

Fire prevention plan template

Plan version: **Version 1.0**

Date of plan: **April 2023**

Site details

Site name: **Barking Eurohub Waste Transfer Station**

Site address: **Box Lane, Renwick Road, Barking, IG11 0SQ**

Operator name: **DB Cargo (UK) Limited**

This FPP has been prepared using the template provided by the Environment Agency at <https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits> Version published on 9 January 2020. Downloaded 20 March 2023.

Who this plan is for

This Fire Prevention Plan (FPP) must be communicated to all site-based staff including the Site Manager, Site Supervisor and Site Operatives and to any relevant agency personnel or sub-contractors employed by DB Cargo (UK) Limited (DBC) including Ward Recycling Limited so they so that they know what they must do:

- To prevent a fire occurring
- During a fire if one breaks out.

The fire prevention measures in this FPP have been designed to meet these 3 objectives:

- minimise the likelihood of a fire happening
- aim for a fire to be extinguished within 4 hours
- minimise the spread of fire within the site and to neighbouring sites

DBC are the Operator for Environmental Permit number EPR/GB3003GR which authorises the receipt, storage and manual sorting and transfer of a range of construction and demolition (C&D) wastes, soil wastes and metal wastes. The areas of the site in which C&D wastes and soil wastes (which are non-combustible wastes) are stored are managed by DBC. The specific part of the site in which metal wastes are stored (see marked in red on Figure FPP1) is managed by Ward Recycling Limited (under lease/license to DBC). The metal waste storage area is separated from the rest of the DB Cargo site by palisade fencing and locked gates. For the purpose of this FPP, the area of the site within the DBC permit boundary in which metal wastes are stored is referred to as "*the site*".

Donald Ward Limited (DWL) are the permit holder and operator of Standard Rules SR2015No14: 75kte Metal Recycling Site (Environmental Permit Number EPR/WE5880AB/A001) adjacent to the eastern boundary of the DBC site (area in blue on Figure FPP1). The metal waste storage area of the DBC site and the DWL site share the

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same site entrance (see Figure FPP1). It is understood that the DWL site has in place a Fire Prevention Plan which has been approved by the Environment Agency. For the purpose of this FPP, the area permitted under Standard Rules SR2015No14: 75kte Metal Recycling Site (Environmental Permit Number EPR/WE5880AB/A001) is referred to as "*the DWL site*".

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APPENDICES

Appendix FPP 1 – A list of the receptors in the vicinity of the site

Appendix FPP 2 – Photograph of the site kerbing

Appendix FPP 3 – Action in the Event of a Fire or Explosion

Types of combustible materials

Combustible waste

With reference to Section 4 of the FPP guidance¹ the types of combustible waste which are stored at the site comprise:

- Scrap metals contaminated or mixed with other waste such as oils or plastics

Details of the storage arrangements for this waste type are presented later in this FPP. The storage locations are shown on Figure FPP1.

The site does not accept or store de-polluted and un-depolluted End of Life Vehicles (ELV)s, waste electrical and electronic equipment (WEEE) or fragmentiser waste.

Persistent organic pollutants

Any waste containing POPs that is involved in a fire will be treated in accordance with the POPs Regulations as residues from that fire and the firewater may contain POPs.

Other combustible materials

Section 3 of the FPP guidance specifies the materials to which the FPP guidance does not apply including hazardous wastes (excluding WEEE) and liquids. As the FPP guidance specifies that these substances must be considered in the FPP because they can cause or increase the impact of fire on a site they are listed below:

- Diesel fuel stored for use in site mobile plant
- Oil stored on site

The storage locations for these materials are shown on Figure FPP1.

There are no gas cylinders or aerosols stored at the site.

¹ Fire prevention plans: environmental permits. Environment Agency. First Published 29 July 2016. Last Updated 11 January 2021. (the FPP guidance)

Using this fire prevention plan

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

The FPP comprises a standalone document and forms part of the site Environmental Management System. The master copy of the FPP is held in the site office and electronic copies of the FPP are distributed to all relevant site personnel. If in the event of a fire the site office is not accessible, an electronic copy of the FPP will be accessible from a mobile device or laptop.

Testing the plan and staff training

Detailed training regarding the contents of the FPP is provided as part of the training of all new staff and as part of regular update training on the FPP provided to all relevant existing staff. The principles of the FPP and the specific actions relevant to their activities are included in site inductions for contract or short term site workers.

Regular fire drills are carried out to test how well the plan works in the event of a fire and confirm that staff understand what to do. These drills will be undertaken 12 monthly as a minimum.

Audits are carried out by the Site Manager on a monthly basis to confirm whether the preventative measures including storage and segregation are being implemented. In addition to the monthly audits, the site will be subject to an annual site audit and inspection. The findings of the audits and any follow up actions are recorded. The monthly and annual audits are in addition to the routine daily checks explained elsewhere in this FPP.

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Activities at the site

The activities undertaken at the site which involve the handling and management of combustible wastes are limited to:

1. Manual sorting or separation of metal waste into different components for disposal or recovery.
2. Storage of metal wastes in stockpiles at the locations shown on Figure FPP1.

No shearing, shredding, baling, compacting, crushing, granulating or cutting of metal wastes will be undertaken at the site. No metal wastes will be stored in containers at the site.

Site plan

Figure FPP 1 (drawing reference DBC/EU/03-23/23618) comprises the site layout plan.

Plan of sensitive receptors near the site

Figure FPP2 (drawing reference DBC/EU/03-23/23625) comprises the sensitive receptors plan. The receptors identified on Figure FPP2 labelled with numbers are listed in Appendix FPP 1.

As shown on Figure FPP2 the site is located at a rail sidings in an area surrounded by commercial industry to the north west, south and south east and residential areas to the north east and south west. The site is located to the south of Ripple Road (A13) and to the east of Renwick Road from which the site is accessed via Box Lane.

The residential properties closest to the site are located on Levine Gardens and adjoining roads (receptor number 27 on Figure FPP2) approximately 225m to the north east of the site and on Keel Close (receptor number 23 on Figure FPP2) approximately 150m to the south west of the site. Gale Street Housing Estate (located east and west of Gale Street - receptor numbers 25 & 26 on Figure FPP2) comprises a large area of domestic dwellings (with the closest houses approximately 650m to the north of the site). There are seven schools within 1km of the site, the closest of which are Castle Green Community School (receptor number 51 on Figure FPP2 approximately 500m north of the site) and Goresbrook School (receptor number 52 on Figure FPP2 approximately 500m north east of the site).

The recreational/amenity area closest to the site is Barking Rugby Club (receptor number 33 on Figure FPP2) approximately 400m north of the site. Adjacent to the rugby club and part of Castle Green Community School is Castle Green Leisure & Community Centre (receptor number 34 on Figure FPP2) approximately 500m to the north. To the north east of the site lies Scrattons Farm Eco Park (receptor number 42 on Figure FPP2) approximately 400m from the site.

Based on information on the DEFRA MAGIC website there are no Sites of Special Scientific Interest (SSSI), Ramsar Sites, Special Protection Areas (SPA), Special Areas of Conservation (SACs) or National Nature Reserves (NNRs) located within 2km of the site. Based on the information available on MAGIC no World Heritage Sites, Scheduled Monuments or Listed Buildings are located within 500m of the site.

The metal waste types will be stored on an impermeable tarmac surface with sealed drainage. The extent of the tarmac surface is shown shaded in grey on Figure FPP3 and covers the entire area of the site in which metal wastes are stored and also covers the area to the north in which soil and C&D wastes (which are non-combustible wastes) are stored and managed by DBC. Rainwater falling on the tarmac surface within the DBC Environmental Permit area drains by gravity (fall of 1:80) to a series of surface water drainage grids at the northern, north western and southern perimeter of the tarmac surface. Rainwater falling on the area of the site in which metal wastes are stored drains by gravity towards the drainage grids marked D2 and D4 on Figure FPP3. The drainage grids at locations D2 and D4 are blocked off to prevent water which has been in contact with metal waste stored at the site from entering the below ground drainage system. A concrete kerb measuring approximately 40cm in height runs along the southern boundary of the site between the metal storage area and the rail line (as shown on the photograph at Appendix FPP 2).

Figure FPP1, Figure FPP2 and Figure FPP3 collectively show the relevant features listed in Section 6.2 of the FPP guidance.

Manage common causes of fire

Arson

Site security measures are employed at the site in order to prevent unauthorised access. The site is manned during operational hours. The site is surrounded by security fencing and has lockable gates at the site entrance. Outside of working hours the gates at the site entrance are locked and patrols of the perimeter of the site are undertaken periodically. The patrols are undertaken for the primary purpose of preventing unauthorised access to the site not for the primary purpose of fire detection. Motion sensors and CCTV are employed to detect the presence of intruders. In the event that motion sensors are triggered the security guards will investigate.

Plant and equipment

All plant and equipment is subject to a maintenance and inspection programme. Daily plant, equipment and site vehicle checks and cleaning are undertaken and routine servicing in line with manufacturers' requirements is undertaken.

Site vehicles / plant are fitted with fire extinguishers, and mobile plant is parked away from combustible materials during non-operational hours. Mobile plant will be parked outside of the DBC site (in the DWL site) outside of operational hours or at least 6m away from the areas of the site in which combustible waste is stored.

Electrical faults including damaged or exposed electrical cables

Electrics certification

Electrical equipment and systems on site are fully certified by a qualified electrician and records are kept of inspections and maintenance. Portable electrical appliances are tested on an annual basis pursuant to the Electricity at Work Regulations.

Electrical equipment maintenance arrangements

All plant and equipment is subject to a maintenance and inspection programme. This programme includes daily site and plant inspections for any damaged or exposed electrical cables. In the event that damaged or exposed electrical cables are identified a qualified electrician will be instructed to undertake repairs as necessary. Any equipment with damaged or exposed electrical cables will not be used until the repairs have been carried out.

Discarded smoking materials

Smoking on site policies

A no smoking policy is implemented at the site. Smoking is not permitted within the site.

Hot works safe working practices

No hot works or cutting of metals is undertaken at the site.

Industrial heaters

Use of industrial heaters

The site does not use industrial heaters or small portable heaters.

There are no furnaces or incinerators employed at the site.

Hot exhausts and engine parts

Fire watch procedures

Visual inspections are undertaken by site personnel throughout the working day to detect potential signs of a fire caused by dust settling on hot exhausts and engine parts.

A final visual inspection is undertaken by site staff at the end of each working day as part of the daily housekeeping and inspection which includes cleaning down of plant at the end of the working day.

Fire watches are undertaken throughout the working day and at the end of the working day including areas where plant are stored. Mobile plant will be parked off site or at least 6m away from combustible waste piles at the end of the working day.

Ignition sources

Portable heaters are not used at the site.

Batteries

Batteries are not accepted at the site. In the event that any batteries are found within a load accepted at the site, they will be segregated and placed in the designated battery quarantine area which is located within the adjacent DWL site. No batteries are stored on the site.

Batteries in end of life vehicles (ELVs)

ELVs are not accepted at the site.

Leaks and spillages of oils and fuels

Site vehicles are subject to regular inspection and maintenance and are inspected for leaks during routine daily site inspections. In the event that spillages occur they will be cleaned up using the spill kits employed at the site.

The locations of oils and fuels stored at the site are shown on Figure FPP 1. As shown on Figure FPP1, the oil and fuel storage areas are greater than 6m away from combustible waste piles and from the quarantine area.

Build-up of loose combustible waste, dust and fluff

Good housekeeping is encouraged at the site and the site is inspected on a daily basis for loose combustible waste, dust and fluff. The waste types accepted at the site generally are not dusty and are unlikely to generate fluff. In the event that the inspection identifies that areas of the site need to be cleaned appropriate arrangements are made. Plant and site vehicles are cleaned down at the end of the working day.

Reactions between wastes

it is considered that the waste types handled at the site generally do not comprise incompatible or unstable wastes. In the event that any batteries are found within a load accepted at the site, they will be segregated and placed in the designated battery quarantine area which is located within the adjacent DWL site.

Waste acceptance and deposited hot loads

Based on the waste types that are accepted routinely at the site it is unlikely that hot loads will be received. In the unlikely event that hot loads are received at the site they will either be rejected or will be placed immediately within the fire quarantine area until such time as they have cooled down and can be stored in the designated area of the site. Handheld thermal imaging equipment will be used if necessary to check the temperature of loads which may be suspected to be hot loads.

Hot and dry weather

The fire risk caused by external heating due to hot and dry weather will be managed by minimising the storage times of waste at the site and monitoring of the temperature using handheld thermal imaging equipment. In the event that the monitoring identifies elevated temperatures in a waste pile, actions will be taken to reduce the temperature such as spraying the waste pile with water or flattening/spreading out the waste pile or transferring part or all of the waste pile to the fire quarantine area to dissipate the heat.

Prevent self-combustion

General self-combustion measures

Section 8 of the FPP guidance is relevant to prevention of self-combustion of waste and explains in the second paragraph that self-combustion can be prevented by carefully managing storage times. In section 8.1 (Manage storage time) of the FPP guidance it is stated:

“If you’re storing combustible wastes in the maximum pile sizes for longer than 3 months, you must show what extra measures you’ll use to prevent self-combustion. For example, this could include monitoring temperatures in the waste.”

Combustible waste will not be stored in the maximum pile sizes and no combustible waste will be stored on site for longer than 3 months therefore in accordance with the FPP guidance extra measures do not need to be specified in order to minimise the risk of self-combustion.

In practice combustible waste comprising scrap metal typically will be removed from the site on a weekly basis.

Manage storage time

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

Records of waste received and removed from the site are maintained as required under conditions of the Environmental Permit for the site and the stock held on the site is reviewed on an ongoing basis during routine site walkovers. As the scrap metal stored on the site comprises a valuable resource, retention of waste on site for long periods is not economically desirable and the site is managed in a way that promotes quick turnaround of waste. No combustible wastes will be stored at the site for longer than 3 months.

Stock rotation policy

The scrap metal, which is stored in stockpiles is managed on a first in first out basis so that older wastes are removed first.

Monitor and control temperature

Reduce the exposed metal content and proportion of 'fines'

Metal fines waste will not be accepted at the site.

Notwithstanding that the FPP guidance does not require extra measures to be specified if combustible waste will be stored on site in the maximum pile sizes for less than 3 months, site personnel will check waste piles during routine operations for visual signs of hot spots or fire. If personnel identify visual signs of hot spots or fire consideration will be given to techniques to address the issue including spraying of the waste pile with water to cool the waste or transferring the waste to the fire quarantine area and spreading it out to dissipate the heat.

Monitoring temperature

Because combustible waste will not be stored at the facility for more than 3 months in the maximum pile sizes, based on the FPP guidance it is unnecessary to monitor temperature in combustible waste stockpiles in order to guard against self-combustion.

Controlling temperature

Because combustible waste will not be stored at the facility for more than 3 months in the maximum pile sizes, based on the FPP guidance it is unnecessary to specify measures to control temperatures in combustible waste stockpiles in order to guard against self-combustion.

Dealing with hot weather and heating from sunlight

The fire risk caused by external heating due to hot weather and heating from sunlight will be managed by minimising the storage times of waste at the site and monitoring of the temperature using handheld thermal imaging equipment. In the event that the monitoring identifies elevated temperatures in a waste pile, actions will be taken to reduce the temperature such as spraying the waste pile with water or flattening/spreading out the waste pile or transferring part or all of the waste pile to the fire quarantine area to dissipate the heat.

Waste bale storage

No combustible waste will be stored in bales at the site.

Manage waste piles

Storing waste materials in their largest form

No cutting, shredding, shearing or size reduction of metal waste is undertaken at the site. Metal waste at the site is not subject to treatment by fragmentising hence does not comprise fragmentiser waste. As the metal wastes are stored in the form in which they are received at the site it is considered that they are stored in their largest form. A large proportion of the waste stored at the site comprises metal in its massive form which has a low combustibility risk as it will not burn in air. Notwithstanding this details of the maximum stockpiles sizes for metal wastes are presented in the following section.

Maximum pile sizes for the waste on your site

Volumes have been calculated for the storage areas based on the assumption that the geometry of the freestanding waste piles will comprise a rectangular or square-based pyramid shape (volume = length x width x 1/3 height).

Table FPP 1 has been prepared using the FPP template layout.

Waste stream	Location (must match site plan)	How it is stored For example this may include piles, bays, containers, skips, racks, bales	Max. length / m	Max. width / m	Max. height / m	Volume / m ³	Max. time it will be stored
Scrap metal (greater than 150mm)	Stockpiles coloured yellow on Figure FPP1	Waste stockpile (loose metal)	20	20	4	533	Typically 1 month Maximum 3 months.

Where maximum pile sizes do not apply

Whole ELVs

Procedures for storing whole end of life vehicles

No ELVs will be stored at the site.

Waste stored in containers

Types of containers you are using

No waste will be stored in containers at the site. As explained earlier in this FPP, any non-conforming wastes which are identified during waste acceptance will be immediately removed from the site and stored on the adjacent DWL site. Storage of these wastes is addressed under the approved Fire Prevention Plan for the DWL site.

Accessibility of containers

As explained above, no waste will be stored in containers at the site.

Moving containers in a fire

As explained above, no waste will be stored in containers at the site.

Compost production

Procedures for active management and monitoring of the compost

As the site does not produce or store compost this section of the template is not relevant.

Prevent fire spreading

Separation distances

Section 11.1 of the FPP guidance specifies that you must:

- *store your combustible waste piles with a separation distance of at least 6 metres*
- *have a separation distance of at least 6 metres between waste piles and the site perimeter, any buildings, or other combustible or flammable materials*

As shown on Figure FPP1 combustible waste piles comprising scrap metal are stored in a series of stockpiles with separation distances of at least 6 metres between each stockpile and at least 6 metres from buildings and other combustible or flammable materials.

Fire walls construction standards

The use of fire walls will not be employed at the site.

Storing waste in bays

As described above waste will be stored in waste piles for which a minimum separation distance of 6m will be applied. Waste will not be stored in bays at the site.

Quarantine area

Quarantine area location and size

At least one fire quarantine area will be provided at the site at all times. The location of the fire quarantine area is not fixed and will change in response to site operations and activities. The size and location of two potential fire quarantine areas are marked on Figure FPP1.

The size of the quarantine area has been determined based on the FPP guidance which states that:

You must have a quarantine area which is large enough to both:

- *hold at least 50% of the volume of the largest pile, row or block of ELVs or containers on your site*
- *have a separation distance of at least 6 metres around the quarantined waste*

As shown in Table FPP 1 the largest pile at the site comprises loose scrap metal (greater than 150mm) with a pile size of 533m³ and a footprint area of 400m².

The quarantine areas marked on Figure FPP1 measure 15m by 15m hence have an area of 225m² and can hold over 50% of the volume of the largest waste pile comprising loose scrap metal.

As shown on Figure FPP1 there is a separation distance of six metres around the quarantine area.

How to use the quarantine area if there is a fire

The quarantine area will be used in the event of a fire to either hold burning wastes or to hold unburnt wastes to isolate and prevent them catching fire. The wastes will be transported with use of the site mobile plant.

Procedure to remove material stored temporarily if there is a fire

A quarantine area will be available at all times. Where it has been used to store non-conforming wastes or to temporarily store other materials these will be removed as soon as practicable and immediately in the event of a fire. This will either be done with the mobile plant available on site or by using plant available at neighbouring sites in the industrial estate.

Detecting fires

Detection systems in use

Section 13 of the FPP guidance identifies that the detection system should be proportionate to the nature and scale of waste management activities carried out and the associated risks.

As explained earlier in this FPP, the metal wastes have an extremely low or low combustibility risk, no treatment (cutting, shearing, baling, shredding, etc) of waste is undertaken at the site, waste is stored in its largest form and storage times will be limited. On this basis, the employment of a manual detection system is considered proportionate to the nature and scale of the activities.

The infrastructure and equipment that are available onsite to detect fires include:

- Visual inspection throughout working day and at the end of the working day.
- Smoke detectors and a fire alarm fitted in the portacabin.
- CCTV covering the site which can be monitored remotely outside the operational hours of the site. The primary purpose of the CCTV is to identify unauthorised access to the site outside of working hours, however, the CCTV cameras can function as a visual fire detection system outside the operational hours of the site. The CCTV cameras do not comprise a dedicated visual fire detection system and on this basis are not relied upon to detect fires out of hours.
- Security personnel are employed at the wider Barking Eurohub industrial estate on a 24 hour basis. Patrols of the perimeter of the site are undertaken periodically by security personnel outside of operational working hours.

In the event that a fire is detected during operational hours or by remote monitoring the alarm will be activated and the emergency response procedure will be followed. Further details of the emergency response procedure are presented in the section of this FPP entitled Firefighting Techniques.

Certification for the systems

With the exception of the smoke detectors in the offices, as the fire detection system comprises a manual system of visual monitoring certification is not relevant.

Suppressing fires

Suppression systems in use

Section 14 of the FPP guidance specifies that if you store waste in a building, you must install a fire suppression system. As waste is not stored in a building it is unnecessary to install a fire suppression system.

In the event that a fire is detected by site staff, if deemed safe to do so, the manual fire suppression system will be employed comprising use of the appropriate hand held fire extinguishers (dry powder, foam, carbon dioxide or water) depending on the nature of the fire (fuel, electrical, etc). Training is provided to site staff in respect of the use of fire extinguishers.

It is considered that the use of the appropriate fire extinguishers to tackle the fire early, directly at the source of the outbreak is the most appropriate method of fire suppression and is proportionate to the scale of the waste management activities.

Certification for the systems

As the fire suppression system comprises a manual system employing manually operated fire extinguishers certification of the overall system is not relevant. All of the fire extinguishers employed at the site comply with the Harmonised EU/British Standard BS EN3. All fire extinguishers at the site are subject to monthly and annual inspections consistent with the manufacturer's instructions.

Firefighting techniques

Active firefighting

In the event of a fire on site the site procedure (Action in the Event of a Fire or Explosion) will be followed together with the measures set out in this FPP. A copy of the procedure is presented at Appendix FPP 3. Regular fire drills are carried out to test how well the plan works and ensure staff understand what to do in the event of a fire. These drills will be undertaken 12 monthly as a minimum. The drills will address aspects including site evacuation, the procedure for notification of nearby residents and businesses and exercises in moving waste using mobile plant and use of the site quarantine area. Following completion of the drill a summary of the findings will be prepared (if required) documenting any procedural improvements or actions and the timescale in which they will be implemented. The Fire and Rescue Service (FRS) will be invited to the site to enable them to be involved in the periodic drills should it be of assistance to the FRS.

In the event of a fire, in addition to alerting the FRS, the EA shall be informed, as soon as practicable, and in accordance with the reporting requirements set out within the Environmental Permit.

The site is laid out and operated to allow for active firefighting. Appropriate resources are available to fight a fire including:

- Mobile plant to move waste
- Trained operators
- Water supply (see below).
- Finances

Firefighting techniques will include some or all of the following:

- Applying water to cool unburned material and other hazards
- Separating unburned material from the fire using mobile plant

- Separating burning material from the fire to quench it

These actions will be taken under supervision from the FRS if required also.

This Fire Prevention Plan will be discussed with the local Fire and Rescue Authority (FRA).

Safe access for fire and rescue services will be achieved by maintaining routes for fire engines as shown on Figure FPP 1.

Water supplies

Available water supply

There are three fire hydrants located within 100m of the site. In the event of a fire at the site fire fighting water will be obtained from the fire hydrants. The locations of the fire hydrants are shown on Figure FPP1. The minimum flow rate for underground hydrants specified in British Standard EN 14339:2005 is 2,000 litres/min (at 1.7 Bar).

The site also has a mains water supply provided by Thames Water.

Show the calculation for your required water supply

It is specified in the FPP Guidance that “*You must have enough water available for firefighting to take place and to manage a worst case scenario*” and the guidance presents the following example “*A worst case scenario would be your largest waste pile catching fire*”.

For the purpose of the water supply calculations the largest waste pile size is 533m³ for loose scrap metal. The water supply calculations are presented in Table FPP2 using the FPP template layout.

Maximum pile volume in cubic metres	Water supply needed in litres per minute	Overall water supply needed over 3 hours in litres	Total water available on site in litres
Enter volume, for example, 300	Pile volume x 6.67	Water supply per minute x 180	
533m ³ Loose scrap metal in stockpile	3,511 l/min	639,920 litres	6,000 l/min (2,000 l/min from each of three hydrants within 100m of the site)

As the minimum flow rate for underground hydrants specified in British Standard EN 14339:2005 is 2,000 litres/min and there are three hydrants within 100m of the site, there is a sufficient water supply available on site to manage a worst case scenario incident of the largest waste pile comprising catching fire.

Managing fire water

Containing the run-off from fire water

Fire water will be contained to minimise pollution from fire water as far as reasonably practicable.

In the event of a fire on site the procedures set out in the site procedure (Action in the Event of a Fire or Explosion (Appendix FPP 3) will be followed together with the measures set out in this FPP. Periodic drills shall be undertaken so that site staff are aware of the procedures that are to be followed. The specific actions to be used to manage firewaters shall be included routinely as part of the emergency drills.

Based on the calculations presented in Table FPP2 the volume of water required to tackle a fire in the largest waste pile at the site (comprising loose scrap metal) is 639,920 litres (640m³) of water storage are required. The area of the site measures approximately 10,500m² hence there is a significant storage area available within the site.

As explained earlier in this FPP, the site surface comprises a tarmac surface and water falling on the area of the site in which metal wastes are stored drains by gravity towards the south towards the drainage grids marked D2 and D4 on Figure FPP3. The drainage grids at locations D2 and D4 are blocked off to prevent water which has been in contact with metal waste stored at the site or fire water used in the event of a fire from entering the below ground drainage system. In addition to the sealed drainage system, a concrete kerb measuring approximately 40cm in height runs along the southern boundary of the site between the metal storage area and the railway line (see photograph at Appendix FPP 2). In order to allow access to the site for vehicles delivering waste to the site, the 40cm high kerb is absent at the site entrance (south east corner of the site). In the event of a fire at the site, a temporary spill protection barrier will be installed in the southern part of the site between the end of the 40cm kerb and the eastern boundary of the site to prevent fire water from escaping via the site entrance. The temporary spill protection barrier is stored on the site.

A combination of the site infrastructure comprising 40cm high kerbing and sealed drains in place to isolate the drainage system and the use of suitable additional spill protection equipment at the low point(s) on the site boundary, it is considered based on the quantity of fire-water (640m³) and the size of the site (10,500m²) that the fire water can be contained on site by allowing the water to accumulate on site. On this basis it is considered that, with the exception of the temporary spill protection barrier which will be employed at the site entrance, dedicated flood protection barriers will not be required. What comprises the low point(s) at the site boundary will depend on the location on the site at which the fire is being tackled, however site personnel are familiar with the drainage profile of the site based on observations of water flow at the site during rainfall events and it is considered that the spill protection equipment at the site will be sufficient to contain fire water on the site. The training undertaken at the site will include drills to practice using the spill protection equipment to prevent water from escaping across the site boundary.

During and after an incident

Dealing with issues during a fire

In the event of a fire the receipt of wastes will be stopped and where necessary loads arriving at the site will be diverted to a suitably authorised alternative site.

Notifying residents and businesses

In the event that there is a fire at the site and in the event that it is considered that local properties may be at risk of being affected by the fire, occupiers of premises in the immediate vicinity of the site, including other commercial operators, shall be informed. If it is not possible to do this by telephone or electronically an appointed company representative will inform the occupiers in person.

Clearing and decontamination after a fire

In the event of a fire on site the procedures set out below will be followed in order to clear the site of fire residues. The need for decontamination measures will be discussed and agreed with the EA by the Site Manager.

Suitable plant and/or equipment shall be used to collect the residues for placement in a suitable container(s). The container(s) shall then be stored temporarily in the quarantine area for subsequent transfer and disposal at a suitably permitted facility.

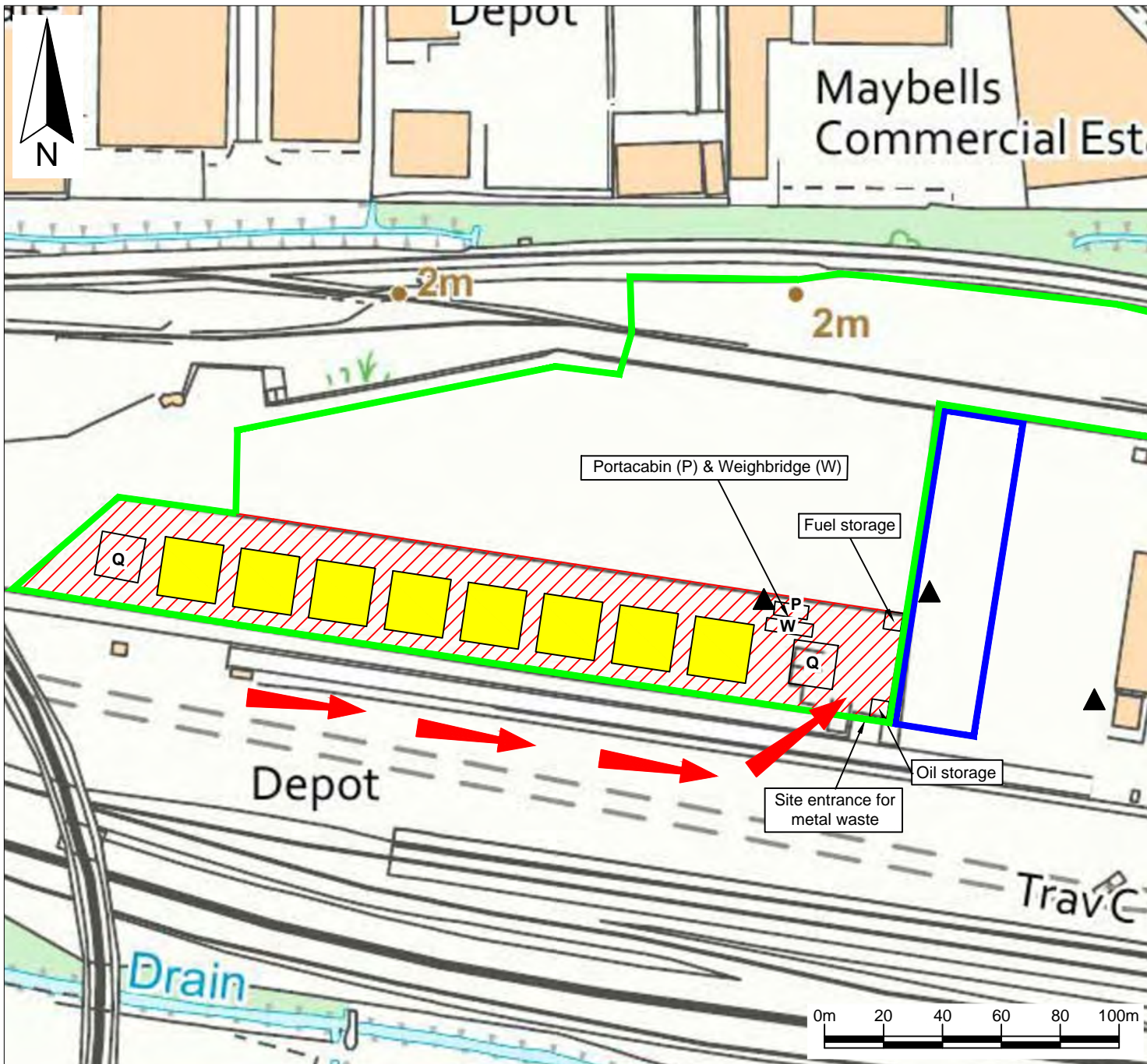
The residual material shall be disposed of in accordance with the requirements of the Environmental Protection Act 1990 and associated Regulations. Specialist advice will be sought in the event of any doubt.

Any waste containing POPs that is involved in a fire and any wastewater containing POPs will be treated in accordance with the POPs Regulations as residues from that fire may contain POPs.

Making the site operational after a fire

Following the closure and clearance of the site it will not reopen until all necessary clearances have been obtained from relevant organisations including the EA and the Site Manager is satisfied that the necessary infrastructure that is required by the Environmental Permit is in place and operational.

FIGURES



Key / Notes

- Environmental Permit boundary for EPR/GB3003GR
- Environmental Permit boundary EPR/WE5880AB (Donald Ward Limited)
- Proposed area of site for storage of metal wastes
- Q Fire Quarantine Area
- Fire hydrant
- Combustible waste storage
- Fire Service access route

Rev	Status	Drn	App	Chk	Date
	Final	KR	AW	LH	21/04/23
A	Minor amendments	KR	AW	LH	18/04/23
	Final	KR	AW	LH	31/03/23

Site: EUROHUB BARKING
 Client: DB Cargo (UK) Limited
 Title: The site layout








Figure FPP1 Scale: 1:2,000@A4
 Drawing Ref: DBC/EU/03-23/23618revA

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MJCA Baddesley Colliery Offices,
Main Road, Baxterley, Atherstone,
Warwickshire, CV9 2LE.
Telephone : 01827 717891
Fax : 01827 718507

Technical advisers on environmental issues

Key / Notes

-  Environmental Permit boundary for EPR/GB3003GR
-  Proposed area of the site for storage of inert and excavation waste types
-  Proposed area of site for storage of metal wastes
-  Potential receptor generally within a 1km radius of the site
-  250m distance from the site for storage of metal wastes
-  500m distance from the site for storage of metal wastes
-  1000m distance from the site for storage of metal wastes

Note:
A full list of the receptors identified on the drawing is presented in the FPP

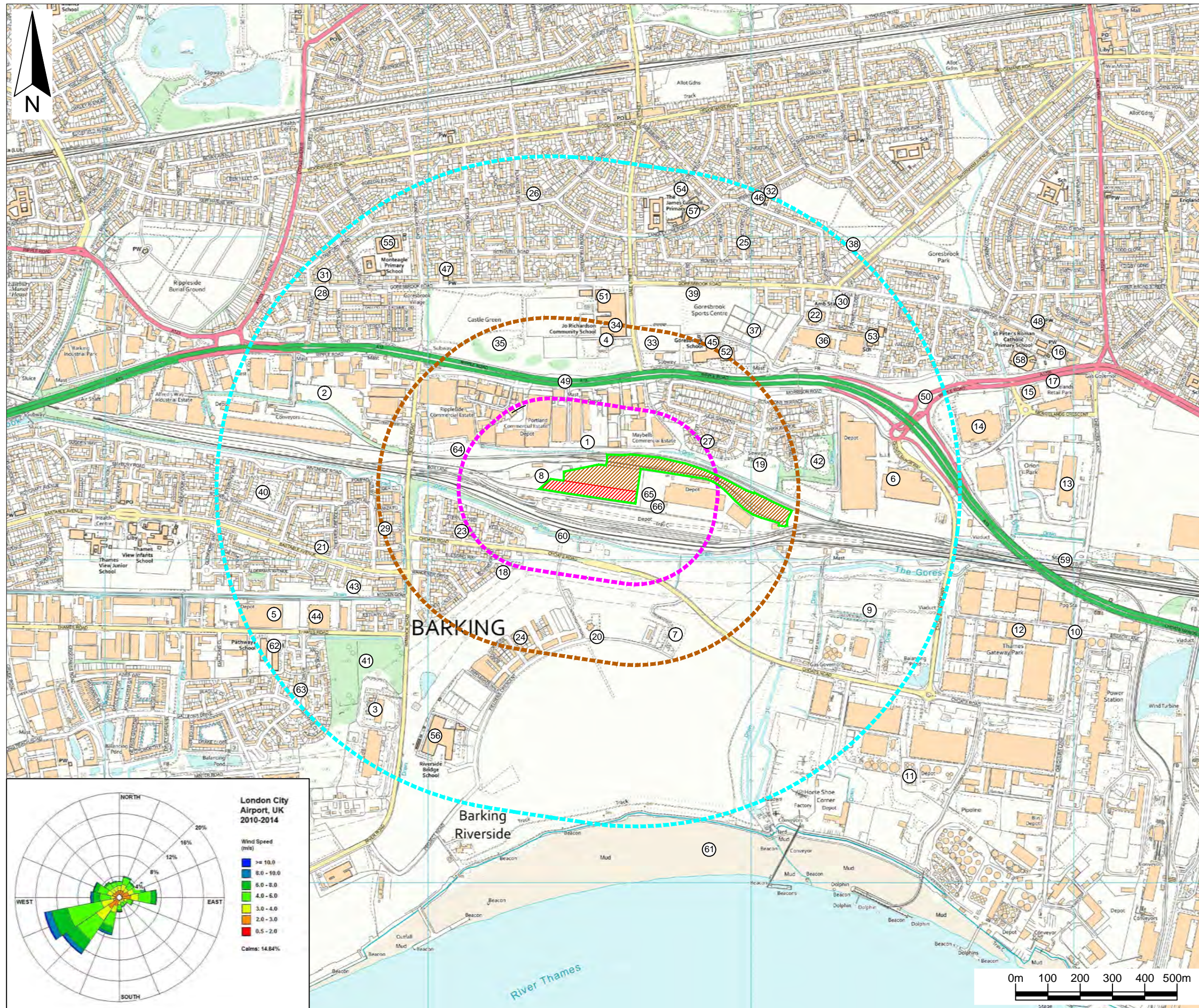
Rev	Status	Drn	App	Chk	Date
	Final	KR	AW	LH	21/04/23
A	Minor amendments	KR	AW	LH	18/04/23
	Final	KR	AW	LH	31/03/23

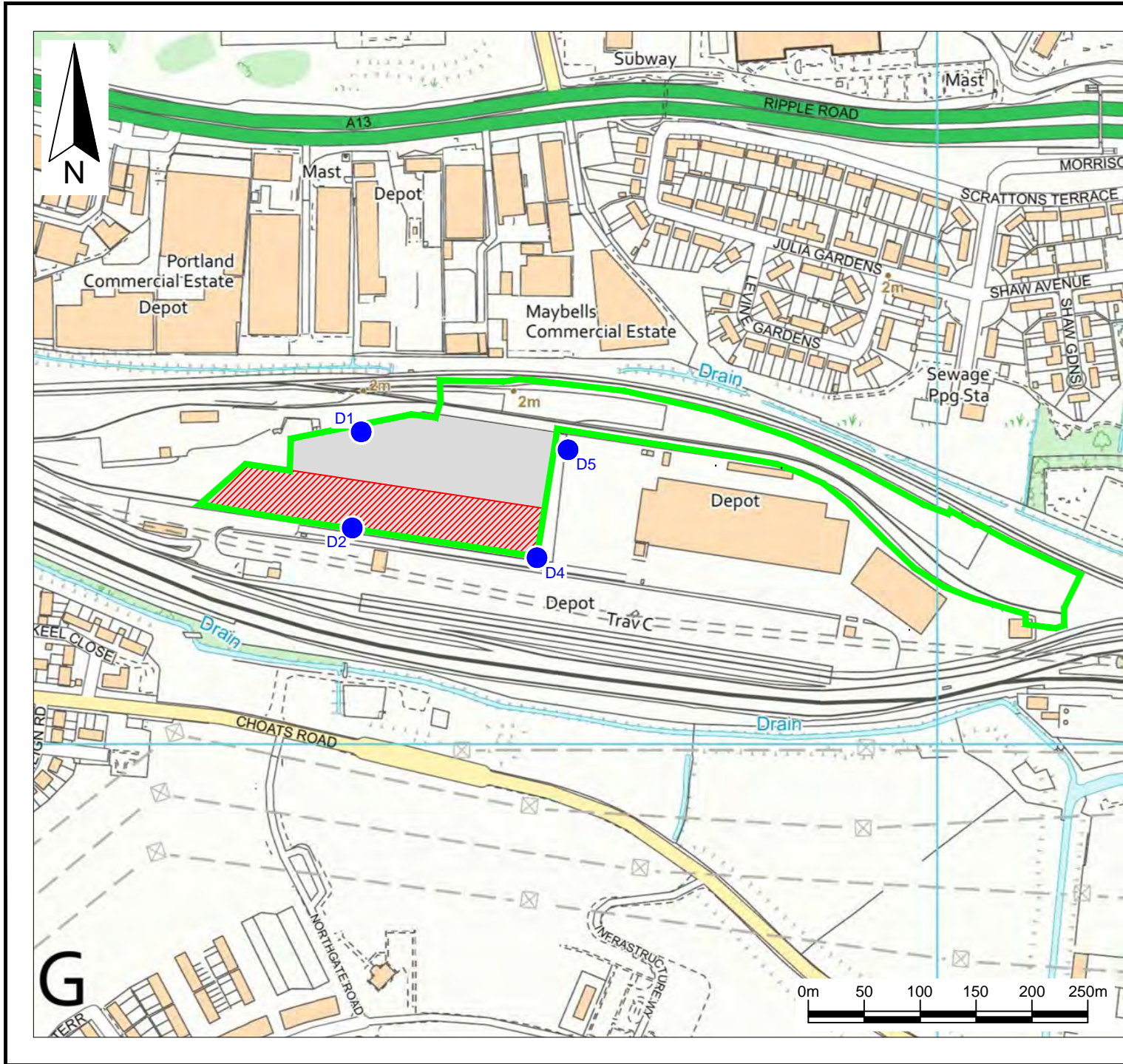
Site: EUROHUB BARKING
Client: DB CARGO (UK) LIMITED
Title: The site and surrounding area

Figure FPP2 Scale: 1:12,500@A3

Drawing Ref: DBC/EU/03-23/23625revA
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Main Road, Baxterley, Atherstone,
Warwickshire, CV9 2LE.
Telephone : 01827 717891
Technical advisers on environmental issues Fax : 01827 718507





Key / Notes

- Environmental Permit boundary for EPR/GB3003GR
- Extent of the tarmac surface at the permitted site
- Proposed area of site for storage of metal wastes
- D1 Drainage grid

Rev	Status	Drn	App	Chk	Date
	Final	KR	AW	LH	21/04/23
A	Minor amendments	KR	AW	LH	18/04/23
	Final	KR	AW	LH	31/03/23

Site
EUROHUB BARKING
 Client
DB Cargo (UK) Limited
 Title
Site surfacing and drainage

Figure FPP3 Scale
1:5,000@A4
 Drawing Ref
DBC//EU/03-23/23626revA

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Main Road, Baxterley, Atherstone,
Warwickshire, CV9 2LE.
Telephone : 01827 717891
Fax : 01827 718507

APPENDICES

Appendix FPP 1

A list of the receptors in the vicinity of the site

Ref	Name or description	Type of receptor	Approximate distance from site (m)	Direction from site
1	Barking Industrial Park East ¹	Commercial	<250m	N
2	Barking Industrial Park West	Commercial	>500m	WNW
3	Barking Power Station	Commercial	>500m	SW
4	Castle Green Nursery	School/Educational	>250m <500m	N
5	DHL	Commercial	>500m	SW
6	Eddie Stobart	Commercial	>500m	E
7	Enterprise Car Club	Commercial	>250m <500m	SSE
8	John G Russell	Commercial	<250m	W
9	London Sustainable Industrial Park	Commercial	>500m	ESE
10	Barking Reach Power Station	Commercial	>1000m	ESE
11	Dagenham Dock Industrial Park South	Commercial	>500m	SE
12	Dagenham Dock Industrial Park East	Commercial	>1000m	ESE
13	Dagenham Dock Industrial Park North	Commercial	>1000m	E
14	Asda Dagenham	Commercial	>500m	ENE
15	Aldi	Commercial	>1000m	ENE
16	Goresbrook Road Post Office	Commercial	>1000m	NE
17	Merrylands Retail Park	Commercial	>1000m	ENE
18	Barking & Dagenham Scout Hall	Community	>250m <500m	SW
19	Social Club & Community Hall	Community	>250m <500m	ENE
20	Fielders Crescent Construction Works	Construction	>250m <500m	S
21	Bestable Avenue Housing Estate	Domestic Dwellings	>500m	WSW
22	Cherry Orchard Care Home	Domestic Dwellings	>500m	NE
23	Choats Road Housing Estate including Keel Close	Domestic Dwellings	<250m	SW
24	Fielders Crescent Accommodation	Domestic Dwellings	>250m <500m	S
25	Gale Street Housing Estate East	Domestic Dwellings	>500m	NNE
26	Gale Street Housing Estate West	Domestic Dwellings	>500m	NNW
27	Scratton Terrace Housing Estate including Levine Gardens	Domestic Dwellings	<250m	NE
28	Outlook Care Home	Domestic Dwellings	>500m	NW

¹ Including the waste facilities identified in the Site Condition Report dated September 2020.

Ref	Name or description	Type of receptor	Approximate distance from site (m)	Direction from site
29	Renwick Road Accommodation	Domestic Dwellings	>250m <500m	WSW
30	Becontree Ambulance Station	Health	>500m	NE
31	St. Albans Surgery	Health	>500m	NW
32	St. Albans Surgery (1)	Health	>500m	NNE
33	Barking Rugby Club	Recreational	>250m <500m	N
34	Castle Green Leisure & Community Centre	Recreational	>250m <500m	N
35	Castle Green Skate Park	Recreational	>250m <500m	NW
36	Dagenham Leisure Park	Recreational	>500m	NE
37	Goals Dagenham	Recreational	>500m	NE
38	Goresbrook Park	Recreational	>500m	NE
39	Goresbrook Sports Ground	Recreational	>500m	N
40	Newlands Park	Recreational	>500m	W
41	Ripple Nature Reserve	Recreational	>500m	SW
42	Scrattons Farm Eco Park	Recreational	>250m <500m	ENE
43	Thames View Skate Park	Recreational	>500m	SW
44	Christ Embassy	Religious	>500m	SW
45	Faith Connections	Religious	>500m	NE
46	Saint Albans Church	Religious	>500m	NNE
47	Saint John	Religious	>500m	NW
48	St Peter RC Church	Religious	>1000m	ENE
49	A13	Road	>250m <500m	N
50	A1306	Road	>500m	ENE
51	Castle Green Community School	School	>250m <500m	N
52	Goresbrook School	School	>250m <500m	NE
53	Hopewell School	School	>500m	NE
54	Maysebrook Park School	School	>500m	N
55	Monteagle Primary School	School	>500m	NW
56	Riverside Bridge School	School	>500m	SSW
57	The James Cambell School	School	>500m	N
58	St Peters RC Primary School	School	>1000m	ENE
59	Dagenham Dock Train Station	Transport	>1000m	E
60	The Gores	Water Body	<250m	S
61	The River Thames	Water Body	>1000m	S
62	Pathways School	School	>500m	SW
63	Marine Drive Housing Estate	Domestic Dwellings	>500m	SW
64	Biffa Waste Transfer Station	Commercial	>250m <500m	WNW
65	Donald Ward Limited Metal Recycling Facility	Commercial	< 250m	E
66	Titan Waste Management	Commercial	< 250m	E

Note: Selected receptors generally within 1km of the site are displayed in Table 1 above. The receptors are measured from their closest point to the site.



BEUR/HSE103: ACTION IN THE EVENT OF A FIRE OR EXPLOSION

No Risk Assessment Necessary

If you discover a fire:

- Assess the situation
- Immediately inform all personnel working in the area
- If required, telephone the emergency co-ordinator **07585 887528**
- Contact the nominated BLC Fire Marshall
- Inform the Facilities Manager or his deputy.

Give the emergency co-ordinator your name and the site address:

DB Cargo UK Limited
London Eurohub
Box Lane off Renwick Road
Barking
Essex
IG11 0SQ
Tel: 01302576858 Mobile: **07585 887528**

If a fire or risk of explosion, isolate the plant, equipment and fuel valves where possible.

TAKE NO UNNECESSARY RISKS-PERSONEL SAFETY IS MORE IMPORTANT THAN PLANT OR EQUIPMENT!

If a small fire, and if possible;

- tackle the fire using fire extinguishers

TAKE NO UNNECESSARY RISKS

Responsibilities of the Fire marshal's

- Recover the Sign in book
- Sound the Air Horn (continuous loud bursts) to alert workers on site to the danger.
- Ensure that the surrounding area is free form danger.
- Ensure that a register of all personnel is conducted.
- Liaise with the Emergency Services:
 - ✓ Incident area.
 - ✓ Dangers on site (mobile Plant Site Vehicles)
 - ✓ Relevant details- Is it a fuel fire, Hazardous substances.

If unable to control fire, or there is risk of explosion OR

If you hear the fire alarm, air horn or receive instructions to evacuate:

- leave area immediately
- use nearest safe route
- leave personal belongings
- check area for people and alert them

Proceed to the assembly point:

- Outside main office opposite Block Storage Bay.

London Eurohub Fire Marshall Representatives
Selaudin Vata

On the way:

- Alert other people

Wait at the Assembly Point for further instructions from the Manager