

Fire Prevention Plan

Canalside Environmental Permit



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1. Site details

Site name: Canalside Operation Hub

Site address: Dock Yard Road, Ellesmere Port, Cheshire CH65 4EF

Operator name: Cheshire West Recycling Ltd

1.1 Activities at the site

The Canalside Operations Hub is a purpose-built municipal waste management facility operated by Cheshire West Recycling Ltd (CWR). The Site comprises a municipal fleet depot, a Materials Recovery Facility (MRF) and a Hazardous Waste Transfer Station, supporting waste and recycling services across the Cheshire West and Chester borough.

The Site receives municipal, commercial and industrial waste for inspection, segregation, sorting, baling, temporary storage and transfer to appropriately permitted recovery or disposal facilities. Non-hazardous recyclable materials are processed within the MRF using manual and mechanical sorting, conveyor systems and a CK baler. Hazardous wastes are received, inspected, temporarily stored, bulked and transferred off site. No hazardous waste treatment is undertaken other than sorting and separation from other waste streams.

This Fire Prevention Plan (FPP) has been prepared to support a substantial variation to Environmental Permit EPR/JB3005CJ. The variation seeks to:

- increase the permitted annual waste throughput from 55,000 tonnes per annum (tpa) to 120,000 tpa;
- increase the maximum permitted non-hazardous treatment capacity from 50 tonnes per day to 150 tonnes per day.
- incorporate waste activities currently undertaken under the registered S1, S2, T11 and T15 waste exemptions into the bespoke Environmental Permit.

- extend the permitted site boundary to include the existing exempt operational areas.
- formally incorporate the Hazardous Waste Transfer Station into the Environmental Permit; and
- improve waste segregation, fire prevention and operational resilience through the revised site layout and dedicated waste storage areas.

The proposed variation does not fundamentally alter the nature of the Site's operations. The principal activities will continue to comprise the receipt, inspection, sorting, baling, temporary storage and transfer of permitted wastes, with enhanced engineering and operational controls implemented to support the increased throughput and revised site layout.

1.2 Site Location

The Site is located at Dock Yard Road, Ellesmere Port, Cheshire, CH65 4EF, centred on National Grid Reference SJ 41034 76911, as shown in Figure 1.

The Site is situated approximately 140 metres north-east of Junction 8 of the M53 motorway and approximately 1 kilometre north-east of Ellesmere Port town centre. The Manchester Ship Canal lies immediately to the north of the Site, with the Shropshire Union Canal located approximately 195 metres to the south-west.

The surrounding area is predominantly industrial and commercial in nature and is well connected to the strategic highway network, making it suitable for municipal waste management activities.



Figure 1 Site Location

1.3 Site Access Arrangements

The Site is accessed from Dock Yard Road, Ellesmere Port, via the junction with Oil Sites Road.

Access to the staff car park and the front of Building A is controlled by a height restriction barrier. The barrier can be opened using a security PIN code, which is made available to the Fire and Rescue Service (FRS) for emergency access.

The principal Site entrance and exit comprise double metal security gates, which are secured outside normal operating hours using a Kasp security padlock. Site supervisors are issued with keys to enable authorised access at all times.

Immediately inside the main entrance is a vehicle access barrier operated by an electronic fob system. In the event of an emergency, arrangements are in place to ensure prompt access for the Fire and Rescue Service.

A red Fire and Rescue Service information box is permanently located adjacent to the main entrance gates. The box contains the current Fire Prevention Plan, site layout plan, emergency contact details, drainage plan, fire hydrant locations and other information required to support an emergency response.

The key to the Fire and Rescue Service information box is securely retained immediately beneath the box to allow the Fire and Rescue Service rapid access to the emergency documentation contained within it. The contents of the information box are reviewed whenever the Fire Prevention Plan or site emergency arrangements are updated to ensure the information remains current.

The internal road network provides suitable access for emergency vehicles to all operational areas of the Site, including the Materials Recovery Facility (MRF), Hazardous Waste Transfer Station, fibre storage area, food waste, garden waste and road sweepings storage bays, and designated quarantine areas. Internal access routes are maintained free from obstruction to facilitate emergency response and firefighting operations.

Access routes, security gates and emergency access arrangements are routinely inspected as part of the Site Environmental Management System (EMS) and Fire Prevention Plan to ensure they remain fully operational.

1.4 Site Infrastructure

The Canalside Operations Hub occupies approximately 37,763 m² and comprises a purpose-built municipal waste management facility incorporating a municipal fleet depot, Materials Recovery Facility (MRF), Hazardous Waste Transfer Station, vehicle maintenance workshops and associated operational infrastructure.

The Site comprises the following principal areas:

Staff Car Park – Tarmac surfaced parking area for staff and visitors, including cycle storage and the electrical substation.

HGV Parking Area – Parking area for the municipal waste collection fleet together with contingency waste storage bunkers.

Building A – Main Hub Building – Single-storey administration and welfare building incorporating offices, meeting rooms, welfare facilities, lockers, toilets, showers and staff welfare accommodation.

Building B – Fleet Workshop – Fleet maintenance workshop incorporating two smaller vehicle workshops, storage areas and associated maintenance facilities supporting the municipal vehicle fleet.

Building C – Materials Recovery Facility (MRF) – Open-fronted waste processing building containing the conveyor system, CK baler and associated manual sorting areas for the receipt, sorting, separation, baling and temporary storage of recyclable materials.

Food, Garden Waste and Road Sweepings Storage Area – A dedicated covered three-bay Zap Shelter providing separate storage bays for food waste, garden waste and road sweepings. The area is constructed on impermeable hardstanding served by a sealed drainage system (INT2) and includes the designated quarantine area.

Hazardous Waste Transfer Station – Dedicated area for the receipt, inspection, temporary storage and bulking of hazardous waste prior to transfer to appropriately permitted recovery or disposal facilities. Hazardous waste is stored on impermeable hardstanding served by the sealed drainage system (INT1).

Street Scene Waste Storage Area – Designated storage area for WEEE, batteries, waste aerosols, tyres, scrap metal and other municipal waste streams received from Household Waste Recycling Centres (HWRCs) and Street Scene operations.

Dedicated Fibre Storage Area – External storage area for baled paper and cardboard designed to improve waste segregation, fire prevention and operational efficiency.

In addition to the principal operational areas, the Site also includes:

- Designated vehicle refuelling area comprising:
 - 2 × double-bunded diesel storage tanks.
 - 1 × double-bunded diesel tank.
 - 1 × AdBlue storage tank (IBC);
- Vehicle wash-down area with pressure lance.
- Vehicle weighbridge.
- Additional contingency waste storage bunkers.
- Three on-site fire hydrants.
- Additional 4,000-litre fire water storage tank adjacent to the fibre storage area;
- Three interceptors/separators serving the Site drainage network.
- CCTV and thermal imaging fire detection system.
- Red Fire and Rescue Service information box located at the Site entrance.

2. About this plan:

This Fire Prevention Plan (FPP) has been prepared to support the operation of the Canalside Operations Hub and the substantial variation of Environmental Permit EPR/JB3005CJ.

The purpose of this Plan is to demonstrate how Cheshire West Recycling Ltd will prevent fires, minimise the likelihood of fire occurring, reduce the potential for fire spread, and ensure that appropriate procedures and resources are in place to protect human health and the environment.

The Plan describes the engineering controls, operational procedures and emergency response arrangements implemented across the Site to manage fire risks associated with the Materials Recovery Facility (MRF), Hazardous Waste Transfer Station and associated waste storage areas. It has been prepared in accordance with the Environment Agency's Fire Prevention Plan Guidance and forms part of the Site's Environmental Management System (EMS).

This Fire Prevention Plan should be read alongside the following supporting management documents:

- Environmental Management System (EMS);
- Environmental Risk Assessment (ERA);
- Dust and Emissions Management Plan (DEMP);
- Odour Management Plan (OMP);
- Noise Management Plan (NMP);
- Site Condition Report (SCR); and
- Non-Technical Summary (NTS).

The Fire Prevention Plan is a live management document and will be reviewed following any significant changes to Site activities, infrastructure, waste types or legislative requirements, and following any fire incident, emergency exercise or identified opportunity for continual improvement.

2.1 Where the plan is kept and how staff know how to use it.

The FPP is kept in the site Battle Box located at the reception desk, Fire Logbook box (depot entrance) and on the CWR Shared drive.

All depot users including contractors working on-site shall be aware and understand the contents of this plan and the actions to take during a fire. All staff shall know where the FPP is kept. Staff will undergo training of the FPP and Emergency Procedures as part of their induction and training programme.

2.2 Testing the plan and staff training.

The effectiveness of this Fire Prevention Plan will be tested through planned emergency exercises and fire evacuation drills undertaken at least every six months. The exercises are designed to assess the effectiveness of the Site's emergency response procedures, communication arrangements, evacuation processes and overall preparedness for a fire incident.

Emergency exercises will, where practicable, simulate a range of potential fire scenarios affecting different operational areas of the Site, including the Materials Recovery Facility (MRF), Hazardous Waste Transfer Station and external waste storage areas. Following each exercise, a formal debrief will be undertaken to identify any lessons learned, corrective actions and opportunities for continual improvement. The Fire Prevention Plan will be reviewed and updated where necessary.

All employees, contractors and temporary staff receive fire safety awareness training and instruction on the Fire Prevention Plan as part of their site induction. Refresher training is provided at regular intervals and whenever significant changes are made to the Site, its operations or this Fire Prevention Plan.

Training records, emergency exercise reports and any resulting corrective actions are maintained as part of the Site's Environmental Management System (EMS).

Emergency exercises will also include familiarisation with the site's fire detection systems, emergency isolation procedures, emergency information box and the roles and responsibilities of designated Fire Marshals and Incident Controllers.

3. Types of combustible materials

3.1 Combustible waste

Table 1 summarises the combustible wastes accepted at the site, including storage arrangements. Details of the storage locations of these wastes is shown on the site plan.

Table 1 Combustible Waste

Description	Storage Calculation				
	Length (m)	Width (m)	Height (m)	Number	Total Volume m ³
Baler Reception Bay 1	12.5	3.5	3.5	1	153 m ³
Baler Reception Bay 2	14	11.5	3	1	483 m ³
Baler Reception Bay 3	16	10.5	3	1	504 m ³
Baler Reception Bay 4	9	7	3	1	189 m ³
Plastic Bale Storage Area 1	1.5	1.1	0.75	64 ² bales	67 m ³
Steel Bale Storage	1.5	1.1	0.75	68 ³ bales	60 m ³
Aluminium Bale Storage	1.5	1.1	0.75	94 ⁴ bales	89 m ³
Carboard Bales	1.5	1.1	0.75	94 bales	89m3
Food/Green Waste Storage	Zap shelter			1	300
Green Waste Storage				1	300
Street Sweeping				1	300
WEEE Storage 5	Shipping containers/ Enclosed Skip	-	-	3	105 m ³ (35 m ³ each)

Description	Storage Calculation				
	Length (m)	Width (m)	Height (m)	Number	Total Volume m ³
Scrap Metal Storage	Skip	-	-	3	105 m ³ (35 m ³ each)
Batteries	Enclosed Containers	1	1	10	10m ³
Aerosol cans	Drum or cage				0.003m ³ (3,000 cans)
Clean Waste wood	bay				400m3
Demolition waste – rubble and discarded debris	Skip				1,180m ³ 500 tonnes
Persistent Organic Pollutant (POPs) Waste Quarantined				1	1000m3
Fiber Bays				5	2000m3

3.2 Other combustible materials

Details the combustible, non-waste materials that are stored at the site .

Table 2 Other Combustible

Details	Location	How it is stored	Max quantity/vol
Diesel	Re-fuelling Area	Double bunded tank	40,000 Litres
Ad Blue	Re-fuelling Area	IBC on bund	1,000 Litres
Small Diesel Tank (CWaC)	Re-fuelling Area	Double bunded tank	14,000 Litres
Waste Oil Tank	Outside Workshop	Double bunded tank	1,940 Litres
Hydraulic Oil Tanks x3	Outside Workshop	Double bunded tank	1,355 Litres each
Argosheild Cylinder	Workshop	Cylinders stored upright, secured by chains on trolleys away from sources of	2

Details	Location	How it is stored	Max quantity/vol
Oxygen Cylinder	Workshop	ignition, and in well-ventilated areas. Oxygen and acetylene cylinders should be stored separately with a 6m gap,	2
Acetylene Cylinder	Workshop	Spare cylinders are stored in the designated gas cages outside the workshop.	2

4. Manage common causes of fire

4.1 Arson

The Site has been designed and operated to minimise the risk of arson, vandalism and unauthorised access. Security measures are implemented across the Site to protect waste storage areas, buildings and operational infrastructure.

The principal security measures include:

- 3-metre-high palisade security fencing around the Site perimeter.
- double metal security entrance gates secured outside normal operating hours;
- electronically controlled access barriers.
- intruder alarm systems;
- 24-hour CCTV surveillance with thermal imaging cameras covering the operational areas.
- security lighting operated by timer and motion sensors; and
- controlled access for authorised personnel only.

The Site entrance is monitored from the main office building, which provides clear visibility of the entrance gates, vehicle movements and the principal waste storage areas.

A Fire and Rescue Service information box is located adjacent to the main entrance gates. The box contains the current Fire Prevention Plan, site layout plans, drainage plans, hydrant locations, emergency contact details and other information required to support an emergency response. The key for the information box is securely retained immediately beneath the box to allow rapid access by the Fire and Rescue Service.

Emergency contact information, Site identification details and the Environment Agency Incident Hotline number are prominently displayed at the Site entrance.

All security infrastructure, including fencing, gates, CCTV systems, thermal cameras, lighting and access controls, is subject to routine inspection and maintenance as part of the Site Environmental Management System (EMS). Any defects identified are reported and rectified promptly to maintain the integrity of the Site's fire prevention and security arrangements.

4.2 Plant and equipment

The Site uses the plant and equipment listed in Table 3 to undertake the receipt, handling, processing and storage of permitted wastes.

Table 3 Site Plant and Equipment

Plant & Equipment	Description	Storage Location	Fire Prevention Measures
Loading shovel	Used for loading, moving and emptying waste storage bays and stockpiles.	Parked overnight in the designated plant parking area in front of the MRF.	Parked a minimum of 6 metres from combustible materials. Fitted with a dry powder fire extinguisher and subject to daily inspections.
Forklift truck	Used for moving bales, containers and waste materials around the Site.	Designated plant parking area.	Parked a minimum of 6 metres from combustible materials. Fitted with a dry powder fire extinguisher and subject to daily inspections.
Clamp truck	Used for handling and transporting baled recyclable materials.	Designated plant parking area.	Parked a minimum of 6 metres from combustible materials. Fitted with a dry powder fire extinguisher and subject to daily inspections.
Conveyor system	Used to transport recyclable materials through the MRF during manual and mechanical sorting.	Building C – Materials Recovery Facility.	Included within the planned preventative maintenance programme and cleaned as part of daily housekeeping procedures.
CK baler	Hydraulic baler used to compact recyclable materials into transportable bales.	Building C – Materials Recovery Facility.	Included within the planned preventative maintenance programme. Emergency stop controls and fire extinguishers are provided in accordance with the Fire Prevention Plan.

Plant Inspection and Maintenance

All plant and equipment are subject to a planned preventative maintenance (PPM) **programme** to ensure they remain safe, reliable and compliant with manufacturers' recommendations and statutory inspection requirements.

MRF operatives undertake daily pre-use inspections and routine weekly inspections of all mobile plant and processing equipment. Any defects identified are recorded, reported immediately and repaired before the equipment is returned to service where necessary.

Routine housekeeping is undertaken throughout the Materials Recovery Facility to prevent the accumulation of combustible dust, fibres and waste around the conveyor system, CK baler and associated plant. These inspections form part of the Site's Environmental Management System (EMS) and support the early identification of potential fire hazards.

Daily inspections undertaken by the MRF Supervisor also provide assurance that plant, equipment and operational areas remain in a safe condition and that the fire prevention measures detailed within this Fire Prevention Plan continue to be effectively implemented.

Where plant is parked outside operational hours, the designated parking area remains within the coverage of the Site's CCTV and thermal imaging system, providing continuous monitoring outside normal operating hours.

4.3 Electrical faults including damaged or exposed electrical cables

All fixed electrical installations at the Site have been designed, installed, inspected and tested in accordance with the current edition of BS 7671 – Requirements for Electrical Installations (IET Wiring Regulations). Electrical Installation Certificates are retained on Site, and all inspections and certification are undertaken by contractors approved by the National Inspection Council for Electrical Installation Contracting (NICEIC).

The electrical installation is subject to periodic inspection and testing through an Electrical Installation Condition Report (EICR), undertaken at intervals not exceeding three years, or more frequently where required following alterations or identified defects

4.4 Discarded smoking materials

Smoking Policy

Smoking is prohibited throughout the Site except within the designated smoking area identified in **Appendix 1**. The designated smoking area is located away from combustible materials, waste storage areas and operational activities to minimise the risk of accidental ignition.

The Site's no smoking policy is communicated to all employees, contractors and visitors during induction and through prominent signage located throughout the Site.

Hot Works

Hot works present a significant potential source of ignition and are avoided wherever reasonably practicable. Vehicle maintenance and other hot works are not permitted within the Materials Recovery Facility (MRF) or in areas where combustible wastes are stored.

Where hot works cannot be avoided, they shall only be undertaken:

- by trained and competent personnel;
- within designated workshop areas where practicable;
- under a formal **Permit to Work** and **Hot Work Permit** system;
- following a fire risk assessment; and
- with suitable firefighting equipment immediately available.

Any hot works undertaken outside the designated workshop areas shall only be carried out by approved contractors and will be subject to a Hot Work Permit, including post-work fire inspections to confirm that no smouldering materials or ignition sources remain.

Appropriate fire extinguishers will be positioned adjacent to the work area for the duration of the activity, in addition to the permanent firefighting equipment provided throughout the Site.

4.5 Industrial heaters

The Site operates:

- one electric heater within the MRF picking cabin; and
- three infrared heaters within the vehicle workshop.

All heating equipment is subject to routine inspection, servicing and maintenance by a competent external contractor. The equipment is positioned away from combustible materials and is included within the Site's planned preventative maintenance programme.

Heating equipment is switched off as part of the Site's end-of-shift close-down procedures unless operationally required.

4.6 Hot exhausts and engine parts

Fire Watch Procedures

Mobile plant and vehicles operating on the Site are recognised as potential ignition sources due to hot exhaust systems and engine components.

A documented fire watch procedure is implemented throughout operational hours. Inspections are undertaken at least every four hours and again at the end of each working shift to confirm that:

- engines and exhaust systems are free from accumulated dust, fibres and combustible debris.

- no evidence of overheating, fuel leaks or mechanical defects is present.
- plant has been parked safely within the designated parking area; and
- all mobile plant is positioned a minimum of 6 metres from combustible waste stockpiles and storage areas.

Ignition Source Control

MRF operatives receive training to identify and remove combustible materials that may accumulate around engines, exhaust systems and other heat-generating components during operation.

At the end of each shift, mobile plant is cleaned where necessary and parked within the designated plant parking area in accordance with the Fire Prevention Plan. The parking area remains under CCTV and thermal camera surveillance outside operational hours to provide continuous monitoring for any abnormal temperature increase or signs of fire.

Thermal Imaging Monitoring

The Site's thermal imaging cameras provide continuous monitoring of the MRF, external waste storage areas and designated plant parking areas. Thermal monitoring enables the early identification of abnormal heat build-up, allowing prompt investigation and intervention before a fire can develop.

4.7 Leaks and spillages of oils and fuels

The Site stores diesel, hydraulic oil and other operational fluids within designated storage areas. Fuel and oil storage tanks are located on impermeable hardstanding and are provided with appropriate secondary containment (double bunding) to minimise the risk of pollution and fire.

All mobile plant and fixed equipment are subject to a planned preventative maintenance (PPM) programme and are inspected prior to use. Any leaks, spillages or mechanical defects identified during inspections are reported immediately to the MRF Supervisor, removed from service where necessary, and repaired by the Site maintenance provider before being returned to operation.

Appropriate spill response equipment is strategically located throughout the Site, and employees receive training in spill response procedures. Any spillages are contained, cleaned immediately and managed in accordance with the Site Environmental Management System (EMS), with contaminated materials disposed of appropriately.

Routine inspections of fuel storage areas, hydraulic systems and refuelling locations are undertaken to identify any deterioration or damage that could increase the risk of fire or environmental pollution.

4.8 Build-up of loose combustible waste, dust and fluff

Good housekeeping is a fundamental component of the Site's Fire Prevention Plan and Environmental Management System. Routine housekeeping and inspection activities minimise the accumulation of combustible waste, fibres, dust and fluff that could contribute to fire development or spread.

Daily inspections are undertaken throughout the Site, with particular attention given to higher fire risk areas, including:

- the Materials Recovery Facility (MRF);
- conveyor system and CK baler;
- fibre storage area;
- food, garden waste and road sweepings storage areas;
- hazardous waste transfer area; and
- mobile plant parking locations.

The MRF Supervisor undertakes documented daily walk-round inspections to assess housekeeping standards, identify any accumulation of combustible materials and confirm compliance with the Fire Prevention Plan. Any issues identified are addressed immediately through cleaning, waste removal or corrective maintenance.

Routine housekeeping activities include:

- removal of loose waste and combustible debris.
- sweeping of operational areas using the Site's mechanical road sweeper.
- cleaning around the conveyor system and CK baler.
- prompt removal of spillages.
- removal of windblown litter; and
- inspection and cleaning of mobile plant where required.

These housekeeping measures also support the Site's Dust and Emissions Management Plan (DEMP) by reducing the potential for dust generation, improving operational safety and maintaining effective fire prevention controls.

4.9 Reactions between wastes

The Site implements strict waste acceptance, inspection and segregation procedures to minimise the risk of incompatible wastes being mixed or stored together.

Collection crews receive training to identify waste contamination and potential fire hazards during collection activities. Where suspect or hazardous materials are identified, the collection crew will notify the Materials Recovery Facility (MRF) prior to arrival so that appropriate arrangements can be made for safe unloading and segregation.

Upon arrival at the Site, all waste loads are visually inspected by trained MRF operatives during tipping and processing. Particular attention is given to the identification and removal of potential ignition sources, including:

- lithium batteries.
- lead-acid and household batteries.
- Waste Electrical and Electronic Equipment (WEEE);
- gas cylinders and gas canisters.
- aerosols.
- hazardous wastes; and
- any other incompatible or potentially reactive materials.

Where identified, these materials are immediately removed from the waste stream and transferred to the designated hazardous waste storage areas or quarantine area, as appropriate.

In addition to dry mixed recycling (DMR) and fibre collections, collection vehicles are equipped with dedicated compartments for the separate collection of small WEEE items and household batteries. These materials remain segregated throughout transportation and are transferred directly into the appropriate designated storage areas upon arrival at the Site.

Street Scene and fly-tipped wastes are also inspected, segregated and stored within designated areas to ensure that incompatible wastes are separated and managed safely, reducing the potential for fire or environmental pollution.

4.10 Deposited hot loads

All waste loads are inspected upon arrival as part of the Site's waste acceptance procedures.

Employees receive training to recognise the signs of a potential hot load, including elevated temperatures, steam, smoke, unusual odours or evidence of combustion.

Where a hot load is suspected:

- the MRF Supervisor is notified immediately.
- the load is isolated from other waste;
- the loading shovel is used to transfer the material to the designated quarantine/hot load area;
- the load is monitored continuously; and
- water is applied where appropriate to cool the material and prevent fire development.

The incident is recorded and managed in accordance with the Site Environmental Management System and Fire Prevention Plan.

4.11 Close Down Procedures

At the end of each operational day, the MRF Supervisor is responsible for ensuring that the Site close-down procedure is completed to minimise the risk of fire occurring outside operational hours.

The close-down procedure includes:

- operating the conveyor system and CK baler until, as far as reasonably practicable, they are clear of waste materials;
- isolating and locking off electrical supplies to processing plant and equipment.
- switching off non-essential electrical equipment, including the picking cabin heater;
- removing accumulated waste, dust, fibres and combustible debris from around the conveyor system, CK baler, picking cabin and associated machinery.
- ensuring all fuels, oils and other flammable materials are securely stored.
- spreading waste awaiting processing, where appropriate, to assist in identifying any concealed hot loads.
- clearing waste from beneath and within the picking cabin.
- removing waste from Reception Bay 1 where operationally practicable.
- confirming that all mobile plant has been parked within the designated parking area and maintains a minimum separation distance of 6 metres from combustible waste.
- confirming that the CCTV and thermal imaging systems are operational.
- confirming that all security systems have been activated and that gates, doors and access points have been secured.

A documented fire watch is undertaken at least two hours after the cessation of operations to identify any signs of overheating, smoke or fire before the Site is left unattended. Any abnormal findings are investigated immediately, and appropriate corrective action is taken.

4.12 Lithium Batteries and Damaged Batteries

Although the Site does not undertake the treatment of hazardous waste, lithium batteries and damaged batteries present an increasing fire risk within municipal waste streams.

Operational staff receive training to identify batteries during waste acceptance, sorting and inspection activities. Batteries identified within incoming waste are removed from the waste stream as soon as reasonably practicable and transferred to the designated battery storage area. Damaged, swollen or overheating batteries are isolated immediately within the designated quarantine area pending removal to an appropriately permitted recovery or disposal facility.

This paragraph is very much in line with current Environment Agency expectations and complements your existing procedures without changing how the Site operates. It would be a worthwhile addition to the FPP.

5. Prevent self-combustion.

5.1 Manage storage time

The Site is managed to minimise waste storage times while maintaining safe and efficient operational throughput. Waste is removed from the Site as soon as reasonably practicable through established contracts with appropriately permitted recovery and disposal facilities.

Although the Environmental Permit allows waste to be stored for up to one year prior to disposal or three years prior to recovery, Cheshire West Recycling Ltd operates significantly shorter operational storage periods for the majority of waste streams.

Typical waste storage periods are less than 10 days, with stock rotation managed to minimise the potential for self-heating, deterioration and fire risk.

Food waste and garden waste are managed separately from other waste streams and are stored within the dedicated covered Zap Shelter for a maximum of 72 hours before being transferred to an appropriately permitted recovery facility. Road sweepings are also stored within a dedicated covered bay pending onward transfer.

All waste is managed using a First In, First Out (FIFO) stock rotation system to ensure older waste is removed before newly received waste. Storage areas are fully emptied wherever practicable before new waste is placed into the bay, reducing the potential for prolonged storage and ensuring effective stock rotation.

Seasonal variations in municipal waste arisings are managed through the use of established recovery and disposal outlets, enabling waste to be removed promptly during periods of increased throughput and preventing excessive stock accumulation.

5.2 Method used to record and manage the storage of all waste on site

The Materials Recovery Facility (MRF) Supervisor undertakes documented daily inspections to ensure:

- maximum stockpile dimensions are not exceeded.
- waste storage capacities remain within permitted limits.
- stock rotation is being maintained in accordance with the FIFO policy.
- waste residence times remain within operational limits.
- waste segregation is maintained; and
- storage areas remain safe, tidy and compliant with the Fire Prevention Plan.

Any issues identified during inspections are addressed immediately through operational controls or the removal of waste from the Site.

5.3 Stock rotation policy

The Site operates a documented First In, First Out (FIFO) stock rotation policy to minimise waste storage time and reduce the risk of self-heating and fire.

Loose waste storage bays are emptied completely wherever operationally practicable before receiving new waste.

Baled recyclable materials are stored within designated storage areas, with older bales dispatched before newly produced bales. Bales are arranged to facilitate systematic stock rotation and safe vehicle access.

Battery containers, WEEE containers, skips and other exchangeable containers are removed from the Site when full and replaced with empty containers to maintain continuous stock rotation.

Dedicated storage areas are maintained for waste awaiting dispatch and newly received waste, ensuring t The proposed increase in annual throughput from 55,000 tonnes per annum to 120,000 tonnes per annum will be achieved through increased processing efficiency, improved site layout, additional storage capacity and increased treatment capacity rather than prolonged waste storage. The Site's waste acceptance procedures, stock rotation policy and established recovery outlets ensure that waste residence times remain tightly controlled, that older material is prioritised for removal.

5.4 Monitor and control temperature

The Site minimises the potential for self-heating through strict control of waste acceptance, storage durations, stock rotation and routine inspections.

Formal temperature probing of waste stockpiles is not routinely undertaken because waste residence times are kept to a minimum and stockpiles are managed in accordance with this Fire Prevention Plan. However, the Site operates 24-hour CCTV with thermal imaging capability, enabling abnormal heat build-up or potential fire development to be identified at an early stage.

Routine daily inspections are undertaken by the MRF Supervisor to identify any signs of overheating, smoke, unusual odours, steam or other indicators of self-heating. Where concerns are identified, the affected material will be isolated, investigated and, where necessary, transferred to the designated quarantine area for further assessment and cooling.

Food waste and garden waste are removed from the Site within a maximum of 72 hours, while all other combustible wastes are managed through the Site's First In, First Out (FIFO) stock rotation procedures to minimise storage durations and reduce the potential for self-heating.

5.5 Dealing with hot weather and heating from sunlight.

During periods of elevated ambient temperatures, additional inspections of combustible waste stockpiles are undertaken to identify any signs of abnormal heating or deterioration.

Where operationally practicable, baled recyclable materials held on Site for extended periods are stored under cover or managed to reduce direct exposure to prolonged sunlight.

Thermal imaging cameras, routine inspections and effective stock rotation provide additional controls to identify any abnormal temperature increases before they develop into a fire.

5.6 Waste bale storage

Baled recyclable materials, including paper, cardboard, plastics and metals, are stored on impermeable hardstanding within the designated fibre storage area identified on the Site Layout Plan.

Bales are stacked in accordance with the Fire Prevention Plan and maintained in stable stacks not exceeding three bales in height. Appropriate separation distances are maintained to facilitate inspection, emergency access and firefighting operations.

Daily inspections of bale stacks are undertaken to confirm:

- stack stability.
- bale condition.
- compliance with maximum storage heights.
- effective stock rotation; and
- the absence of damage, overheating or deterioration.

Where necessary, bale stacks will be rearranged, dispatched or relocated under cover to maintain stability and minimise the potential for fire.

6. Manage waste storage.

6.1 Maximum waste storage volumes

Maximum waste storage volumes and locations are shown in the table below:

Table 4 Waste storage

Description	Storage Calculation				
	Length (m)	Width (m)	Height (m)	Number	Total Volume m ³
Baler Reception Bay 1	12.5	3.5	3.5	1	153 m ³
Baler Reception Bay 2	14	11.5	3	1	483 m ³
Baler Reception Bay 3	16	10.5	3	1	504 m ³
Baler Reception Bay 4	9	7	3	1	189 m ³
Plastic Bale Storage Area 1	1.5	1.1	0.75	64 ² bales	67 m ³
Steel Bale Storage	1.5	1.1	0.75	68 ³ bales	60 m ³
Aluminium Bale Storage	1.5	1.1	0.75	94 ⁴ bales	89 m ³
Carboard Bales	1.5	1.1	0.75	94 bales	89m3
Food/Green Waste Storage	Zap shelter			1	300
Green Waste Storage				1	300
Street Sweeping				1	300
WEEE Storage 5	Shipping containers/ Enclosed Skip	-	-	3	105 m ³ (35 m ³ each)
Scrap Metal Storage	Skip	-	-	3	105 m ³ (35 m ³ each)
Batteries	Enclosed Containers	1	1	10	10m ³
Aerosol cans	Drum or cage				0.003m ³ (3,000 cans)
Clean Waste wood	bay				400m3
Demolition waste – rubble and discarded debri	Skip				1,180m ³ 500 tonnes
Persistent Organic Pollutant (POPs) Waste Quarantined				1	1000m3
Fiber Bays				5	2000m3

6.2 Waste stored in containers.

A number of waste streams are stored within enclosed skips, roll-on/roll-off (RoRo) containers, sealed containers and designated storage containers to minimise the risk of fire, litter, pollution and unauthorised access.

Containerised waste streams include, but are not limited to:

- Large WEEE.
- Small WEEE.
- Scrap metal.
- Batteries.
- Waste aerosols.
- Tyres.
- Printer toner cartridges.
- Hazardous wastes accepted under the Hazardous Waste Transfer Station activity; and
- Other municipal waste streams received from Household Waste Recycling Centres (HWRCs) and Street Scene operations.

All containers are positioned on impermeable hardstanding and located within the designated storage areas shown on the Site Layout Plan. Storage capacities remain within the maximum limits specified within this Fire Prevention Plan.

Accessibility of Containers

All skips and containers are positioned to allow safe inspection, loading, unloading and emergency access.

Where appropriate, containers can be accessed through top openings, rear or side doors to facilitate routine inspections and the removal of waste. Adequate access is maintained around all container storage areas to enable emergency response and firefighting activities.

Movement of Containers During a Fire

Where it is safe to do so, skips and containers may be relocated using Site plant to prevent fire spread and improve access for the Fire and Rescue Service.

The Site maintains arrangements with local haulage contractors who can attend the Site at short notice to remove skips or containers where required during an emergency. Contractors are capable of attending the Site within approximately four hours of being contacted, subject to prevailing operational and road conditions.

Hazardous waste containers remain segregated from combustible waste streams and are stored within the designated hazardous waste storage area in accordance with the Site Environmental Management System and Fire Prevention Plan.

7. Prevent fire spreading.

7.1 Separation distances & Fire Walls

The Site has been designed to minimise the risk of fire spread through the segregation of waste streams, maintenance of fire breaks and the provision of fire-resistant separation walls.

Combustible waste streams are stored within designated storage areas to maintain a minimum separation distance of 6 metres between stockpiles and other combustible materials wherever practicable, in accordance with the Fire Prevention Plan. These separation distances provide safe access for inspection, firefighting operations and emergency vehicle movements, while reducing the potential for fire spread between waste stockpiles.

Waste storage bays are constructed using precast reinforced concrete segregation walls, providing a minimum two-hour fire resistance rating. The walls provide physical separation between waste streams, assist in containing any fire to a single storage bay and reduce the potential for fire spread to adjacent materials.

As part of this substantial variation, an additional engineering controls will be constructed at the end of the dedicated fibre storage area, as shown in Figure 2. These engineering controls provides additional protection to the largest combustible waste stockpile on the Site by limiting the potential for lateral fire spread and improving the overall fire resilience of the storage area.

The revised Site layout has been designed to improve waste segregation by providing dedicated storage areas for fibre, hazardous wastes, food waste, garden waste and road sweepings. These engineering controls, together with the maintained separation distances will form an integral part of the Site's fire prevention strategy.

The separation distances and the engineering controls have been considered alongside the maximum stockpile dimensions and firewater calculations to ensure that a fire can be contained and managed within the affected storage area.



Figure 2 Firewall located at the end of the fibre bay storage area

8. Quarantine area.

8.1 Quarantine area location and size

The Site operates a designated quarantine procedure to isolate waste that presents a fire risk, including suspected hot loads, damaged or overheating lithium-ion batteries, Persistent Organic Pollutants (POPs), incompatible wastes and any other waste requiring temporary segregation pending removal from Site.

For operational flexibility, the Site has a number of designated quarantine locations that may be utilised depending on the nature of the incident, the location of the affected waste and the operational status of the Site at the time.

The selected quarantine area will always:

- be located on an impermeable surface with a sealed drainage system.
- be positioned adjacent to an available firefighting water supply, where practicable.
- maintain appropriate separation distances from combustible waste stockpiles and buildings.
- provide safe access for Site plant and Cheshire Fire and Rescue Service; and
- remain under continuous supervision until the waste has been made safe or removed from the Site.

The quarantine area selected will be appropriate to the incident and may include the following designated locations:

- Q1 – Metal Bay Area
- Q2 – Food, Garden Waste and Road Sweepings Area

- Q3 – Bunker Storage Area
- Q4 – POPs Quarantine Area

The location selected will depend on the type of waste involved, the location of the incident, prevailing operational activities and the need to minimise the risk of fire spread. The Site Manager or Incident Controller will determine the most appropriate quarantine location during the incident.

Where practicable, the selected quarantine area will provide a capacity sufficient to isolate the affected material while maintaining safe separation distances and allowing access for firefighting operations.

8.2 Use of quarantine area in the event of a fire

In the event of a fire, hot load or other incident requiring the isolation of waste, the Site Manager/Incident Controller or MRF Supervisors will select the most appropriate designated quarantine area based on the location of the incident, the type of waste involved, prevailing Site activities and the availability of firefighting water.

The selected quarantine area will be:

- located on an impermeable surface served by a sealed drainage system.
- positioned away from combustible waste stockpiles and buildings wherever practicable.
- located adjacent to, or within easy reach of, an available firefighting water supply.
- accessible to Site plant and Cheshire Fire and Rescue Service; and
- clearly identified and controlled throughout the duration of the incident.

Where a quarantine area is brought into use, a minimum 6-metre separation distance will be maintained around the isolated waste, wherever practicable, to reduce the risk of fire spread and provide sufficient space for firefighting operations, vehicle movements and emergency access.

The quarantined waste will remain under continuous supervision and, where appropriate, be monitored using the Site's thermal imaging cameras and visual inspections until the material has been made safe or removed from the Site.

Following the incident, the quarantine area will be inspected, cleaned and returned to operational use in accordance with the Site Environmental Management System (EMS).

8.3 Procedure to remove material stored temporarily if there is a fire

The Site has several designated areas that can be used as quarantine areas in the event of a fire, hot load or other emergency requiring the isolation of waste. At least one of these areas will always be capable of being made available immediately.

Where a selected quarantine area is being used for the temporary storage of material during normal operations, that material will be relocated without delay using the loading shovel, forklift truck (FLT) or other suitable mobile plant. Material will be transferred to an alternative designated storage area to ensure the quarantine area is available for emergency use.

The Site Manager or Incident Controller will determine the most appropriate quarantine area based on the location and nature of the incident, taking into account:

- safe separation from combustible materials.
- access for site plant and Cheshire Fire and Rescue Service.
- the availability of firefighting water.
- the presence of an impermeable surface with sealed drainage; and
- the safe movement of waste without increasing the risk of fire spread.

Once the incident has concluded, quarantined material will be managed in accordance with the Site's Fire Prevention Plan and Environmental Permit, with waste either returned to storage where appropriate or removed from site to a suitably permitted facility.

Operational controls ensure that plant operators can access and clear any designated quarantine area immediately. Designated quarantine areas will not be blocked by fixed infrastructure or stored in a manner that prevents rapid clearance.

9. Detecting fires

9.1 Detection systems in use

The Site is equipped with a combination of automatic and manual fire detection systems to provide the early identification of fire and facilitate a rapid emergency response.

The principal fire detection measures include:

- 24-hour CCTV surveillance covering all operational areas of the Site.
- Thermal imaging cameras providing continuous monitoring of waste storage areas, the Materials Recovery Facility (MRF), plant parking areas and external operational areas. The thermal cameras enable the early detection of abnormal temperature increases and potential fire development, allowing prompt investigation and intervention.
- A site-wide fire alarm system incorporating manual call points positioned at strategic locations throughout the buildings.
- Automatic smoke detection within the office and welfare accommodation.
- Routine fire watch inspections undertaken by Site personnel during operational hours and as part of the end-of-shift close-down procedures.

The CCTV and thermal imaging systems are monitored 24 hours a day, enabling any fire or abnormal heating to be identified quickly and the appropriate emergency procedures to be implemented.

All fire detection equipment is routinely inspected, tested and maintained in accordance with the manufacturer's recommendations and the Site Environmental Management System (EMS). Records of testing, inspections and maintenance are retained on Site.

Any activation of the fire detection system or identification of abnormal temperatures is immediately reported to the Site management team, who will implement the emergency procedures detailed within this Fire Prevention Plan and contact the Fire and Rescue Service where appropriate.

Upon arrival, the Fire and Rescue Service can obtain the current Fire Prevention Plan, Site Layout Plan, drainage plan and emergency contact information from the Fire and Rescue Service information box located adjacent to the main Site entrance, supporting a rapid and informed emergency response.

9.2 Certification for the systems

Fire Alarm and detection systems are inspected annually by a NICEIC and BAFE qualified engineer to the standards set out in BS 5839-1 2017. All certificates are available in the Fire Logbooks on the shared drive and in the fire logbook on site.

10. Suppressing fires

10.1 Suppression systems in use

The Site incorporates a range of passive and active fire protection measures designed to minimise the likelihood of fire spread, protect occupants and support the effective response of Cheshire Fire and Rescue Service.

The principal fire protection measures include:

- Fire-resisting construction throughout the buildings, including compartmentation designed to limit the spread of fire and smoke.
- Fire dampers fitted to all ductwork passing through fire-resisting walls and floors. Dampers provide either 30-minute or 60-minute fire resistance, depending on the fire rating of the building element, in accordance with the building fire strategy.
- All service penetrations passing through fire-resisting walls, floors and ceilings are appropriately fire-stopped to maintain the required fire resistance of the compartment.
- Portable firefighting equipment is provided throughout the Site in locations agreed with the Fire Safety Officer. Fire extinguishers are installed, inspected and maintained in accordance with the relevant British Standards. Larger extinguishers within the Materials Recovery Facility (MRF) are securely mounted on mobile trolleys to facilitate rapid deployment.
- Manual fire alarm call points are installed at strategic locations throughout the Site in accordance with BS 5839-1:2017.

- Emergency escape lighting is provided throughout the buildings and is designed, installed, inspected and maintained in accordance with the relevant British Standards to ensure safe evacuation in the event of a power failure.
- Emergency escape routes, final exits and directional signage are clearly identified using compliant fire safety signage throughout the Site.
- All buildings are protected by fire alarm systems providing both audible and visual warning in the event of fire.
- Fire doors are fitted with self-closing devices to maintain fire compartmentation and limit the spread of smoke and fire.
- Thermal imaging cameras are installed at strategic locations throughout the Site, including the Materials Recovery Facility and external waste storage areas. The system provides 24-hour monitoring, enabling the early identification of abnormal heat build-up and supporting rapid intervention before a fire develops.

All fire protection systems are subject to routine inspection, testing and planned preventative maintenance in accordance with the Site Environmental Management System (EMS), relevant British Standards and manufacturers' recommendations. Records of inspections, testing and maintenance are retained within the Site Fire Logbook and the Company's electronic management system.

These passive and active fire protection measures complement the Site's operational fire prevention controls, including waste segregation, stock rotation, housekeeping, thermal monitoring, routine inspections and emergency response procedures, providing multiple layers of protection against fire occurrence and fire spread.

11. Firefighting techniques

11.1 Active firefighting

The Site is equipped with a range of active firefighting measures designed to enable the safe management of small fires during their early stages while ensuring that the safety of personnel remains the highest priority.

Employees receive training in the use of firefighting equipment, emergency procedures and evacuation arrangements. Staff are instructed that firefighting activities should only be undertaken where it is **safe to do so** and where the fire can be controlled without placing personnel at risk. Where there is any doubt, the Site will be evacuated immediately and **Cheshire Fire and Rescue Service** contacted.

The active firefighting arrangements described below are supported by routine training, emergency exercises and the Site Environmental Management System (EMS).

Fire Extinguishers

Portable fire extinguishers are strategically located throughout the Site in locations agreed with the Fire Safety Officer to ensure they are readily accessible during an emergency.

The type and location of extinguishers reflect the specific fire hazards present within each operational area.

Fire extinguishers are maintained in a visible, unobstructed condition at all times.

Weekly visual inspections are undertaken by Site personnel to confirm that extinguishers:

- remain in their designated locations.
- are free from damage;
- have intact safety seals and pins; and
- remain serviceable.

A competent contractor undertakes an annual inspection and service of all firefighting equipment in accordance with the relevant British Standards. Inspection records are retained within the Site Fire Logbook.

Fires Involving the CK Baler

In the event of a fire within the CK baler:

- Activate the **Complete Bale** function to eject the bale from the baler chamber where it is safe to do so.
- This operation simultaneously stops the conveyor system, preventing additional waste entering the baler.
- If only elevated temperatures are present and no visible flames are observed, remove the bale using Site plant to the designated quarantine area, provided it is safe to do so.
- Apply the appropriate fire extinguisher to control the fire were safe.
- Continue monitoring the bale using thermal imaging and visual inspection until there is no evidence of further heating.
- Contact Cheshire Fire and Rescue Service where the fire cannot be immediately controlled or there is any risk of escalation.

Fires in the Picking Cabin or Conveyors

Where a fire occurs within the picking cabin or conveyor system:

- Activate the emergency stop system immediately.
- Stop all waste processing operations.
- Prevent further waste entering the affected area.
- If safe to do so, use the appropriate firefighting equipment to control the fire.
- Sand buckets may be used where there is a suspected **lithium-ion battery fire**, as sand can assist in containing thermal runaway and reducing fire spread.
- Isolate the affected waste and transfer it to the designated quarantine area where appropriate.
- Notify the MRF Supervisor and implement the Site emergency procedures.

Lithium-Ion Batteries and Thermal Runaway

Lithium-ion batteries present one of the principal fire risks associated with municipal waste management activities.

Operational staff receive training to identify batteries during waste acceptance, manual sorting and inspection activities.

Where a lithium-ion battery fire is suspected:

- the affected material is isolated immediately.
- batteries are transferred to the designated quarantine area where safe to do so;
- appropriate firefighting media are used.
- the affected material remains under continuous observation following extinguishment; and
- thermal imaging cameras are used, where appropriate, to monitor for any abnormal temperature increase or signs of re-ignition.

Staff understand that batteries affected by thermal runaway may continue to generate heat after the visible fire has been extinguished and may re-ignite. Consequently, affected batteries and surrounding materials remain under observation until there is no further evidence of heat generation.

12. Water supplies

12.1 Available water supply

The Site has a dedicated firefighting water supply comprising three fire hydrants, providing water for emergency firefighting operations.

The hydrants comprise:

- One internal fire hydrant located adjacent to the refuelling area within the Site.
- Two external fire hydrants located adjacent to the Site entrance and on Dock Yard Road.

The internal hydrant is inspected, tested and serviced annually to ensure it remains fully operational. Based on available information, each hydrant is capable of delivering approximately 1,100 litres per minute.

Should the internal hydrant be unavailable or unable to provide the required flow rate or volume of water, Cheshire Fire and Rescue Service (CFRS) can utilise the two external hydrants located adjacent to the Site boundary, providing operational resilience during an emergency.

As part of the proposed variation, an additional 4,000-litre emergency water storage tank will be installed adjacent to the dedicated fibre storage area. This provides an immediate supplementary water source during the initial stages of a fire while additional firefighting resources are mobilised.

Should the hydrant system be unable to deliver the required quantity or rate of firefighting water, Cheshire Fire and Rescue Service has the option to abstract water directly from the nearby Manchester Ship Canal (MSC). Vehicular access to the canal is available at the end of Dock Yard Road, where emergency vehicles and pumping equipment can be positioned safely. Portable lift pumps can be deployed into the canal, with flexible delivery hoses routed back to the Site through the main entrance gates to provide an additional firefighting water supply if required.

The locations of the Site hydrants, emergency water storage tank and the nearest access point to the Manchester Ship Canal are shown on the Site Layout Plan and are included within the Fire and Rescue Service information box located at the Site entrance. Figure 3 identifies the location of nearby hydrants using information obtained from the RISC Authority Hydrant Register.

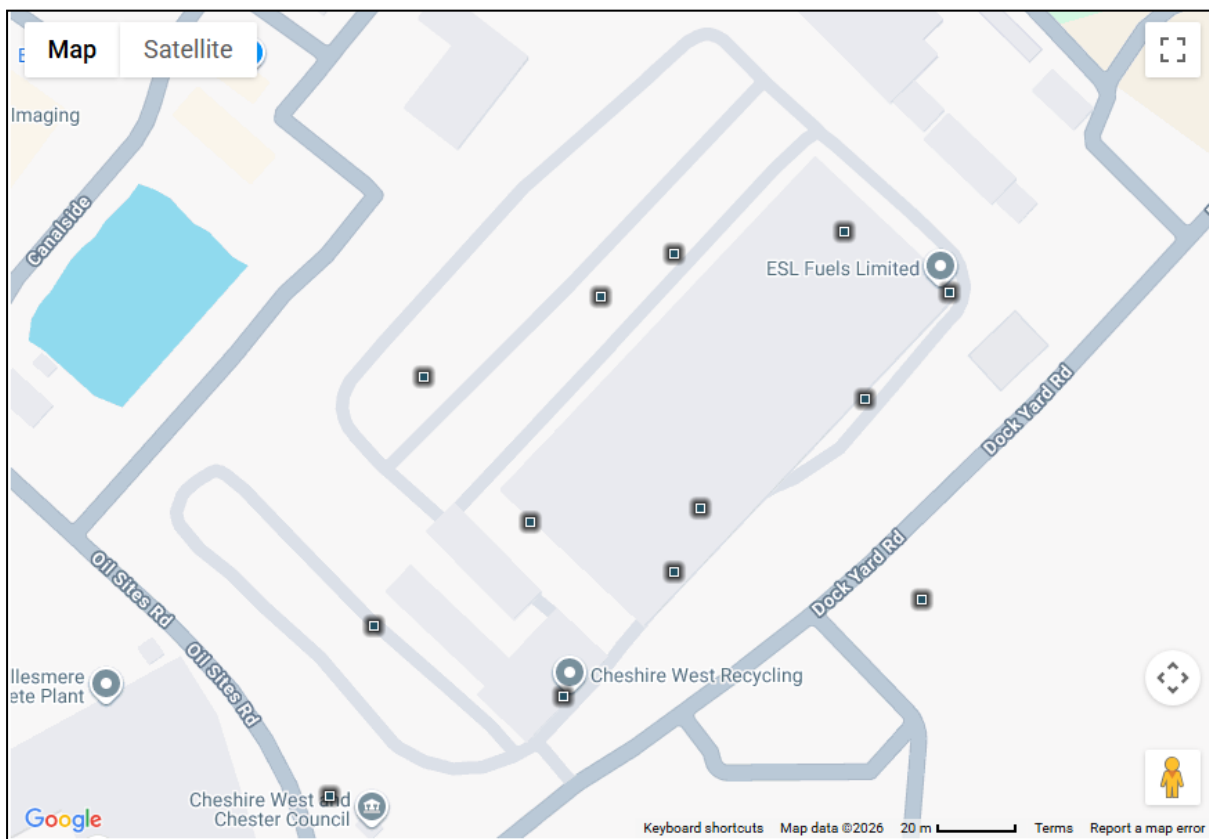


Figure 3 Location of fire hydrants near to the site

Table 5 Fire Water Calculations

Maximum Stockpile Volume (m ³)	Required Water Flow Rate (litres/minute)	Firewater Required Over 3 Hours (litres)	Available Firefighting Water Supply
504	3,360	604,800	Approx. 200,000 litres available from the on-site hydrant system and emergency water storage tank. An additional 400,000 litres is available from the external fire hydrants located within approximately 100 metres of the Site. A dedicated 4,000-litre emergency water tank is located adjacent to the fibre storage area. Should further water be required, Cheshire Fire and Rescue Service may abstract water directly from the Manchester Ship Canal via the access point at the end of Dock Yard Road.

The available firefighting water supply has been assessed against the calculated firewater demand for the maximum design fire scenario. In addition to the on-site hydrant system, the Site benefits from nearby public fire hydrants and the proximity of the Manchester Ship Canal, providing Cheshire Fire and Rescue Service with contingency water supplies should additional firefighting water be required

13. Managing fire water

13.1 Containing the run-off from fire water

The Site has been designed to contain firewater generated during firefighting activities, preventing contaminated firewater from entering the environment.

In the event of a fire, the Site Emergency Plan includes procedures to isolate the drainage system and maximise the available containment capacity.

Surface Water Drainage

Should a fire occur, the surface water drainage system will be isolated by installing a drain stopper at the designated manhole located at the north-eastern section of the Site access road. This will prevent contaminated firewater from leaving the Site via the surface water drainage network and enable firewater to be retained within the drainage system.

Foul Drainage

Foul drainage from the Site is discharged to the public sewer via a lift pump station with a maximum pumping capacity of 3.8 litres per second.

During a fire incident, the lift pump will be isolated at the designated isolation points (P1 and P2) to prevent contaminated firewater from being discharged to the sewer network. Firewater will be retained within the Site drainage system until it can be removed safely.

Following the incident, retained firewater will either:

- be removed from the Site by a licensed tanker contractor for appropriate treatment or disposal; or
- following analysis and with the prior agreement of United Utilities, be discharged to the public sewer under the terms of the Site's Trade Effluent Discharge Consent.

Primary Firewater Containment

The combined foul and surface water drainage system, including the interceptors, separators and drainage infrastructure, provides an estimated 210,000 litres of primary containment capacity. This estimate assumes the drainage system is operating at approximately 20% capacity immediately prior to a fire event.

Secondary Firewater Containment

Where additional containment capacity is required, the following contingency measures are available:

- Pre-arranged tanker support – The Site has arrangements in place with tanker contractors to provide rapid attendance during an emergency. Tankers can remove retained firewater from the drainage system to maintain available containment capacity throughout the incident.
- Storage bay containment – Waste storage bays are constructed on impermeable hardstanding and designed with falls towards the sealed drainage system. The bays provide additional temporary containment capacity, assisting in retaining firewater on Site during emergency response operations.

These measures provide additional resilience and support the containment of contaminated firewater until appropriate disposal arrangements can be implemented.

The Site drainage strategy, including the location of interceptors (INT1 and INT2), drainage isolation points, lift pump isolation points and firewater containment measures, is shown on Appendix 15 – CS Drainage Plan 2024 and forms part of the Site Emergency Response Procedures.

14. Emergency Response and Recovery

14.1 Dealing with issues during a fire

Cheshire West Recycling Ltd has developed comprehensive fire emergency procedures for the Site, detailing the actions to be taken in the event of a fire or suspected fire.

The procedures include:

- raising the fire alarm.
- notifying Cheshire Fire and Rescue Service by calling 999.
- immediate evacuation of personnel to the designated assembly point.
- accounting for all employees, contractors and visitors.
- providing the Fire and Rescue Service with access to the Fire and Rescue Service information box located at the Site entrance.
- implementing the Site Emergency Plan and Fire Prevention Plan; and
- supporting the emergency services throughout the incident.

14.2 Fire Marshals

The Site maintains a sufficient number of trained Fire Marshals to support the safe evacuation of personnel during normal operations.

During normal operating hours, a minimum of three trained Fire Marshals are available and are responsible for designated operational areas of the Site.

Outside normal depot operating hours (07:00 to 16:00), a minimum of one trained Fire Marshal will be present on Site to coordinate emergency evacuation and liaise with the emergency services until additional management personnel arrive.

Fire Marshals receive appropriate training and refresher training, with records maintained as part of the Site Environmental Management System (EMS).

14.3 Business Continuity and Contingency Planning

In the event of a significant fire, the Assistant Operations Manager will assume the role of Incident Controller and coordinate the Site's emergency response and business continuity arrangements.

Where operationally necessary, municipal waste collections will continue by diverting waste to the Company's Winsford Depot or other appropriately authorised facilities.

Contingency arrangements have also been established to accommodate the municipal collection fleet. Should access to the Site be restricted, collection vehicles may be temporarily

parked at the Canal Boat Museum car park, located at the northern end of Oil Sites Road, until normal operations can resume.

These arrangements help ensure continuity of essential waste collection services while emergency response and recovery activities are undertaken.

14.4 Communication with Neighbouring Businesses and Residents

The Site maintains an Incident Response Register containing contact details for neighbouring businesses and other relevant stakeholders.

Where a fire has the potential to affect neighbouring properties, the Operations Manager or nominated Incident Controller will notify affected parties as soon as reasonably practicable and maintain communication throughout the incident where appropriate.

The Environment Agency, Cheshire Fire and Rescue Service, United Utilities and any other relevant regulatory authorities will also be notified where required by legislation or permit conditions.

14.5 Recovery and Decontamination Following a Fire

Following the successful extinguishment of a fire, recovery activities will be undertaken in a controlled manner to protect human health and the environment.

Recovery activities include:

- assessing and sampling retained firewater where required.
- arranging removal of contaminated firewater by licensed tanker or disposal in accordance with the Trade Effluent Discharge Consent following agreement with United Utilities.
- removing fire-damaged waste and debris for recovery or disposal at appropriately permitted facilities.
- inspecting all remaining waste to identify any damage or ongoing fire risk.
- inspecting, cleaning and, where necessary, repairing the Site drainage system, interceptors and associated infrastructure;
- inspecting buildings, plant and equipment for structural damage before reuse; and
- recording the incident and any corrective actions within the Site Environmental Management System.

14.6 Returning the Site to Normal Operation

The Site will only recommence operations once it is satisfied that it can do so safely and without risk to the environment.

Prior to recommencing operations:

- Cheshire Fire and Rescue Service must confirm that the incident has concluded, and the Site is safe to re-enter.
- Any requirements of the Environment Agency or other regulatory authorities will be addressed.
- Fire detection, alarm and firefighting equipment will be inspected, tested and reinstated where necessary.
- Drainage systems, interceptors, separators and pollution prevention measures will be inspected and confirmed operational.
- Damaged infrastructure will be repaired or replaced.
- A full investigation into the cause of the fire will be undertaken.
- Lessons learned will be incorporated into the Fire Prevention Plan, Environmental Management System and associated operational procedures.
- Any additional fire prevention or pollution prevention measures identified through the investigation will be implemented before operations recommence.

14.7 Review of the Fire Prevention Plan

This Fire Prevention Plan is a live management document and will be reviewed:

- following any fire or significant incident.
- following emergency exercises or fire drills.
- following significant changes to Site activities, infrastructure or waste types.
- following changes to relevant legislation or Environment Agency guidance; and
- at least annually as part of the Site Environmental Management System review.

Any amendments will be communicated to employees, and updated copies will be placed within the Fire and Rescue Service information box, retained electronically within the Company's management system and issued to relevant personnel.

Appendix 1

Fire Emergency Evacuation Plan and Fire Procedure

1. Fire Emergency Evacuation Plan

1.1 Action on discovering a fire

On discovering a fire, it is the duty of every person to sound the nearest fire alarm immediately. This is done by pressing the call points or breaking glass (where indicated) using the call points located strategic points around each building.

1.2 Action on hearing the fire alarm

On hearing the emergency alarm all personnel must evacuate the site buildings immediately (do not go back and collect personal belongings) and go to the nominated assembly point in the staff car park at the front of the main depot building. Anyone with visitors of any kind should accompany the visitors to the assembly point.

Mobile Plant/Vehicles must be left safely parked with handbrake on and keys in ignition. If it is safe to do so switch off any plant and equipment as you leave the building. You should not take any risks and remember that the priority is to evacuate the area.

Remain at your assembly point until you have been advised that it is safe/necessary to move. The Fire Marshal will carry out a roll call of all persons on site. Please ensure you are accounted for.

DO NOT leave the site until you have been told that you may do so.

1.3 Fire Marshals & Incident Controllers:

On being informed of the discovery of an emergency, the Fire Marshals (FM) should:

- Put the FM bibs for each evacuation area. During normal operational hours the Operations Manager (or Assistant will act as Incident Controller (IC)) outside of main depot hours one fire marshal will assume this role. (See Evacuation zones below).
- Evacuation will be carried out in Zones with the Zone where the fire has been detected being evacuated first. The IC should decide if other parts of the site require evacuation and instruct this to be done.
- Fire marshals for each will communicate with each other through the Incident Controller
- Fire Marshals should ensure that their area is clear of people before leaving themselves.

The Incident Controller is responsible for ensuring the emergency services have been contacted where required. This is done by dialling 999 and clearly stating the location and type of the emergency. The IC may delegate this. The procedure is:

- i) Dial 999
- ii) Give the operator your telephone number and ask for the Fire Service
- i) When the Fire Service operator replies, state distinctly: -

“FIRE AT....

Cheshire West Recycling Ltd Canalside Operations Hub Dock Yard Road

Ellesmere Port Cheshire CH65 4EF

What 3 Words: fired.onions.rock”

DO NOT replace receiver until the Fire Service operator has repeated the address.

- FM/ICs are responsible for running the Evacuation Report via the Sign in app to conduct headcount at the assembly point. The single aim of this being able to inform the emergency services if anyone may still be in danger in the emergency and require rescue.
- The IC is responsible for meeting the emergency services and directing them to and informing them of the emergency, persons requiring rescue, hazards and local conditions. They must provide this plan, and other relevant information to the FRS once on site. This plan is available in the Battle Boxes (located in the main site office, in the Sub-station and in the Fire Logbook Box)
- The IC will then follow the procedures on the Business Continuity Plan and the Incident Control Manager will be advised.

Once on site, the emergency services will take control of the emergency to bring the situation under control with the assistance of site personnel.

Where required fire marshals will isolate the foul sewer by using the cut-off switch in P1 and P2. If required use sandbags to block surface water drain at MH1.

On discovering a fire, dependent on the circumstances and where it is safe to do so fire marshals may isolate the electricity at the main point in each building.

Once the emergency is under control the emergency services will give the IC the all clear. The IC should then inform the evacuated personnel to return to work.

1.4 Evacuation Zones

Due to the size and layout of the site the emergency arrangements are designed to allow people who are not at immediate risk from a fire to delay starting their evacuation. The evacuation will be carried out initially by evacuating only the Zone closest to the fire and warning other people to stand by. The rest of the site are then evacuated if it is necessary to do so. During main depot hours each zone will have a designated fire marshal, out of hours zones will be combined, refer to Figure 4.



Figure 4 Canalside Evacuation Zones

1.5 The duties and responsibilities of Fire Marshals

Fire marshals have the responsibility of maintaining a high standard of fire precautions and the overall responsibility for the action in the event of fire. There will be always a designated fire marshal (or deputy) on site.

Fire Wardens/Marshals are responsible for:-

- Fire routine and evacuation drill procedure
- Ensuring personnel know location of fire alarm points
- Ensuring regular use of primary and secondary escape routes
- The close-down procedure
- Using and managing the Sign In app and running the evacuation report.
- The HSEQ supervisor will be made responsible for ensuring that notices are correctly sited, the fire emergency evacuation plan is properly distributed and understood by all.

1.6 Assembly points and Sign In app

Personnel should assemble at the assembly point in the staff car park opposite the main hub building. All CWR staff and visitors must sign in using the 'Sign In app'. The IC will be responsible for running the evaluation report and marking off all staff on the report.

2. Training and Drills

Cheshire West Recycling Ltd recognises that effective training is fundamental to the successful implementation of this Fire Prevention Plan.

All employees, contractors and agency staff receive fire safety information and instruction as part of their Site induction. This includes:

- the Site Fire Prevention Plan.
- emergency procedures.
- fire alarm arrangements.
- evacuation routes and assembly points.
- use of firefighting equipment (where appropriate);
- identification of fire hazards, including lithium-ion batteries and hot loads; and
- individual responsibilities during an emergency.

Refresher training is provided annually and whenever significant changes are made to Site operations, infrastructure or the Fire Prevention Plan.

Emergency evacuation drills are undertaken at least every six months to test the effectiveness of the Site's emergency procedures. Exercises are designed to simulate a range of fire scenarios and, where practicable, use different evacuation routes to ensure staff remain familiar with alternative means of escape should the primary route be unavailable.

Following each exercise, a formal debrief is undertaken to identify lessons learned, corrective actions and opportunities for continual improvement. Records of all training, drills and emergency exercises are retained as part of the Site Environmental Management System (EMS).

3. Personal Emergency Evacuation Plan (PEEP)

Cheshire West Recycling Ltd is committed to ensuring that all persons can evacuate the Site safely in the event of an emergency.

Any employee, contractor or visitor requiring additional assistance during an evacuation will be assessed through the completion of a Personal Emergency Evacuation Plan (PEEP).

The PEEP will identify any specific assistance required, allocate responsibilities where appropriate and ensure suitable arrangements are in place to facilitate a safe evacuation. PEEPs will be reviewed periodically and whenever there is a significant change in an individual's requirements or Site operations.

4. Liaison with emergency services

Cheshire West Recycling Ltd maintains ongoing liaison with Cheshire Fire and Rescue Service (CFRS) to support effective emergency planning and response.

A copy of this Fire Prevention Plan, together with the Site Layout Plan, drainage plan and other relevant emergency information, will be made available to Cheshire Fire and Rescue Service. Key emergency information is also held within the Fire and Rescue Service information box located adjacent to the main Site entrance.

Where appropriate, Cheshire Fire and Rescue Service may be invited to undertake familiarisation visits to the Site to review access arrangements, fire hydrant locations, waste storage areas, drainage controls and firefighting water supplies.

The Fire Prevention Plan will be updated following any significant changes to Site operations or infrastructure, and revised copies will be made available to the Fire and Rescue Service where appropriate.

5. Shared Workplace

The Canalside Operations Hub is a shared workplace occupied by Cheshire West Recycling Ltd (CWR) and Cheshire West and Chester Council (CWaC) Street Care. Both organisations cooperate to ensure fire safety arrangements are coordinated across the Site in accordance with the Regulatory Reform (Fire Safety) Order 2005.

Site Fire Risk Assessment

A Site-wide Fire Risk Assessment has been completed, considering the activities undertaken by both organisations and the associated fire hazards.

The Fire Risk Assessment is coordinated by Equans, Cheshire West and Chester Council's Facilities Management provider, in consultation with both CWR and CWaC. The findings are used to develop and maintain a coordinated fire safety strategy for the shared workplace.

Fire Marshals and Emergency Evacuation

Cheshire West Recycling Ltd is responsible for coordinating the Site evacuation.

A minimum number of trained Fire Marshals are maintained on Site in accordance with this Fire Prevention Plan. During an evacuation, CWR Fire Marshals undertake a full sweep of the operational areas to ensure that all personnel have evacuated safely.

Although CWaC personnel receive fire safety training, CWR Fire Marshals coordinate the overall evacuation due to varying occupancy levels associated with hybrid working arrangements.

The designated evacuation procedures, assembly point and emergency arrangements have been agreed between both organisations and are communicated through the Site induction process.

All employees, contractors and visitors are required to complete the Site induction before commencing work on the Site.

Controlled Access Areas

The Cheshire West and Chester Council operational footprint comprises:

- office accommodation.
- small vehicle workshop; and
- stores area.

The workshop and stores operate under controlled access arrangements.

The mechanic and store person are responsible for checking their respective work areas during evacuation. Where these personnel are absent, the areas remain secured, and access is restricted to authorised managers only.

Fire Safety Responsibilities

Under the terms of the Site lease agreement, Cheshire West Recycling Ltd is responsible for:

- weekly fire alarm testing.
- routine inspection of firefighting equipment.
- maintenance of fire safety records.
- coordination of emergency evacuation procedures.
- six-monthly fire drills.
- maintenance of the Fire Prevention Plan; and
- liaison with Cheshire Fire and Rescue Service.

Records of inspections, testing and maintenance are retained within the Site Fire Logbook and the Company's electronic management system.

Fire Drills

Joint emergency evacuation drills are undertaken at least every six months and include participation from both CWR and CWaC personnel.

The effectiveness of each exercise is reviewed following completion, with any lessons learned incorporated into the Fire Prevention Plan and Environmental Management System.

Personnel Accountability

Due to Cheshire West and Chester Council's hybrid working arrangements, CWaC employees do not operate the same sign-in and sign-out procedure as CWR employees.

During an emergency, physical evacuation sweeps undertaken by CWR Fire Marshals are used to confirm that CWaC personnel have safely evacuated the buildings and operational areas.

CWR employees are accounted for using the Company's normal emergency roll-call procedures at the designated assembly point.

Communication and Coordination

Cheshire West Recycling Ltd and Cheshire West and Chester Council maintain regular communication regarding fire safety and emergency planning.

A monthly depot working group is held to discuss shared health and safety matters, including fire safety, emergency planning, lessons learned, operational changes and any improvements required to maintain effective fire prevention arrangements across the shared workplace.

Appendix 2 - INCIDENT RESPONSE REGISTER

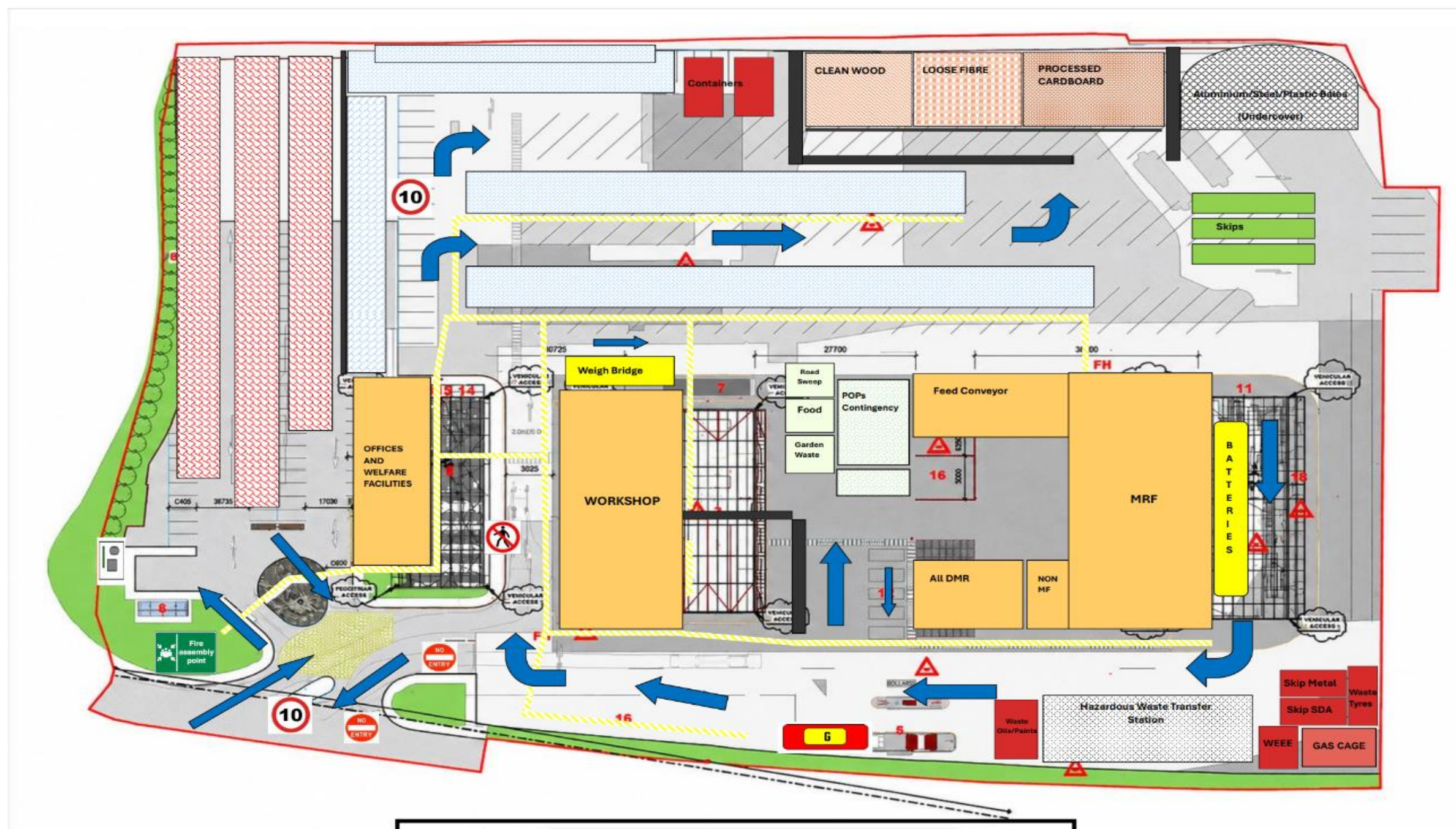
Site Details
Company Name: Cheshire West Recycling (CWR)
Depot Name: Canalside Operations Hub
Address: Dock Yard Road, Ellesmere Port CH65 4EF
Grid Reference: SJ 40950 76883
What 3 Words: fired.onions.rock
Nearest A&E: The Countess Of Chester Hospital, Chester CH2 1HJ (Tel: 01244 365000)

Emergency Contact Details		
Emergency Services	Fire/Police/Ambulance	999
Out of hours contact	CWaC	07747476233
Emergency Contact 1	Steve Irwin	07961330767
Emergency Contact 2	Edwin Ashley	07961321493
Water Supplier	United Utilities	https://www.unitedutilities.com/emergencies/
CWR HSEQ Manager	Louise Burns	07903325374
CWR HSEQ Supervisor	John Lockett	07275714433
Spillage Response Contact	SafetyKleen	01909 519 300
Fuel Tank Contact	Fueltek	01254 495763
Pump station1 (carpark)	H2O Flow Tech Ltd	0161 8831777 / 07895425553
Pump station2 (Weighbridge)	CSG	01622885847/01489782232
DHCESL Fuels (neighbouring site)	Dane Hinsley	07523950979

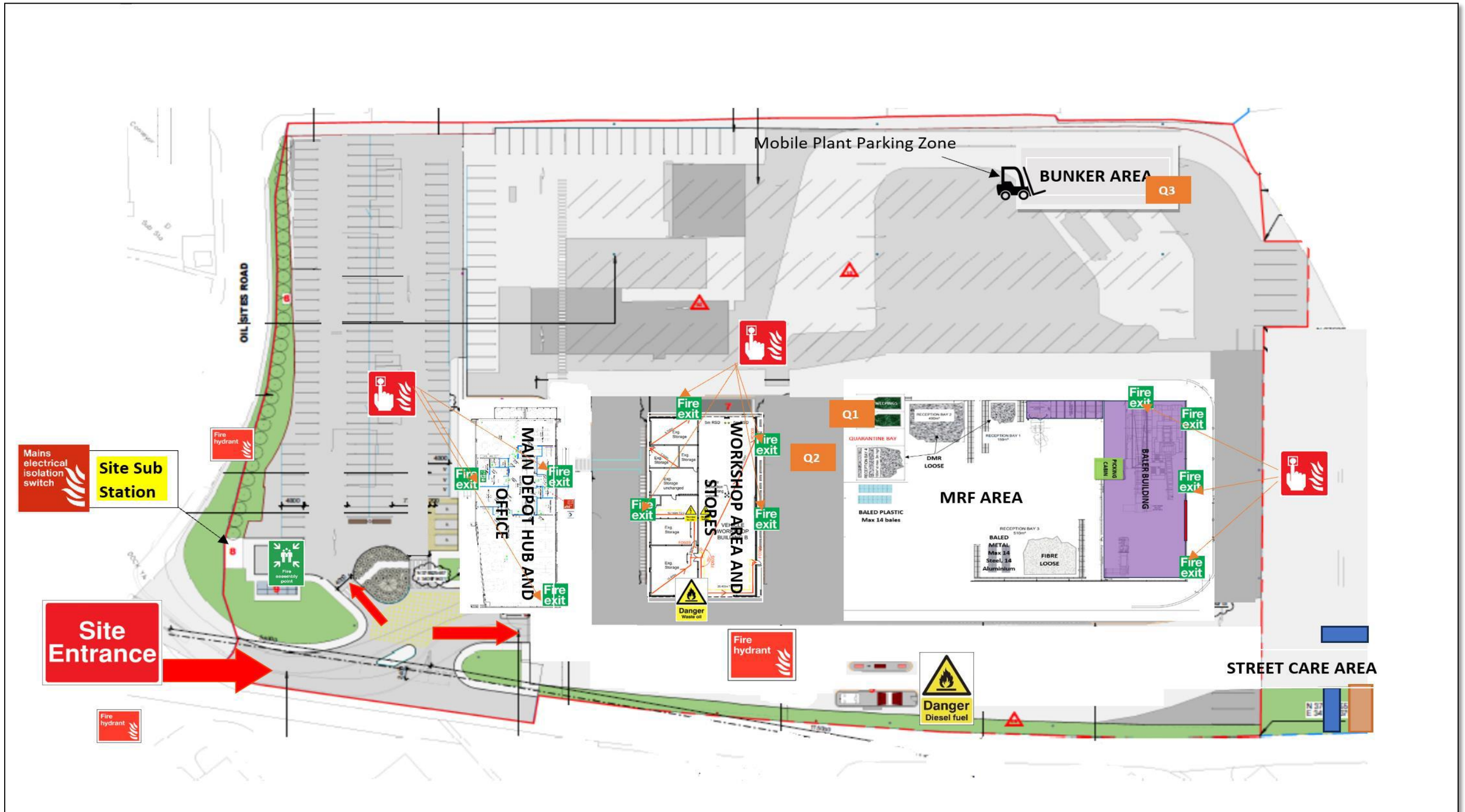
Fire Marshals	
Lee Royle, Adam Griffiths, Mark Rutter Martin Andrews John Lockett	Depot Fire Marshals
Edwin Ashley, Dean Postles, Dave Thornton Jason Schott	MRF Fire Marshals
Dan Burns Ben Eyre-Jones	Workshop Fire Marshal

Appendix 3 - Site Plans

Site Layout Plan

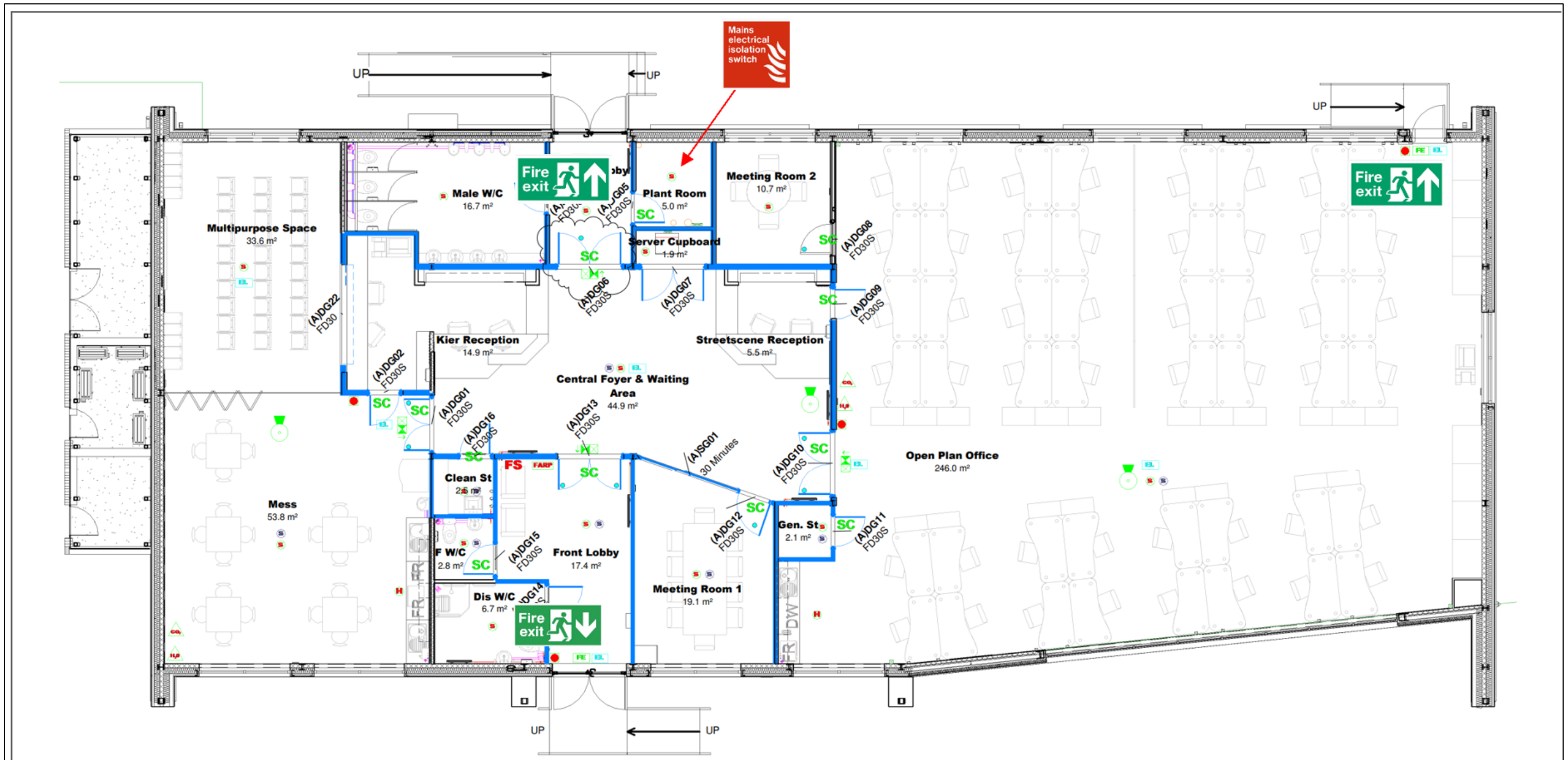


Site Access and Fire Fighting Equipment

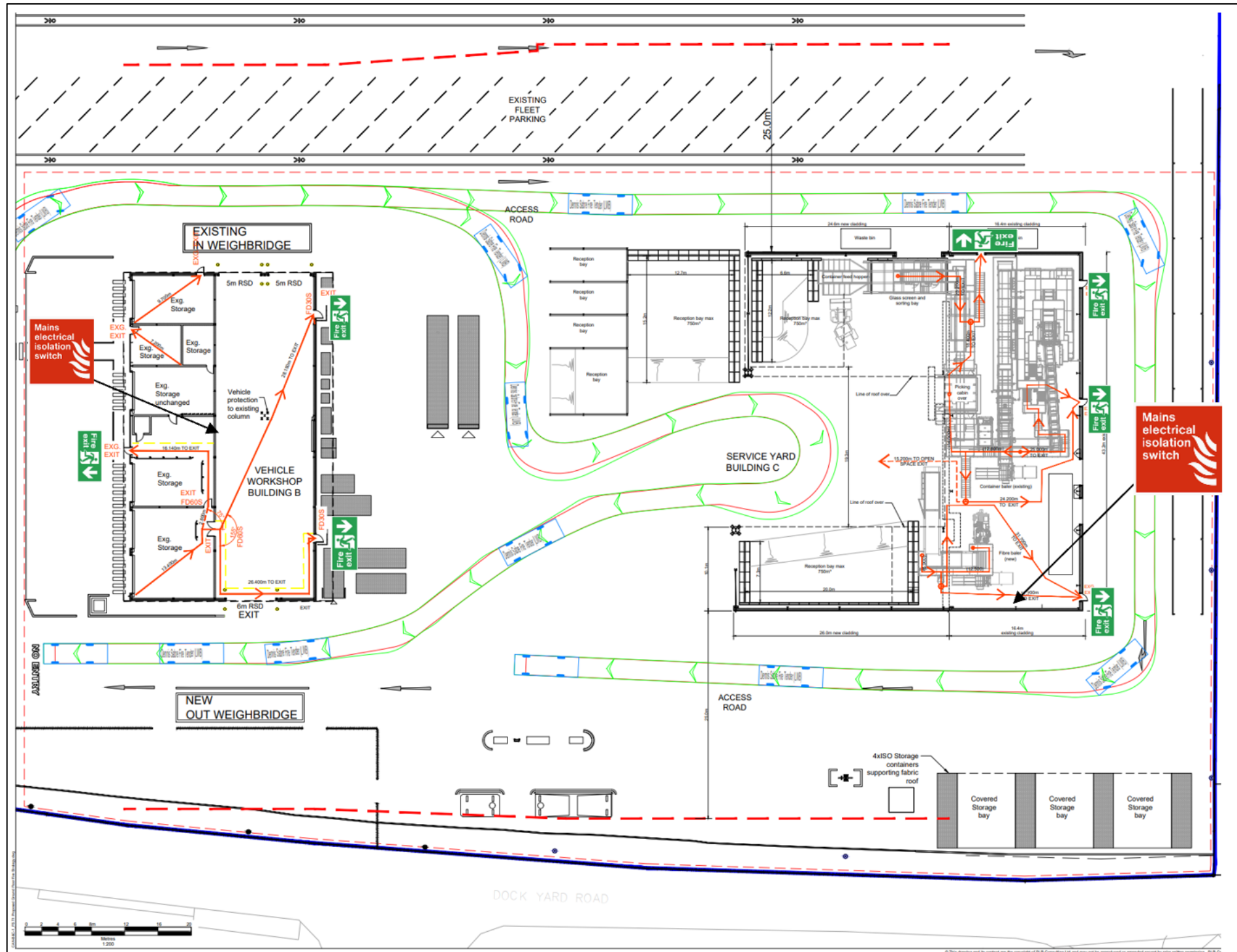


MRF Area

Main Depot Hub Building Layout



Workshop and MRF Evacuation Strategy Plan



Sensitive Receptor Plan

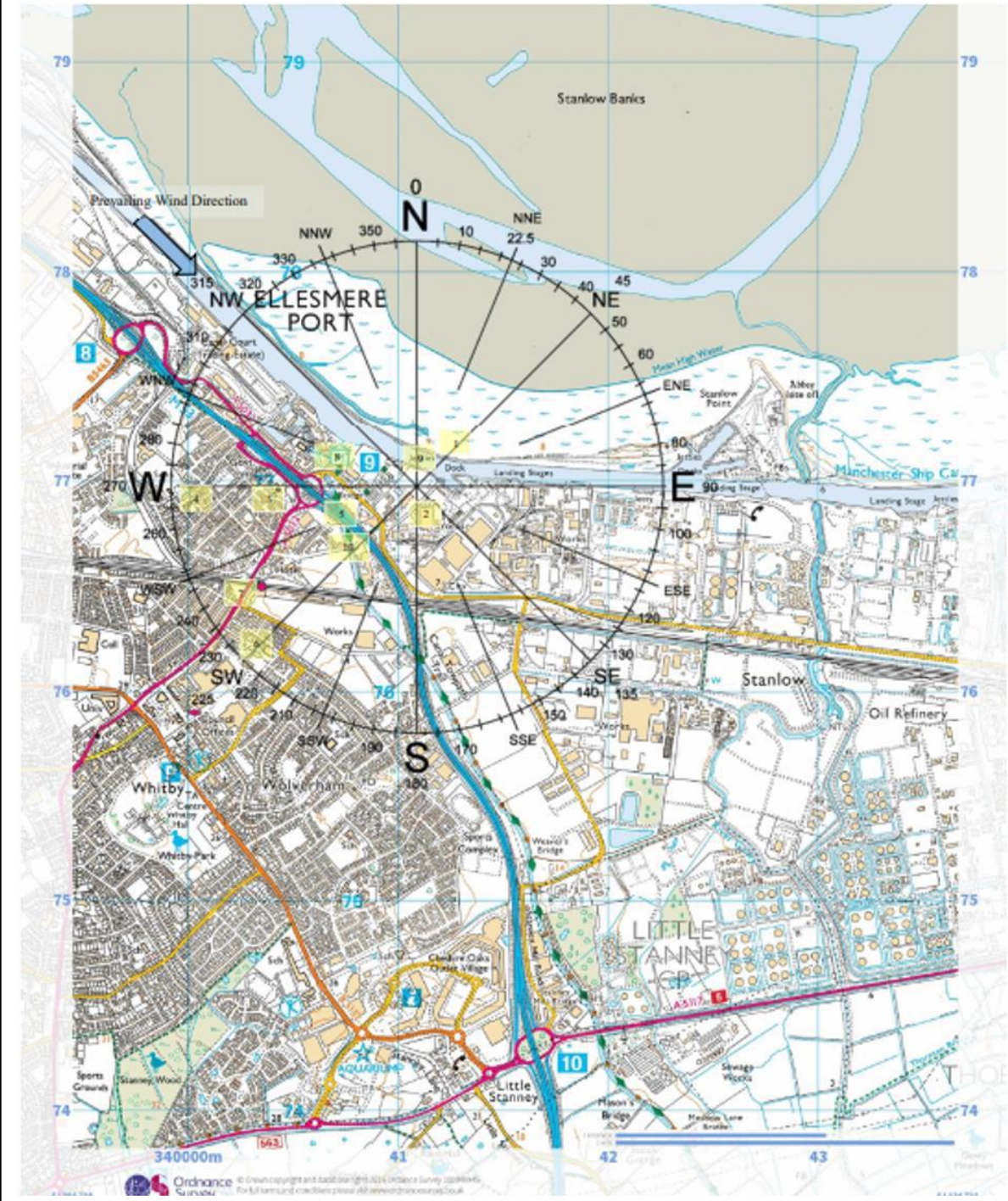


Table 1: Sensitive Receptors

Ref	Nearest Receptors	Type	Distance from Site (m)	Direction from site
1	Mersey Estuary	SSSI	112	NNW to ENE
2	Business & Industrial Units around Dockyard Road	Workplace	50	E to S
3	Residential area around King Street	Residential	600	W to WSW
4	Westminster Community Primary	School	1km	W
5	M53	Highway	220	S
6	Residential Estate off Princess Rd	Residential	950	SW
7	Ellesmere Port Train Station	Transport	800	WSW
8	Waterway Museum & Holiday Inn	Amenity	460	WNW
9	Manchester Ship Canal	Watercourse	50	N
10	Pipeline Canal	Watercourse	250	S to W

Table 2: Sensitive Receptors Assessment

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	Overall Risk
Fires	1	Air	Site Management and monitoring procedures (See FPP) Staff training Fire detection and protection systems and emergency procedures.	Low due to prevailing wind and use	Pollution to air and dust.	Not Significant
	2			Medium - due to proximity and prevailing wind direction	Pollution to air and dust	
	3			Low due to prevailing wind and distance	Pollution to air and dust	
	4			Low due to prevailing wind and distance	Pollution to air and dust	
	5			Low due to prevailing wind direction	Smoke and reduced visibility	
	6			Very unlikely – distance and prevailing wind direction	Pollution to air and dust	
	7			Very unlikely – distance and prevailing wind direction	Pollution to air and dust	
	8			Very unlikely – distance and prevailing wind direction	Pollution to air and dust	
Fire water contain ment	9 & 10	Surface run off, leaching	Site Management Procedures (FPP) Impermeable pad and contained drainage system	Unlikely – due to use	Pollution to air and dust	Not Significant
	9			Low – low risk from materials / quantities with high nutrients / contaminants	Pollution of surface water	
	10	Surface run off, leaching		Low – distance & low risk from materials / quantities with high nutrients / contaminants	Pollution of surface water	

Site Drainage Plan



Windrose for the Site

The prevailing wind direction across the site is from the south east as shown below.

[Ellesmere Port Wind Forecast, Cheshire CH65 4 - WillyWeather](#)

