

FIRE PREVENTION PLAN

A2B House, Orwell Crossing, Nacton, Ipswich, IP10 0DD

A2B-Online Limited

Version:	1.0	Date:	07 March 2025		
Doc. Ref:	ORW-3301-B	Author(s):	EG	Checked:	CP
Client No:	3301	Job No:	001		



Oaktree Environmental Ltd
Waste, Planning & Environmental Consultants



Oaktree Environmental Ltd, Lime House, 2 Road Two, Winsford, Cheshire, CW7 3QZ
Tel: 01606 558833 | E-Mail: sales@oaktree-environmental.co.uk | Web: www.oaktree-environmental.co.uk
REGISTERED IN THE UK | COMPANY NO. 4850754

Document History:

Version	Issue date	Author	Checked	Description
1.0	07/03/2025	EG	CP	Application copy

THIS DOCUMENT IS DUE FOR REVIEW IN **MARCH 2027** OR AS A RESULT OF ANY INCIDENTS WHICH MAY LEAD TO THE REQUIREMENT FOR IMMEDIATE REVIEW, WHICHEVER IS THE SOONER

CONTENTS

DOCUMENT HISTORY:.....	I
CONTENTS	II
LIST OF APPENDICES:.....	IV
LIST OF TABLES	V
SITE INFORMATION & KEY CONTACTS LIST	VI
1 INTRODUCTION.....	1
1.1 GENERAL	1
1.2 FIRE PREVENTION PLAN OBJECTIVES.....	2
1.3 REVIEWING AND MONITORING THIS FPP.....	2
1.4 SITE OPERATIONS	3
1.5 HOURS OF OPERATION	3
1.6 STAFFING AND MANAGEMENT	3
1.7 PLANT AND EQUIPMENT.....	4
1.8 CORRESPONDENCE WITH FIRE AND RESCUE SERVICE	4
1.9 SENSITIVE RECEPTORS.....	4
2 MANAGING COMMON CAUSES OF FIRE	7
2.1 DETAILS	7
2.2 FUEL, OIL & HAZARDOUS MATERIAL STORAGE.....	9
2.3 HOT WORKS PROCEDURE.....	9
2.4 SMOKING POLICY.....	9
2.5 MOBILE AND FIXED PLANT MAINTENANCE	9
2.6 SITE SECURITY.....	10
2.7 ELECTRICAL FAULTS OR DAMAGED/EXPOSED ELECTRICAL CABLES.....	11
3 WASTE ACCEPTANCE PROCEDURES.....	12
3.1 GENERAL	12
3.2 WASTE RECEPTION / STORAGE.....	13
4 MANAGING WASTE STORAGE TO PREVENT SELF-COMBUSTION AND THE FIRE SPREADING	15
4.1 GENERAL	15
4.2 WASTE STORAGE TABLE.....	15
4.3 CONVERSION FACTORS	17
4.4 WASTE STORAGE RESIDENCE TIME.....	18
4.5 FREE STANDING PILES.....	18
4.6 WASTE STORED IN CONTAINERS	18
4.7 WASTE STORED IN BALED FORM	19
4.8 EXTERNAL HEATING FROM HOT WEATHER	20

5	PREVENT FIRE SPREADING	21
5.1	WASTE STORAGE GENERAL / FIRE BREAKS	21
5.2	WASTE STORED WITHIN 6M OF THE SITE PERIMETER	21
5.3	SEPARATION DISTANCES.....	22
5.4	STOCK ROTATION AND SEASONAL VARIATIONS	22
6	SITE INSPECTION PROGRAMME.....	23
6.1	DAILY CHECKS.....	23
6.2	STAFF TRAINING	23
6.3	TOOLBOX TALKS.....	24
7	QUARANTINE AREA.....	25
8	DETECTING FIRES & RESPONSE PROCEDURES	26
8.1	FIRE DETECTION PROCEDURE (MANUAL)	26
8.2	AUTOMATED/OUT-OF-HOURS DETECTION.....	26
9	FIRE RESPONSE PROCEDURES.....	28
9.1	RESPONSE PROCEDURE	28
9.2	ACCESS FOR EMERGENCY SERVICES	29
9.3	NOTIFYING RECEPTORS	29
9.4	CONTROL OF COMBUSTION PRODUCTS	30
10	SUPPRESSING FIRES & FIREFIGHTING TECHNIQUES	31
10.1	SITE-WIDE SUPPRESSION	31
10.2	EXTERNAL SUPPRESSION - FIRE HYDRANTS	31
11	WATER SUPPLIES.....	32
11.1	GENERAL	32
11.2	WATER SUPPLY REQUIREMENTS FOR LARGEST WASTE PILE.....	32
11.3	ON-SITE WATER SUPPLY	32
11.4	EXTERNAL SUPPRESSION – FIRE HYDRANTS.....	32
12	MANAGING FIRE WATER.....	34
12.1	DRAINAGE.....	34
12.2	CONTAINMENT OF FIRE WATER	34
12.3	FIRE WATER BOOM DEPLOYMENT PROCEDURE	35
12.4	REMOVAL OF FIRE WATER.....	36
13	AFTER AN INCIDENT.....	37
13.1	CONTINGENCY PLANNING.....	37
13.2	GENERAL RECOVERY PROCEDURE	37
13.3	SITE DECONTAMINATION	38
13.4	POST FIRE SITE RECOVERY	39

List of Appendices:

Appendix I - Drawings

Drawing No. ORW/3301/03 –Site Layout & Fire Plan

Drawing No. ORW/3301/04 –Receptor Plan

Appendix II - Record Keeping Forms

Fire Check Inspection Form

Preventative Maintenance Checklist

Employee Training Needs Assessment / Review

(Forms used as a guide; operator may use internal forms based on the information provided)

List of Tables

Table 1.1 - Staffing Levels	4
Table 1.2 - Sensitive Receptors	6
Table 2.1 - Common fire sources and mitigation measures	7
Table 4.1 – Waste Storage Table	17
Table 4.2 – Conversion Factors	17
Table 4.3 - Combustible waste storage/monitoring table (containers)	18
Table 4.4 – Storage and monitoring procedures for wastes stored in baled form	19
Table 11.1 - Water supply calculations (Largest Stockpile)	32
Table 12.1 - Firewater Containment Calculation for External yard	34

Site Information & Key Contacts List

Site Address:	A2B House, Orwell Crossing, Nacton, Ipswich, IP10 0DD		
Site Operator:	A2B-Online Limited	National Grid Ref:	TM 21173 41324

Contact	Description	Office Hours	Out of Hours
Marinus Scheijde	Director	01394 458530	07765 924896
Paul Caruana	TCM	01352 878471	07436 189610
<u>Ipswich Hospital</u> Heath Road, Ipswich, IP4 5PD	Main NHS Hospital	01473 712233	999
	Accident & Emergency (A&E) – 12-hour service	01473 712233	999
<u>Ravenswood Medical Practice</u> 24 Hening Avenue, Ipswich, IP3 9QJ	Local Doctor Surgery (GP)	01473 271122	999
<u>Suffolk Constabulary</u> Suffolk Constabulary Police Headquarters, Portal Avenue, Martlesham Heath, Martlesham, Ipswich, IP5 3QS	Local Police Non-Emergency	101 or 01473 613500	999
	Police Emergency	999 or 112	999
<u>Suffolk Fire & Rescue Service – Ipswich East Fire Station</u> 17 The Havens, Ipswich, IP3 9SJ	Fire and Rescue Service (in Emergency Dial 999)	999 or 01473 260588	999
<u>Suffolk County Council</u> Landmark House, 4 Egerton Road, Ipswich, IP1 5PB	County Council General Enquiries	0345 606 6067	01473 260588
<u>Anglian Water</u>	Water Provider / Sewerage Undertaker	03457 919 155	03457 145 145
Environment Agency Ceres house, Searby Rd, Lincoln LN2 4DW	Local Environment Agency Office	0370 850 6506	0800 80 70 60
Oaktree Environmental Ltd Lime House, 2 Road Two, Winsford, Cheshire CW7 3QZ	Specialist Advisor (Waste Permitting and Planning Issues)	01606 558833	N/A

1 Introduction

1.1 General

- 1.1.1 Oaktree Environmental Ltd have been instructed by A2B-Online Limited (the Operator) to prepare this Fire Prevention Plan (FPP). The FPP assesses the fire risk associated with the storage of combustible waste at A2B House, Orwell Crossing, Nacton, Ipswich, IP10 0DD (the site).
- 1.1.2 The site will be operated as a non-hazardous waste transfer station comprising the acceptance, storage and transfer of predominantly SDF / RDF bales for export. The Operator may also store bales of other household, commercial and industrial (HCI) waste types such as paper/cardboard, plastic, ferrous/non-ferrous metals etc.
- 1.1.3 The permit boundary is illustrated in green on Drawing No. ORW/3301/02 Permit Boundary Plan. All references to 'the site' in this FPP refer to the associated operations, infrastructure, plant, and equipment within this boundary.
- 1.1.4 All site staff and contractors must be aware and understand the contents of this FPP and what they must do during a fire. A copy of this FPP will be kept on site at all times and be made available to all members of staff.
- 1.1.5 In the event of a fire, the Fire & Rescue Service and EA would be able to view this FPP to ensure the actions set out are implemented to meet the objectives shown in Section 1.2.2.
- 1.1.6 Contact details for neighbouring business and receptors within the immediate vicinity of the site are kept on site. In the event of a fire these receptors would be contacted to alert them of the fire.
- 1.1.7 In addition to this FPP the site is managed and operated in accordance with a fully comprehensive Environmental Management System (EMS). Copies of all management plans including this FPP will be kept in the site office at all times (including electronic copies).

1.2 **Fire Prevention Plan Objectives**

- 1.2.1 This FPP has been prepared in accordance with the Environment Agency guidance on Fire Prevention Plans: Environmental Permits (updated 11th January 2021). The FPP guidance requires that the FPP accounts for the fire risk from potentially combustible waste types stored on site.
- 1.2.2 This FPP has been designed to meet the following objectives:
- a) To minimise the likelihood of a fire happening.
 - b) To aim for a fire to be extinguished within 4 hours.
 - c) To minimise the spread of a fire within the site and to surrounding neighbouring sites; and,
 - d) To minimise impact of fire on people, environment, and businesses.
- 1.2.3 All staff working on site must understand the content of this FPP to know what to do:
- a) To prevent a fire occurring.
 - b) During a fire if one breaks out.

1.3 **Reviewing and Monitoring this FPP**

- 1.3.1 This FPP is considered a 'live' document which will be reviewed on a biannual basis (once every two years), if there are changes to FPP guidance and or if any of the following occur:
- a) A fire incident.
 - b) Additional combustible waste types are accepted on to site.
 - c) An increase in the annual throughput of combustible waste accepted.
 - d) An increase in the amount of combustible waste stored.
 - e) The construction of new infrastructure e.g. buildings.
 - f) The installation of new plant / equipment.
- 1.3.2 Reference should be made to Sections 5.2 and 5.3 which details procedures for staff training in the event of any changes in relations to the FPP.

1.4 **Site Operations**

- 1.4.1 Reference should be made to the Environmental Management System for specific details regarding the acceptance, storage and removal of waste, in summary the main operations which take place at the site are as follows:
- a) Storage of Refuse Derives Fuel (RDF) bales.
 - b) Storage of Solid Recovered Fuel (SRF) bales.
 - c) Storage of HCI waste bales (paper & cardboard, plastic, metals etc).
- 1.4.2 No treatment or processing of waste is undertaken on site, the site is used for the above storage operations only.
- 1.4.3 The above activities are clearly shown on the Site Layout & Fire Plan, Drawing No. ORW/3301/03.

1.5 **Hours of Operation**

- 1.5.1 The site will be operated on a 24/7 basis for the receiving / removal of waste from site, however, waste is typically accepted Monday to Friday. 24/7 operation is necessary due to the vessel departure times from the dock.
- 1.5.2 The manned office hours for the site are typically between 7am-7pm Monday to Friday.
- 1.5.3 During times where the site is closed or not in operation, the site will be locked and secured to prevent unauthorised vehicular or pedestrian access. If loads are being delivered / removed from site outside of the manned office hours, drivers are provided with a code for the keypad used to gain access the site.

1.6 **Staffing and Management**

- 1.6.1 The site will open for the deposit of waste or for other essential operations during the hours listed in Section 1.5 above. Table 1.1 overleaf details the staff structure of the site when operating at full capacity.

Table 1.1 - Staffing Levels

Position	Employees	Responsibilities
Site manager & TCM	1	Overseeing and co-ordinating all activities which take place at the site
Office / administrative staff	13	Office/administrative duties

1.7 Plant and Equipment

- 1.7.1 There is no plant or equipment located on site, waste remains within the trailers in the parking spaces and is not required to be removed for storage. The only items on site will be HGV's and their accompanying trailers / loads.

1.8 Correspondence with Fire and Rescue Service

- 1.8.1 The Operator will seek a two-yearly response from the EA and FRS (or sooner should a fire incident occur) with regards to their FPP and associated operations on site. This regular correspondence will ensure all measures to prevent, mitigate and contain fires on site are up to date and deemed sufficient by the FRS.
- 1.8.2 The FRS were contacted during the preparation to obtain information relating to the nearest fire hydrants to the site, see Drawing No. ORW/3301/03 and Section 10.3 for further information.

1.9 Sensitive Receptors

- 1.9.1 It is considered that fire presents three main hazards to nearby sensitive receptors:
- a) Heat from the fire itself.
 - b) Air pollution (predominantly from smoke emissions).
 - c) Pollution to groundwater / surface water features.
- 1.9.2 Heat energy from a fire will reach sensitive receptors via direct fire spreading or by the deposit of burning embers. Heat energy is largely dependent upon the location and intensity of the fire.

- 1.9.3 Smoke produced from fires can contain harmful gases that are produced from the combustion process. The distance smoke will travel is dependent on wind speed at the time of the fire, however it is considered unlikely that smoke from the burning waste stored on site will significantly affect sensitive receptors outside of a 1km radius.
- 1.9.4 Significant amounts of water and / or other chemicals may be used when controlling a fire. Firewater produced from tackling a fire has the potential to contain contaminants from the chemicals used, burned materials and other pollutants present on the site. The release of firewater from the site because of a fire has the potential to cause pollution to groundwater / nearby surface water features.
- 1.9.5 Sensitive receptors within 1km of the site are listed overleaf in table xx, sensitive receptors are also illustrated on Drawing No. ORW/3301/04 Receptor Plan, see Appendix I.
- 1.9.6 The primary sensitive receptor for any fire event would be the site itself and any site users.

Table 1.2 - Sensitive Receptors

Receptor	Direction from Site	Approx distance from the site boundary to the receptor boundary (m)
Commercial / Industrial		
Ransomes Industrial Estate	West	0
Orwell Logistics Park	East	0
CP Transportation Services Limited	South	0
Lytham Road Waste Transfer Station (operated by FCC)	West	15
Basetek (mechanical engineering)	Northwest	40
Fryers Transport	Northwest	135
Clip 'n Climb Ipswich – Indoor Rock-Climbing Centre	West	230
Drax Energy Solution Ltd	West	270
Ipswich East Fire Station	West	310
Residential		
Residential properties (Felixstowe Road)	North	370
Residential properties (Penny Lane)	Northwest	755
Residential properties (Mill Piece)	Southeast	940
Care homes (residential)		
n/a	n/a	n/a
Schools		
n/a	n/a	n/a
Watercourses		
n/a	n/a	n/a
Infrastructure (major roads and transport links)		
A14 and its users	South	65
Felixstowe Road (A1156)	North	360
Ecological Sites		
Priority habitat (Deciduous Woodland)	West	110

- 1.9.7 There are no schools, care homes, watercourses or protected habitats (SSSI, SAC, Ramsar sites) within 1km of the site boundary.

2 Managing Common Causes of Fire

2.1 Details

2.1.1 Table 2.1 below outlines common causes of fire and outlines specific examples of these sources, the associated risks and any mitigation measures necessary to manage them:

Table 2.1 - Common fire sources and mitigation measures

Source	Risk	Magnitude of Risk / Likelihood	Brief outline of Mitigation (refer to Section 4 for storage/monitoring procedures)	Magnitude of risk / likelihood following mitigation
Arson or vandalism	Deliberate ignition of wastes by intruder(s) and/or vandalism of site infrastructure, plant and/or machinery which may give rise to malfunction or compromise the integrity of waste storage/containment measures	Medium	<ul style="list-style-type: none"> Suitable site security infrastructure, see section 2.6 for further information. Vehicle checks on arrival to the site. Vehicles / HGVs are maintained in accordance with manufacturer recommendations and relevant legislation. Staff training / toolbox talks. 	Negligible
Plant or equipment	Spillages of fuel, sparks from machinery or malfunction caused by ineffective maintenance	Medium	<ul style="list-style-type: none"> No plant or equipment is used on site. Vehicles / HGVs are maintained in accordance with manufacturer recommendations and relevant legislation. There is no fuel storage on site. Daily checks of site surfacing and spill kits available on site. Staff training / toolbox talks. 	Negligible
Electrical appliances and cabling	Faulty appliances or damaged/ exposed electrical cables may spark as a result of a power surge	Medium	<ul style="list-style-type: none"> Fixed wiring testing is carried out 5 years and portable appliances are PAT tested 24 months in accordance with Legislation. It is not considered there will be a build up of dust and fluff as no waste operations take place within the building, RDF bales are securely wrapped and are not removed from trailers. 	Negligible
Discarded smoking materials	Risk of ignition of stored wastes from smoking materials which have not been fully distinguished	Low	<ul style="list-style-type: none"> Smoking (including e cigarettes) is not permitted on site. Any persons wanting to smoke will have to do so in the dedicated smoking area (6m from combustible waste). 	Negligible
Sparks from loading buckets/shovels	Scraping of loading buckets/shovels causing sparks which may ignite stored wastes	Low	<ul style="list-style-type: none"> No loading shovels are used on site. 	Negligible
Hot works	e.g. welding, soldering, cutting, etc. which involve the use of high temperature equipment which may be a source of both primary and residual heat to stored wastes	Medium	<ul style="list-style-type: none"> No hot works will take place at the site. 	Negligible
Industrial heating	Industrial heaters and/or pipework used to heat internal and external areas on site which may, in turn, supply heat to stored wastes increasing the risk of combustion	Low	<ul style="list-style-type: none"> There are no industrial heaters (or associated pipework) used to heat areas of the site. 	Low
Hot exhausts	Potential source of both primary and residual heat to stored wastes	High	<ul style="list-style-type: none"> No plant or equipment is used on site, therefore only the hot exhausts from HGVs delivering loads are considered to be a potential risk. A no idle policy is implemented on site, vehicle engines will be turned off when not in use. Daily checks are undertaken for hot exhausts at least once during the day and again at the end of the day. 	Low

Source	Risk	Magnitude of Risk / Likelihood	Brief outline of Mitigation (refer to Section 4 for storage/monitoring procedures)	Magnitude of risk / likelihood following mitigation
Build-up of loose combustible waste, dust and fluff	Light waste and ambient particulates with high combustibility settling and building up in key areas in and around plant/machinery and around exhausts	High	<ul style="list-style-type: none"> No plant or equipment is used on site, HGV exhausts will be inspected for evidence of dust or fluff prior to leaving the site. Fire extinguishers are located within the site office and close to waste storage areas. Staff training / toolbox talks for continuous monitoring throughout the day to detect signs of a fire caused by dust settling on hot exhausts and vehicle engine parts. Daily checks are undertaken for hot exhausts at least once during the day and again at the end of the day. 	Low
Hot loads	Imported wastes which may contain materials which are above ambient temperature	High	<ul style="list-style-type: none"> All loads are inspected in accordance with strict waste acceptance procedures. Quarantine area and rejected waste containers on site for quick isolation of load. 	Low
Overhead power lines	Any overhead power lines on or around the site may ignite in the event of a fire and worsen the effects	Low	<ul style="list-style-type: none"> There are no overhead power lines which traverse the site. 	Negligible
Ignition sources	Activities or appliances which use a source of both primary and residual heat to treat waste or manufacturer material or plant/equipment	Medium	<ul style="list-style-type: none"> No plant or equipment is used on site, therefore only the hot exhausts from HGVs delivering loads are considered to be a potential risk. A no idle policy is implemented on site, vehicle engines will be turned off when not in use. Daily checks are undertaken for hot exhausts at least once during the day and again at the end of the day. 	Low
Other combustible non-waste materials on or near the site not mentioned above i.e. gas cylinders / LPG tanks	Any combustible non-waste materials on or near the site may ignite in the event of a fire and worsen the effects	High	<ul style="list-style-type: none"> All loads are inspected in accordance with strict waste acceptance procedures. Quarantine area and rejected waste containers on site for quick isolation of load. There will be no storage of any cylinders, tanks or other type of materials at the site. 	Negligible
Reaction between wastes	Combustible waste piles may ignite in the event of a fire and worsen the effects if wastes react	High	<ul style="list-style-type: none"> All loads are inspected in accordance with strict waste acceptance procedures. Quarantine area and rejected waste containers on site for quick isolation of load. The Operator does not accept any waste types that could react with one another. 	Low
Leaks and spillages of oils and fuels	Fuels and combustible liquids leaking or trailing from site vehicles and ELVs can combust or cause accidents leading to combustion	High	<ul style="list-style-type: none"> Spill kits available throughout the site. Suitable and sealed drainage system. Continuous (minimum twice daily) checks for spillages around the site. Staff training / toolbox talks. Preventative maintenance of vehicles / HGVs. 	Low
"Tramp" metal	Metal could be hot from mechanical processing and interact with lighter waste causing a fire	High	<ul style="list-style-type: none"> All loads are inspected in accordance with strict waste acceptance procedures. Quarantine area and rejected waste containers on site for quick isolation of load. No mechanical processing is undertaken on site. No scrap metal is accepted on site. 	Negligible

2.2 Fuel, Oil & Hazardous Material Storage

- 2.2.1 No gas cylinders or aerosols will be accepted for storage at the site, nor will there be chemicals present on site.
- 2.2.2 No fuel or oil are stored on site.
- 2.2.3 AdBlue is stored on site for HGV maintenance.

2.3 Hot Works Procedure

- 2.3.1 No hot works take place at the site.

2.4 Smoking Policy

- 2.4.1 Smoking (including e-cigarettes) is prohibited on site. Any persons wanting to smoke will have to do so in the designated smoking area located 6m from combustible waste storage area.

2.5 Mobile and fixed plant maintenance

- 2.5.1 There are no items of mobile or fixed plant on site, vehicles part of the Operators fleet will be subject to annual manufacturer maintenance to ensure proper working order in the form of service contracts.
- 2.5.2 Site management will undertake or delegate additional preventative maintenance checks on a more frequent basis i.e. daily, before, during and 1 hour at the end of each working day using a checklist similar to that in Appendix II to ensure the following:
 - Vehicles are mechanically sound for use and no presence of black fumes or trailing liquids visible prior to use or following shutoff of engines.
 - As there is no mobile plant or equipment used on site, no out-of-hours storage area is required.

2.6 **Site Security**

- 2.6.1 Site security is important to reduce the likelihood of unauthorised access to the site. The only access to the site is via Lytham Road.
 - 2.6.2 The site is located within Ransomes Industrial Estate who have their own wider security that perform overnight patrols which the Operator pay a service charge to.
 - 2.6.3 The site itself is bounded by 2m high steel palisade fencing on all sides, the entrance to the site is secured with an automated cantilever sliding gate. If deliveries are required to be delivered / collected overnight outside of the manned office hours, drivers will be given a security code for the access keypad to provide secure entry to the site and prohibit any unauthorised access.
 - 2.6.4 In addition to the above, there is 24-hour CCTV on site which is remotely accessible by all senior members of staff via mobile phones which will send alerts of any movement detected. Camera locations are shown on Drawing No. ORW/3301/03. CCTV provides coverage of the whole site including all waste storage areas providing easy recognition of a fire if one were to occur.
 - 2.6.5 In the unlikely event an area of the site becomes obscured and is not visible by CCTV, the operator will install additional CCTV cameras along the site perimeter.
 - 2.6.6 In terms of out-of-hours monitoring, CCTV cameras link to senior managements mobile devices and an incident will directly inform the Operator with a notification so senior management can review the footage on their phone and decide whether action is required i.e. attend the site or contact the FRS/EA. Any unusual or suspicious activity picked up which could present the risk of arson and is not in line with the Operators site specific procedures will mean a call to the emergency services.
- 2.2 As stated in paragraph 2.6.2 above, the Operator pay a service fee to the wider Ransomes Industrial Estate security guard who will periodically patrol the industrial estate including the site outside of manned office hours.

2.6.7 The site security measures will be inspected on a weekly basis and any defects which impair the effectiveness of the security will be repaired to the same or better standard as soon as practicable. All repairs will be noted on the site diary within 24 hours of the event.

2.6.8 If unauthorised access becomes apparent as a problem at the site the security measures will be reviewed and improvements implemented.

2.7 **Electrical Faults or Damaged/Exposed Electrical Cables**

2.7.1 The only building located on site is the office which is not directly associated with the waste operations. All fixed wiring electrical cabling within the site office will be inspected periodically by staff and serviced in accordance with Legislation by fully qualified and certified electrical contractors to undertake both Planned Preventative Maintenance and Reactive Maintenance (under contract) of the following:

- a) Fire detection & alarm system;
- b) Emergency lighting;
- c) Vehicle checks / services (as per manufacturers' instructions).

2.7.2 In terms of portable appliance testing (PAT), this will be serviced annually by qualified and certified electrical contractors.

2.7.3 Any potential ignition sources from suspected electrical faults (CCTV) will be isolated and the appointed electrical contractors will be contacted immediately to rectify the situation. Where possible, staff will immediately remove any stored wastes from the vicinity of the fault area or cable traverse if safe to do so.

3 Waste Acceptance Procedures

3.1 General

- 3.1.1 Strict waste acceptance procedures are implemented on site to ensure that only suitable waste is accepted. The procedure for accepting waste is summarised below.
- 3.1.2 Waste pre-acceptance checks are implemented prior to the collection of a load by the Operator. When drivers employed by A2B-Online Limited arrive at the waste producer's premises, they will check the waste to ensure it is acceptable at the site and confirm the integrity of bales ensuring they are wrapped securely and free from defects e.g., no tears or holes in the bale wrapping. Ensuring the waste is securely wrapped / baled will prevent RDF material escaping and combusting.
- 3.1.3 Every load will have the following details recorded at pre-acceptance:
- a) Vehicle Registration and drivers name and signature.
 - b) Waste haulier name and valid waste carriers' registration number.
 - c) Name address (of source site) and signature of transferor.
 - d) Name, address (of destination site) and signature of the person receiving the waste (transferee).
 - e) Permit number or exemption reference of person receiving the waste (if applicable).
 - f) Description of waste including waste type, waste source, waste containment and waste quantity.
 - g) List of Waste (LoW) code.
 - h) SIC code of the waste holder.
 - i) Date and time of waste transfer and waste transfer note number.
 - j) Confirmation that the waste hierarchy has been considered.
- 3.1.4 Waste is delivered to the site via curtain slider lorries, upon arrival at the site all waste will undergo a second visual inspection. If any RDF bales appear to be damaged, they will be rejected from the site.

- 3.1.5 Once the vehicle has passed the onsite inspection, the waste transfer documentation will be fully checked to ensure the waste matches the pre-acceptance information received.
- 3.1.6 Any wastes identified during the incoming waste inspections which do not conform to site acceptance criteria will not be accepted and removed/quarantined immediately to await safe removal from site. The EA will be contacted (where necessary) if the non-conforming waste discovered is likely to lead to a breach of permit conditions or a potential risk of combustion.

3.2 **Waste Reception / Storage**

- 3.2.1 The main combustible waste types accepted at the site include the following EWC codes:
- **19 12 10** - combustible waste (refuse derived fuel).
 - **19 12 12** - combustible waste (solid recovery fuel).
 - **15 01 01, 19 12 01, 20 01 01** - paper and cardboard.
 - **15 01 02, 19 12 04** – plastic.
 - **19 12 02** – ferrous metals.
 - **19 12 03** – non-ferrous metals.
- 3.2.2 The Operator may also accept other combustible waste types such as baled paper and cardboard, plastic packaging and metals.
- 3.2.3 Once accepted on site, waste will not be removed from the curtain side trailers. Trailers will be parked in the appropriate bays for storage prior to removal. Trailers are stored on flat ground and the curtain of the trailer will remain closed unless bales are being inspected / monitored, therefore reducing the risk of bales falling off trailers which could accelerate combustion by exposure to direct sunlight or split the bale.
- 3.2.4 Loads will typically be stored on site for less than 48 hours prior to delivery to the Port of Felixstowe which is approximately 15 minutes from the site. Due to the location of the site being within close proximity to the port, temporarily storing waste at the site will ease demand and congestion at the port.

- 3.2.5 A maximum storage duration of 5 days has been provided in Table 4.1 to account for loads being delivered on a Friday as these typically wouldn't be removed until the following Monday, delays in shipments from the port have also been considered.
- 3.2.6 No mechanical treatment of any waste will be undertaken on site.

4 Managing Waste Storage to Prevent Self-Combustion and the Fire Spreading

4.1 General

4.1.1 All waste stored on site will comply with Section 9.1 of the EA's FPP guidance, reference should be made to Drawing No. ORW/3301/03 Site Layout & Fire Plan for details of waste stored and the indicative storage locations on site.

4.1.2 The operator will minimise pile sizes and store combustible waste materials in their largest form i.e. bales.

4.2 Waste Storage Table

4.2.1 Table 4.1 details the maximum quantity, location and duration for all wastes stored on site. This ensures all piles are stored in accordance with Section 9.1 of the FPP guidance.

4.2.2 The storage table has been based on the maximum volumes of waste the site could store at any one time.

4.2.3 The largest area on site would never comprise of more than 4 trailers of combustible waste meaning a maximum volume / tonnage of waste stored in the largest area would never surpass 364m³, 13m in length and three bales high unless in extenuating circumstances.

4.2.4 The Operator is able to store a maximum quantity of 2,145 tonnes of waste on site at any one time if all areas were full and trailers were at maximum capacity. This is considered a worst-case scenario, and it will be more likely approximately a maximum of 930.6 tonnes to be stored on site at any one time as the maximum payloads for deliveries to the Netherlands and Belgium are 28.2 tonnes and 25 tonnes for loads being exported to Germany. Therefore, trailers will never typically contain more than this.

Table 4.1 – Waste Storage Table

Storage Area Details														
Plan Ref	Description	Storage type	Containment / type	Height of firewall (m)	Max Width (m)	Max Length (m)	Max storage height (m)	Approx. Area (m2)	Conversion factor used	Approx. volume (m3) per container	Approx. volume total (m3)	Approx. no. of bales (per container)	Approx. tonnage (per container)	Max storage time
AREA 1	Storage of bales i.e. paper/cardboard, plastic, RDF/SDF bales	Bale stack (three high)	Secure curtain side trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 2	Storage of bales i.e. paper/cardboard, plastic, RDF/SDF bales	Bale stack (three high)	Secure curtain side trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 3	Storage of bales i.e. paper/cardboard, plastic, RDF/SDF bales	Bale stack (three high)	Secure curtain side trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 4	Storage of bales i.e. paper/cardboard, plastic, RDF/SDF bales	Bale stack (three high)	Secure curtain side trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 5	Storage of bales i.e. paper/cardboard, plastic, RDF/SDF bales	Bale stack (three high)	Secure curtain side trailers	N/A	2.2	12.6	3.3	27.72	1	91	182 (2 containers)	54	65	<5 days
AREA 6	Storage of bales i.e. paper/cardboard, plastic, RDF/SDF bales	Bale stack (three high)	Secure curtain side trailers	N/A	2.2	12.6	3.3	27.72	1	91	273 (3 containers)	54	65	<5 days
AREA 7	Storage of bales i.e. paper/cardboard, plastic, RDF/SDF bales	Bale stack (three high)	Secure curtain side trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 8	Storage of bales i.e. paper/cardboard, plastic, RDF/SDF bales	Bale stack (three high)	Secure curtain side trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 9	Storage of bales i.e. paper/cardboard, plastic, RDF/SDF bales	Bale stack (three high)	Secure curtain side trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days

4.3 Conversion factors

4.3.1 The following conversion factors for calculating waste pile sizes are set out in Table 4.2 below.

Table 4.2 – Conversion Factors

Conversion Factors
Conversion factors for waste piles are worked out using the following methods set out by The Environment Agency
The maximum length width pile is based on the largest dimension – the volume of the pile has been calculated using the area x height x conversion factor of 1 as shown below
Conversion of 1 for materials stored as waste/bale stacks
Each bale measures 1.1m (W) x 1.4m (L) and 1.1m (H), 1.54m ² / 1.694m ³

4.4 Waste Storage Residence Time

- 4.4.1 Each waste storage area (trailers) on site is inspected throughout the day by operational staff and in the event of a fire has suitable techniques shown in various sections of this FPP to ensure any fire could be extinguished.

4.5 Free Standing Piles

- 4.5.1 There will be no free-standing piles of waste at the site i.e. stockpiles, all waste will be stored in bale form in secure curtain side trailers.

4.6 Waste Stored in Containers

- 4.6.1 Table 4.3 below details the storage and monitoring procedures for waste stored in containers.

Table 4.3 - Combustible waste storage/monitoring table (containers)

Pile Reference	Storage/monitoring procedures to reduce the risk of fire
ALL PILES	<ul style="list-style-type: none">• Due diligence checks in the form of pre-acceptance checks are undertaken prior to collection of a load from a customer premises to confirm no incompatible waste is accepted and bales are securely wrapped. A second visual inspection is undertaken upon arrival at the site to ensure bales have not been damaged during transit.• Bales will arrive on site in curtain side trailers and will not be removed from the trailer, instead bales will remain in the trailers for storage on site, removing the risk of combustion from the double handling of waste.• The curtains of the trailers will remain closed unless waste is being inspected / monitored, this is to reduce the potential for combustion from direct sunlight.• Trailers will be accessible from at least one side and will be able to be hooked up to HGV cabs and moved to the quarantine area instantaneously if required.• The Operator predominantly stores SRF/RDF bales. All waste stored on site is done so prior to transportation and loading onto vessels at the Port of Felixstowe against known contracts with TFS in place.• No physical waste treatment is undertaken on site, only the storage of waste.• CCTV on site is recorded 24-hours and accessible via senior managements mobile devices, CCTV covers all areas of the site including all waste storage areas.• During manned office hours, a member of staff will always be on site who will be trained in the requirements of this FPP and early detection of a fire. Outside of manned office hours a security guard for the wider Ransomes Industrial Estate will periodically patrol the industrial estate including the site and will inform the Operator and FRS if a fire is detected.• Waste is typically removed from site within 48 hours or a maximum of 5 days to cover any contingencies. These short storage times significantly reduce the risk of combustion.• Due to the above it is considered no further storage or monitoring is required.

4.7 Waste Stored in Baled Form

- 4.7.1 Baled Refuse Derived Fuel (RDF) and Solid Recovered fuel (SRF) will be stored on site in the back of curtain side trailers. RDF and SRF are the predominant waste type accepted by the Operator.
- 4.7.2 Baled HCl waste such as paper and cardboard, plastic and metals will be stored on the back of curtain side trailers.
- 4.7.3 The monitoring and storage procedures mentioned in section 4.6 above will also apply and are outlined in Table 4.4 below, ensuring the risk of any spontaneous combustion or other incident which could lead to a fire is minimised.

Table 4.4 – Storage and monitoring procedures for wastes stored in baled form

Pile Reference	Storage/monitoring procedures to reduce the risk of fire
ALL PILES	<ul style="list-style-type: none">• Due diligence checks in the form of pre-acceptance checks are undertaken prior to collection of a load from a customer premises to confirm no incompatible waste is accepted and bales are securely wrapped. A second visual inspection is undertaken upon arrival at the site to ensure bales have not been damaged during transit.• Bales will arrive on site in curtain side trailers and will not be removed from the trailer, instead bales will remain in the trailers for storage on site, removing the risk of combustion from the double handling of waste.• The Operator only store bales ready for loading onto vessels at the Port of Felixstowe against known contracts with TFS in place.• Waste is typically removed from site within 48 hours or a maximum of 5 days to cover any contingencies. These short storage times significantly reduce the risk of combustion.• Bale contents have different specifications, which are shipped to specific customers and as such the bales are received onto site for shipment to meet these requirements, and ensure the correct bales go to the correct destination and as described in the TFS.• The piles will be visually monitored throughout the day by site operatives and trained personnel who will be trained via toolbox talks in recognition of fire.• CCTV on site is recorded 24-hours and accessible via senior managements mobile devices, CCTV covers all areas of the site including all waste storage areas.• During manned office hours, a member of staff will always be on site who will be trained in the requirements of this FPP and early detection of a fire. Outside of manned office hours a security guard for the wider Ransomes Industrial Estate will periodically patrol the industrial estate including the site and will inform the Operator and FRS if a fire is detected.• Due to the above it is considered no further storage or monitoring is required.

4.8 **External Heating from Hot Weather**

- 4.8.1 It is considered the storage of wastes externally will not possess a high risk of over-heating from hot weather or direct sunlight.
- 4.8.2 Waste is stored in secure curtain side trailers, the curtains of the trailers will remain closed unless the bales are being inspected / monitored which will significantly minimise the risk of combustion from exposure to direct sunlight. During the sites manned hours waste storage areas are continuously monitored and checked for signs of a fire.
- 4.8.3 Waste is typically stored for 48 hours or maximum of 5 days to account for any contingencies, therefore, waste will not be stored for a period where it could combust from exposure to direct sunlight.
- 4.8.4 To reduce the risk of self-combustion from external heating, the Operator will deploy the following measures:
- a) In the event of a drought period i.e. three hot days where weather conditions would exceed 25°C / 75°F, which the operator would know in advance via the Met Office, the monitoring frequency of these piles will be increased to at least three times every 12 hours per day.
 - b) The piles can be easily suppressed using hoses in the event of early fire detection i.e. smoke, steam, flames.
 - c) No waste is stored for longer than 5 days and therefore in accordance with FPP guidance, due to this, no monitoring i.e. temperature checks, thermal probes are considered necessary. The site would only look to deploy the use of thermal imaging cameras / probing would be in extenuating circumstances i.e. closure of destination sites, transport failures, staff illness where the waste could be stored excessively i.e. up to 12 weeks. This would occur only on very rare occasions and the EA would be contacted in this scenario.

5 Prevent Fire Spreading

5.1 Waste Storage general / fire breaks

- 5.1.1 Combustible waste will be stored as per Table 4.1 and Drawing No. ORW/3301/03 and within the limit of EA's FPP guidance. All stockpiles of stored wastes are detailed in the Storage Area Details table on Drawing No. ORW/3301/03 in respect of their description, maximum length and width, area, volume and storage duration.
- 5.1.2 Given the site will only accept one type of waste in baled form with no processing of waste taking place, the operator will always store waste bale stacks in their largest form.
- 5.1.3 Although trailers are stored within 6m of the site perimeter, as shown on the site plan and clearly visible from Google Maps, no combustible or flammable is stored within 6m of the site boundary.

5.2 Waste Stored Within 6m of the Site Perimeter

- 5.2.1 The following alternative measures will apply to the trailers of RDF stored within 6m of the site perimeter.

ALTERNATIVE MEASURES

- 5.2.2 It is considered if a fire were to occur on site it would not spread beyond the site boundary due to the lack of fuel to feed the fire. The immediate receptors to the north of the site are Lytham Road, which is over 6m from the storage areas.
- 5.2.3 In terms of the southern boundary these borders the adjacent site, which is used to store trailers and HGVs, trailers are predominantly stored on the boundary adjacent to the site which are not considered combustible, they are also in excess of 6m from the waste storage areas.

5.3 **Separation Distances**

- 5.3.1 Site staff will ensure a 6m separation distance is maintained between wastes piles and other combustible/flammable materials throughout the day. Prior to closing, a final check of the above will take place by trained staff which will include measuring the separation distances between storage areas.

5.4 **Stock Rotation and Seasonal Variations**

- 5.4.1 In the event of destination site closure (nonarrival of shipment), the Operator would contact the EA and agree whether or not additional monitoring is required, this could be done by using temperature probes or thermal imagery in accordance with Section 8.3 of the FPP guidance. Given all waste tracked and required for the shipment, a delay in the waste storage is unlikely.

6 Site Inspection Programme

6.1 Daily Checks

- 6.1.1 Site management are ultimately responsible for carrying out daily site walks for checking drainage systems, security measures and waste storage areas. Site management can reference the Inspection Checklists shown in Appendix II but may use internal check sheets.
- 6.1.2 The fire watches/site inspections will take place regularly throughout the day and recorded at least once at the end of the working day before the site closes to ensure the risk of a potential fire has been reduced.
- 6.1.3 Carrying out the above checks daily will keep the levels of dust, fibre, paper and other loose combustible materials, which could aid in the acceleration of a fire, on site surfaces to a minimum and ensure all containment of wastes on site are functioning effectively in accordance with the storage limitations provided in the table on Drawing No. ORW/3301/03.
- 6.1.4 Weekly inspections of firefighting equipment also take place to ensure they are fit for purpose and there are sufficient quantities available on site.

6.2 Staff training

- 6.2.1 Operational staff are subject to site inductions which includes basic fire emergency procedures. Site management are suitably trained to carry out these inductions.
- 6.2.2 A full test (drill) of the procedures in this document will be carried out every 6 months to test that the plan works. The first test will take place within one month of the agreement of this document with the EA. The outcome and any follow up training for staff will be documented in the site diary and relevant forms in the operator's EMS. The Fire Checklist and training form in this FPP may also be used during the drill.

6.3 **Toolbox talks**

- 6.3.1 All operational staff on site have received fire awareness training / toolbox talks off trained staff i.e. the operations, site or technically competence manager on their staff induction to detect early signs of fire and to minimise the chance of a fire breaking out in order to meet the three objectives.

7 Quarantine Area

- 7.1.1 In accordance with the EA's FPP guidance an area of the site has been designated as the quarantine area as shown on Drawing No. ORW/3301/03 which is accessible at all times.
- 7.1.2 It is considered the largest storage area on site will comprise a maximum of 4 curtain side trailers. Each container **measures 2.2m x 12.6m x 3.3m** and has a volume of approximately 91m³ of waste material per container, therefore, the total maximum capacity for an area with 4 containers is 364m³.
- 7.1.3 The quarantine area proposed has a volume capacity of 182m³ if bales are stacked three high (3.3m) which is capable of holding more than 50% of the waste in the largest area.
- 7.1.4 In the event of a fire, the quarantine area will be used to either isolate wastes which are smouldering to allow safe dissipation of heat without placing other areas on site at risk of ignition; or, to remove any wastes stored in piles/containers near any material affected by a fire to prevent fire spreading to adjacent piles.
- 7.1.5 As no waste bales are removed from the back of trailers and the Operator has no mobile plant on site capable of removing waste bales, in the event of a fire either the trailer containing the combusted waste will be moved to the quarantine area or the adjacent trailers of unburnt material will be moved to prevent the fire spreading.
- 7.1.6 Waste will only be moved to the quarantine area if safe to do so following judgement by site management co-ordinating the fire response procedure or the FRS.

8 Detecting Fires & Response Procedures

8.1 Fire detection procedure (manual)

8.1.1 If a fire is detected or suspected by a member of staff during operational hours, the relevant person will conduct the following procedure report to site management:

- a) Raise the fire alarm (if not already done by another staff member) or sound fire alarms/communicate via radio or ring out-of-hours key holders. **Timescale for this will be upon detection i.e. seconds**
- b) Assess the intensity and scale of the fire and make a judgment as to whether the fire can be managed without the requirement for assistance from the emergency services i.e. using the hose or fire extinguishers. **This process should take less than 60 seconds. If fire requires further assistance, a call will be logged to the FRS then the procedures in 9.1 will be followed.**
- c) Initiate evacuation of staff and visitors on site to the meeting point and instruct delegated person(s) to conduct a roll-call to ensure all site users are accounted for. **Timescale variable depending on staff on site – estimated within 5 minutes.**
- d) If viable and safe, instruct necessary site staff to commence extinguishment. **Timescale variable depending on size of fire, suppression can be within minutes if safe to do so.**

8.2 Automated/out-of-hours detection

8.2.1 The site has CCTV at the site which provides coverage to areas storing waste as shown on Drawing No. ORW/3301/03.

8.2.2 Details of the site's security infrastructure and 24-hour CCTV are outlined in Section 2.6 which are considered ample to prevent arson which could lead to a fire incident. As the site benefits from 24-hour manned security, it is considered the need for automated detection or certification of CCTV from UKAS accredited company is not

required as all bale stacks would be monitored at least four times over a 24-hour period by trained staff.

8.2.3 The security guard would contact the site manager/TCM in the event of a fire and the TCM is trained in the following to ensure to reduce the impact of a fire:

- Site drainage and surface water protection measures
- Firefighting equipment

8.2.4 If a fire broke out when no staff are on site, the wider industrial estates security guard would contact the FRS and request assistance as shown in Section 9.1. Given the type of waste stored, if a fire did happen, it is likely to accelerate quickly meaning staff on site may not be able to assist.

9 Fire response procedures

9.1 Response procedure

9.1.1 Further to the measures detailed in Section 8, the following procedures would apply in the event of an incident:

- a) Call the Fire Response Service (FRS) immediately using 999.
- b) Call the EA's Emergency Contact Number.
- c) Contact the competent person to ensure a suitably trained employee attends the site as quickly as possible.
- d) Prior to the FRS arriving, inform all neighbouring premises likely to be affected as a result of the fire in terms of potential road closures, smoke inhalation and action to be taken i.e. **stay indoors** (see Section 8.3).
- e) If not previously informed, senior management of the company will be informed at this point of the details, nature and extent of the fire and whether assistance from staff from other depots is required.
- f) Ensure access routes are clear (see Section 9.2).
- g) If safe to do so, site management will inspect the location of the fire, to identify immediate risks to surrounding premises and the FRS.
- h) 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.
- i) Ensure relevant site staff are standing by in a safe location to deploy additional surface water protection equipment where required under the direction of the FRS when they arrive.
- j) Site management will identify themselves to the FRS as soon as they arrive on site and will provide them with a copy of this document and update them with relevant information in terms of fire location, possible reason, waste on fire and projected impact which will assist them in dealing with a fire more effectively.
- k) Implement pollution control measures) if safe to do so as shown on Drawing No. ORW/3301/03 (see Section 12).

- 9.1.2 In the event of site management being absent from site, the operator will ensure the TCM or a suitably competent person is available during operating hours to take command of an incident should one occur.

9.2 **Access for Emergency Services**

- 9.2.1 The site has clear access points for the emergency services as shown on Drawing No. ORW/3301/03. The nearest fire station is Ipswich East fire station, situated 310m to the west. The anticipated response time following a call to the FRS is for them to be on site within <5 minutes. The out-of-hours contact for the site will be made available to the security guard situated at the wider industrial estate.
- 9.2.2 The width of the surrounding roads and gateway exceeds the minimum required by the FRS which is 3.7m. Site management will also ensure the 3.7m access routes are maintained throughout the working day and before cessation of works during site inspections.

9.3 **Notifying Receptors**

- 9.3.1 The contact numbers of key sensitive receptors identified within 1km of the site who could be directly affected in the event of a fire along with the Receptor Plan will be stored within the site office. The numbers/contacts are also shown in the pre-pages of this FPP. Other numbers may be added to this list or existing numbers changed throughout the lifetime of this FPP.
- 9.3.2 As it isn't feasible for a contact number to be provided for every individual residential receptor and individual business within 1km, the most sensitive receptors and closest business receptors have been included within the table overleaf. It is considered these receptors could pass on the incident to adjacent premises who contact information hasn't been provided in this FPP.

9.3.3 Once Emergency Services arrive on site i.e. FRS, Police, the lead authority (usually the Police) will co-ordinate a systematic approach to ensure all the relevant sensitive receptors within 1km are notified. This will involve via telephone calls, personal visits (knocking on doors) and or using a loud speaker while driving around the associated catchment. In addition to this, the Emergency Services would also publicise the fire on their Social Media outlets and contact local news websites, radios who can also provide updates on the incident.

9.3.4 The police with the assistance of the council and any other attending authority will ensure all relevant properties are informed of the fire event and given clear instructions of the actions they need to take.

9.4 **Control of Combustion Products**

9.4.1 Combustion products likely to be associated with the waste stored at the site include PAHs, dioxins and particulate matter including black smoke from mixed waste. The receptors will be advised of this during notification.

9.4.2 The release of combustion products may be controlled by the low size of waste piles at the site and the swift removal of burning wastes to the quarantine area (thus reducing spread of fire and reducing the amount of combustion products created).

9.4.3 **POPS** – In terms of POPs waste, as the site will be receiving only SRF/RDF bales from a producer site who will have segregated these at source or on site, it is considered that in the event of a fire, there would be no burning of any POPs waste. The FRS will be made aware of the waste storage and the origin should they need to tackle a fire at the site.

10 Suppressing fires & firefighting techniques

10.1 Site-wide suppression

- 10.1.1 As the site comprises an external bulking area for predominantly RDF/SRF waste, it is not considered necessary to have any fire extinguishers or hoses at the site as if a fire were to occur, these items would have very little effect given the nature of the waste stored. However, the Operator does have hoses and extinguishers available on site if required for smaller fires.
- 10.1.2 It would also be considered dangerous for staff to try and tackle a fire of this nature without specialist training.

10.2 External suppression - Fire Hydrants

- 10.2.1 In the event of a fire at the site, there are two no. hydrants adjacent to the site which are shown on Drawing No. ORW/3301/03.

11 Water Supplies

11.1 General

- 11.1.1 Section 16 of the EA's FPP mentions the site should have enough water available for firefighting to take place and to manage a worst-case scenario. A worst-case scenario would be the largest waste pile catching fire.

11.2 Water Supply Requirements for Largest Waste Pile

- 11.2.1 Based on Drawing No. ORW/3301/03, the largest volume of waste is **364m³**. It is calculated that 437,040 litres (437m³) of water with a flow rate of approximately 2,428 litres per minute would be required to extinguish a fire within 3 hours involving the largest pile of combustible waste stored on site (364m³). This is based on the following calculation.

Table 11.1 - Water supply calculations (Largest Stockpile)

Maximum pile volume in m ³	Water supply needed in litres per minute	Overall water supply needed over 3 hours in litres	Total water available on/off site in litres
364	$364 \times 6.67 = 2,428$	$2,428 \times 180$	437,040 (437m ³)

11.3 On-site Water Supply

- 11.3.1 There is access to mains water on site however, reliance would be from the FRS due to the location of the nearest fire station.

11.4 External Suppression – Fire Hydrants

- 11.4.1 As mentioned in section 10.2, there are two no. fire hydrants adjacent to the site. The fire hydrants conform to British Standard 750 and are regularly serviced and maintained by the FRS / Anglian Water. The location of these hydrants are shown on Drawing No. ORW/3301/03.

- 11.4.2 An actual flow rate for the hydrants was unable to be provided. Therefore, the following guidance extracted from the Local Government Association (LGA) / Water UK National Guidance Document details the following flow rates which should be considered for this site. As the hydrant is located within an industrial area, the recommended minimum flow rates and location of fire hydrants are:

Industry

- 11.4.3 In order that an adequate supply of water is available for use by the Fire and Rescue Authority in case of fire it is recommended that the water supply infrastructure to any industrial estate is as follows with the mains network on site being normally at least 150 mm nominal diameter is 75 l/s.
- 11.4.4 Based on information provided in Section 11.4.1 and as the above site is considered in an area of industry, the flow rate of the hydrant) should be approximately 4,500 l/m (based on 75 l/s). Therefore, it is considered the hydrant would be suitable in surpassing the required flow of 2,428 l/m based on Section 11.2.1.

12 Managing Fire Water

12.1 Drainage

12.1.1 All areas used for waste operations are located on an impermeable concrete surface with sealed drainage. Surface water from waste processing areas of the site drain into a full retention interceptor.

12.1.2 The site generally falls to the west of the site towards the interceptor. The above is demonstrated on Drawing No. ORW/3301/03.

12.2 Containment of Fire Water

12.2.1 The only possible outlet for firewater to be released from the site is the site access, the remainder of the site is secured with 300mm impermeable concrete kerbing which will contain firewater and prevent it from escaping. Areas such as the site entrance which do not have containment or are not fully sealed will have a firewater containment boom placed across the areas in the event of a fire. It is proposed to block all drainage outlets by placing dammit matts over drainage gullies / manholes.

12.2.2 As detailed in Section 11.1.2, the largest pile would require containment for 437,040 litres (437m³) of water in accordance with the FPP guidance. Table 12.1 below details the containment available on site.

Table 12.1 - Firewater Containment Calculation for External yard

Volume of Water (m ³)	Containment Area (m ²)	Containment Required	Total Containment On Site
437	5,295 (sealed site area)	$437/5,295 = 0.08$	Concrete kerb = 0.3m high Firewater containment boom = 0.16m high Containment available = +0.22

12.3 **Fire Water Boom Deployment Procedure**

- 12.3.1 The site will have access to fire water booms which will be located as shown on Drawing No. ORW/3301/03 and would be deployed in the event of a fire and positioned as per the plan to contain any fire water. The booms have a 160mm diameter tube each side and using a standard water main i.e. the hose from the site could be filled and provide containment in <5 minutes based on the length of the boom, the volume required and the 15 l/m from the standard hose.
- 12.3.2 A key member of senior staff will be responsible for arranging the deployment of the fire water boom will be trained in this procedure.
- 12.3.3 Upon confirmation that a significant volume of water is likely to be required for extinguishing a fire on site, the following deployment procedure for the fire water booms will be observed:
- a) Take the boom roll from the site office.
 - b) Emplace the boom as shown on Drawing No. ORW/3301/03 by rolling the necessary length; they will be cut to size prior to being used as part of the fire drill procedure.
 - c) Use supplied cable ties to seal the front end of the boom.
 - d) Using a sharp knife, cut the laid-out section from the remaining roll.
 - e) Using the Hose Reel, begin filling the first of the two chambers of the boom being sure to elevate the 'fill' end to prevent the water leaving the tube.
 - f) Once the first chamber is filled, repeat in second chamber ensuring the 'fill' end is kept elevated to prevent escape of water.
 - g) When both chambers are full the 'fill' end should be sealed using a cable tie thus completing deployment.
 - h) Typically, one side of the roll would be filled which has a 160mm diameter.
- 12.3.4 The above process should be completed as above for all lengths of boom shown on Drawing No. ORW/3301/03.

12.3.5 Once deployed, all booms should be regularly checked during a fire event to ensure that they are providing effective containment and that there are no breaches. Secondary/additional lengths of boom can be deployed in addition to the compulsory locations using the same procedure (as above) if deemed necessary.

12.3.6 **Fire water boom specification** - The boom is the same as those issued by the Agency to the FRS in their 'Grab Packs'. In the grab pack information, it states "*The boom is resistant to most chemicals but may be adversely affected by very aggressive solvents such as acetone*". The site will not accept any waste material containing acetone or any other solvents.

12.3.7 If there is any deviation from the above drainage arrangement, an amended FPP will be submitted for approval by the EA and FRS.

12.4 **Removal of Fire Water**

12.4.1 Upon successfully extinguishing a fire all standing fire water would be pumped using a hired-in vacuum tanker and deposited to a suitably permitted site.

13 After an incident

13.1 Contingency Planning

13.1.1 In the event of a fire the site will cease accepting waste. All customers who wish to deliver wastes during a fire will be notified by site admin staff and any who arrive without prior notification will be turned away. If urgent, deliveries will be directed to an alternative waste facility in the borough; details of which can be found on the EA's public register.

13.1.2 No waste will be accepted on site until the post-fire site recovery procedures outlined in the section below have been fully implemented and the site is authorised to re-open for trade and waste acceptance.

13.2 General recovery procedure

13.2.1 When the fire has been successfully dealt with the following actions will take place:

- a) All fires will be reported to the EA on the working day that they occur including all steps taken by site staff, management and/or emergency services to deal with the fire.
- b) Removal of burnt material to a suitably permitted site.
- c) Investigation into the cause of the fire, to ensure it does not reoccur.
- d) A review of the FPP and EMS, associated amendments will be implemented.
- e) Review of any additional training requirements for site personnel as a result of the incident.
- f) All fire extinguishers used to tackle the fire will be serviced and replaced after use.

13.2.2 In addition to the abovementioned procedures, the sections below outline specific procedures following a fire.

13.3 **Site decontamination**

13.3.1 Surface water on site will be cleared using the following method:

- a) Using a tanker/sucker, all standing fire water should be sucked up and taken off site or stored in a tank/bowser prior to removal off site.
- b) Using all available resources, manually clean the site surface and removing the debris to the pile of fire damaged waste for removal to landfill or permitted site.
- c) Using a road sweeper, sweep the yard (damp as required using the bowser) until all ash and clinker has been removed.
- d) All debris has now been isolated and all contaminated water holding areas have been cleaned and emptied.
- e) Wash the yard down in entirety using clean water or allow a reasonably heavy rain shower to wash the yard down.
- f) It is at this stage that site management should decide whether to repeat areas of the clean-up.

13.3.2 If the clean-up operation has been deemed complete and the site is deemed suitable for accepting waste, the site will ensure the following:

- a) Account for all consumables that have been used in the fire and re-order / replace immediately (containment booms)
- b) Restack, and re-locate all items used for the surface water protection during the fire to their storage locations ready for future deployment.
- c) Check monthly that items are still present and correct and still serviceable for use in an emergency.

13.3.3 The operator will liaise with the EA throughout the event ensuring they are satisfied with the clean-up programme and notify the operator when the site can begin accepting waste again onto site.

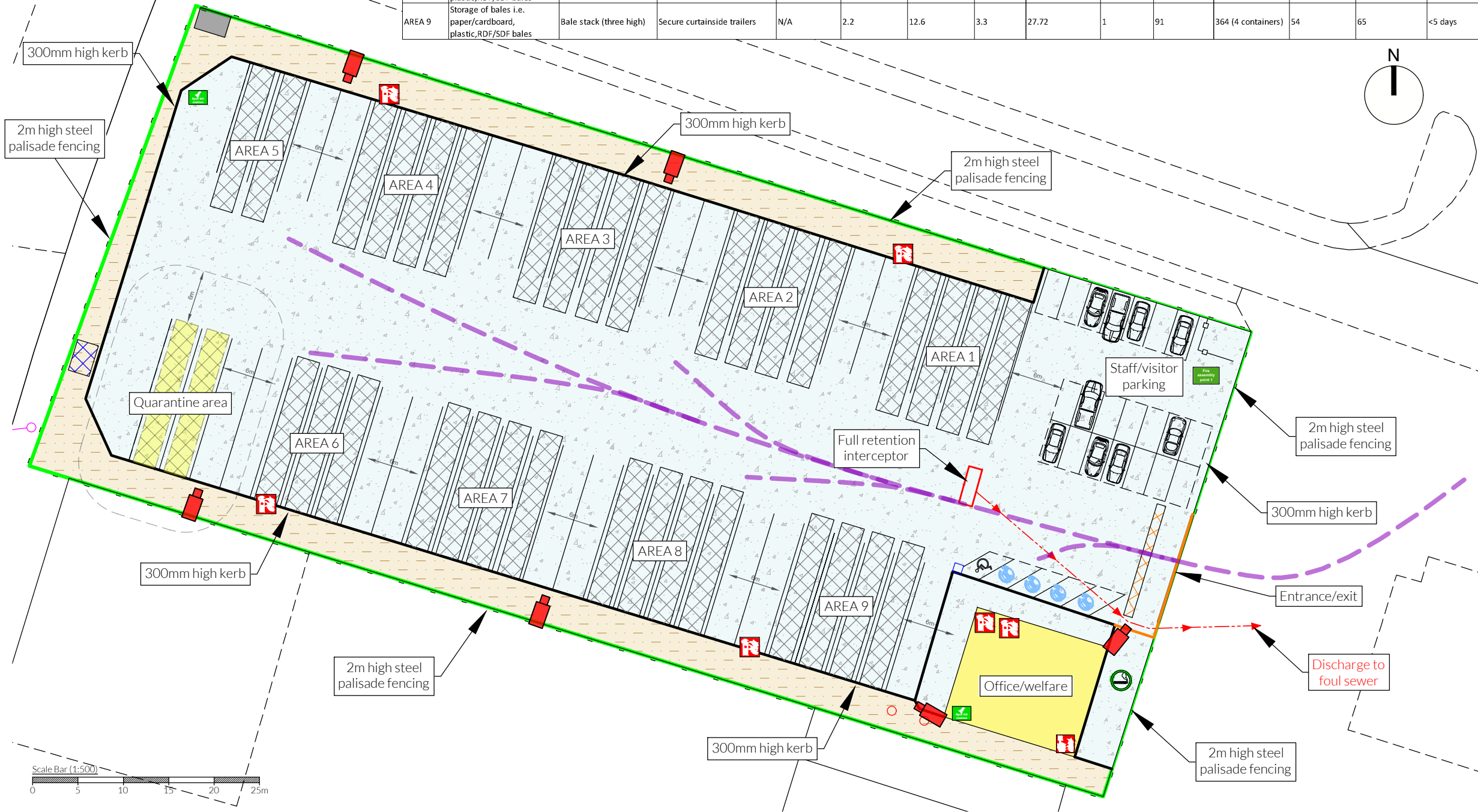
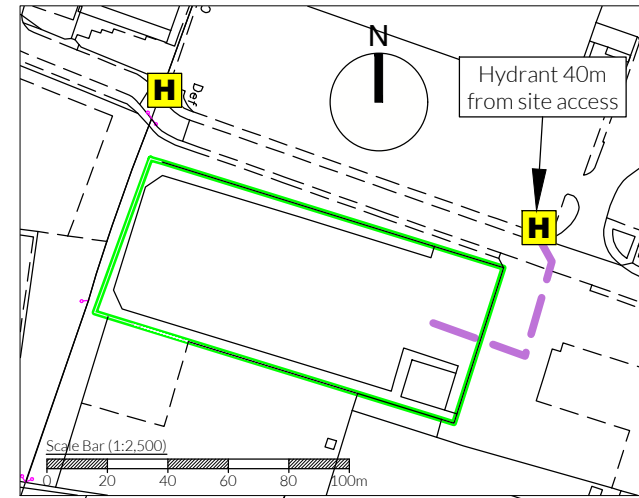
13.4 **Post fire site recovery**

13.4.1 If a recovery procedure is required, the operator would instigate the following procedures:

- a) Remove damaged material to a permitted facility that can deal with it legally.
- b) Ask engineers to carry out repairs on any plant, vehicles and/or infrastructure.
- c) Assist the FRS with the fire investigation and where necessary engage the advice from a professional fire consultant.
- d) Review the FPP procedures and improve upon those which were found deficient.
- e) Review training requirements for staff.
- f) Assess whether further preventative measure could be implemented.
- g) Ensure all fire equipment, where used, is replenished.
- h) Remove fire water to a permitted facility for disposal.

Appendix I

Drawings



Storage Area Details														
Plan Ref	Description	Storage type	Containment / type	Height of firewall (m)	Max Width (m)	Max Length (m)	Max storage height (m)	Approx. Area (m2)	Conversion factor used	Approx. volume (m3) per container	Approx. volume total (m3)	Approx. no. of bales (per container)	Approx. tonnage (per container)	Max storage time
AREA 1	Storage of bales i.e. paper/cardboard, plastic,RDF/SDF bales	Bale stack (three high)	Secure curtainside trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 2	Storage of bales i.e. paper/cardboard, plastic,RDF/SDF bales	Bale stack (three high)	Secure curtainside trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 3	Storage of bales i.e. paper/cardboard, plastic,RDF/SDF bales	Bale stack (three high)	Secure curtainside trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 4	Storage of bales i.e. paper/cardboard, plastic,RDF/SDF bales	Bale stack (three high)	Secure curtainside trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 5	Storage of bales i.e. paper/cardboard, plastic,RDF/SDF bales	Bale stack (three high)	Secure curtainside trailers	N/A	2.2	12.6	3.3	27.72	1	91	182 (2 containers)	54	65	<5 days
AREA 6	Storage of bales i.e. paper/cardboard, plastic,RDF/SDF bales	Bale stack (three high)	Secure curtainside trailers	N/A	2.2	12.6	3.3	27.72	1	91	273 (3 containers)	54	65	<5 days
AREA 7	Storage of bales i.e. paper/cardboard, plastic,RDF/SDF bales	Bale stack (three high)	Secure curtainside trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 8	Storage of bales i.e. paper/cardboard, plastic,RDF/SDF bales	Bale stack (three high)	Secure curtainside trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days
AREA 9	Storage of bales i.e. paper/cardboard, plastic,RDF/SDF bales	Bale stack (three high)	Secure curtainside trailers	N/A	2.2	12.6	3.3	27.72	1	91	364 (4 containers)	54	65	<5 days

NOTES
Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

REVISION HISTORY			
Rev:	Date:	Init:	Description:
-	07.03.25	JH	Initial drawing

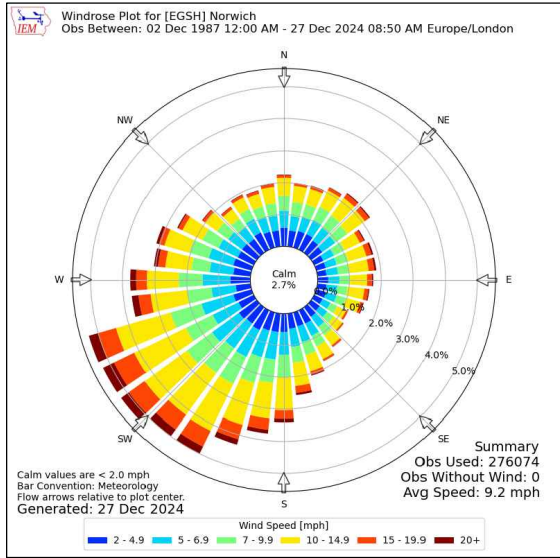
- KEY:
- Permit boundary
 - Non-waste storage (AdBlue)
 - Waste storage areas
 - Concreted areas
 - Pedestrian walkway
 - Hardstanding
 - Office/welfare
 - Quarantine area
 - Firefighting equipment/extinguishers
 - Fire alarms (indicative locations)
 - Spill kits (indicative locations)
 - Fire hydrant
 - Fire assembly point
 - Pan, tilt & zone cameras with 360 50cm coverage
 - Designated smoking area
 - Access route for emergency services
 - Manhole
 - Gully
 - Firewater boom / sandbag deployment

TITLE: SITE LAYOUT & FIRE PLAN		
CLIENT: A2B Online Ipswich		
PROJECT/SITE: A2B House, Orwell Crossing, Nacton, Ipswich, IP10 0DD		
SCALE @ A3: 1:500	CLIENT NO: 3301	JOB NO: 001
DRAWING NO: ORW-3301-03	REV: -	STATUS: Issued
DATE: 07.03.25	DRAWN: JH	CHECKED: EG

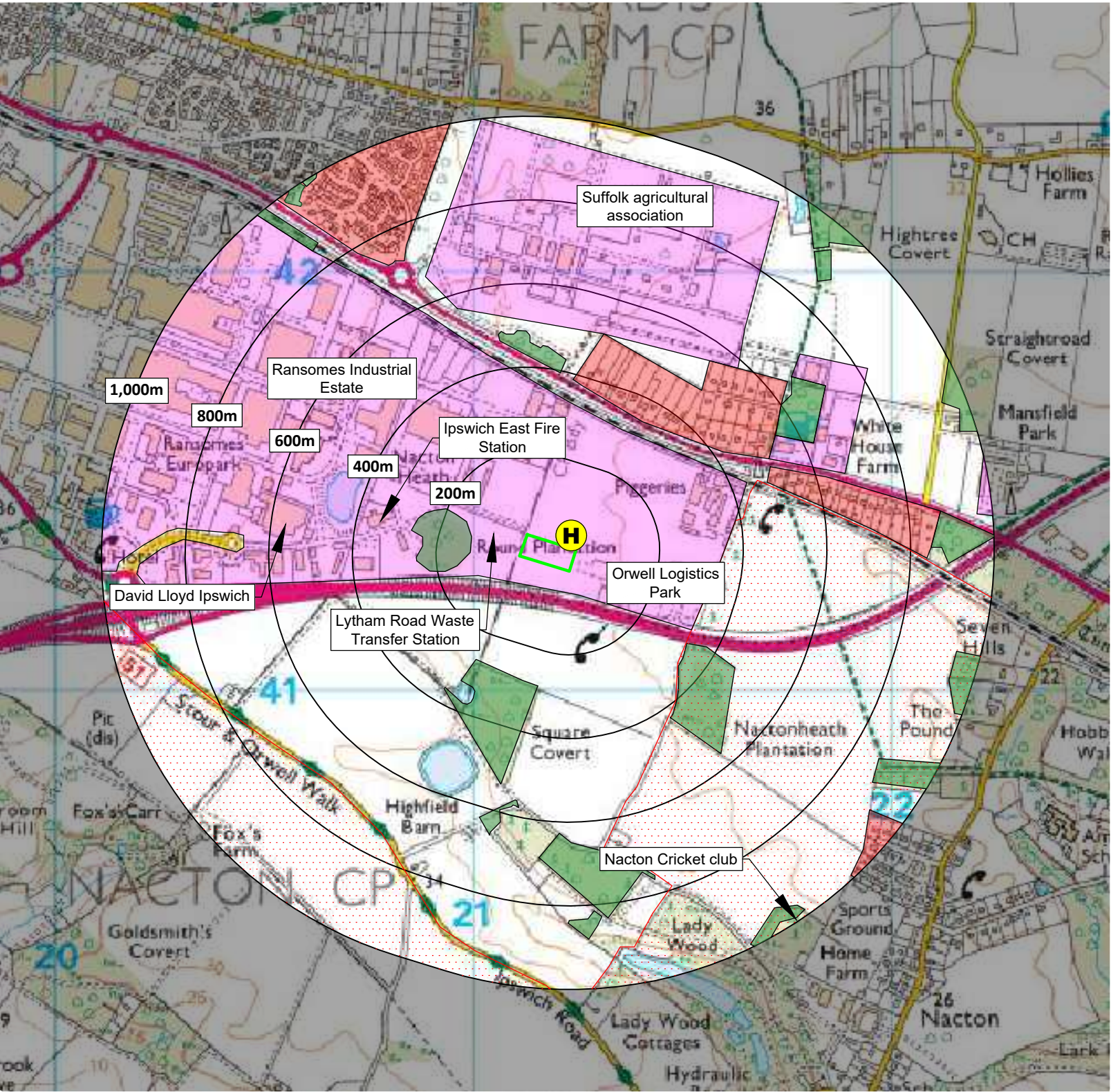


KEY:

- Permit boundary
- Surface water body (river / stream / pond / pool / lake)
- Workplaces (includes agriculture industry, commerce and retail)
- Areas with mix of residential, retail and commercial properties
- Residential blocks
- Class A, B, C roads
- Nearest fire hydrant
- Railway line
- Woodland areas
- Priority habitat inventory (deciduous woodland)
- Areas of outstanding natural beauty



Compass Wind Rose for (EGSH) Norwich Period
1987-2024
- source: Iowa State University

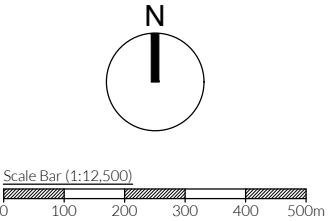


NOTES

- Boundaries are shown indicatively.
 - Wind rose data shows the prevailing wind direction to be Southerly.
- Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

REVISION HISTORY

Rev:	Date:	Init:	Description:
-	07.03.25	JH	Initial drawing



TITLE: RECEPTOR PLAN		
CLIENT: A2B Online Ipswich		
PROJECT/SITE: A2B House, Orwell Crossing, Nacton, Ipswich IP10 0DD		
SCALE @ A3: 1:12,500	CLIENT NO: 3301	JOB NO: 001
DRAWING NO: ORW-3301-04	REV: -	STATUS: Issued
DATE: 07.03.25	DRAWN: JH	CHECKED: EG



Appendix II

Record Keeping Forms

A2B-ONLINE LIMITED SITE INSPECTION FORM (DAILY INSPECTIONS) – ORW/RF/4							
WEEK STARTING							
TYPE OF INSPECTION	DAY						
	M	T	W	T	F	S	S
FIRE EXITS, ESCAPE ROUTES AND CALL POINTS FREE FROM STORAGE OF WASTES/CONTAINERS							
SITE ENTRANCE/NOTICE BOARD							
SECURITY - GATES							
SECURITY - FENCING							
SITE ROADS (CLEAR FROM HAZARDS)							
IMPERMEABLE CONCRETE AREAS (INTEGRITY)							
INTERCEPTOR							
FUEL STORAGE AREAS							
BAY WALLS (STRUCTURAL INTEGRITY)							
FIRE BREAKS IMPLEMENTED (WHERE NECESSARY)							
WASTE STORAGE LIMITS BALES							
COMBUSTIBLE WASTES (AWAY FROM POTENTIAL IGNITION SOURCES)							
REJECTED WASTE TYPES / STORAGE							
NOISE LEVELS							
SANDBAGS (INTEGRITY)							
FIRES (ANY INCIDENTS REPORTED)							
QUARANTINE AREA CLEAR OF WASTE							
NO SMOKING SIGNS IN PLACE							
FIRE FIGHTING EQUIPMENT							
PLANT/EQUIPMENT MAINTENANCE CHECKS							
HOT EXHAUSTS FIRE WATCH (DUST/FLUFF CLEANED REMOVED)							
OFFICE/WELFARE FIRE RISKS CHECKED							
LITTER							
DUST							
ODOUR							
VERMIN							
RECORDS							
COMPLAINTS RECEIVED							
OTHER (SEE NOTES BELOW)							
INSPECTION CARRIED OUT BY							
NOTES/ACTION (CONTINUE ON A SEPARATE SHEET IF NECESSARY):							
CHECKED BY			SIGNATURE				
POSITION			DATE				
<i>Sheet</i>			<i>of</i>				

A2B-ONLINE LIMITED PREVENTATIVE MAINTENANCE CHECKLIST

CHECKED BY	POSITION
DATE	DATE OF LAST CHECKLIST

	EQUIPMENT ITEM					
OFFICIAL MAINTENANCE CHECK REQUIRED (Y/N)						
IF NO, DATE OF LAST CHECK						
IF YES, DATE OF NEXT CHECK						
IS ITEM IN CORRECT WORKING ORDER						
LEAKAGES OF OIL/DIESEL ON MOBILE PLANT / VEHICLES						
IF NO, WHAT REPAIRS ARE REQUIRED (USE SEPARATE SHEET IF REQUIRED)						
WERE REPAIRS DETAILED ON THE LAST CHECKLIST						
IF YES, HAVE THEY BEEN CARRIED OUT						
ADDITIONAL REPAIRS OR ACTIONS REQUIRED						

A2B-ONLINE LIMITED - EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW

EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW

EMPLOYEE NAME				DATE COMPLETED			
POSITION				REVIEW DUE			
TRAINER				OUTCOME	PASSED		
POSITION					FURTHER TRAINING REQUIRED		
CARRIED OUT /SIGN OFF >	Y/N	SIGNED BY EMPLOYEE	SIGNED BY TRAINER		Y/N	SIGNED BY EMPLOYEE	SIGNED BY TRAINER
ENVIRONMENTAL PERMIT				FIRE PREVENTION PLAN			
MANAGEMENT SYSTEM				FIRE SAFETY			
SITE RULES				EMERGENCY PROCEDURES			
RECORD KEEPING / TRANSFER NOTES				STORAGE /PILE SIZE LIMITS			
RECOGNITION OF WASTE TYPES				STORAGE DURATION			
SECURITY				FIRE DETECTION			
VEHICLE CHECKS				FIRE ALARMS			
PLANT OPERATION				FIRE FIGHTING EQUIPMENT			
PLANT CHECKS				FIRE WATER CONTAINMENT MEASURES			
AMENITY - LITTER, ODOUR, PESTS etc.				SPILL CLEARANCE			
NOTES AND ACTIONS:							