Hayes Transfer Station

Fire Prevention Plan

February 2024

Recycling and recovery UK
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Document Details

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Document Review History

Date	Description	Summary of Changes
November 2022	Version 1.0	Fire Prevention Plan produced following fire incident at site
February 2024	Version 1.1	Revised FPP produced following redevelopment of site

Contents

Appendices

Figures

No.	Drawing	Reference
1	Site Receptor Plan	Rbl-REC-0918-01
2	Site Layout Plan	Rbl-PLN-0224-01
3	Emergency Plan	Rbl-EME-0224-01
4	Drainage Plan	Rbl-DRN-0224-01

1 INTRODUCTION

1.1 This document details the Fire Prevention Plan for Hayes Transfer Station (the site) located at Rigby Lane, Hayes, Middlesex, UB3 1ET at National Grid Reference (NGR) TQ 08240 79769 (what3words – having.grin.energy). The site location and permit boundary are presented in Figure 1.

1.2 The site is permitted as a Transfer Station (TS) with physical treatment, with an annual waste acceptance limit of 375,950 tonnes.

1.3 The main site activity will be the acceptance of mixed municipal waste, industrial and commercial waste and municipal bulky waste for processing and sorting to produce recyclable fractions and refuse derived fuel (RDF).

1.4 Other activities will include the acceptance of single-stream recyclable wastes for bulking and transfer.

1.5 Most waste materials are tipped in the main transfer building. External bays are in place for storage of waste wood and waste glass, and metals are stored within RORO containers externally. Different waste streams are segregated within the building within concrete bays which will act as fire breaks.

1.6 The site also operates as a vehicle collection depot, with a fleet of waste collection vehicles based at the facility. Associated refuelling facilities are located on site.

1.7 A Fire Risk Assessment covering the operations will be undertaken and in place prior to the proposed activities commencing. It will also be reviewed at regular intervals not exceeding 12 months. The Fire Risk Assessment is included within the SUEZ electronic Risk Assessment database and a hard copy kept on site; however, the electronic version should always be referred to in the first instance.

1.8 An appropriate person will review this Fire Prevention Plan at regular intervals and on at least an annual basis, following any of the events below:

- testing of the plan to ensure the plan works and staff understand the procedures to be undertaken to prevent a fire occurring and the procedure to be undertaken in the event of a fire
- an incident
- change in legislation or formal guidance
- prior to a change in activity on site.

1.9 In addition, the requirements of the Fire Prevention Plan will be communicated to site operational staff on at least an annual basis via toolbox talks. Yearly refresher toolbox talks will ensure that the requirements of the Fire Prevention Plan are reinforced.

2 RISK OF FIRE

2.1 Assessing the Risk of Fire

2.1.1 The risk assessment to identify potential events or failures that may lead to an environmental impact as a result of a waste related fire is included in the Environmental Risk Assessment (document reference 1.1). The risk assessment provides details of the following: the hazard, the pathways and receptors, the probability of occurrence, the consequences or impacts and the measures that will be taken to manage the risk, and an evaluation of the mitigated risk.

2.1.2 Further detail on the hazard, in terms of the materials that will be received stored and/or treated on the site, the volumes of materials received, and the potential causes of fires are discussed further in this section of the Fire Prevention Plan. The sensitive receptors and the consequence of a fire on those receptors are also discussed below.

2.2 Combustible Materials on Site

2.2.1 The combustible materials that may be received at the site are as follows:

- General residual waste
- Bulky waste (including POPs)
- Paper
- Cardboard
- Plasterboard
- Wood
- Glass
- Metal
- Dry mixed recyclables
- Batteries
- Gas cylinders

2.2.2 In addition, the facility will produce refuse derived fuel (RDF) and trommel fines.

2.3 Waste Storage and Hazardous Materials Storage

2.3.1 Managing waste storage is a key factor, not only in preventing fires, but in mitigating the impact, should a fire break out.

2.3.2 Appendix A details the volume, storage time and storage method where relevant for each waste type across the site. All maximum storage volumes have been calculated using 75% of the maximum storage volume of the bay (using depth, height, and width dimensions) to account for the nature of the material stored and the pile properties.

Waste Storage

2.3.3 The majority of the waste transfer activity will be undertaken inside the Transfer Station building. Wastes will be accepted and stored inside the building with the exception of gas canisters, batteries, wood, glass and metal which are stored outside as identified on Figure 2.

2.3.4 An indicative site layout plan showing the proposed waste storage areas is provided in Figure 2.

2.3.5 Further detail relating to the volume, storage time and storage method of each waste type is provided in Appendix A.

Hazardous Materials Storage

2.3.6 Oils and chemicals required for mobile plant use and maintenance are stored inside the storage container.

2.3.7 Emptied gas cylinders are stored in a caged area. The indicative location of the caged area is provided in Figure 2. Batteries are stored in a battery box, also identified on Figure 2.

2.3.8 Non waste fuel is stored in a static tank located at the front of the site adjacent to the main access gate.

2.3.9 No additional hazardous materials will be stored within the site.

2.4 Causes of Fire

2.4.1 The potential causes of fire on the site have been considered and include the following:

- arson or vandalism
- self-combustion of received and processed waste materials (e.g. chemical oxidation, microbial decomposition)
    - Cooking appliances in the welfare facilities
    - electrical faults
    - discarded smoking materials
    - naked lights
    - hot works, e.g. welding, cutting (will be included within contractor's risk assessments as this type of work is not undertaken by site staff)
    - fuel deliveries and refuelling plant
    - build-up of dusts
    - Neighbouring site activity
    - Mechanical heat from sparks and friction
    - Plant and equipment failure
    - Hot exhausts
    - Incompatible wastes

- Ignited material received on site.

2.4.2 Any of the causes detailed above has the potential to ignite waste materials on site. The consequences of a fire are discussed below with mitigation measures detailed in a further section.

2.5 Impacts of a Fire

2.5.1 The effects of a fire may be both immediate and long term. The potential impacts of a fire have been considered and are summarized below:

- Fire water run-off transporting pollutants to surface water and groundwater
- nuisance from smoke, odour and particulates
- threat to life and property
- transport disruption resulting from road and rail closures
- creation of hazardous waste by the fire and impacts of firefighting
- detriment of local amenity
- thermal radiation harming nearby properties and residents leading to fire spread
- explosions and projectiles harming sensitive receptors and spreading the fire to unaffected areas

2.5.2 The management actions to mitigate the impact of a fire on sensitive receptors are detailed in Section 3 and 4 of this Fire Prevention Plan.

2.6 Sensitive Receptors

2.6.1 Sensitive receptors within 1km of the site that may potentially be at risk from a fire have been identified within Table 1 and are shown in Figure 1.

Table 1 – Hayes TS Sensitive Receptors

No.	Receptor	Category	Distance (m)	Direction from site
1	Grand Union Canal	Surface water	50m	North
2	Industrial Units	Industrial/commercial	10-700m	East
3	Industrial Units	Industrial/commercial	10-400m	West
4	Industrial Units	Industrial/commercial	100m	North
5	Industrial Units	Industrial/commercial	100m	South-West

6	Residential	Residential	100-900m	South to southwest
7	Railway Line	Railway infrastructure	30m	South
8	Recreation Ground	Recreational	600m	Southwest
9	Cemetery	Public space	900m	South
10	Residential	Residential	600m	West
11	Golf Club	Recreational	700m	North
12	Supermarket	Commercial	1000m	East
13	School	Educational	900m	South/southeast
14	Stockley Road	Residential	500m	West
15	Groundwater	Groundwater	-	Beneath site

2.7 Wind Direction

2.7.1 Data obtained from Heathrow airport shows that the prevailing wind direction is from the south west.

3 PREVENTATIVE MEASURES

3.1 SUEZ Policies and Procedures

3.1.1 SUEZ's Integrated Management System relating to Emergency Preparedness and Response will be followed in the event of a fire or explosion.

3.1.2 In addition the following policies and procedures, as detailed in the IMS, are also relevant:

- Accident Investigation and Reporting
- Site Inspection, Audit and Reporting
- Managing Non-Conformance, Corrective & Preventive Action
- Control of Records
- Audits
- Duty of Care
- Surface Water Management
- Oil and Fuel Storage

3.1.3 One of the principle objectives of the IMS is to ensure the efficient and safe operation of the site through the implementation of procedures that ensure defined staff roles and responsibilities supported by provision of appropriate training.

3.1.4 Key procedures that apply to all SUEZ sites include training all staff, contractors and visitors in correct health and safety and fire prevention procedures and the implementation of a regular maintenance and inspection programme for all areas of site and equipment to ensure good housekeeping and effective operation of machinery.

3.1.5 All site staff along with site visitors and contractors are required to wear appropriate Personal Protective Equipment.

3.2 Site Procedures to Prevent Fires

Arson

3.2.1 Site security to prevent arson includes security fencing and monitored CCTV. CCTV monitoring systems are installed in various strategic locations inside and around the site. The TS security gate is kept locked outside of operational hours, preventing unauthorised access.

Plant and equipment

3.2.2 Faults within a vehicle or item of plant have potential to cause fire so a regular plant and machinery preventative maintenance programme is in place to identify and remedy potential issues at an early stage.

3.2.3 All machinery/equipment is subject to routine cleaning, servicing in line with manufacturers guidance and daily checks/defect reporting. The daily check includes identification of leaks.

3.2.4 All site diesel vehicles are fitted with fire extinguishers and dust filters. Vehicles will have high level exhausts fitted.

3.2.5 All vehicles and plant will be parked externally out of hours, at least 6m from combustible waste.

3.2.6 The use of rubber strips on equipment featuring steel buckets, loading arms or grabs will be considered where appropriate to prevent sparks being generated when steel comes into contact with concrete.

3.1.6 Mobile plant will be maintained in accordance with the Mobile Plant procedures as outlined in the SUEZ IMS. This includes daily vehicle pre-use inspection checks, reporting of all defects to site management and regular clearing of detritus from around the machine. The machine will be subject to regular service inspections in accordance with manufacturer's recommendations which will include maintenance of the exhaust and cleaning if required. Daily inspections of the exhaust will check for blockages or excess build-up of material.

3.2.7 All plant and machinery will have a fire suppression system using a twin agent with engine isolation and in cab fire extinguisher (where relevant).

Electrical Equipment

3.2.8 All portable items of electrical equipment are listed in a register and tested by a competent person at least annually. Items must not be connected to the electrical supply that cannot be shown to have been tested within the previous 12 months.

3.2.9 Fixed electrical installations are installed, inspected, tested and maintained by a suitably trained and qualified persons. Contractors undertaking the work must be enrolled on the National Inspection Council for Electrical Installation Contacting (NICEIC) register of Approved Contractors or similar contractor from SUEZ Approved supplier list. Inspection and testing shall be carried out at minimum periods of three years, or following:

- any substantial alteration to the electrical installation,
- any incident that might have cause damage to the electrical installation
- At periods stipulated by an approved contactor issuing a test report

3.2.10 Following every inspection and testing, defects should be rectified as soon as reasonable practicable.

3.2.11 In addition, fixed electrical equipment will only be installed if it is fit for purpose and compatible with the electrical installation and its capacity. All fixed electrical equipment will be used, inspected, tested and serviced in line with manufacturers' recommendations.

3.2.12 Electrical sockets must not be overloaded.

Discarded smoking materials

3.2.13 No wastes will be burned within the boundaries of the site.

3.2.14 Smoking on site is only permitted in the site designated smoking areas that will be located at strategic location during the development.

Hot works

3.2.15 Contractors required to undertake hot works will be required to provide risk assessments and follow approved safe working procedures. Any hot works will be subject to the Permit to Work procedure and will be adequately supervised. In the event of hot works on site the initial fire watch will be undertaken two hours after hot works have been completed. Following the completion of hot works, the end of the day fire watch will pay particular attention to the area where hot works were undertaken.

Industrial heaters

3.2.16 No industrial heaters will be used on site.

Hot exhausts

3.2.17 SUEZ employees are constantly present within the site during operational hours and so a fire watch will be ongoing during the working day. A fire watch will be implemented at the end of the working day to reduce the risk of combustion as dust can settle onto hot exhaust and engine parts.

3.2.18 The fire watch is a visual check to detect any signs of fire in particular caused by dust settling on hot exhausts and engine/machinery parts.

Ignition sources

3.2.19 Any sources of ignition including for example heating pipes, naked flames, light bulbs, spaces heaters etc. will be kept 6 metres away or will be separated by a fire wall from any combustible and flammable waste on site.

Leaks and spillages of oils and fuels

3.2.20 All machinery/equipment is subject to routine cleaning, servicing in line with manufacturers guidance and daily checks/defect reporting. The daily check includes identification of leaks, and where identified, is cleaned up according to spillage procedure as detailed in the SUEZ IMS - Emergency Preparedness and Response.

Build up of loose combustible waste, dust and fluff

3.2.21 Regular cleaning will be undertaken by site staff to minimise the generation of dust and litter on site.

3.2.22 Daily check sheets include a requirement for site staff to undertake visual dust qualitative monitoring; if perceived to be excessive the action causing the emission will be halted and remedial measures implemented.

3.2.23 Site cleaning regimes to reduce dust and litter will be directed through Standard Operating Procedures detailing the duration and frequency of cleaning activities, the equipment required to clean and visual aids depicting how areas should look following cleaning activity. In general, ongoing inspection and cleaning is undertaken on site. The waste storage area is cleaned regularly.

Waste acceptance/reactions between wastes

3.2.24 Waste acceptance procedures will comply with the site permit and associated environmental legislation. Only waste types detailed in the permit will be accepted at the site.

3.2.25 The documentation accompanying the load shall be checked at the weighbridge, and shall include, but not be limited to the Carriers Certificate of Registration and Duty of Care Waste Transfer Note.

3.2.26 The information recorded in respect of each load as provided by the Waste Transfer Note will be:

- Ticket Number
- Vehicle Registration Number and Type
- Time and date (or date range) of transfer
- Waste description and quantities including all EWC codes

- Container type
- Where the transfer(s) took place
- Category of Transferor and Transferee (i.e. producer, WDA, registered carrier, permit holder, EPR etc)
- Names and addresses of all parties involved in the transfer and their roles (i.e. producer, carrier, disposer)
- Details of relevant permit/exemptions and Waste Carrier Licence.
- Signatures of all parties involved

3.2.27 Staff will carry out ongoing visual inspections of the wastes at the weighbridge where possible. All loads will be visually inspected on site as the waste is discharged or unloaded from the delivering vehicle.

3.2.28 Should any load, either upon entry to the site, or upon tipping, be discovered to contain waste types not permitted at the site or contain incompatible wastes the load will be rejected and removed from site by the delivering vehicle. A load rejection form will be completed in all cases and the customer informed.

3.2.29 If wastes not permitted by the site permit are discovered amongst a load after deposit, the waste will be isolated to prevent the processing of this waste.

Deposited hot loads

3.2.30 A quarantine area as detailed in section 3.3.24 is available in the event that a hot or burning load is received on site. This area may also be used in the event of a fire on site.

3.2.31 If a hot load is discovered during delivery or deposit of the load, the waste will be isolated and placed in the quarantine area. The waste will be dealt with accordingly (i.e. dampened etc.). The incident and time of discovery will be recorded in the site diary. The waste will be placed in a quarantine area until the fire is extinguished and then loaded into a suitable container. Arrangements will be made for the disposal of such wastes at a suitably permitted disposal facility as soon as practicably possible.

3.3 Controls to Prevent Self-Combustion of Waste

Waste storage procedures and waste piles sizes

3.3.1 Managing storage at the site is a key consideration in reducing the fire risk. The waste types, storage detail, volumes/stockpile size, storage duration and location are detailed in Appendix A.

3.3.2 Materials are removed from site in order of receipt to reduce the storage duration and therefore the risk of self-combustion.

3.3.3 Storage of waste will be managed to minimize the volume of waste stored and limit the storage time as far as practicably possible. The normal residence time of materials is 48 hours (72 hours on a Bank

Holiday weekend). The maximum residence time of waste on site is 3 months (for certain non-putrescible wastes)

3.3.4 The site can operate 24 hours a day if required. However normal operations are from 0700 to 0700 Monday to Sunday and follows a “First in First Out” stock management rule. Both input and output materials are continuously handled.

3.3.5 Regular working practice includes arranging haulage for material to be removed from site in advance. The planned number of vehicle movements out are based upon contracted and predicted inputs to the site, to enable to facility to maintain control of waste stockpiles.

3.3.6 All waste materials are stored below the height of the bay walls.

3.3.7 Stock rotation can be demonstrated via the continuous operation undertaken as part of the process and fully recorded by the use of weighbridge tickets.

3.3.8 There will be a staff presence during any loading operation of materials.

3.3.9 Combustible materials stored within containers are fully accessible to allow any fire inside the containers to be extinguished. Containers are accessible to enable rapid segregation if necessary of burning materials from non-burning materials and vice versa. Containers will be moved using the existing mobile plant at the site.

Monitoring and controlling of temperature

3.3.10 Waste temperature monitoring at site is not proposed due to the short maximum residence time of the majority of waste type at the site (72 hours with the exception of some waste streams as detailed in Appendix A). Environment Agency guidance requires temperature monitoring to be in place if combustible waste is stored on site for longer than 3 months, which is not the case at this site.

Measures to prevent fire spread

3.3.11 All waste will be stored on an impermeable surface. The non-flammable nature of the impermeable surface will act as a firebreak, which should significantly reduce the risk of a fire spreading.

Storage within the TS building

3.3.12 Stockpiles of waste on site are stored within separate bays or are fully containerised. Stockpile volumes of processed materials will not exceed those detailed in Appendix A.

3.3.13 The bays in place within the transfer station building are constructed from concrete, legio blocks and A frames.

3.3.14 The external bay is constructed from metal frames with railway sleepers. This bay is segregated from all other wastes. There are adequate separation distances around this bay to prevent the spread of fire.

3.3.15 The layout of the facility is shown in Figure 2. Potentially combustible wastes are distributed around the site, with concrete walls used as the primary method of separation.

3.3.16 Other stockpiles of waste are separated by concrete walls. This includes the separation between SUEZ's operation and the neighbouring facilities.

Storage within the external area

3.3.17 The external bay is constructed from metal frames with railway sleepers. This bay is segregated from all other wastes (apart from glass, which is deemed to have low combustibility). There are adequate separation distances around this bay to prevent the spread of fire.

3.3.18 Metals are stored within RORO containers, segregated from the building.

Quarantine area

3.3.19 A quarantine area will be retained at all times to allow burning material to be moved into these areas (provided it is safe to do so) so as to extinguish and control fire spread. They can also be used to move piles of non-burning material (adjacent to a fire) to prevent spread.

3.3.20 The indicative location and size of the external quarantine area is shown in Figure 3.

3.3.21 As set out in EA guidance, the size of the quarantine area should be sufficient to accommodate 50% of the volume of the largest waste pile and provide a minimum separation distance of 6m on all sides to the nearest pile, building or site boundary.

3.3.22 The largest waste stockpile on site is bay 3, which is 504m^3. Therefore, a quarantine area with the capacity to store 252m^3 of waste is required on site.

3.3.23 The transfer station building has the capacity to hold 180m^3 of waste as quarantine within the loading tunnel. There is no drainage within this area and any fire water will be retained.

3.3.24 The site has an external yard area which can also be used as the quarantine area in the event that the loading tunnel cannot be used or is at capacity. An area of approximately 7m x 10m would be required to store a volume of 72m^3 waste (which combined with the 180m^3 within the loading tunnel provides a total of 252m^3). The concrete yard area can accommodate this volume (7m x 10m) with a 6m firebreak around the edge.

3.3.25 The external bay can also be used as a quarantine area for storage of unburnt waste materials to isolate them and prevent further fire spread. This bay is located upon foul drainage.

3.3.26 The drains within the TS building flow to foul sewer, via a pump. Therefore, this can be isolated by switching off the foul pump meaning that all water within the TS building and loading tunnel can be isolated.

3.3.27 A stockpile of sandbags are available on site for use within the surface water system in the event that fire water escapes the TS building, or for use within the surface water drains.

4 DETECTION AND SUPPRESSION MEASURES

4.1 Fire Detection

Fire Alarm System

4.1.1 The site is equipped with a fire detection and alarm control panel system that has been designed in general accordance with BS 5839-1: 2013. The fire detection system will be connected to the appropriate number of sounders and beacons to notify site staff should the detection system trigger during operational hours.

4.1.2 The fire alarm system will be regularly checked by the Technically Competent Manager (or other designated person) via a visual inspection of the control panel. Visual checks will be recorded. Any fault must be reported immediately.

4.1.3 The fire alarm system will be tested weekly from a different alarm point – on the same day and time – or at a frequency in line with the manufacturer's recommendations, by a designated person. This will be recorded in the Fire Logbook.

4.1.4 The fire alarm system will be inspected and maintained by a competent person every year in line with the service contract. Inspection and maintenance records will be kept in the Fire Logbook.

4.1.5 Fire alarm points must be kept clear, visible and correctly labelled at all times.

Flame detection and thermal imaging

4.1.6 The site has a CCTV system which covers the outer yard and perimeter fencing. This was installed by iSecure Security and Fire Systems who have installed similar systems across multiple SUEZ facilities.

4.1.7 For security purposes, the exact locations of the cameras will not be provided.

4.1.8 At the end of operational hours, a handover is completed between Site Management and ARC Monitoring who monitors the CCTV system during non-operational hours. This includes the results of Fire Watches as well as areas/items subject to Hot Works during operational hours.

4.1.9 ARC Monitoring are an accredited BS 5979 (Remote Centres Receiving Signals from Fire and Security Systems Code of Practice) and BS 8418 (Installation and Remote Monitoring of Detector-Activated CCTV System Code of Practice) monitoring station.

4.1.10 Being an accredited monitoring station means a Unique Reference Number (URN) can be obtained from local police guaranteeing their response if the site was intruded.

4.1.11 During non-operational hours, ARC Monitoring monitor the CCTV system for unauthorised access and fire. The onsite security guard will also monitor the site for unauthorised access and fire. They will use the handheld thermal gun to assess stockpile temperatures.

4.1.12 If activity is detected by ARC Monitoring or the onsite security guard, they will contact the Site Manager to explain findings and prompt a response from the Site Manager. If possible, the Site Manager then reviews the CCTV system footage remotely on their mobile phone.

4.1.13 It is the responsibility of the Site Manager to confirm the action to be taken during the call.

4.1.14 If the Fire & Rescue Service (F&RS) is deemed required, ARC Monitoring or the onsite security guard will contact them, and the Site Manager contacts on-call mobile plant staff to attend site.

4.1.15 Upon resumption of operational hours, an additional handover is completed between Site Management and ARC Monitoring and the onsite security guard.

4.1.16 Contact details for Site Manager, Site Supervisor and on-call mobile plant staff as well as for iSecure Security and Fire Systems and ARC Monitoring are reviewed annually.

4.2 Fire Suppression

Extinguishers/fire fighting equipment

4.2.1 Firefighting equipment will be provided on site and will consist of fire extinguishers along with a fire suppression system. One fire hydrant is located outside of the site boundary.

4.2.2 Site staff will be trained in fire safety awareness and in the use of site fire fighting equipment.

Fire extinguishers

4.2.3 There will be a number of portable extinguishers placed at key strategic locations around the site. The number of portable extinguishers needed at the site and their locations will be assessed by a competent contractor prior operation starting. A check of the fire extinguishers (discharged/full, service in date etc) is undertaken as part of the site weekly checks. All fire extinguishers are subject to annual testing by an approved accredited supplier.

4.2.4 All fire extinguishers conform to British Standard EN 3 and are located on wall brackets with the base of the extinguisher at a suitable height, or they are sited in permanent fire points. The extinguishers are of a suitable size and weight for use by site staff.

Fire hydrants

4.2.5 One Fire Hydrant to provide water for firefighting is located on Rigby Lane. This hydrant is not managed or maintained by SUEZ. Although the flow from this hydrant is unknown, the flow is adequate for firefighting purposes as was used for the fire on site August 2022.

Sprinkler System

4.2.6 The site (TS building) is equipped with a sprinkler system. The system will also include diesel fire pump sets and a water storage tank. The sprinkler system installed will be designed in accordance with industry/insurance standards e.g. the requirements of the CHUBB Technical Guidance for Waste Processing Facilities. The principal system will be at roof level.

4.2.7 The sprinkler installation system and water supply systems complies with NFPA 13 and 20 respectively and the fire detection system is designed in general accordance with BS 5839-1: 2013, Code of practice for the design, installation, commissioning and maintenance of systems in non-domestic premises, all relevant technical bulletins issued to date and specifically the CHUBB project performance specification referenced above.

4.2.8 The system includes a detection system (automatically linked to the sprinkler pumps).

4.2.9 Pumps will be tested and maintained as per manufacturer guidance and any test and maintenance will be recorded.

4.3 Fire Fighting Techniques

4.3.1 Managing waste storage is a key factor, not only in preventing fires, but in mitigating the impact, should a fire break out.

4.3.2 Providing access to the site in the event of a fire is a key consideration in containing a fire. Contact details in the event of an emergency are clearly displayed on site.

4.3.3 The emergency access routes to waste storage and quarantine area in the event of a fire are shown in Figure 3.

4.3.4 The fire fighting procedure detailed in Section 5 must be adhered to if a fire should break out on site.

4.4 Water Supply

4.4.1 The site is equipped with a high volume sprinkler system and flame detectors throughout. The water supply is in the form of a large water tank which holds 339m^3. This is topped up with mains supplied water. It is in good working order maintained by a contractor specialising in fire safety. Maintenance and inspections will be undertaken in accordance with good industry practice.

4.4.2 In addition, a fire hydrant is located outside the site on the highway. Thames Water have advised that in general they are unable to guarantee any flow rates or pressures from fire hydrants. However, this hydrant has been used for a fire at the facility in the past, with no issues raised by the Fire and Rescue Service. The Local Government Association/water UK national guidance states that for industrial areas of over three hectares, a hydrant supply of 4500l/min should be available. This cannot be guaranteed, and so SUEZ have made a conservative estimate of flow rate of 1000l/min.

4.4.3 The site is located adjacent to the Grand Union Canal, and so a large volume of potential fire fighting water exists. London Fire Brigade are able to utilise a High Volume Pump (HVP) that can be lowered into the canal and used to pump up to 6000l/min.

4.5 Fire Water Management

Fire Water Volume

4.5.1 The Environment Agency Fire Prevention Plan guidance indicates that a 300m^3 of combustible material will require a water supply of at least 2000 litres a minute for a minimum of 3 hours. The maximum total volume of combustible waste stored within the largest bay at the site will be 504m^3 (within the TS building)

4.5.2 Based on the estimation above it is anticipated that 360m^3 of water would be required to manage the maximum stockpile size of 504m^3 on site (largest bay), calculated via:
2000/300 = 6.6 x 504 =3,360 litres/min
3360 litres/min x 60 = 201,600 litres/hour x 3 = 604,800 litres = 605m^3

Fire Water Management

4.5.3 The site will benefit from an impermeable surface that will prevent infiltration of any spent fire water.

4.5.4 All areas of hardstanding, impermeable pavement, bays and containers are visually inspected at least weekly to ensure continuing integrity and fitness for purpose. The inspection and any necessary maintenance subsequently required will be recorded.

4.5.5 Based on the largest stockpile of 504m^3 of combustible materials located at the site it is estimated that we will need to store in the worst case scenario 605m^3 of fire water.

4.5.6 Fire water is proposed to be retained on site. The TS building is capable of retaining 336m^3 of fire water. This is based on the TS having an internal area of circa 2240m^2 with an internal upstand of approximately 150mm. The bale storage area is capable of retaining 240m^3 of Fire Water. The bale storage area has a dimension of 43m by 28m with an internal slab of 200mm below the surrounding yard levels.

4.5.7 The loading tunnel is able to hold approximately 200m^3 (based on dimensions of 40m x 5m x 1m).

4.5.8 Therefore, in total the facility can store approximately 556m3. This is slightly less than the total volume potentially required, but SUEZ hold contracts with major tanker companies and can arrange for tankering of firewater at short notice.

4.4.9 In the event of firewater escaping from the transfer station, the site's surface water system will be blocked. Measures will be used to isolate the surface water pipe and prevent liquid escaping the site

e.g., sandbags, sand (or other material) or a bung. Any water collected on site will be extracted and removed by tanker or diverted to foul sewer once sample results have been obtained.

4.5.9 A drainage plan for the site is included in Figure 4.

4.6 Contingency Plan in the Event of a Fire

4.6.1 In the event of a fire, the emergency procedures will be followed which may include notifying the Fire Rescue Service (FRS) and Environment Agency as necessary. A Business Continuity Plan is in place as part of our contract with Cornwall Council and this includes contingency planning in the event of a fire. The Business Continuity Plan is included as Section 1.5 of the Site Specific Management System. In the event of a fire, the following contingency action plan will be implemented:

- Remove all staff off site to a safe place.
- Depending upon the scale of the fire, operations on site will be suspended whilst the fire is extinguished.
- Close site and await further instruction from the authorities.
- During this period, SUEZ haulage team will be notified.
- Inform nearby residents and businesses. This will be done via SUEZ's communications team and in consultation with the local authority.
- Direct waste deliveries/commercial customer to alternative facilities.
- Any burnt waste or material will be segregated and contained on site, either directly on site or within containers. This will then be assessed, classified and described in accordance with EA guidance and disposed of at a suitably permitted facility.
- Any fire water produced as a result of fighting a fire would be contained on site. This would then be removed from site via tanker for subsequent processing at a suitably permitted facility.
- The site will be cleaned or cordoned off preventing operational access prior to operations recommencing.
- Internal plant checks may also be required prior to recommencement of operations.

4.6.2 Fire damaged wastes will be disposed off at a suitable permitted disposal facility as soon as practicably possible.

4.6.3 Operations will only recommence after a major fire once the Fire Service have advised that it is safe to do so.

4.7 Out of Hours Response

4.7.1 A fire pack will be located in a box or suitable container at the entrance of the site clearly marked for the FRS to access in the event of attending site in the absence of personnel on site. The pack will contain

- Site drawings

- Information relating to hazardous materials and their location
- Drainage plans
- Contact details for key holders

4.7.2 In the event of an out of hours fire when there was no SUEZ presence at site, the FRS would force their entry into the site and will gain access to the site via the normal site access. The FRS can attend site in less than 10 min, and following a callout, site personnel would attend site as early as possible but within 30 min of receipt and acknowledgment of notification.

5 FIRE FIGHTING PROCEDURE

The following procedure must be adhered to if a fire should break out on the site.

ALL FIRES ON SITE MUST BE TREATED AS SERIOUS AND MUST BE REPORTED TO THE SITE SUPERVISOR AND/OR MANAGER AS SOON AS POSSIBLE.

5.1 Any outbreak of fire will be regarded as an emergency and immediate action will be taken to extinguish the fire. No one should attempt to fight a fire unless they have received training in the use of fire extinguishers and then only if this can be done without risk.

5.2 If it is safe to do so, attempts should be made to extinguish a fire. This can be done by using site machinery to move any non-burnt material away from the smoulder or source of fire or using water, working from the edge of the fire inwards. Plant and machinery must never be driven into the centre of any fire; this will place both the driver and the machine in danger. If possible, extinguish the fire with a portable extinguisher or water.

5.3 Should the fire be successfully extinguished by this action; a check should be kept of the area to ensure that the fire does not re-ignite. The area should be vacated until it is obvious that there is no further danger of the fire restarting.

5.4 If the above action FAILS to extinguish the fire, prohibit all entry to the area, then summon emergency services immediately. Close the site to all members of the public. Any persons already on the site should leave. The Fire Service will be contacted to deal with major fire incidents. Site staff will not be deployed to deal with major fires.

5.5 Telephone the Fire and Rescue Service – Dial 999. Give the exact details including the site address and telephone number.

5.6 Before the Fire and Rescue Service arrives staff will:

- ensure operators of appropriate machinery are standing by in a safe location to help create fire breaks, under the direction of the FRS when they arrive
- Appoint a clearly identified person to liaise with the emergency services on site. They should identify themselves to the FRS as soon as they arrive

- ensure access routes are clear
- use pollution control equipment to block drains and/or divert firewater to a containment area and/or operate any pollution control facilities, such as drain closure valves/or penstocks where safe to do so

5.7 On arrival the FRS should be met by the identified responsible person who must provide them with a copy of your accident plan and update them with relevant information that will assist them in dealing with a fire more effectively.

5.8 The designated assembly point is located at the main gate of the facility. All persons must wait at the assembly point for further instructions. A Fire Warden will ensure that unauthorised persons do not enter the premises and that no one re-enters the site until given permission by a Fire Warden.

5.9 Upon the outbreak of fire, the receipt of waste at the site is to be suspended and not resumed until authorised by the Site Manager.

5.10 In the event of a major Fire, the Site Manager should notify the Environment Agency immediately by telephone on the incident hotline, telephone number: 0800 807060. The Agency must also be informed in writing as soon as is practicable.

5.11 Communication with local businesses and residents identified in the sensitive receptor table in Section 2.6 will be undertaken in the event of a fire to reduce any environmental damage and risks to human health associated with smoke and dust.

5.12 All incidents must be reported in the site diary and on the SUEZ Incident Reporting and Investigation System (IRIS). The Environment and Industrial Risk (EIR) manager should be informed so that in turn, full details of the event can be reported to the Environment Agency.

5.13 Site operations will not be recommenced until deemed safe to do so by the Local Fire Authority.

Appendix

Appendix A – Waste Storage Details

Hayes Transfer Station – Waste Storage Plan

APPENDIX A – WASTE STORAGE DETAILS

Waste type	Form	Location within site	Storage detail	Bay or Container Dimensions	Volume of waste (m3)	Maximum storage time on site
Waste fines	Loose and generally <50mm	Bay 1	In a concrete storage bay	7m (W) x 8m (L) x 4m (H)	168	48 hours or 72 hours over a bank holiday
General bulky waste	Loose and generally >300mm	Bay 2 (x3)	In a concrete storage bay	5m (W) x 5m (L) x 4m (H) x3 bays	75 per bay	48 hours or 72 hours over a bank holiday
Shredded/black bag waste	Loose and generally <300mm	Bay 3	In a concrete storage bay	14m (W) x 12m (L) x 4m (H)	504	48 hours or 72 hours over a bank holiday
Plasterboard	Loose	RORO bin (location 4)	In a standard 40 cubic yard RORO container	40 cubic yard container	30	48 hours or 72 hours over a bank holiday
General waste	Loose	Bay 5	In a concrete storage bay	10m (W) x 9m (L) x 4m (H)	270	48 hours or 72 hours over a bank holiday
Wood	Loose	External bay 6	In a metal storage bay	7m (W) x 7m (L) x 4m (H)	147	48 hours or 72 hours over a bank holiday
Dry mixed recyclables	Loose	Bay 7	In a concrete storage bay	9m (W) x 12m (L) x 4m (H)	324	48 hours or 72 hours over a bank holiday
Glass	Loose	External bay 8	In a concrete storage bay	5m (W) x 7m (L) x 4m (H)	105	48 hours or 72 hours over a bank holiday
Gas canisters	Loose	Gas cage	In a cage	1.5m (W) x 3m (L) x 2m (H)	9	3 months
Metal	Loose	External container storage	Within 40 cubic yard ROROs (up to 4)	2.25m (W) x 6m (L) x 2.8m (H)	30 per container	1 month

Note: all volume calculations allow for material slump at the front of the storage area and so equate to 75% of the total cubic volume.

Figures

Figure 1 – Receptor Plan

N

Stockley Park

Golf Course

Business Park

Warehouses

Warnford Industrial Estate

Adler Industrial Estate

Heathrow Prologis Park

Bourne Farm Playing Field

Pinkwell Park

Pinkwell Primary School

Cemetery

Works

Rigby Lane

Bennetsfeld Road

Stockley Road

Dawley Road

Bourne Close

Glamis Crescent

Waltham Avenue

Colbrook Avenue

Wentworth Road

Kestrel Way

Betam Road

Rigby Lane

Grand Union Canal

A4007

A437

1

2

3

4

5

6

7

8

9

10

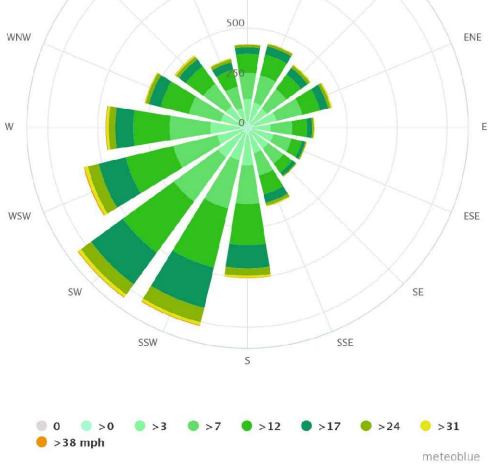
11

12

13

14

Rigby Lane Hayes Wind Rose Data
Graph showing Wind Speed by Direction



0 100 200m 300 400 500

Metres
1:7500

Notes

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Permit Boundary

1km Offset

5 Receptors

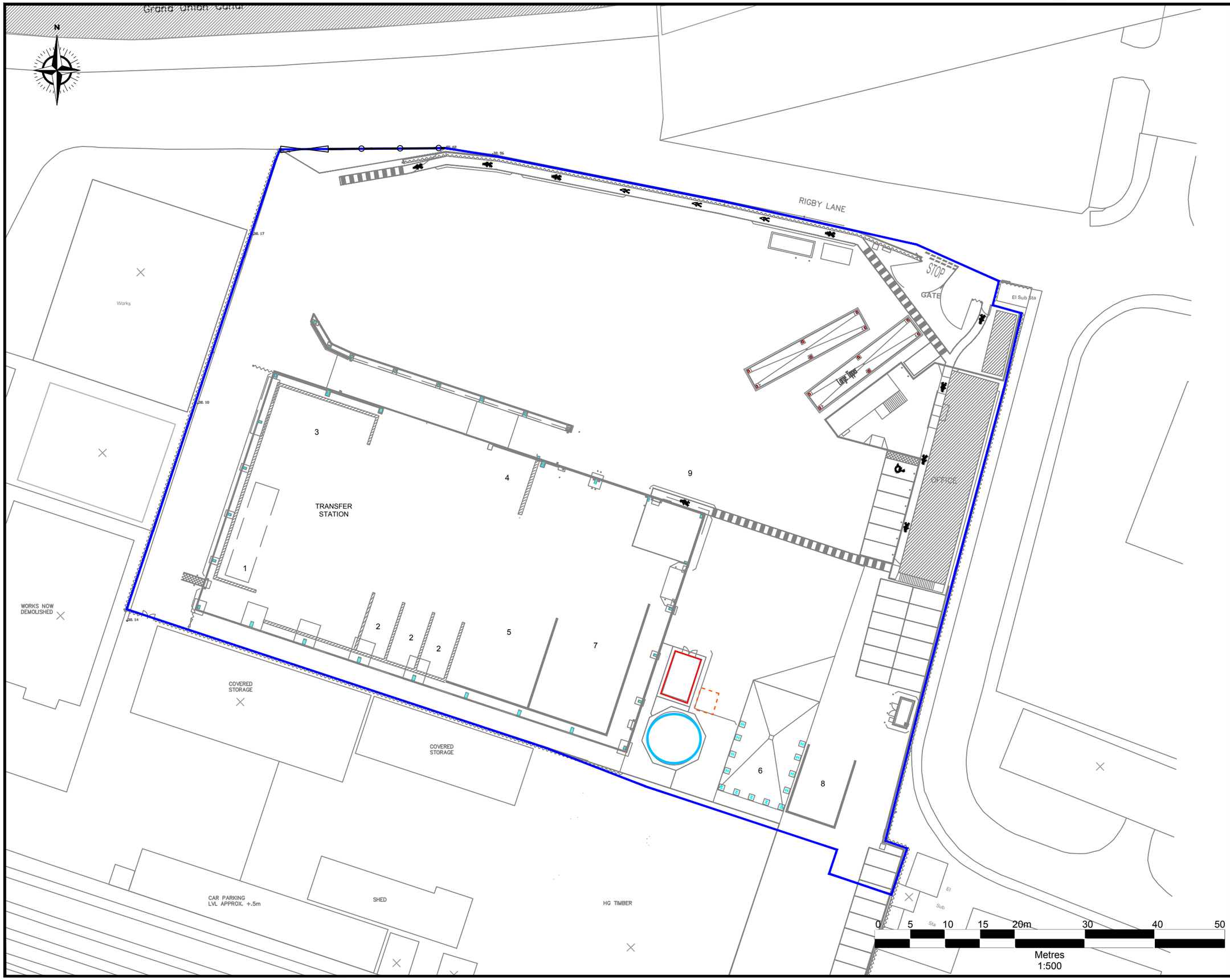
suez

Darwen Resource Recovey Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@suez.co.uk

Site	Rigby Lane Hayes
Title	Receptor Plan
Scale	1:5000 @ A3
Date	September 2018
Drawing Ref	Rbl-REC-0918-01
Drawn by	RB
Checked by	CJ

Rev	subject	date

Figure 2 – Site Layout Plan



Notes

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- Site Boundary
- Gas Cylinders

1	Fines
2	General bulky waste
3	Shredded/black bag waste
4	Plasterboard
5	General waste
6	Wood
7	Dry mixed recycling
8	Glass
9	Container storage
	Fire suppression tank
	Fire pump room

Rev	subject	date

suez

Darwen Resource Recovey Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@sita.co.uk

Site: Rigby Lane, Hayes

Title: Infrastructure Plan

Scale: 1:500 @ A3

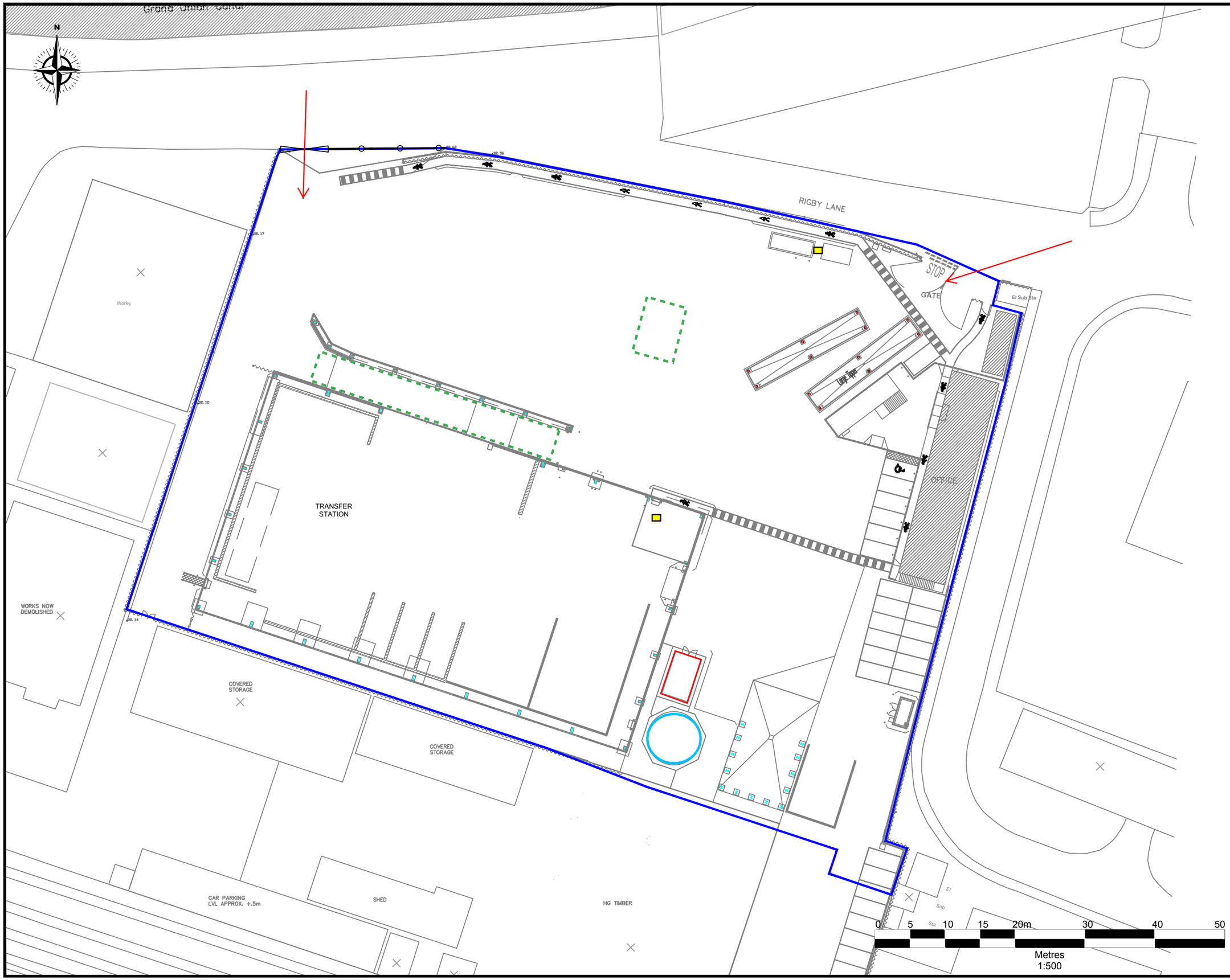
Date: February 2024

Drawing Ref: Rbl-PLN-0124-01

Drawn by: CJ

Checked by: BB

Figure 3 – Emergency Plan



Notes

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- Site Boundary
- Fire suppression tank
- Fire pump room
- Spill kit (indicative location)
- Quarantine areas

Rev	subject	date

suez

Darwen Resource Recovey Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@sita.co.uk

Site	Rigby Lane, Hayes
Title	Emergency Plan
Scale	1:500 @ A3
Date	February 2024
Drawing Ref	Rbl-EME-0224-01
Drawn by	CJ
Checked by	BB

Figure 4 – Drainage Plan

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS IN METRES. DO NOT SCALE.
2. DRAWING TO BE READ IN CONJUNCTION WITH LATEST REPORT AND MICRODRAINAGE REMODELLING RESULTS.
3. ALL MANHOLE REFERENCES STATED REFER TO MICRODRAINAGE MODEL NODE POINTS AND NOT TO REFERENCES ALLOCATED DURING CONSTRUCTION.

AREA BREAKDOWN

• SITA SITE:	0.835Ha
• WOODYARD/ BUILDING VIA SITA SITE:	0.227Ha
• WOODYARD SITE inc. ACCESS ROAD:	0.374Ha
• VEHICLE WASHDOWN BAY TO FOUL:	0.021Ha
• METAL BUNKER TO FOUL:	0.018Ha
• PERMEABLE OPEN GROUND:	0.019Ha
• TOTAL SITE AREA:	1.494Ha

AREA LEGEND

DRAINAGE RUNOFF AREA

ATTENUATION STORAGE AREA

PERMEABLE OPEN GROUND

LEGEND

- AS-BUILT SURFACE WATER DRAINAGE (MODELLED)
- FORMER (RETAINED) SURFACE WATER DRAINAGE (MODELLED)
- AS-BUILT SURFACE WATER DRAINAGE (NOT MODELLED)
- FORMER (RETAINED) SURFACE WATER DRAINAGE (NOT MODELLED)
- AS BUILT FOUL WATER DRAINAGE (NOT MODELLED)
- FORMER (RETAINED) FOUL WATER DRAINAGE (NOT MODELLED)
- MANHOLE COVER (SW/FW)
- RWP RAIN WATER DOWNPIPE
- RE RODDING EYE
- G GULLY (SW/FW)

NEW BOUNDARY FENCE LEGEND

9.8m

LINE OF NEW GALVANISED STEEL PALISADE FENCE. DIMENSIONS SHOWN WERE TAKEN FROM SITE BY SITA AND ARE APPROXIMATE (NTS)

REV	DRN	CHK	APP	DATE	DESCRIPTION
B	EMT	RLG	RLG	24.06.14	NEW BOUNDARY FENCE SHOWN
A	EMT	RLG	RLG	20.01.14	ISSUED WITH REPORT FOR INFORMATION
P1	EMT	RLG	RLG	20.12.13	PRELIMINARY ISSUE FOR INFORMATION

Client: SITA

Project: RIGBY LANE - HAYES

Title: AS BUILT DRAINAGE MODEL LAYOUT INCLUDING RUNOFF AREAS

Scale	Drawn	Date	Chkd	Approved
1:200	EMT	Feb 2024		RLG

Drawing No.: Rbl-DRN-0224-01-A0

Revision:

Status: INFORMATION

Sheet Size: A0