

# Mannings Heath Transfer Station Fire Prevention Plan June 2025

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#### **Document Details**

Document title	Mannings Heath Transfer Station			
Version	1.0			
Date	June 2025			
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Distribution	SUEZ – Site Copy SUEZ – EIR Department Environment Agency			

## **Document Review History**

Date	Version	Description
June 2025	Version 1.0	Original Fire Prevention Plan to support permit variation



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No.	Drawing	Reference
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2	Permit Boundary Plan	Mnh-PER-0625-01-A3
3	Site Layout Plan	Mnh-LAY-0625-01-A3
4	Site Drainage Plan	Mnh-DRN-0625-01-A3
5	Site Receptor Plan	Mnh-REC-0625-01-A3
6	Emergency Access Plan	Mnh-EAR-0625-01-A3



#### 1 INTRODUCTION

- 1.1 This document details the Fire Prevention Plan (FPP) for Mannings Heath Transfer Station (the site) located at Mannings Heath Road, Parkstone, Poole, Dorset, BH12 4NH at National Grid Reference (NGR) SZ 03904 94147. The site location and permit boundary are shown in Figure 1 and 2 respectively.
- 1.2 This document has been updated in support of a variation to the site's permit. The site has historically operated under Standard Rules SR2008 No.7 (EPR/EB3708UG) supported by an S2 exemption, allowing external storage of batteries, WEEE, tyres, wood, UPVC, scrap metal, glass and cardboard. The varied bespoke waste operations permit will integrate the S2 activities, allow for the acceptance of vapes and e-liquid at the site and the acceptance of hazardous and non-hazardous waste streams collected from industrial and commercial (I&C) customers by SUEZ's adjacent depot.
- 1.3 The waste types accepted at the site comprise non-hazardous household, commercial and industrial wastes, mainly comprising waste, dry mixed recycling (DMR), cardboard, wood, glass and metal. Hazardous waste streams accepted at the site from HCI sources include small and large WEEE, vapes and e-liquids, fluorescent tubes, fridges and batteries. The site also accepts varied single stream hazardous and non-hazardous collected from I&C customers with sources including but not limited to garages, marinas workshops. The annual throughput of waste is limited to 75,000 tonnes per year.
- 1.4 Material is delivered to the site predominantly in Refuse Collection Vehicles (RCVs), Front End Loaders (FELs) or skip/ hook loader type vehicles and either end tipped directly into the bays outside or TS building. The material in the bays is removed from the site using the loading shovel and transferred into bulk haulage vehicles.
- 1.5 Residual waste and DMR wastes are tipped in the main transfer building. External bays are in place for storage of waste wood, glass and UPVC. Cardboard is stored externally in a covered bay.
- 1.6 An existing Fire Risk Assessment covering the site operation is already in place. It is reviewed at regular intervals not exceeding 12 months. The Fire Risk Assessment is included within the SUEZ electronic Risk Assessment database.
- 1.7 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



1.8 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 at site is included in the Environmental Risk Assessment (document reference 1.3). 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 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 which may be received and stored at the site include:
  - General residual waste
  - Bulky waste (Including POPs)
  - Dry mixed recyclables
  - Waste Electrical and Electronic Equipment (WEEE)
  - Cardboard
  - Paper
  - Tyres
  - Glass
  - Plastics
  - Wood
  - Batteries
  - Metals
  - Gas Cylinders
  - Contaminated textiles
  - Oils/ fuel
  - Other small quantities of hazardous waste

#### 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 for each waste type at site. Maximum storage volumes for stockpiles in bays have been calculated using 75% (3 sided bays) or 50% (2 sided



bays) of the maximum storage volume of the bay (using maximum depth, height and width dimensions) to account for the nature of the material stored, pile properties and freeboard space.

#### Waste storage

- 2.3.3 Dedicated bays, areas and containers are provided for separate acceptance of various waste streams.
- 2.3.4 Wastes are stored with the aim of ensuring that different types of waste accepted are stored separately where possible to ensure they do not contaminate each other, they can be recycled more easily and transfer notes can be completed correctly. All wastes delivered and accepted to the site are directed to specific areas for storage (or treatment prior to storage).
- 2.3.5 All wastes on site are stored safely and securely using suitable buildings, bays or containers to ensure waste will not escape. Where wastes are stored in containers they are labelled correctly and covers are utilised where possible to prevent litter and rainfall infiltration and the potential for contaminated surface water run-off.
- 2.3.6 An indicative site layout plan showing the proposed location of the waste storage bays, areas and containers are shown in Figure 3.
- 2.3.7 As detailed in Figure 3, the majority of combustible wastes received at the site will be stored inside bays or stockpiles located either within the existing transfer station building located in the centre of the site or in the external bays located to the north of the site. This also includes card which will be stored inside a covered external bay.
- 2.3.8 Wastes are stored to ensure there is no mixing of incompatible wastes. This is particularly important within the hazardous waste storage area, where a qualified chemist attends site to sort and store waste appropriately.
- 2.3.9 The key control at site to ensure wastes are stored for the minimum timescales is the use of the principle of "first in, first out". Materials are handled and removed from site in order of receipt therefore ensuring a frequent turnover of materials.
- 2.3.10 No waste types are stored on site for longer than 3 months.

#### Hazardous materials storage

- 2.3.11 All hazardous waste accepted on site is stored in the dedicated hazardous waste storage area in the eastern corner of the site.
- 2.3.12 The site accepts various hazardous waste streams collected from I&C customers. These wastes include (but are not limited to) waste from garages, harbours and workshops, oil, fuels and other liquid and chemical wastes. Other hazardous waste accepted on the site include WEEE and batteries from HWRCs and other commercial and industrial customers.
- 2.3.13 All hazardous wastes are stored within containers to prevent leakage and runoff. Maximum pile sizes do not apply to waste stored in containers. All containers can be moved easily in the event of a fire.



- 2.3.14 Any hazardous waste delivered to the site that is not permitted by the permit will be segregated and consigned appropriately for disposal at a suitably permitted facility.
- 2.3.15 Where necessary to prevent contaminated emissions to water, hazardous waste is stored on separate bunds to ensure no mixing of incompatible wastes.
- 2.3.16 Hydraulic fluids and oils required for mobile plant are stored inside the oil store as indicated on the indicative site layout drawing provided in Figure 3.
- 2.3.17 Non-waste fuel storage is located on site as indicated in Figure 3 in an underground tank.
- 2.3.18 Orphaned gas cylinders extracted from incoming waste streams are quarantined and stored upright within a well-ventilated, lockable, roofed, storage area. The storage area is clearly marked with a "flammable gas" warning sign and will be kept locked when cylinders are not being inserted or removed.
- 2.3.19 Batteries are stored in battery boxes that will contain any spillage of acid batteries.
- 2.3.20 No additional hazardous materials will be stored within the site.

#### 2.4 Cause of Fire

- 2.4.1 The potential causes of fire on the site have been considered and include the following:
  - arson or vandalism
  - ignition/explosion of pressurised gas canisters
  - cooking appliance in welfare facilities
  - plant or equipment failure
  - electrical faults
  - naked lights
  - discarded smoking materials
  - 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)
  - hot exhausts
  - · fuel deliveries and refuelling plant
  - build up of dusts
  - damaged/exposed electrical cables
  - neighbouring sites activities
  - sparks from loading buckets
  - incompatible wastes
  - ignited materials received at the site
  - heat generated by friction on mobile plant
  - neighbouring site activity



2.4.2 Any of the causes detailed above has the potential to ignite waste materials upon the 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:
  - Thermal radiation harming nearby properties and residents leading to fire spread.
  - Creation of hazardous waste by the fire and impacts of firefighting.
  - Explosions and projectiles harming sensitive receptors and spreading the fire to unaffected areas.
  - Fire water run-off transporting pollutants to surface water and groundwater.
  - Transport disruption resulting from road and rail closures.
  - Nuisance from smoke, odour and particulates.
  - Threat to life and property.
  - Detriment of local amenity.
- 2.5.2 The general management actions to mitigate the impact of a fire on sensitive receptors are detailed in Sections 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 drawing in Figure 5.

Table 1 – Sensitive receptors

No.	Receptor	Category	Distance (m)	Direction from site
0	Groundwater	Water Body	<50	-
1	Ringwood Road Residential Area	Residential	270	SE
2	Industrial Units	Industrial / Commercial	270	N
3	Trinidad Village Extra Care Scheme - Care Home	Residential	360	S
4	Tower Retail Park	Commercial	420	W
5	The Aldbury Dementia Home	Residential / Medical	430	NE
6	Tower Park Leisure Complex	Recreational	460	W
7	Aniwell Veterinary Clinic	Commercial	490	Е



No.	Receptor	Category	Distance (m)	Direction from site
8	Deciduous Woodland	Deciduous Woodland	500	E
9	Alderney Hospital	Medical	510	NE
10	Deciduous Woodland	Deciduous Woodland	560	SW
11	Alderney Community Association - Community Centre	Recreational	590	SE
12	Verity Crescent Residential Area	Residential	630	W
13	Deciduous Woodland	Deciduous Woodland	630	SE
14	Trinidad Community Multiuse Play Area	Recreational	630	SE
15	Bedford Road Residential Area	Residential	640	NE
16	Deciduous Woodland	Deciduous Woodland	640	W
17	Poole Trade Park	Industrial / Commercial	650	SW
18	Halford Road Rebound Wall	Recreational	660	SE
19	Mannings Heath Retail Park	Commercial	680	SW
20	Sherborn Crescent Residential Area	Residential	740	NW
21	Wessex Trade Centre	Commercial	740	S
22	Rosemary Medical Centre	Medical	750	S
23	Bedford Road Playground	Recreational	760	NE
24	Haymoor Bottom Heathlands	Recreational	820	W
25	Our Lady of Fatima Church	Place of Worship	850	SE
26	Newton Business Park	Industrial / commercial	880	S
27	Dorset Heathlands	SPA, SAC, SSSI, Ramsar	900	N
28	Bourne Valley Park	Recreational	910	E
29	Cranford Heath Nature Reserve	SAC	930	N
30	Winchelsea School	Educational	940	E
31	St. Aldhelm's Academy	Educational	940	SE
32	Sherborn Crescent Play Area	Recreational	950	W



No.	Receptor	Category	Distance (m)	Direction from site
33	Bourne Valley Nature Reserve	SSSI	950	NE
34	Rossmore Library	Recreational	950	SE
35	Dorset Stour Catchment	Watercourse	430	SE

#### 2.7 Wind Direction

2.7.1 The data obtained for Mannings Heath indicates that the prevailing wind direction is from the south west. A compass rose from meteoblue.com with the prevailing wind direction is included in Figure 5.



#### 3 PREVENTATIVE MEASURES

- 3.1 SUEZ Policies and Procedures
- 3.1.1 Section 3.8 of SUEZ Integrated Management System (IMS) relates to Emergency Preparedness and Response and will be followed in the event of a fire or explosion.
- 3.1.2 In addition to Section 3.8, 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 principal 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. 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 contractors are required to wear appropriate Personal Protective Equipment.
- 3.2 Controls to Manage Common Causes of Fire

**Arson** 

3.2.1 Site security to prevent arson includes security fencing and monitored CCTV. CCTV monitoring systems are installed in various strategic locations around the site. Out of hours security monitoring is undertaken through the use of the CCTV system. CCTV would also be utilised to detect any early signs of hot spots and/or fire detected by thermal cameras. The system will be linked to a monitoring station operating 24hrs (including weekends and bank holiday) which will alert the relevant employee in order of priority. Three telephone numbers are supplied to the monitoring station.



#### 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 vehicles are fitted with fire extinguishers and dust filters. Vehicles will have high level exhausts fitted.
- 3.2.5 All vehicles and items of plant are stored at a safe distance (6m) from waste stockpiles when not in use as indicated on Figure 3 as 'waiting area'.
- 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.
- 3.2.7 Mobile plant is maintained in accordance with the manufacture's guidance and Mobile Plant procedures as outlined in SUEZ Policies and Procedures. This includes daily vehicle pre-use inspection checks, reporting of all defects to site management, weekly cleaning and regular clearing of detritus from around the machine. The machine will be subject to regular service inspections which will include maintenance of the exhaust and cleaning if required. Daily inspections of the exhaust are conducted to check for blockages or excess build-up of material.
- 3.2.8 Plant and machinery will not be fitted with an infra-red detection system as it is not deemed as required due to the low risk. However, the mobile plant on site conform to the SUEZ essential safety requirements as outlined in Policies and Procedures. This requires loading shovels to have a fire suppression system using a twin agent with engine isolation and in cab fire extinguisher. In addition the mobile plant will be parked away from the bays when not in use.

#### **Electrical Equipment**

- 3.2.9 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.
- 3.2.10 Fixed electrical installations are installed, inspected, tested and maintained by 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 reports
- 3.2.11 Following every inspection and testing, defects should be rectified as soon as reasonably practicable.



- 3.2.12 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.
- 3.2.13 Electrical sockets must not be overloaded.

Discarded smoking materials

- 3.2.14 Wastes are not permitted in any circumstances to be burned within the boundaries of the site.
- 3.2.15 Smoking on site is only permitted in the site designated smoking areas as shown on Figure 3.

Hot works

3.2.16 Contractors undertaking 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** 

3.2.17 No industrial heaters will be used on site.

Hot exhausts

3.2.18 A fire watch is implemented at the end of the working day to reduce the risk of combustion as dust can settle onto hot exhaust and engine 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 Faults within a vehicle or item of plant have potential to cause fire so a regular plant and machinery maintenance program is in place to identify and remedy potential issues at an early stage.
- 3.2.21 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

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



- 3.2.23 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.
- 3.2.24 Site cleaning regimes in place 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
- 3.2.25 Waste acceptance procedures comply with the site permit and associated environmental legislation. Only waste types detailed in the permit are accepted at the site.
- 3.2.26 Hazardous and chemical wastes accepted at the facility are subject to a prior pre-acceptance evaluation process. Wastes are assessed and classified separately before collections are undertaken and wastes are accepted on to site.
- 3.2.27 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.
- 3.2.28 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
  - Signatures of all parties involved
- 3.2.29 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.
- 3.2.30 Waste deposition will generally be undertaken by those delivering the waste. Site staff will direct and assist drivers as necessary.
- 3.2.31 Wastes are stored to ensure there is no mixing of incompatible wastes. This is particularly important within the hazardous waste storage area, where a qualified chemist attends site to sort and store waste appropriately.



- 3.2.32 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 a record kept in the site diary and the customer informed.
- 3.2.33 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** 

- 3.2.34 A quarantine area 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.
- 3.2.35 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 As an existing TS, managing storage at the site is a key consideration in reducing the risk of fire. The waste types, storage detail, maximum volumes/stockpile size, storage duration and location on site are detailed in Appendix A.
- 3.3.2 All waste entering the site is logged in at the weighbridge, with weight, EWC codes, date and time recorded. The records enable the Site Manager to review the weighbridge reports to understand the materials that have been imported and exported from site.
- 3.3.3 Twice-daily visual checks are made of waste in storage to identify any issues that have potential to cause a fire.
- 3.3.4 Clear signage reinforces the safe storage of materials and use of ignition sources.
- 3.3.5 Storage of waste is managed to minimise the volume of waste stored, ensuring that it does not exceed maximum pile sizes, and limit the storage time as far as practicably possible.
- 3.3.6 Materials are removed from site in order of receipt to reduce the risk of self-combustion. This is implemented by the frequent turnover of material and the bays/ waste stockpiles being emptied regularly.
- 3.3.7 Regular working practice includes the emptying of a bay or removal of a stockpile when the product pile reaches the size of a full vehicle load. As the outputs of the process are a valued commodity, SUEZ seek to remove the material off site as soon as possible in order to release its commercial value.



Bays are marked showing the maximum height of waste storage. A 1m freeboard will be implemented at the top of each bay wall to prevent fire spreading over the bays. Waste will not be stored above the maximum height ensuring that the maximum stockpile sizes are not exceeded. In line with other similar facilities within the SUEZ portfolio, a visual "5S" system will be implemented on site using a traffic light system to aid stock management and ensure compliance with the maximum storage time on site identified within Appendix A. This entails the use of green, amber and red colours marked on bay walls as indicative markers to inform operators on the maximum storage limit of the bay.

- 3.3.8 Stock rotation can be demonstrated via continuous operation and the implementation of the "5S" system and is fully recorded via the use of weighbridge tickets.
- 3.3.9 Materials are normally stored for a maximum of 72 hours. Unless stated otherwise in the waste storage plan (Appendix A). This will reduce the potential risk associated with self-heating due to processes within the waste.
- 3.3.10 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

3.3.11 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.

Waste bale storage

3.3.12 There is no storage of waste in bales at site.

Measures to prevent fire spread

- 3.3.13 All waste is 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.
- 3.3.14 Stockpiles of waste stored within the TS building are separated by a distance of 6m to ensure a sufficient firebreak. The TS building benefits from concrete walls clearly marked with the maximum storage height which act as a suitable fire wall to prevent fire spreading outside of the building.
- 3.3.15 External waste storage areas are separated by either 6m separation or legio block concrete walls/ in situ concrete walls which act as a suitable fire wall. Waste stored in bays is not permitted to exceed the maximum pile height or exceed the footprint of the bay.
- 3.3.16 Waste storage arrangements are shown on Figure 3.
- 3.3.17 Access to any waste, should it ignite, is from the front of the storage bays or stockpiles.



3.3.18 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 following instruction by Site Manager.

#### Quarantine area

- 3.3.19 A quarantine area is retained at all times to allow burning material to be moved into this area (provided it is safe to do so) to extinguish and control fire spread. It is also 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 quarantine area is north west of the site, 6m in front of the external storage bays measuring 10m by 30m. This area is subject to change due to the nature of the process and therefore the exact quarantine area needs to remain flexible. The quarantine area will be available and utilised as required.
- 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 With reference to the pile size dimensions in Appendix A, it is considered that 532 m³ will comprise the largest potentially flammable stockpile and therefore the quarantine area size is deemed suitable to accommodate 50% of this.
- 3.3.23 In the event of a fire being detected on site, the material would be dealt with in the most appropriate manner, including either segregation of burning material into the quarantine area or the remaining non burning waste will be segregated to ensure the separation distance from the burning waste. The site has capability to move loose materials and containers quickly, with mobile plant operational at the site.
- 3.3.24 The quarantine area is located inside the site permit boundary with at least a 6 metre separation distance with the site office, the site perimeter, and any combustible waste piles.
- 3.3.25 The quarantine area is located in the middle of the yard area and as such will be clear of other material. However, to avoid confusion it will not be marked upon the ground but will be identified to site operatives at the beginning of each shift and emphasise will be made to the need of a 6m fire break from the nearest combustible waste. The Site Manager will also ensure that no materials are stored within this area which will be fully communicated at the start of each shift and will be reinforced during yearly toolbox talks on Fire Prevention Plan.
- 3.3.26 Should any waste in one of the waste storage areas contain burning waste material, then either that stockpile itself or the designated quarantine area, would form the quarantine area. Non-burning waste would also be removed from any burning waste storage area (and from adjacent stockpiles) where possible and moved to the designated quarantine area or any clear area on site.



#### 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.
- 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 on the site Daily Checklist. 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.
- 4.1.6 The results of the alarm testing and servicing will be held in the Fire Logbook.

Flame detection and thermal imaging

- 4.1.7 The site has a CCTV system which covers the TS building, outer yard and perimeter fencing.
- 4.1.8 For security purposes, the exact locations of the cameras will not be provided.
- 4.1.9 In addition to CCTV cameras thermal imaging cameras are installed at strategic locations on site. The thermal camera will be linked to a call centre which will automatically view live CCTV footage during out of hours. In the event of a fire during out of hours, the call centre will automatically contact the fire service and contact a relevant site employee.

#### 4.2 Fire Suppression

Fire hydrants

- 4.2.1 Three fire hydrants are present in close proximity outside site boundary, one along Ling Road and two along Mannings Heath Road.
- 4.2.2 Further details of the fire hydrants is provide in Section 4.4.

**Manual Suppression Systems** 

4.2.3 There are a number of portable extinguishers placed at key strategic locations around the site as shown in Figure 3. 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.
- 4.2.5 A standard hose reel is also available on site to supplement fire suppression if needed, located next to the building to the east of the site.
- 4.2.6 Site staff will be trained in fire safety awareness and in the use of site fire fighting equipment.
  - **Automatic Suppression Systems**
- 4.2.7 As an existing site, the TS building does not have any automatic suppression systems installed as the existing manual suppression systems are considered appropriate to control the risk of fire.
- 4.2.8 Alternative measures are used to prevent fire and ensure suppression, including:
  - Short residence time of stored material (maximum 72 hours but under normal operating conditions this will be less).
  - No processing operations occur inside the TS building, meaning the risk of heat generation from friction, moving parts or motors is eliminated.
  - Staff presence during any loading or movement operation.
  - A daily fire watch system will be utilised on site and the use of CCTV monitored via the weighbridge to detect any early signs of hot spots and/or fire.
  - The provision of water hose reels on site. These will be used by SUEZ employees as a
    precautionary measure; staff are not trained to fight fires, but these hose reels can be used to
    cool wastes and for small-scale smoulder incidents.
  - The use of CCTV for out of hours security monitoring and to detect any early signs of hot spots and/or fire. The system will be linked to a monitoring station operating 24hrs (including weekends and bank holiday).
  - The total volume of waste stored within the shed at any one time will be less than 634m³, with stockpiles ranging from 102m³ to 532m³.
  - Waste stockpiles always maintained at a distance of at least 6m if not separated by a fire wall.
  - A fire watch will be implemented at the end of the working day to reduce the risk of combustion.
  - The use of rubber strips on equipment featuring steel buckets, loading arms or grabs will be considered. A rubber blade is present on the Loading Shovel, which reduces the risk of sparks whilst moving waste.
  - The easy access to tackle a fire within the shed with the presence of 4 roller shutter doors on the north east side of the shed.



#### 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 6.
- 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 Environment Agency Fire Prevention Plan guidance indicates that a 300m³ of combustible material will require a water supply of at least 2000 litres a minute for a minimum of 3 hours. As the maximum total volume of combustible wastes stored within the largest bays at the site will be 532m³ it is calculated that the site will need a water supply capable of providing 3547l/min.
- 4.4.2 Dorset & Wiltshire Fire and Rescue Service has confirmed that three fire hydrants with good flow are present in close proximity to the site. The location of the along Ling Road located approximately 30m west of the sit boundary, and along Mannings Heath road located approximately 30m east and 180m east of the boundary.
- 4.4.3 In accordance with the EA's Fire Prevention Plan Guidance, the hydrant are understood to be serviced and maintained by Dorset & Wiltshire Fire and Rescue Service and conform to British Standard 750 or equivalent, providing adequate water supply for the purpose of fire-fighting.

#### 4.5 Fire Water Management

#### Fire water volume

- 4.5.1 The Environment Agency Fire Prevention Plan guidance indicates that a 300m³ 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 wastes stored within the largest bays at the site will be 532m³.
- 4.5.2 Based on the estimation above, the volume of water that would be required to manage the maximum total volume of materials contained within the largest bay would be 637,200 litres. with a flow rate of 3547l/min.
- 4.5.3 According to Dorset and Wiltshire fire and rescue service, the site is surrounded by a combination of 200mm and 300mm watermains providing an average of 2000l/min per hydrant. Therefore, based on the calculation above, it is considered that the presence of 3 fire hydrants, in close proximity to the site can provide an adequate volume of water.



4.5.4 In the event of a fire, in order to reduce the requirement for the calculated large volumes of both water supply and the resultant management of fire water, alternative measures are proposed. These measures include a priority action (where safe to do so) of the removal of a non-burning waste within any stockpile in order to provide a suitable firebreak to prevent fire spread via use of the quarantine area.

Fire water management

- 4.5.5 The site benefits from an impermeable surface that will prevent the uncontrolled release of any spent fire water.
- 4.5.6 All areas of hardstanding, impermeable pavement, bays and containers are visually inspected at least monthly to ensure continuing integrity and fitness for purpose. The inspection and any necessary maintenance subsequently required will be recorded.
- 4.5.7 Fire water will be retained on site. With the use of booms and clay drain mats to cover drains. Using the minimum kerb heights of 100mm, the minimum amount of water the permitted area of the site plus the weighbridge pit is calculated to be 681,500 litres. The kerbing in place on site is deemed sufficient to hold a volume of fire water that exceeds the maximum water volume calculated to be required to manage a fire located in the largest waste pile. A service agreement will be in place for a tanker to pump fire water from the site and dispose of accordingly.

#### 4.6 Contingency Plan in the Event of a Fire

- 4.6.1 In the event of a major fire, the emergency procedures will be followed which includes notifying the Fire Rescue Service (FRS) and Environment Agency. A business continuity plan is in place which includes contingency planning in the event of a fire, the business continuity plan is included in Appendix B. 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 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 areas cordoned off 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 of at a suitable permitted disposal facility as soon as practicably possible.
- 4.6.2 Operations will only recommence once the Fire Service have advised that it is safe to do so and the Environment Agency will be notified of the restart of operation.
- 4.7 Out of hours response
- 4.7.1 A fire pack will be located in a box 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 It is considered very unlikely that a fire will occur but if this should happen then 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 fire water 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 entrance gate of the transfer station. 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 The Site Manager should notify the Environment and Industrial Risk Manager by telephone. For major fires the Environment agency should be notified on the incident hotline, telephone number: 0800 807060. The Environment Agency must also be informed in writing of major fires as soon as is practicable.
- 5.11 Communication with local businesses and residents identified in the sensitive receptor table above 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 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.



## **Appendices**



Appendix A – Waste Storage Details



## Mannings Heath 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
Bulky General Waste incl. POPs	Loose	Internal Bay	In a concrete storage bay	15m (W) x 13.5m (L) x 3.5m (H)	532 m³	72 Hours
Dry mixed recyclables	Loose	Internal Bay	In a concrete storage bay	6m (W) x 6.5m (L) x 3.5m (H)	102 m <sup>3</sup>	72 Hours
Wood	Loose	External Bay	In a concrete storage bay	17m (W) x 6.5m (L) x 3.5 (H)	290 m³	2 Weeks
Glass	Loose	External Bay	In a concrete storage bay	3m (W) x 6.5m (L) x 3.5 (H)	51 m³	1 Month
UPVC	Loose	External Bay	In a concrete storage bay	6.5m (W) x 6.5m (L) x 3.5 (H)	111 m³	1 Month
Cardboard	Loose	External (Covered) Bay	In a metal and Concrete storage bay	7.5m (W) x 9m (L) x 3.5 (H)	177 m³	2 Weeks
Gas canisters	Loose	Gas Cage	In a concrete storage bay	3m (W) x 2m (L) x 1m* (H)  *1m Assumed as gas bottles will  not be stacked on top of one  another	6 m³	3 Months
Metal	Loose	RORO bin	In a standard 40 cubic yard RORO container	2.4m (W) x 6.2m (L) x 2.9m (H)	30 m <sup>3</sup>	1 Month
Asbestos	Double bagged	External Haz Waste Storage Area	Enclosed 16yd Skip	1.7m (W) x 4.1m (L) x 2m (H)	12 m³	3 Months
Fridges	Loose	External Haz Waste Storage Area	In a standard 40 cubic yard RORO container	2.4m (W) x 6.2m (L) x 2.9m (H)	30 m <sup>3</sup>	1 Month
Tyres	Loose	External Haz Waste Storage Area	In a standard 40 cubic yard RORO container	2.4m (W) x 6.2m (L) x 2.9m (H)	30 m³	3 Months



Lithium Batteries	Loose	External Haz Waste Storage Area	In a Standard Battery Box	2m (W) x 1m (L) x 2m (H)	4 m <sup>3</sup>	1 Month
Fluorescent Tubes/ bulbs	Loose	External Haz Waste Storage Area	Specialised Container	1.2m (W) x 2.5m (L) x 1.2m (H)	3.6 m <sup>3</sup>	3 Months
Lead Acid Batteries	Loose	External Haz Waste Storage Area	In a Standard Battery Box	2m (W) x 1m (L) x 2m (H)	4 m³	1 Month
Ni-Cd Batteries	Loose	External Haz Waste Storage Area	In a Standard Battery Box	2m (W) x 1m (L) x 2m (H)	4 m <sup>3</sup>	1 Month
Contaminated/ mixed Fuel	Liquid	External Haz Waste Storage Area (Covered)	Intermediate Bulk Container	1.0m (W) x 1.2m (L) x 1.16m (H)	1.4 m³	1 Month
Paint	Loose	External Haz Waste Storage Area (Covered)	205L Drum	0.59 (D) x 0.88m (H)	0.2 m <sup>3</sup>	1 Month
Grease & Containers	Loose	External Haz Waste Storage Area (Covered)	205L Drum	0.59 (D) x 0.88m (H)	0.2 m <sup>3</sup>	1 Month
Petrol	Liquid	External Haz Waste Storage Area (Covered)	Intermediate Bulk Container	1.0m (W) x 1.2m (L) x 1.16m (H)	1.4 m³	1 Month
Oil Filters	Loose	External Haz Waste Storage Area (Covered)	205L Drum	0.59 (D) x 0.88m (H)	0.2 m <sup>3</sup>	1 Month
Spill Sorbs/ Oily Hoses	Loose	External Haz Waste Storage Area (Covered)	205L Drum	0.59 (D) x 0.88m (H)	0.2 m <sup>3</sup>	1 Month
Laser Dust	Containerised	External Haz Waste Storage Area (Covered)	205L Drum	0.59 (D) x 0.88m (H)	0.2 m <sup>3</sup>	1 Month
PVA Water	Liquid	External Haz Waste Storage Area (Covered)	Intermediate Bulk Container	1.0m (W) x 1.2m (L) x 1.16m (H)	1.4 m³	1 Month
Caustic Contaminated Water	Liquid	External Haz Waste Storage Area (Covered)	Intermediate Bulk Container	1.0m (W) x 1.2m (L) x 1.16m (H)	1.4 m³	1 Month
Oily Water	Liquid	External Haz Waste Storage Area (Covered)	Intermediate Bulk Container	1.0m (W) x 1.2m (L) x 1.16m (H)	1.4 m <sup>3</sup>	1 Month
Styrene Sludge	Liquid	External Haz Waste Storage Area (Covered)	Intermediate Bulk Container	1.0m (W) x 1.2m (L) x 1.16m (H)	1.4 m <sup>3</sup>	1 Month



Cutting oil	Liquid	External Haz Waste Storage Area (Covered)	Intermediate Bulk Container	1.0m (W) x 1.2m (L) x 1.16m (H)	1.4 m <sup>3</sup>	1 Month
Gunwash	Liquid	External Haz Waste Storage Area (Covered)	Intermediate Bulk Container	1.0m (W) x 1.2m (L) x 1.16m (H)	1.4 m <sup>3</sup>	1 Month
Ink	Containerised	External Haz Waste Storage Area (Covered)	205L Drum	0.59 (D) x 0.88m (H)	0.2 m <sup>3</sup>	1 Month
Toner Cartridges	Loose	External Haz Waste Storage Area (Covered)	205L Drum	0.59 (D) x 0.88m (H)	0.2 m <sup>3</sup>	1 Month
PCBs	Loose	External Haz Waste Storage Area (Covered)	HDPE Dolav Container	2m (W) x 1m (L) x 2m (H)	4 m³	1 Month
Dental Waste moulds	Loose	External Haz Waste Storage Area (Covered)	HDPE Dolav Container	2m (W) x 1m (L) x 2m (H)	4 m <sup>3</sup>	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, all waste stored within the hazardous waste storage area is within containers and so maximum pile sizes do not apply.



**Figures** 



Figure 1 – Site Location Plan

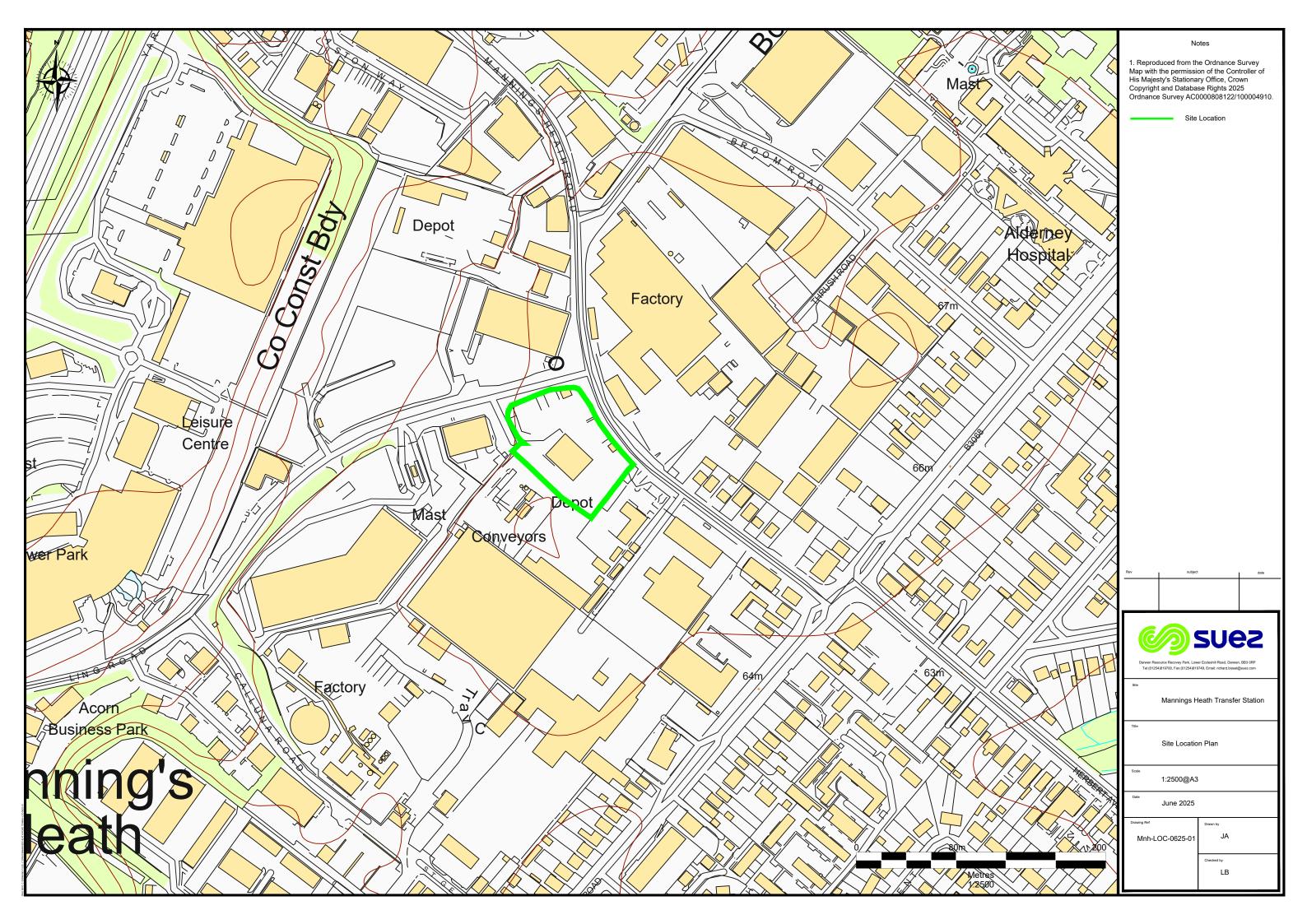




Figure 2 – Permit Boundary Plan

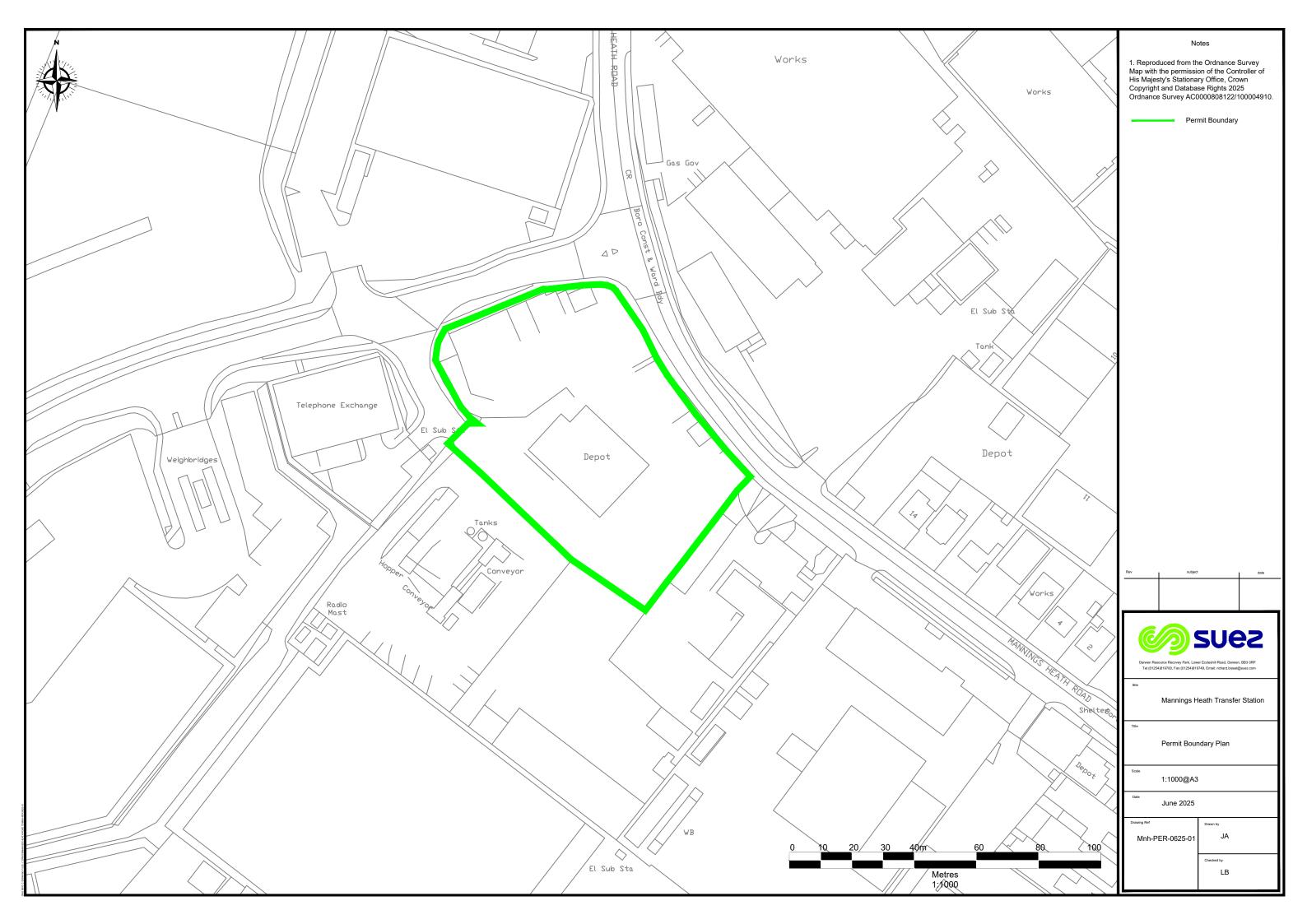




Figure 3 – Site Layout Plan





Figure 4 – Site Drainage Plan

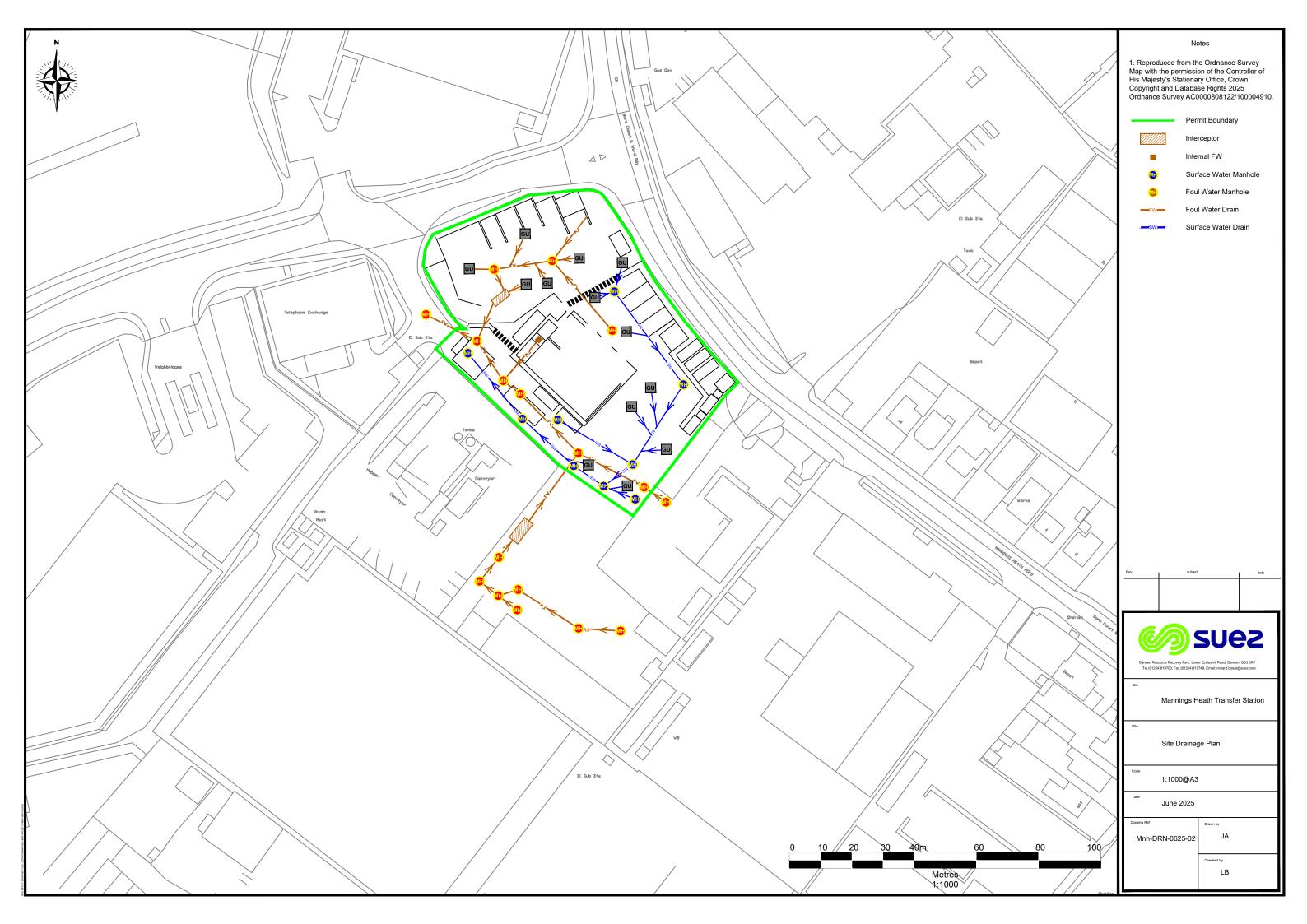




Figure 5 – Site Receptor Plan

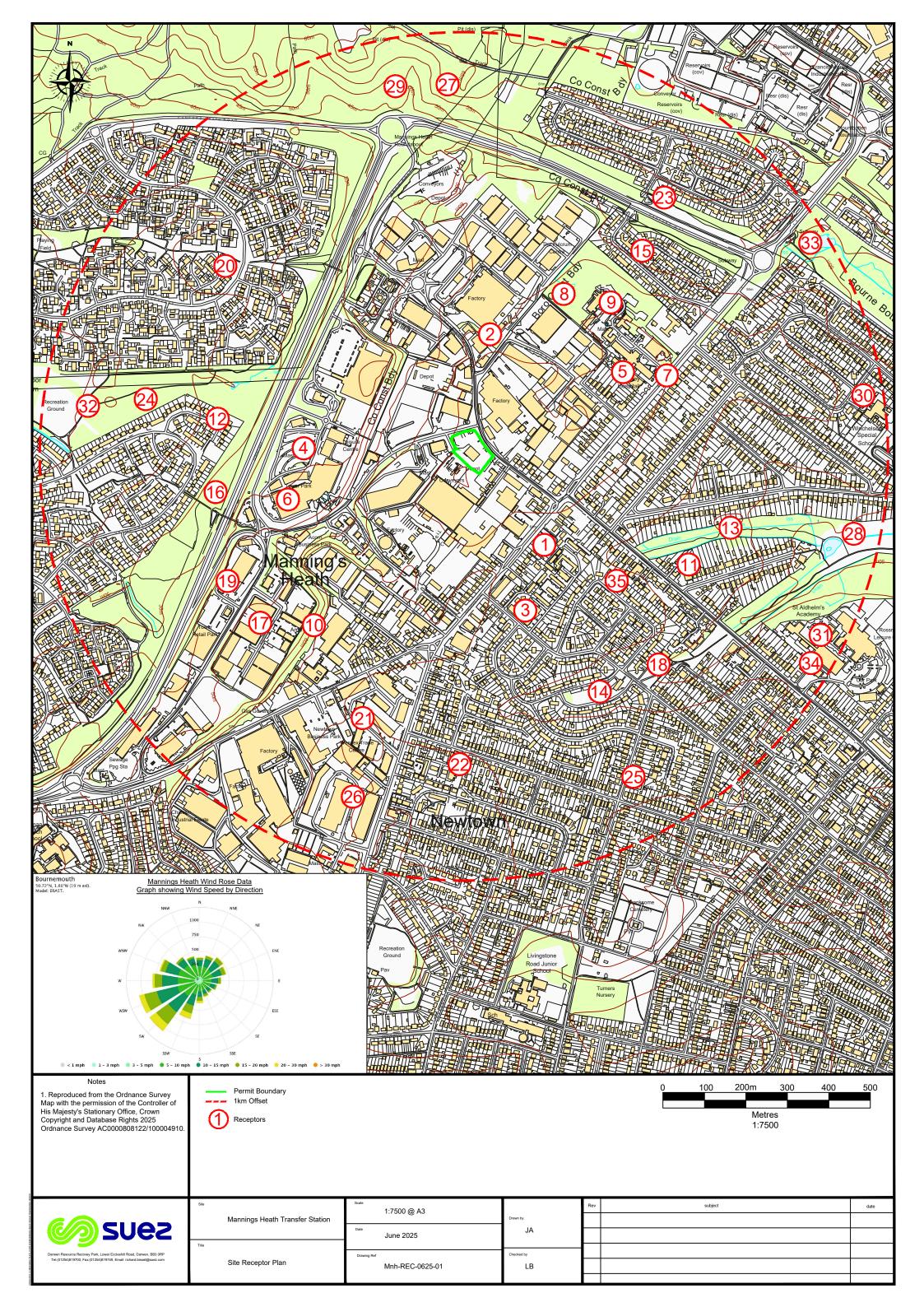




Figure 6 – Emergency Access Plan

