – medium probability of dust generation.
- Processing – Low probability of dust generation, as process is wet.
- Material storage - low probability of dust generation as material is damp.
- Vehicles leaving the site – low probability as vehicles will be sheeted. Vehicles also travel over 230m to reach the highway.
- Particulate emissions from the exhaust of vehicles and plant on site.

It is also important to identify other potential sources of dust emissions in the locality. These are provided in Table 2.

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Table 2 Sources of Dust and/or other Emissions

Source	Address	Type of Business	Distance from site boundary (m)
Excel Waste Management	Ferry Lane, Rainham	Waste Management	35m
G&S Waste Management	Ferry Lane, Rainham	Waste Management	Adjoining
Piers Metals	Ferry Lane, Rainham	Waste Management	Adjoining

Environment Agency Technical Guidance Note TGN M172 (TGN M17) discusses the pathways for the transport of dust in the context of waste facilities and explains the differentiation between the terms dust and particulate matter as follows:

“The terms dust and PM are used fairly interchangeably, although in some contexts one term tends to be used in preference to the other, as summarised below.

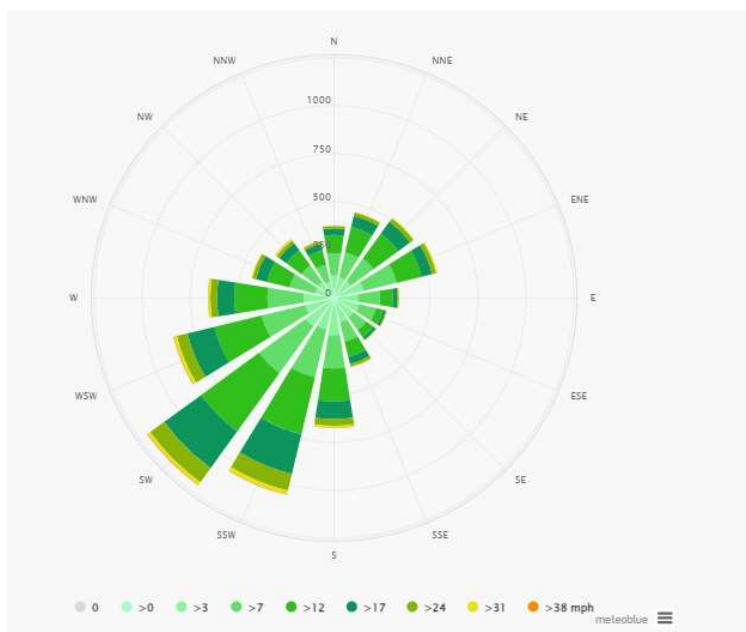
The dust will be generated by an emission source on the site and released to the air, for example by the tipping of waste from a lorry onto a stockpile. Once the dust is in the air it is termed suspended PM and will spread out from the source and be carried on the wind away from the site.”

With reference to the wind rose for the site, the prevailing wind direction is from the west south west or south west and therefore areas to the east north east or north east of the site are down prevailing wind of the site.

Windrose data has been obtained from the Met Office for Rainham.

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Figure 1 - Wind Rose Data¹



Particle size is the key parameter when considering the transport of particulate matter in air. Coarse particles have much faster settling rates than finer particles and will therefore settle out as deposited dust generally close to the source. The finer particles may remain airborne for longer and travel further from the source.

Based on information published by DETR3 large particles (>30µm) mostly deposit within 100m of the source, intermediate-sized particles (10µm to 30µm) are likely to travel up to 200m to 500m and smaller particles (<10µm) can travel up to 1km from the source, although very small particles can travel much further. TGN M17 states that:

'PM10 emissions from industrial combustion processes and road transport are considered to contain more fine material (i.e. PM2.5) than, for example, mechanically-generated particulates from quarries and construction sites'

'Waste management operations that involve mechanical generation of PM rather than combustion, are also likely to release predominantly coarse particles.'

For the purposes of identifying the nearest receptors, a search area of 1km has been used.

Figure 2 shows the site and broad location of the main receptors within 1km. Table 3 provides a description of those receptors and the distance and direction from the site. The distance has been measured from the permit boundary, at the closest point.

In terms of the sensitivity to dust the following has been adopted:

¹ https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/rainham_united-kingdom_2639691

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Type of Receptor	Sensitivity
Residential, schools, hospitals, nursing homes, Statutory Designations (SSSI, SPA, SAC)	High
Industrial premises, recreational grounds, Non Statutory Designations (Local Wildlife Sites)	Medium
Roads, Industrial premises (waste)	Low

There may be other unique receptors that do not fall within any of the above categories. These have been considered separately depending on the nature of the business and use. People on footpaths are transient receptors.

Figure 2 - Site Setting and Receptors (The permitted site is shown with a green boundary). Blue shows 1km radius from centre point of site.

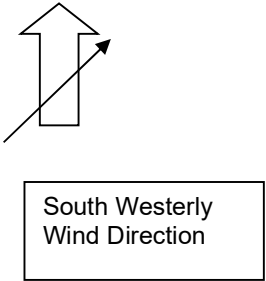


Table 3 – Receptors

Receptor	Legend	Type	Sensitivity	Distance and Direction from Permitted site
Ferry Lane		Road	Low	270m South East
A13		Road	Low	355m South West
Mainline Rail	Rail	Residential	Low	300m North
Albright Industrial Estate	IND1	Industrial	Low	Adjoining
Sewage Treatment Works	STW	Industrial	Low	130m North West
Creek Way	IND2	Industrial	Low	580m South West
River Thames		Surface Water	High	1.1km South
Rainham Creek	SW1	Surface Water	High	70m North West
London Loop	FP	Footpath	Low	270m South East
Capstan Drive	R1	Residential	High	415m North East
Passive Close	R2	Residential	High	530m North
Creekside	R3	Residential	High	165m North West
Heriot Road	R4	Residential	High	330m North
La Salette Catholic Primary School	S1	Education	High	830m North
Rainham Village Primary School	S2	Education	High	800m North East
Tesco	RET1	Retail	Medium	530m North East
Rainham Marshes Local Nature Reserve	E1	Ecological	High	280m South East
Inner Thames Marshes SSSI	E1	Ecological	High	280m South East
Local Wildlife Site	LWS	Ecological	Medium	70m North West

Note - Footpath users are transient receptors.

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2.2.1 Mobile Plant

Nitrogen Dioxide gas is a by-product of internal combustion engines and the site uses several items of plant with internal combustion engines. The process equipment will be powered by 3-phase electric.

Wherever possible the operator will provide modern plant and machinery and replace older models with new.

Table 4 – Mobile Plant

Description	Make	Model	Emission Rating
Wheeled 360 machine handler	Liebherr	LH30	Stage IV
Tracked 360 Machine handler	Liebherr	LH30	Stage IV
Wheeled 360 machine handler	Liebherr	LH24	Stage V
Materials re handler shovel	Liebherr	L556	Stage IV
Materials re handler shovel	Lieber	L556	Stage IV

ATS has a team of mechanics, and a workshop to carry out routine maintenance of all equipment. The processing equipment will be under the manufacturer's warranty for call-outs, servicing and repairs.

New equipment will be subject to service agreements.

All ATS vehicles will meet Euro VI engines.

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3.3 Dust Suppression

The existing dust suppression measures will continue to be implemented for the main waste processing operation. This involves a combination of dust suppression, maintaining waste storage limits, regular cleaning and monitoring the site and weather conditions.

For the Wash Plant, the main source of dust will be from stockpiling the incoming waste and loading into the plant. Once in the processing equipment, the waste will be in a wet form, which will prevent dust emissions.

The incoming waste will be stockpiled in a storage bay, with three concrete walls. Fixed dust suppression sprays will be fitted to this storage bay. In addition, the site has mobile misters and hoses that can be deployed to target to specific areas.

The following measures are currently in place at the site:

- Dust Sprinklers are located in the non hazardous waste building reception area.
- Dust Sprinkler is located in the central part of the site which can reach the waste storage building and main yard.
- There are six hoses positioned around the site, each with a 40m range. This provides full coverage of active areas and the main yard.
- There are two mist sprays located at an elevated position behind the site offices.

It is proposed to install the following:

- Dust mist curtain across the entrances to the hazardous waste building.
- Internal dust suppression sprinklers for the reception area and post treatment storage bay. This will cover the loading bay as well.
- Internal mist sprays to dampen the outputs from the screener.

3.4 Visual Dust Monitoring

At all times dust will be monitored by visual inspections. The site manager will ensure dust management measures are undertaken as appropriate to the site operations and current weather conditions. Weather conditions which require specific site actions including cessation of processing plant operations are detailed in the site offices allowing actions to be taken in response to the prevailing weather conditions.

If further management measures are taken to control dust as a result of dust or weather condition monitoring, the additional mitigation measures will be recorded. In certain adverse weather conditions visual monitoring will be intensive.

The site manager is responsible for the operation of the dust management plan and all site operatives will be trained and required to take necessary mitigation action. They will also be required to take preventative action to avoid dust by suitable location of sprinklers, misters, clearing any spillages of materials, maintaining water suppression equipment, repair of defective water suppression equipment, maintaining road

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cleanliness and in good condition and by washing machinery to keep all plant clean and dust or mud free. Additionally, any contractors working on site will be made aware of the provisions of dust management plan and be required to comply with relevant provisions as appropriate to any work they are undertaking on site.

If airborne dust is seen within the immediate area of activity, then the site manager will investigate the incident and ensure additional/alternative mitigating measures are employed, which may include relocation of processing equipment, or redeployment of the sprinklers. Additional measures may include cleaning and damping haul roads and surfaces as and when necessary or imposing further speed limits.

Should weather conditions and operations be such that dust is blown beyond the boundaries of the site, then operations responsible for the generation of airborne dust will be stopped until the weather changes.

Any complaints or incidents will be fully investigated and recorded by the site manager including details of any mitigation or remedial actions taken as per the procedures in the management system. The site manager will ensure that the EA is informed of these within 24 hours, ideally as soon as possible, practically possible and appropriate.

The Dust Management Plan will be reviewed annually by the site manager or otherwise in response to a request from the Environment Agency, changed circumstances such as the operation of new processing plant or substantiated dust complaints.

Tables 5 and 6 provide the risk assessment for dust and the remediation/control measures.

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Table 5: Source-Pathway-Receptor Routes

Source	Pathway	Receptor	Type of impact	Control Measures
Unloading and processing waste	Tracking dust on wheels and vehicles	Local Roads	Visual soiling, also consequent resuspension as airborne particulates	Vehicles will be checked prior to leaving the site and will be cleaned if mud/debris is noticeable on the wheels or chassis. Each driver will be responsible for this process. All vehicles will be on concrete surface. There is approximately 230m of estate road before entering the public highway. As the unloading of vehicles is controlled by operatives it is unlikely that vehicles will be directed in a manner that results in waste being tracked out. Use of road sweeper to clean the yard and entrance. Processing of waste is wet.
	Atmospheric dispersion	Nearby industrial premises (workers and pedestrians).	Visual soiling and airborne particulates	Vehicles will only be unsheeted when ready to discharge. Low sensitivity of adjoining properties. No pedestrian access to site.
	Atmospheric dispersion	Residential properties	Visual soiling and airborne particulates	As above, but also the distance and intervening topography between the site and these receptors will reduce any impact.
Debris	Falling of lorries	Local Roads	Visual soiling, and resuspension as airborne particulates	All vehicles delivery and collecting waste will be sheeted. There is a 230m estate roads before vehicles reach the local highway. A hose and brush will be used to clean the wheels and clean the yard. A road sweeper will be deployed as necessary to clean the yard and access road.
Vehicle exhaust emissions	Atmospheric dispersion	All	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength
Non road going machinery exhaust emissions	Atmospheric dispersion	Local Environment	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength.

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Table 6 - Measures used on site to control Dust/Particulates

Abatement Measure	Description / Effect	Overall consideration and 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.	The wash plant is a bespoke system with internal components and is a wet process. There will be concrete storage bays to contain separated materials. The existing non hazardous waste operation takes place inside a building. There is a second building used for storage. The hazardous waste operation will take place in a separate building.
Negative pressure extraction	Within enclosed buildings, controlled extraction can be undertaken to ensure a constant negative pressure relative to the outside air. This system should prevent the emission of particulates from any openings in the building. Extracted air should be treated through a suitable filtration system prior to discharge to atmosphere. This method is more frequently applied for odour control.	This is not necessary.

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Abatement Measure	Description / Effect	Overall consideration and implementation
Site / process layout in relation to receptors	Locating particulate emitting activities at a greater distance and downwind from receptors.	The wash plant has been designed to separate the operations from the nearby residents located to the north. The pathway between the source and receptor is prevented using this infrastructure. The risk assessment and controls will prevent dust emissions leaving the site. The hazardous waste operation will take place in a building that has been orientated to shield properties downwind of prevailing wind. Existing site infrastructure will provide protection.
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.	The site speed restrictions will be 5mph for all vehicles and mobile plant. In the event that vehicles are held up to unload, they will be asked to switch off their engines. Banksman will be used to ensure the efficient flow of traffic, control the door opening/closing, and minimise waiting times and reducing unnecessary vehicle manoeuvring. The site entire site is concreted and is remote from the highway, to avoid queueing.
Minimising drop heights for waste. Use of enclosed chutes for waste drops/end of conveyor transfers and covered skips / storage vessels.	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. Enclosing processes will further reduce dispersion.	The process equipment will be set at defined heights. The loading operator will reduce the height of the drop when placing waste into the equipment and loading vehicles. This applies to all activities.

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Abatement Measure	Description / Effect	Overall consideration and implementation
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	All incoming loads will be unsheeted once ready to discharge. All waste being removed will be in sheeted vehicles.
Good Housekeeping	Having a consistent, regular housekeeping regime will ensure the site is regularly checked and issued remedied to prevent and remove dust and particulate build-up	As part of the daily Site Checks, the TCM carries out 2 hourly checks of the site, but all staff are trained to monitor for any debris or dust on the site and instigate cleaning. The site is cleaned at the end of each working day. On a weekly basis (typically on Saturday), a more detailed clean will take place which will include the process equipment. A hose and brush will be used to clean the yard. A road sweeper will be deployed as necessary to clean the yard and site entrance. Separate equipment will be used to clean the hazardous waste facility.
Hosing of vehicles on exit	May remove some dirt, dust and particulates from the lower parts of vehicles.	All vehicles will be checked when leaving the site to ensure vehicle wheels are cleared. All staff will be trained to check on the vehicles. A hose and brush will be used to clean the wheels. All road vehicles will be washed weekly. Separate equipment will be used to clean the vehicles working in the hazardous waste facility.
Install a wheel wash	Provides a high pressure wash of vehicle wheels and lower parts (including under body) using a series of jet sprays. More effective if vehicles drive through the wheel wash slowly in order	This is not currently proposed. There will be a hose and brush provided to clean wheels. The entire site is concreted which will allow regularly cleaning. There is 230m of estate road between the waste site and highway. Any mud or debris will be reported to the site manager. Separate equipment will be used to clean the vehicles working in the hazardous waste facility.

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Abatement Measure	Description / Effect	Overall consideration and implementation
	that there is sufficient time for dirt to be removed	
Ceasing operation during high winds and/or prevailing wind direction	Mobilisation of dust and particulates is likely to be greater during periods of strong winds and hence ceasing operation at these times may reduce peak pollution events.	The Wash Plant is a wet process and activities should not need to stop. The dust suppression system will be activated during operations to prevent the dust becoming airborne. However, in the event of a weather warning from the Met Office, the Site Manager will review the on-site conditions and assess if loading the wash plant can continue. This applies to all activities.
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.	Entire site is concreted. A road sweeper will be used to keep the site clean. A separate sweeper will be used to clean the hazardous waste facility. There are six hoses located around the site that provide full coverage to the working area. Daily checks as part of the EMS.
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.	The incoming waste will be stored in a concrete bay with three sides. The waste will be kept at 0.5m below the top of the concrete wall. A line will be painted to delineate this. The process will be continuous to maintain capacity.

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Abatement Measure	Description / Effect	Overall consideration and implementation
	Reducing storage volumes should reduce the surface area over which particulates can be mobilised.	This applies to all activities.
Reduction in operations (waste throughput, vehicle size, operational hours)	Reducing the amount of activity on site, including no tipping, shredding, chipping or screening of high risk loads during windy weather as well as associated traffic movements should result in reduced emissions and re-suspension of dust and particulates from a site.	The operations are unlikely to be affected by the weather conditions. The prevailing wind is from the south west. The dust suppression system will be activated during operations to prevent the dust becoming airborne. The wash plant acts as a barrier to wind escaping beyond the site boundary (which is downwind of the prevailing wind). The incoming waste will be contained within a concrete bay. This applies to all activities.
Use of wheel wash	Vehicles would exit the site via a wheel wash.	It is considered unnecessary given the controls in place and the distance that vehicles travel before reaching the highway.
Remedial Measures		
Netting / micro netting around equipment	Erecting netting around equipment that could give rise to large amounts of dust and particulates may be effective within the site boundary and prevent their dispersion off-site / their re-suspension within the site.	This is not required. Dust has not been an issue on this site.

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Abatement Measure	Description / Effect	Overall consideration and implementation
On-site sweeping	Sweeping could be effective in managing larger debris, dust and particulates but may also cause the mobilisation of smaller particles. Road sweeping vehicles damp down dust and particulates whilst brushing and collecting dust and particulates from the road surface, particularly at the kerbside.	The site will be cleaned daily. A road sweeper will be deployed as necessary to clean the external area and entrance.
Site perimeter netting / micro netting	Erecting netting around the site perimeter may capture released debris and dust and particulates prior to it being dispersed off-site.	The use of netting is considered unnecessary as this is a wet process. All waste and products will be stored in bays. The hazardous waste operation will take place in a building that has been orientated to shield properties downwind of prevailing wind. Existing site infrastructure will provide protection.
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.	A hose and brush will be provided. This will be used to clean vehicle wheels before exiting the site. The site will be cleaned daily using hose and brushes. A road sweeper can also be used. There are six hoses located around the site that provide full coverage to the working area. Dust suppression and misting system already installed.

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Abatement Measure	Description / Effect	Overall consideration and implementation
		Separate equipment will be used to clean the vehicles working in the hazardous waste facility. Separate dust suppression for the hazardous waste building.
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 particulates, therefore, reducing emissions from site.	Dust suppression and misting system already installed. There are six hoses located around the site that provide full coverage to the working area. A separate system will be installed in the hazardous waste facility to dampen material as it is unloaded. The dust suppression system will be checked daily. Staff will be trained to use the system. The dust suppression system will be activated when receiving waste during dry weather conditions.
Shaker grids	Similar to cattle grids, these are installed at a site entrance and exit. The movement of vehicles over the grids shakes dust and particulates from the wheels, thus removing them before vehicles enter the site.	The site is fully concreted and therefore this is not required. Wheel washing will take place before vehicles exit the site.
Water Cannons	Water cannons provide a means for delivery of powerful water streams from a water truck. With variable nozzles, the spray pattern can be controlled and varied between jet and fog.	Water cannons are usually deployed on sites that store materials outside, for example construction waste and aggregates. These are unnecessary at this site.

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Abatement Measure	Description / Effect	Overall consideration and implementation
	Typical water flows are up to 5000 litres per minute. Water cannons are most often used for fire protection, mining operations, heavy machinery wash down, cleaning and dust and particulate abatement.	
Screening of buildings / reducing large apertures using plastic strips	Installing plastic strips to cover entrances/exits to buildings may reduce emissions of dust and particulates dispersing through doorways.	Not relevant to the wash plant. Not required for non-hazardous waste facility. Will be monitored for the hazardous waste facility but measures in place to reduce likelihood of dust emissions.
Application of CMA / chemical suppressant	Diluted Calcium Magnesium Acetate (CMA) or other chemical based dust suppressant is regularly applied by spraying using a back-pack applicator for small areas or by road sweeper to cover larger areas. CMA acts as a suppressant with the aim of reducing dust and particulate re-suspension and hence ambient concentrations.	Typically applied to stockpiles stored outside. This is unnecessary for this operation.
Heavy Water	Heavy water is used to improve the compaction and stability and reduce	There are no proposals to utilise heavy water at the site.

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Abatement Measure	Description / Effect	Overall consideration and implementation
	dust and particulates on unsealed roads or areas of land. Ideally it is blended into the road construction material as the road is constructed, but where this is not possible it can be sprayed onto the top of the road. Heavy water combines fast acting wetting agents with polymer binders, to allow penetration deep into the material and to 'agglomerate' the dust and particles together.	It is considered that the proposed dust suppression system will be sufficient to achieve adequate dust management.
Foam Suppression	The aggregate and mining industries frequently use foam suppression for the control of dust and particulate emissions, mixing the foam with broken material to increase efficiency. Foaming agents can be added to increase the efficiency of dust and particulate reduction. Foam suppression has seen increased attention in recent years and has previously been applied to waste transfer facilities where crushing of waste occurs. If using foam suppression to control dust and	There are no proposals to utilise foam suppression at the site. It is considered that the proposed dust suppression system will be sufficient to achieve adequate dust management.

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Abatement Measure	Description / Effect	Overall consideration and implementation
	particulates from waste drops, the foam must be entrained within the waste material and as such must be injected prior to dropping the waste rather than at the bottom of the drop.	

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Other considerations

Water usage/ availability:

Water for dust suppression will be stored in a tank on site. This will be fed with mains water or will use recycled water from the wash plant.

In the event of a drought:

In the unlikely event that there was a ban on the use of water, the operations would continue until such time as the water in the stored tank had run dry. After which time, the operator will assess the conditions and if dust is observed to be leaving the building, the operations will cease until the water supply has been re-established.

Failure of Suppression System:

If the entire dust suppression system fails, the Site Manager will arrange for repair and decide on the best course of action depending on weather conditions. If the downtime is expected to be longer than 48 hours and the weather conditions are dry², the Site Manager will have to provide interim dust suppression measures or cease operations until conditions improve, or the system has been repaired. Interim measures would include hiring mobile dust suppression units for a temporary period.

The system installed will be subject to a service agreement.

² Dry conditions refer to no precipitation (rain, drizzle, sleet, snow)

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4. Monitoring

No monitoring is proposed for this site other than the visual daily checks which are carried out every 2 hours by the TCM. This will be kept under review and updated in the event of substantiated complaints being received or if the TCM observes increased dust emissions during specific activities. All staff are trained to monitor the cleanliness of the site and implement corrective action if necessary.

The monitoring locations are shown on Drawing ATSL-FL-MON-01. Three monitoring positions are shown that will observe if any dust is leaving the permit boundary.

Table 7 – Monitoring Locations.

Monitoring Location	Target Area
M1	To check if dust is leaving the rear of the site.
M2	To check if dust is leaving behind the non-hazardous waste building. Full visual of access road towards the rear of the site.
M3	To check the access road and site entrance.
M4	Internal Site Check from elevated office position.

Weather conditions will be recorded daily in the Site Diary.

The site diary will also contain details of the various processing operations that take place each day. The site manager will ensure dust management measures are undertaken as appropriate to the site operations and current conditions.

As part of the daily checks, the Site Manager will check the condition of the yard and check if dust is being generated and leaving the site. This exercise will identify whether dust is being generated from other sources in the area.

The DEMP will be reviewed on an annual basis or sooner if requested by the EA. It will also be updated if the operator changes the operation.

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5. Reporting and Complaints Response

The Site Manager has the overall responsibility for this procedure.

The administration staff will all be responsible for handling complaints and recording on the correct form. All complaints must be referred to the Site Manager.

In this context, a complaint may be received directly from a resident, customer or from a Regulator.

When the site receives a complaint, a record is summarised in the Site Diary. Full details will be provided on the complaints form, see Appendix A.

All staff based in the office will be trained on recording complaints and to make sure they notify the TCM immediately.

The TCM will review the activities that may have given rise to the complaint. If necessary, the CCTV footage will be reviewed to note any specific operational issues that may have given rise to the source of the complaint. Other actions will include:

- Review site diary and establish what site activities were taking place at the time the complaint even occurred.
- Review waste types accepted that day.
- Identify whether there were any other activities in the area taking place that could have generated dust e.g. road works or construction works.
- If it is established that the emissions were attributable to activities being undertaken at the site, as necessary review the relevant operational procedures and implement improvements and provide additional training to site.
- The action taken will be reported to the Environment Agency.

The Site Manager will report the findings to the complainant and implement appropriate corrective action in accordance with a specific management plan or the Operational Procedures.

The TCM will aim to provide feedback within 48 hours of receiving the complaint.

If the site receives several substantiated complaints, the operator will engage the services of an Air Quality specialist to review the site operations and update this DEMPS accordingly. Interim measures will be sought to improve conditions until a more permanent solution has been assessed and implemented. If during the interim period, complaints continue to be received, the operator will cease operations until measures have been implemented to prevent dust emissions.

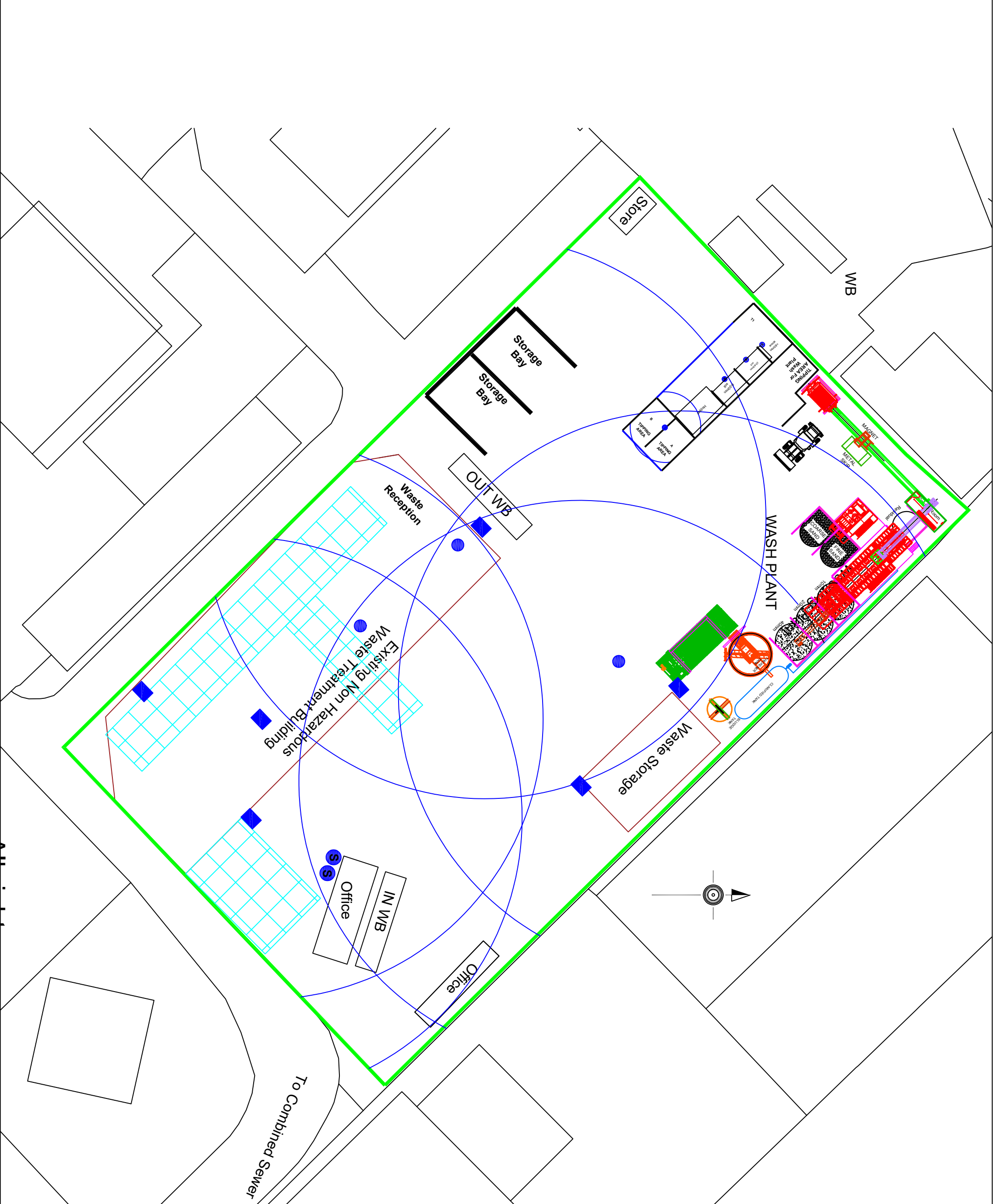
Document Reference: ATS-DEMP-V2	Dust & Emissions Management Plan
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5.1 Engagement with the Community

The immediate neighbours will be contacted, and direct dial telephone details provided for the TCM and main officer number. Email contact details will also be provided. The operator has operated from this site for many years. It is well established and already has contact with immediate neighbours.

Appendix A - Complaint Form

Customer Details	
Customer Name -	
Address -	
Postcode -	
Customer Contact Details -	
Tel -	
Email -	
Date -	
Complaint Ref Number -	
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 public -	
Date feedback given -	
Review and Improve	
Improvements needed to prevent a reoccurrence -	
Proposed date for completion of the improvements -	
Actual date for completion -	
If different insert reason for delay -	
Does the dust management plan need to be updated -	
Date that the dust management plan was updated -	
Closure	
Site manager review date	
Site manager signature to confirm no further action required	



KEY:

Sprinkler

Mist Spray

Mist Curtain

Hose with 40m range

Processing Equipment

0 5 10 15 20 25 m
SCALE 1:500

Client: Albright Transfer Station Limited

Project: Dust Management Plan

Albright Industrial Estate, Ferry Lane
Rainham, RM13 9BU

INTEGRATED SKILLS LIMITED

Suite 3A Chapel Allerton House
114 Harrogate Road
LEEDS

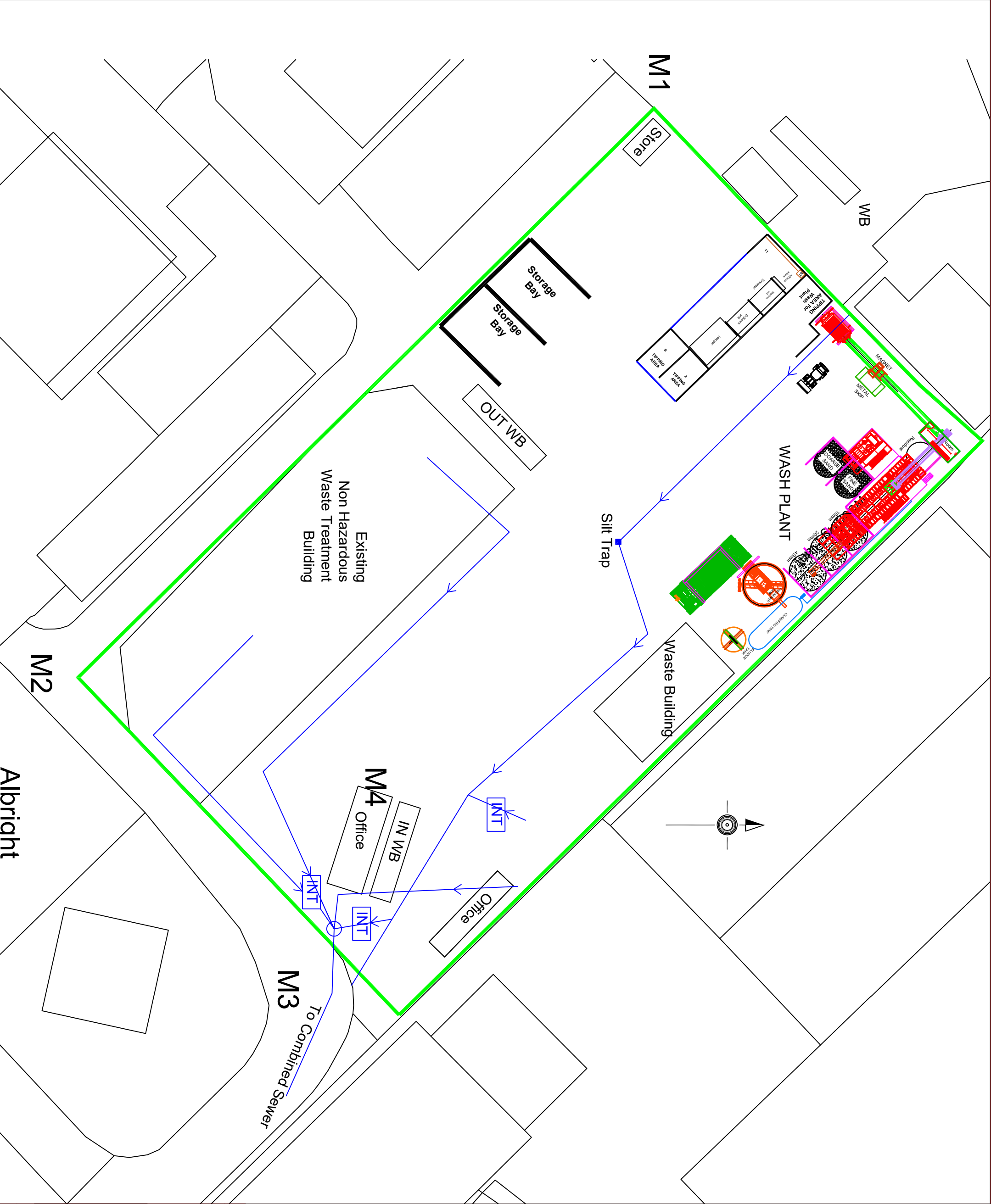
LS7 4NY

TEL: 0330 088670
EMAIL: ukinfo@integrated-skills.com
(www.integrated-skills.com)

Date: April 2025

Scale: 1:500@A3

Dwg: ATSL-FL-DMP25-01



Client: Albright Transfer Station Limited	
Project: Monitoring Plan	
Albright Industrial Estate, Ferry Lane Rainham, RM13 9BU	
INTEGRATED SKILLS LIMITED Suite 3A Chapel Allerton House 114 Harrogate Road LEEDS LS7 4NY TEL: 0330 0888670 EMAIL: ukinfo@integrated-skills.com (www.integrated-skills.com)	
Date: April 2025	Scale: 1:500@A3
Dwg: ATSL-FL-MON-01	