## **Fire Prevention Plan**

# Prepared on Behalf of: Scrapco Metal Recycling Limited

Site Name:

2a Landau Way

Darent Industrial Park

Erith

Kent

DA8 2LF

Environmental Permit: WML 101450

Version 1.1 (Submission Version)

#### **DOCUMENT CONTROL SHEET**

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#### 1 Introduction

- 1.1.1 This Fire Prevention Plan explains how operational procedures laid out in this Fire Prevention Plan ensures that the risk of fire is minimised, and any outbreaks are effectively controlled.
- 1.1.2 This document is separate to any documentation intended to meet the Health & Safety obligations associated with the Regulatory Reform (Fire Safety) Order 2005.

## 1.2 Interpretation

- 1.2.1 'Responsible Person' refers to any person trained and responsible for monitoring and reporting as detailed in this Plan i.e., Senior Management (Director, Technically Competent Manager, the Site Manager and any Supervisors).
- 1.2.2 'Fire Warden', relates to any person appointed & sufficiently trained with specific responsibilities in the event of a fire.
- 1.2.3 'Operative', relates general yard staff.

#### **2** Fire Prevention Plan

- 2.1.1 This Plan has been prepared with reference to the following documents:
  - Fire Prevention Plans: Environmental Permits Environment Agency Guidance.

#### 3 Fire Risk Scoping Exercise

- 3.1.1 The controls and measures are aimed at reducing:
  - 1) Minimising the likelihood of a fire happening;
  - 2) Aiming for a fire to be extinguished within 4 hours;
  - 3) Minimise the spread of a fire within the site and to neighbouring sites.
- 3.1.2 The Risk Assessment presented in <u>Section 4 Table 1</u> underpins the measures adopted.

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# 4 Fire Risk Assessment

<u>Table 1:</u> Possible Causes of Fires as identified within the Fire Prevention Plan Guidance 2021

Potential Source of	Prevention/Management
Ignition	
Arson;	Enclosed site perimeter Security cameras (24-hour operation), alongside the fact that the site is manned 24 hours 7 days a week including staff and a night security watchman. Location remote from centre of population and access difficult due to condition of surrounding land. Combustible materials stored at a distance from the main site entrance.
Self combustion	Self-combustion addressed in Section 5.2 of FPP Document.
Plant or equipment failure	Daily inspection of all equipment/machinery by operatives, conducted at the beginning of the working day. Full annual inspection of all equipment/service contracts (LOLER/PUWER). End of Day Procedures Fuel storage tanks provide 110% secondary containment (over 6 metres from combustible material accumulations).
Plant or equipment operation	Inspection procedures as detailed above. Reliance will be placed on Fire Fighting Equipment and the planned preventative maintenance schedule as detailed.
Electrical faults or damaged/ exposed electrical cables	Preventative maintenance via weekly inspections of all electrical equipment to ensure that any obvious signs of damage or deterioration do not go undetected. A qualified electrician will install all electrical supplies & PAT testing is completed annually.
Naked (hot) light fixtures	No naked sources of ignition are within 6 metres of combustible or flammable materials.
Discarded smoking materials	Designated smoking areas.
Hot works e.g., welding, cutting	Only trained operatives are authorised to conduct operations involving hot cutting equipment. Activities will not take place with 6 metres of any risk materials. End of Day Procedures. Cutting and burning equipment isolated other than when in use.
Industrial heaters	No industrial heaters are currently used onsite.
Hot exhausts	Equipment is parked at a safe distance of at least 1 metre from accumulation of risk materials.  End of Day Procedures.
Open burning onsite	No open burning takes place onsite.
Incompatible materials	All materials are stored within designated areas. Detailed waste acceptance procedures are followed by all Operatives
Neighbouring site activities	Adjacent sites are not sensitive in nature as they are commercial/industrial and waste activities.
Hot loads deposited at the site	Hot loads are not accepted.  Monitoring for hot loads takes place as loads arrive at site with procedures to manage materials.  Separation, isolation & storage of combustible materials within identified storage bays or containers.
Weather, e.g., lightning strikes	Naturally occurring and uncontrollable.

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# 4.1 Operational Flow Diagrams (Combustible Materials).

4.1.1 The operation is summarised in the Operational Flow Diagrams below:

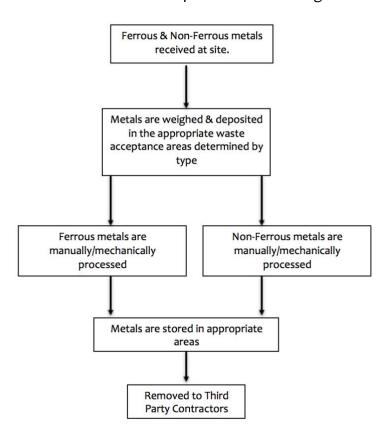


Figure 1: Operational Flow Diagram (MRS)

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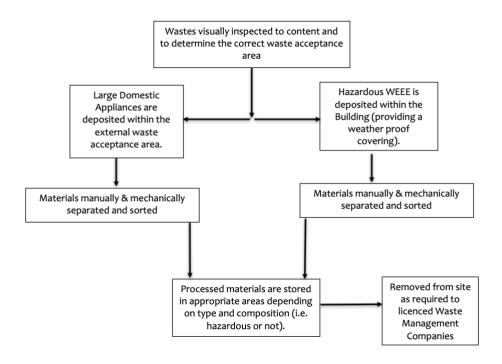


Figure 2: Operational Flow Diagram (WEEE ATF)

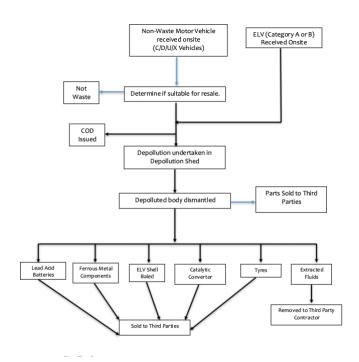


Figure 3: Operational Flow Diagram (ELV ATF)

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# 5 Preventing Fires

- 5.1.1 Scrapco Metal Recycling Limited operate an End-of-Life Vehicle ATF, Metal Recycling Site at their site at Red Lodge.
- 5.1.2 The site will receive between 75-150 tonnes of material each day.
- 5.1.3 All drivers are instructed to inspect loads prior to collection to ensure any potential sources of ignition are not present and will adhere to strict waste acceptance procedures that form part of the site Environmental Management System (as detailed in <u>Appendix FPP7</u>).
- 5.1.4 Vehicles are inspected prior to purchasing to ensure no concealed items are present, such as canisters/hypodermic needles/wastes or any other items that should not be present. In the event of these items being discovered during the inspection process the vehicles will be rejected and the vehicle will not be purchased.
- 5.1.5 Non-waste motor vehicles are assessed for resale suitability; if the vehicles are not suitable for resale, they become waste on the site of production and will be transferred to the area benefitting from an impermeable concrete surfacing for processing.
- 5.1.6 Materials will be unloaded in designated 'tipping areas' and inspected for the presence of any fire risks (e.g., glowing embers or explosive materials or signs of flammable liquids), which will be moved to the quarantine area and extinguished.
- 5.1.7 Extinguished material will be monitored prior to isolation in a designated skip/container, which will be brought forward as necessary & removed within seven working days.
- 5.1.8 Acceptable materials are stored in areas/bays/skips around the facility dependant on type & composition, as shown on the Site Layout Plan within <u>Appendix FPP2</u>. Combustible materials will be removed from site within one month of acceptance.
- 5.1.9 A Fire Quarantine Area of at least 81m² (9m x 9m) plus a 6m buffer zone on all sides is available at all times. The area will accommodate over 50% of the single largest accumulation of combustible waste, equating to 324m³ of waste (stored to a height of 4 metres), which supports the largest single accumulation at 540 m³.
- 5.1.10 The Responsible Person will ensure that a suitable fire quarantine area is available at all times and will conduct a visual check at the commencement of daily operations and throughout the day (fire watch). All staff members will be made aware that an area is to be kept clear for this purpose & its importance.
- 5.1.11 Potentially explosive & flammable fuels/oils (non-waste materials fuels & lubricating oils/grease) are stored over 6 metres from any accumulations of wastes.

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- 5.1.12 Gas bottles (pressurised canisters) if identified within incoming loads or emptied following use will be isolated and stored within a designated lockable cage in accordance with relevant guidance (Location as shown on the Site Layout Plan in Appendix FPP2).
- 5.1.13 Batteries will be disconnected or removed from vehicles before they are stockpiled for depollution (i.e., once they become waste).
- 5.1.14 ELVs will be limited to two vehicles deep and three vehicles high.
- 5.1.15 Smoking is only permitted in designated areas.
- 5.1.16 Only Competent Persons that have completed training will be authorised to perform 'hot work' activities, which are approved by Responsible Persons onsite, which will include a Permit to Work System. If necessary two operatives will complete 'hot work' activities, which will allow one person to complete necessary works & the other to supervise and tackle any sparks generated (this may include a member of the site office watching via CCTV). Fire extinguishers will be kept at hand all times 'hot works' are undertaken. All hot work activities will be undertaken at least 6 metres from any accumulation of combustible materials.
- 5.1.17 Materials will be stored in their largest form & pile sizes will be minimised wherever possible, according to operational need.
- 5.1.18 Fire Watch Procedure (During Working Day) Conducted by Operatives every hour:
  - That all mobile plant is parked at a distance from any combustible material (minimum 1 metres) and that there is no trapped debris located within the vicinity of exhausts.
  - 2. That no material is trapped within static plant.
  - 3. That no debris has settled onto hot exhausts and engine parts.
  - 4. That a suitable fire quarantine area is available at all times.
- 5.1.19 A fire watch will be conducted at the end of the working day as part of the site's End of Day Procedures, as detailed at <u>Section 10</u>. In the event of hot work activities being conducted an inspection of the area/material will be conducted every 15 minutes for at least 1-2 hours.
- 5.1.20 A Responsible Person will carry out a detailed weekly inspection of all onsite equipment.
- 5.1.21 Plant & equipment is subject to manufacturers maintenance. Driver inspection/defect sheets are completed prior to use. Defects are reported to fleet & logged for our contractors to address & repair, once completed the jobs are signed off by Fleet on completion. Records for each plant item contained with Fleet.

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- 5.1.22 Maintenance completed is recorded. All maintenance records will be kept within the Site Office and any necessary maintenance recorded on the appropriate documentation & logged. All faulty equipment will be isolated pending repair.
- 5.1.23 Operatives inspect all machinery/equipment on a daily basis to ensure that no leakages are apparent; any leakage/spillages will be rectified. Site staff will be alert to any such leakages or trails that might develop during the day and in the event that such is detected the site leakages/spillage response procedures presented in <u>Appendix FPP1</u> will be actioned.
- 5.1.24 In the event of a fault with equipment that may pose a risk of fire being discovered the following procedure will be followed: -
  - 1. Switch off the equipment immediately if safe to do so
  - 2. Isolate the equipment; and
  - 3. Report the fault to a Responsible Person. A Responsible Person will inspect the equipment, records the fault in the Defect Sheets & will contact the internal engineers to complete necessary repairs.
- 5.1.25 Fire extinguishers are strategically located throughout the site. All static plant, mobile plant & vehicles will have fire extinguishers installed. A Responsible Person inspects all extinguishers on a weekly basis, and they are serviced annually. Spent extinguishers are replaced as soon as identified.
- 5.1.26 A Responsible Person on a monthly basis inspects electrical equipment and any defects (loose cables, deterioration or wear) are rectified. Only a qualified electrician will be instructed to assess & complete necessary repairs.
- 5.1.27 All Portable Electrical Equipment is inspected annually (PAT Testing).
- 5.1.28 The whole site is under the control of the operator and can only be accessed through the main entrance gate, thereby ensuring that unauthorised access to the site is prevented at all times.
- 5.1.29 The whole site is security controlled by CCTV to reduce the risk of accidental or deliberate ignition (arson).
- 5.1.30 Operatives conduct routine housekeeping activities (i.e., cleaning & tidying) as necessary and as a minimum on a weekly basis (including all treatment equipment/electrical areas if the Responsible Person deems it necessary during the course of weekly inspections). Cleaning/tidying will include but not limited to pressuring washing/sweeping.

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#### 5.2 Self-Combustion

- 5.2.1 Certain materials can self-combust under certain conditions as a result of: -
  - 1. A physical reaction such as fine materials with large surface areas prone to friction; and/or
  - 2. A biological reaction through degradation processes; and/or
  - 3. A chemical reaction if coming into contact with corrosive substance such as strong acids and bases.
- 5.2.2 Self-combustion is most possible during hot conditions or where waste is left to stagnate for extended periods or items exist within the waste that cause combustion over a period of time. The likelihood of self-combustion occurring has been assessed as low, as the waste is rotated on a first in first out basis precipitated by frequent emptying of the storage areas/containers/bays. During extreme hot weather water hoses will be deployed to dampen down accumulations of materials to reduce the likelihood of hot spots forming as deemed necessary by a Responsible Person.
- 5.2.3 Material Management & Mitigation Measure Procedures: -
  - Operatives throughout the working day will monitor each bay/ container
    holding combustible materials. If the monitoring indicates any evidence of a
    'hot spot' forming (such as visible steam, discolouring or odour i.e., indicating
    degradation) a Responsible Person will be notified, and <u>Condition 1 of Table 2</u>
    will be implemented immediately.

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# 6 Detecting & Suppressing Fires

- 6.1.1 All staff members undergo fire training as part of their induction with refreshers as required (every three years for Fire Warden for example). Staff members will be trained on the contents of this Fire Prevention Plan, which is accessible at all times for them to refer to if needed.
- 6.1.2 Staff awareness is maintained by regular (as deemed necessary by Management to maintain understand and competency in the requirements of this document) 'Toolbox Talks' that form part of a programme of appropriate regular refresher training and the induction process.
- 6.1.3 All fire-fighting equipment is checked/inspected weekly by a Responsible Person.
- 6.1.4 All fire drills are recorded on the sites Fire Safety Logbook in accordance with the applicable legislation.
- 6.1.5 Fire Drill Procedure:
  - 1. A fire drill is carried out annually to confirm that the facilities, procedures and this FPP are effective and that everyone understands what they should do in the event of a fire, and how to evacuate the site.
  - 2. Records must be kept regarding each drill. Special attention should be given if the drill was slow or incomplete
  - 3. All fire points should be checked once a year
- 6.1.6 All training records are kept in the Offices.
- 6.1.7 Reliance will be placed on strategically positioned CCTV monitoring system as detailed in <u>Appendix FPP2</u> so in the unlikely event of a fire occurring, it would be identified at the earliest opportunity, via employees and the Site Office during operational hours and via the monitoring system/watchman during non-operational hours. Reliance will be placed on the below provisions as detailed in <u>Paragraph 6.1.8</u> to combat and extinguish a fire.
- 6.1.8 Equipment available to tackle a fire:
  - 1. Portable fire extinguishers located as shown on the Site Layout Plan in Appendix FPP2.
  - 2. Fire Hoses supplied by a dedicated water supply & storage tank, located as shown on the Site Layout Plan in <u>Appendix FPP</u>2.
  - 3. Fire Hydrants located as shown on the Hydrant Map in Appendix FPP4.

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#### 6.2 Detection Out of Hours

- 6.2.1 The site benefits from an out of hours watchman that is always present onsite and therefore the site is manned 24 hours a day and so in the event of a fire being identified the procedures within the FPP will be actioned immediately, the FRS noticed, and the Responsible Person notified to attend site. The watchman will patrol the site at least every hour and will monitor the site via the CCTV camara system. Location of the CCTV Camera is shown on the Site Layout Plan (Appendix FPP2).
- 6.2.2 Responsible Persons can monitor the site during non-operational via the internet on mobile telephones or laptops.

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# **6.3 Fire Conditions**

<u>Table 2:</u> Fire Fighting Conditions

Alert Condition	Characteris tics	Action	Preparation	Resources Available
Condition 1	Materials Smoking	Operatives will turn the material stockpiles utilising mechanical equipment to enable any trapped heat to be released.	Fire extinguishers ready for deployment. Be prepared to initiate fire procedures (Section 13) Responsible Person to be notified if not already present.	Operating Hours Responsible Persons available Closed Responsible Persons onsite.
Condition 2	Visible Flame	Raise the site fire alarm immediately & initiate Fire Procedures detailed at Sections 13  If safe to do so tackle the blaze utilising onsite fire-fighting provisions including:  • Fire Extinguishers (Deploy on small scale fires)  • Fire Reel Hoses  • Alert FRS  Deploy sandbags across designated areas.	the Fire Procedures detailed at the bins 13 are to do so tackle the blaze utilising the fire-fighting provisions including:  The Extinguishers (Deploy on small alle fires)  The Reel Hoses are Reel Hoses  The Fire Procedures detailed at the bins 13 are to do so tackle the blaze utilising are fire-fighting provisions including:  Prepare the fire quarantine area, inert material & water provisions for deployment.	
Condition 3	Full Fire Established	Remove materials ablaze to the quarantine area or drag containers and deposit them in the fire quarantine area if safe to do so, so extinguishing/suppressing/tackling can take place, location shown on the Site Layout Plan in Appendix FPP2.  On arrival of the FRS the appointed Fire Warden will transfer control of the incident over to the Incident Commander who will direct site operatives accordingly.	Prepare for the arrival of the FRS and follow all instructions.	Operating Hours  Mechanical Equipment

- 6.3.1 These provisions aim as far as reasonability possible to ensure that if a fire were to break out it would be extinguished within 4 hours.
- 6.3.2 The internal site layout is such that FRS can access all areas of the site at all times and HGVs are able to enter and turn around without obstruction. It is therefore, considered that there is suitable access for fire tenders to manoeuvre freely around the site should a fire break out.

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# **7** Fire Prevention Equipment Inventory and Procedure

<u>Table 3:</u> Fire Equipment Inventory

Material	Procedure	Storage	Trained User	Location
Personal Protection Equipment	Full range of PPE readily available for use.	N/A	All staff are issued with PPE.	Provisions are contained within the Site Office.
Fire Extinguishers	Fire Extinguishers are used in the event of fires.	Stored in designated location when ready for deployment. Spent extinguishers are isolated and stored pending recharge/removal.	All staff are trained on how, when & what types of Fire Extinguishers should be used in the event of a fire depending on the composition of the material ablaze.	At locations throughout the site- as shown on the Site Layout Plan (Appendix FPP2).
Water Hoses	Hoses used in the event of a fire.	Stored in designated location and secured via the reel provided.	Staff are trained on how and when to use the hoses.	At locations throughout the site- as shown on the Site Layout Plan (Appendix FPP2).
Fire Hydrant	Hydrant used in the event of a fire.	N/A	Staff are trained on how and when to use the hydrant.	Location as shown on the Hydrant Map (Appendix FPP4).

7.1.1 Firefighting equipment is inspected on a weekly basis by a Responsible Persons to ensure it is present, functional, and well maintained. Firefighting provisions are inspected on an annual basis by a competent person.

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## 8 Material Storage & Management

- 8.1.1 Concrete retaining wall are positioned around sections of the site as well as concrete dividing walls between the designated bays as detailed in <u>Section 9</u>

  <u>Table 4</u> & as shown on the Site Layout Plan in <u>Appendix FPP2</u>.
- 8.1.2 Concrete can provide up to 4 hours (240 minutes) fire resistance (radiation & spreading), which meet the A1 class fire resistance standard (DIN EN 13501-1). Concrete is a non-combustible material and has a slow rate of heat transfer that provides shielding from heat and enables natural cooling. It is accepted in the industry that concrete "can be described as virtually fireproof". The concrete retaining walls will prevent any sparks escaping.
- 8.1.3 End of Life Vehicles pending depollution are stored in a designated area with a suitable separation distance from other accumulations as detailed in <u>Section 9</u>

  <u>Table 4</u> & as shown on the Site Layout Plan in <u>Appendix FPP2</u>.
- 8.1.4 Scrap Metals are stored in designated bays depending on grade and composition as detailed in <u>Section 9 Table 4</u> & as shown on the Site Layout Plan in <u>Appendix</u> FPP2.
- 8.1.5 Scrap Metals are stored in a variety of skips/containers as detailed in <u>Section 9</u>

  <u>Table 4</u> & as shown on the Site Layout Plan in <u>Appendix FPP2</u>.
- 8.1.6 Non-Hazardous WEEE waste are accepted and processed (shear/baler) and stored in bays in <u>Section 9 Table 4</u> & as shown on the Site Layout Plan in <u>Appendix FPP2</u>.
- 8.1.7 Hazardous WEEE (potentially containing POPS) waste are stored in bays in <u>Section</u>
  9 Table 4 & as shown on the Site Layout Plan in <u>Appendix FPP2</u>.
- 8.1.8 Cables (potentially containing POPS) are stripped/granulated and stored in bays in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2.
- 8.1.9 Window frames (containing steel/aluminium) are stored in bays in <u>Section 9 Table</u> 4 & as shown on the Site Layout Plan in <u>Appendix FPP2</u>.
- 8.1.10 Batteries are stored in designated stillages with an appropriate separation distance implemented between other accumulations as detailed in <u>Section 9</u>

  <u>Table 4</u> & as shown on the Site Layout Plan in <u>Appendix FPP2</u>.
- 8.1.11 Tyres are stored in designated areas/containers with an appropriate separation distance implemented between other accumulations as detailed in <u>Section 9</u>

  <u>Table 4</u> & as shown on the Site Layout Plan in <u>Appendix FPP2</u>.
- 8.1.12 The Waste Industry Safety & Health Forum (WISH) guidance Waste 28 Reducing Fire Risk At Waste Management Sites (Issue 2 April 2017), confirms the suitability of steel as a material for use in fire breaks (See page 47). The Chief Fire Officers Association amongst other bodies has endorsed this guidance. A report by the

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<sup>&</sup>lt;sup>1</sup> http://www.concretecentre.com/Performance-Sustainability-(1)/Fire-Resistance.aspx

British Constructional Steelwork Association identified 550 Celsius as the limiting temperature for a steel structure with four sides such as a skip container to maintain its stability<sup>2</sup>. The risk associated with steel is melting, which happens at around 1365 Celsius.

#### 8.1.13 Skip/Container Isolation Procedure

- A. Operatives on identification of a fire within a skip will enact procedures as detailed at Table 2.
- B. Each skip/container will, if safe to do so be moved utilising the 360 grab machines (by connecting the grab head to the lip of the container) & dragged to the fire quarantine area, after which extinguishing (smothering/burying or deployment of water) will be attempted pending FRS arrival.
- 8.1.14 Containment in identified bays/areas or skips (as shown on the Site Layout Plan in Appendix FPP2) ensures materials are isolated from potential sources of ignition and from environmental elements such as wind (fanning). The storage bays or containers will ensure that materials are well ventilated and able to cool naturally, whilst providing a thermal barrier.
- 8.1.15 During extreme hot weather the fire hoses will be deployed to dampen down accumulations of combustible wastes to reduce the likelihood of self-combustion, if deemed necessary by a responsible person (i.e., extreme heat wave).
- 8.1.16 At least once every quarter, the storage bays will be emptied, cleaned, and inspected for damage and repaired as needed as part of the preventative maintenance regime.
- 8.1.17 The site will turn over materials as quickly as practicably possible, operating a 'first in first out' policy, as detailed in the procedure in <u>Section 8.1.15</u>. Materials will be kept onsite until sufficient quantities have accumulated to constitute an economic onward load, or the maximum storage limits detailed at <u>Table 4</u> have been reached.

#### 8.1.18 Stock Rotation Procedure (Operatives):

- 1. Operatives will deposit all 'new' incoming wastes at the front of any accumulation within a pile.
- 2. Operatives must load all collection vehicles with the oldest materials first (accumulations at rear of pile), therefore materials at the back of a pile will be loaded in the first instance (i.e., a first in first out policy);
- 3. Once loading is completed Operatives will utilise mechanical machinery to manoeuvre the accumulations of waste to the back of the pile.

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<sup>&</sup>lt;sup>2</sup>http://www.tatasteelconstruction.com/file\_source/StaticFiles/Construction/supplements/Fire\_Protection\_Supplement.pdf

- 8.1.19 We are proposing an alternative arrangement as the site is manned 24 hours a day seven days a week and so any incident can be rapidly responded to by onsite personnel (daytime and nighttime monitoring) to ensure the likelihood of a fire spreading is very low and the objectives of the FPP are met. We would note that due to the additional onsite arrangements the requirement to have a freeboard space is not necessary as any fire would be managed immediately on identification and the site would not have to wait for responsible persons to arrive, which will reduce the spread and impact of a fire if one to occur. We have set a limitation that piles will not be stored above the confines of the site boundary at over 4 metres and the boundary provisions will be visible at the top, which would reduce the likelihood for a fire to spread between the bays.
- 8.1.20 Due to the separation distances maintained onsite it is considered that the risk of bridging is very low.

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# 9 Combustible Material Storage Arrangements

<u>Table 4:</u> Combustible Materials Storage Arrangements

Reference Point Site Layout Plan Appendix FPP2.	Combustible Material	Storage Arrangements	Width Maximum (metres)	Depth Maximum (metres)	Height Maximum (metres)	Volume Maximum (metres cubed)	Minimum Separation Distance From Other Combustible Waste (metres)	Storage Time Onsite (Working Hours/Days)
1	Scrap Metal	Stored loose in bay.	20	6	4	480	0.5	3 Months
2	Scrap Metal	Stored loose in bay.	12	10	4	480	0.2	3 Months
3	Baler/Shear	-	-	-	-	-	-	-
4	Scrap Metal (Non- Hazardous WEEE Processed)	Stored loose in bay.	9	15	4	540		
5	Scrap Metal	Stored loose in bay.	9	12	4	432	0.2	3 Months
6	Scrap Metal	Stored loose in bay.	9	12	4	432	0.2	3 Months
7	Scrap Metal	Stored loose in bay.	10	10	4	400	0.2	3 Months
8	Scrap Metals	Stored loose in bay	10	15	4	600	0.2	3 Months
9	Office	-	-	-	-	-	-	-
10	Car Park	-	-	-	-	-	-	-
11	Weighbridge	-	-	-	-	-	-	-
12	Office	-	-	-	-	-	-	-

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13	Scrap Metal	Stored loose in a containers/bin	5	5	2	50	0.5	3 Months
14	Scales	-	-	-	-	-	-	-
15	Scrap Metal	Stored loose in a container	2.5	6	3	45	0.5	3 Months
16	Scrap Metal	Stored loose in a container	2.5	6	3	45	0.5	3 Months
17	Containers/Bins	-	-	-	-	-	-	-
18	Batteries	Storage loose in stillage	6	4	4	96	6	3 Months
19	Scrap Metal (Hazardous WEEE)	Stored loose in a container	2.5	6	3	45	0.5	3 Months
20	Scrap Metal	Stored loose in a skip	1.8	4.2	2	15.12	0.5	3 Months
21	Diesel Tank	-	-	-	-	-	-	-
22	Canister Cage	-	-	-	-	-	-	-
23	Undepolluted ELVs	Stored loose in area	1.5	13.5	5.4	109.35	6	3 Months
24	Depollution Stand (One ELV)	Stored loose on stand	4.2	1.5	1.8	11.34	0.5	3 Months
25	Depollution Stand (One ELV)	Stored loose on stand	4.2	1.5	1.8	11.34	0.5	3 Months
26	Tank Farm	-	-	-	-	-	-	-
27	Tyres	Stored loose in a container	2.5	6	3	45	0.5	3 Months
28	Scrap Metal	Stored loose in a container	2.5	6	3	45	0.5	3 Months
29	Scrap Metal	Stored loose in a container	2.5	6	3	45	0.5	3 Months

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30	Scrap Metal	Stored loose in a container	2.5	6	3	45	0.5	3 Months
31	Scrap Metal	Stored loose in a container	2.5	6	3	45	0.5	3 Months
32	Scrap Metal	Stored loose in a container	2.5	6	3	45	0.5	3 Months
33	Scrap Metal	Stored loose in bay.	6	6	4	144	0.2	3 Months
34	Scrap Metal	Stored loose in bay.	6	6	4	144	0.2	3 Months
35	Scrap Metal (Cables Potential Containing POPS)	Stored loose in bay.	6	6	4	144	0.2	3 Months
36	Scrap Metal	Stored loose in bay.	3	6	4	72	0.2	3 Months
37	Scrap Metal	Stored loose in bay.	3	6	4	72	0.2	3 Months
38	Scrap Metal	Stored loose in bay.	3	6	4	72	0.2	3 Months
39	Scrap Metal (Window Frames)	Stored loose in bay.	3	6	4	72	0.2	3 Months
40	Scrap Metal (Window Frames)	Stored loose in bay.	3	6	4	72	0.2	3 Months
41	Hot Cutting Area	-	-	-	-	-	-	-
	Grand Total:						4,854.15m	3

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# 10 End of Day Operations

- 10.1.1 All operatives conduct an end of day inspection on all mobile equipment once parked to ensure that no trapped debris is located in the vicinity of the exhausts.
- 10.1.2 A Responsible Person is notified after mobile equipment has been parked and inspections conducted.
- 10.1.3 A Responsible Person conducts a final end of day inspection prior to closure to ensure: -
  - 1. All mobile plant is parked in the designated parking area over 1 metre away from accumulations of combustible wastes.
  - 2. Whenever possible no material will be left uninspected in any 'tipping area'.
  - 3. No material is trapped within static plant.
  - 4. No debris has settled onto hot exhausts and engine parts (Fire-watch).
  - 5. Everything is switched off.
  - 6. No visible signs of flames or embers are present
  - 7. The security system is activated.
  - 8. No one remain within the yard after closure

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#### 11 Fire Water & Containment

11.1.1 As required by the Fire Prevention Plan Guidance, a minimum water supply of at least 2,000 litres/min for a minimum of 3 hours is required for a 300 cubic metres pile of combustible material. This equates to 6.6 l/min (2000/300) per cubic metre of combustible material. At least 723,600 litres of water (6.7 l/min x 600 = 4,020 l/min x 180 minutes) would be required were the complete contents of the single latest accumulation ablaze. Reliance will be placed on the fire fighting provisions as detailed at Table 5 below.

<u>Table 5:</u> Fire Fighting Provisions

Fire Suppression Provisions & Water Delivery Systems	Specification	Cumulative Supply I/mins	Total Volume m3 Available (for up to 180 mins)
Primary Suppression Equipment (	Non-water Provisions)		
Fire Extinguishers (AFFF/Co2)	An array of Portable Fire Extinguishers suitable for tackling a range of fires.	-	-
Secondary Suppression Equipmer	nt (Water Provisions)		
Fire Hose (30 Metres)	100 l/min connected directly to mains water supply.	100	18,000
Fire Hose (30 Metres)	100 l/min connected directly to mains water supply.	200	36,000
Hydrant (Located on Landau Way)	, , , , , , , , , , , , , , , , , , , ,		153,000
Hydrant (Located on Landau Way)	75l/second delivering 650 l/min (approximately)	1500	270,000
Hydrant (Located on Manor Road)	,		810,000
Grand		4,500	810,000
Tertiary Suppression Equipment (	Water Provisions)		
45mm standard jet capable of delivering 220 l/min (approximately 6,000 litres)		220	6,000
Grand	l Total	220	6,000

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#### 11.2 Fire Fighting Water

11.2.1 In the event of water being required the following provisions are available:

#### • Fire Hoses:

Two fixed hoses are installed throughout the site, which are connected directly to dedicated water supplies. Each hose is capable of delivering 100 l/min each, locations as shown on the Site Layout Plan within <u>Appendix FPP2</u>. In the event of deployment, the fire procedures detailed at <u>Table 2</u> and in <u>Section 13</u> will be implemented.

#### • Hydrant:

Three hydrants capable of delivering 4,300 l/min each are situated on the main access roads for easy access by the FRS to the site as shown on the Hydrant Map within Appendix FPP4.

- 11.2.2 Once the FRS have arrived onsite & connected to the hydrant the use of onsite water-based fire-fighting provisions will only be deployed on FRS instruction. The FRS can connect directly to the Water Storage Tanks via a dedicated coupling, so they will be able to utilise the water contained within the tanks as required.
- 11.2.3 Furthermore, a Fire Tender is capable of delivering up to 6,000 litres of water at 220 l/min in a single load (through a 45mm standard jet). While the supply of water on the tender may not be available for the whole 180 minutes, on arrival onsite it will make an important contribution in the early stages of fire fighting prior to hydrant connection.
- 11.2.4 The provisions detailed at <u>Table 5</u> are capable of delivering the required 4,020 l/min as per the EA Fire Prevention Plan Guidance.

## 11.3 End of Life Vehicles Fire Fighting Water

11.3.1 The Fire Prevention Plan Guidance Document states that if you are storing ELVs, you will need to have 1800 litres of water to extinguish each vehicle. We would note that the site is capable of generated 651,240 litres of water every 180 minutes, which would enable 362 vehicles to be stored onsite.

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#### 11.4 Firewater Containment

- 11.4.1 Resultant firewater will be contained within the permitted area via a kerbed perimeter edge around the concreted area and the deployment of sandbags across the site entrance (Locations as shown on the Site Layout Plan Appendix FPP2 & Site Drainage Plan Appendix FPP3).
- 11.4.2 On average a 15kg sandbag is 0.8m wide x 0.77m length x 0.1m high, so 26 sandbags in all would be deployed to build a wall across the site entrance totalling 10metres long x 0.2 metres high (13 sandbags end to end (i.e., two layers). It is anticipated that it would take 15 minutes to construct the sandbag wall. A supply of at least 26 full and 26 empty sandbags will be kept onsite at all times. Sandbags are stored in IBCs/Stillages for rapid deployment. The location of sandbags and the deployment lines is details on the Site Layout Plan Appendix FPP2.
- 11.4.3 Given the floor area of the site is over 5000 m² and the height of 0.2m, up to 1,000,000 litres (5000 x 0.2 = 1,000 m³) of firewater would be retained within the site if required. This does not account for evaporation, which will occur to some degree (25% allowance). Overall, the onsite provisions for firewater containment are more than sufficient to the anticipated 723,600 litres of water stated in Paragraph 11.1.1, which does not account for the drainage capacity of the drainage system.
- 11.4.4 Operatives will be instructed by a Responsible Person (Senior Management) on when to construct a sandbag wall, which will depend on real time events onsite.
- 11.4.5 Sandbag Monitoring & Replacement Procedures
  - Sandbags will be stacked & covered with a lid ready for deployment; a
    Responsible Person will monitor these bags. If necessary, sandbags will be
    rotated (i.e., those sandbags at the bottom of the stack will be placed at the
    top of the stack during the course of the inspection)
  - 2. Sandbags will be replaced as necessary as determined by the ongoing inspections.

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# 12 Contingency Planning

<u>Table 6:</u> Contingency Plans

Eventuality	Procedures/Measures
Contingency	Measures could include: -
Planning in the	The site will cease all operations and will not accept any further waste material (contact)
event of a fire	appropriate customers/contractors if necessary) until FRS arrives.
	2. Employees will be advised of the situation.
	3. Enact fire procedures as detailed within <u>Sections 13</u> of this FPP.
	4. The site will only reopen once FRS has advised it is safe to do so.
	<ol> <li>Fire damaged waste will be processed as appropriate or removed as deemed necessary.</li> </ol>
Accident	Measures may include: -
	The affected area will be isolated and an appointed 'first aider' will be contacted to attend to any
	injured party.
	2. If necessary, the emergency services will be contacted.
	3. A Responsible Person will decide on a case-by-case basis if cessation of operations around the
	affected area and reception of waste is necessary until the appropriate emergency services have
	arrived.
	4. A Responsible Person will complete an Accident Investigation Report.
Seasonality	Measures could include: -
(Including	Confirm current storage times for materials accumulated onsite.
Transportation	2. Contact outlets for the specified stream and arrange transportation.
Shortages)	3. Transport all waste accumulated within a designated container, even if it may be economically
,	undesirable to do so, i.e., the container for transportation is not full.
	4. In the event of no outlet being viable a last resort would be to transport the specified material to a
	landfill site via a third-party haulier to ensure that the storage limit maxima are not exceeded.
Supply Chain	Measures could include: -
Failure	<ol> <li>Confirm current storage times for materials accumulated onsite.</li> </ol>
(Including	2. Increase monitoring of material stockpiles onsite.
Transportation	3. Contact outlets for the specified stream and arrange transportation.
Shortages)	4. If the outlet is not receiving the specified waste stream, contact other outlets.
	5. Conduct investigations into potential alternative outlets if potential outlets are not accepting
	specified streams.
	6. Seek advice from EA.
Breakdowns	Measures could include: -
(Mechanical	1. Immediate isolation of the affected machinery.
Equipment)	2. External contractors notified to complete repairs
	3. Hire in relief equipment in interim if needed.
	4. Reschedule material despatch to align with scheduled repairs and or relief machinery availability.
Site Closure	Measures could include: -
	1. Appropriate signage will be erected notifying any visitors that operations have been suspended.
	2. Advise customers of the situation.
	3. No more wastes will be accepted on to site.
	4. Contact all potential outlets to ensure that all waste material is managed in accordance with the
	waste hierarchy where possible.
	5. Notify EA that customers & receiving outlets have been contacted and provide scheduled dates for
	material removal.
	6. Notify EA once stockpiles have been reduced to acceptable level

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## 13 Fire Alert Procedures

#### Procedure in Event of Fire on the site

- i. There must be no hesitation in raising the alarm. Any person discovering a fire must immediately operate the fire alarm, or (where an alarm is not provided) shout 'FIRE' to warn others in the vicinity. Fire alarms must not be used for any purpose other than as a signal for fire action or pre-arranged fire drills.
- ii. Everyone must immediately leave the site and proceed directly to the designated assembly area upon hearing the alarm. The mobile plant/machine operators are, if possible, to remove their machines from the fire vicinity at that time; park and turn off their machines at a safe distance from the fire without blocking any Emergency access routes. No one is to return to the affected part of the site until it is confirmed safe to do so by the Responsible Person in charge of the premises.
- iii. The Responsible Person in control of the site must check that FRS has been called and that a delegated member of staff knows where to direct FRS. In addition, the Responsible Person in control must check that occupants of adjacent units have been notified.
- iv. The Responsible Person in control of the site must ensure that the site has been evacuated and in particular: -
  - 1. Supervise the orderly evacuation of visitors and staff.
  - 2. Supervise roll calls and collect and collate information, e.g., persons not at the assembly point. Collect information about the fire location and source.
  - 3. Ensure first aid is given if required.
- v. On arrival FRS will take charge, and the Responsible Person must co-operate with the FRS Officers. See Fire Service Act 2004 Sect. 45 for Fire Service Powers of entry.
- vi. Contact neighbouring identified receptors within proximity to the site on identification of a fire & those that are contactable within a 1km radius of the facility as detailed in <u>Appendix FPP5 & 6</u> if instructed to do so by FRS (Major Incident).

# 14 Post-Incident Procedures

- 1. If required clean up contractors will pump out & remove all accumulations of firewater run off from wherever required onsite.
- 2. Inspection of all equipment to be conducted prior to reinstating.
- 3. All burnt material to be removed to an appropriately licenced disposal site.
- 4. Post incident reports and enquiries.
- 5. Review and update this Fire Prevention Plan in light of incident & provide a copy to any key stakeholders (EA/FRS).

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# 15 Periodic Review

15.1.1 The adequacy of this Fire Prevention Plan will be reviewed as necessary or on an annual basis as a minimum.

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#### Appendix FPP1: Leakage/Spillage Response Procedure

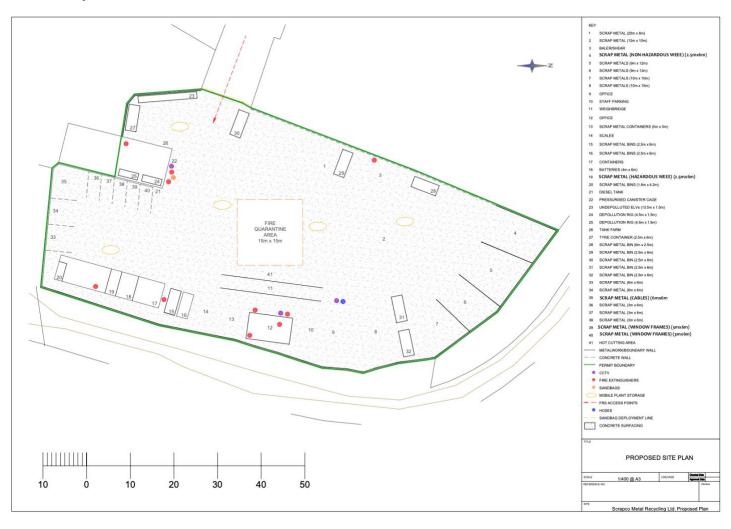
On identification of a <u>Leak or Spillage</u> the following procedure is to be followed to:

- 1. Prevent unauthorised access to the affected area
- 2. Prevent uncontrolled escape of potentially contaminating liquids using supply of absorbent materials to control the flow of liquids.
- 3. If safe to do so, isolate source of leak/spillage to prevent further losses, which may involve switching off a particular piece of machinery & deploying a containment vessel (i.e., drip trays) underneath the affected area.
- 4. If necessary, initiate controlled evacuation of the site.
- 5. If the leak/spillage is battery acid, apply a neutralising agent hydrated lime or similar. (Please note that water in a large quantity will only dilute the acidity & will not neutralise it) on the affected areas (Operatives must use appropriate PPE; gloves, face masks & goggles, whilst handling hydrated limes).
- 6. All contaminated absorbents must be placed in a leak proof container, which is labelled & stored pending removal.
- 7. Seek specialist advice on decontamination of the site surfaces if necessary
- 8. Complete an Environmental Incident Record Form (See Appendix EMS2)
- 9. Any actions taken will be recorded on the Site Diary.
- 10. Written confirmation of any actual or potential pollution incidents must be submitted to the Environment Agency via the sites Permitting Office within 24 hours.
- 11. Confirm site clean up with the Environment Agency.
- 12. Replenish supplies of absorbent materials.

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# **Appendix FPP2:** Site Layout Plan



Location: Erith

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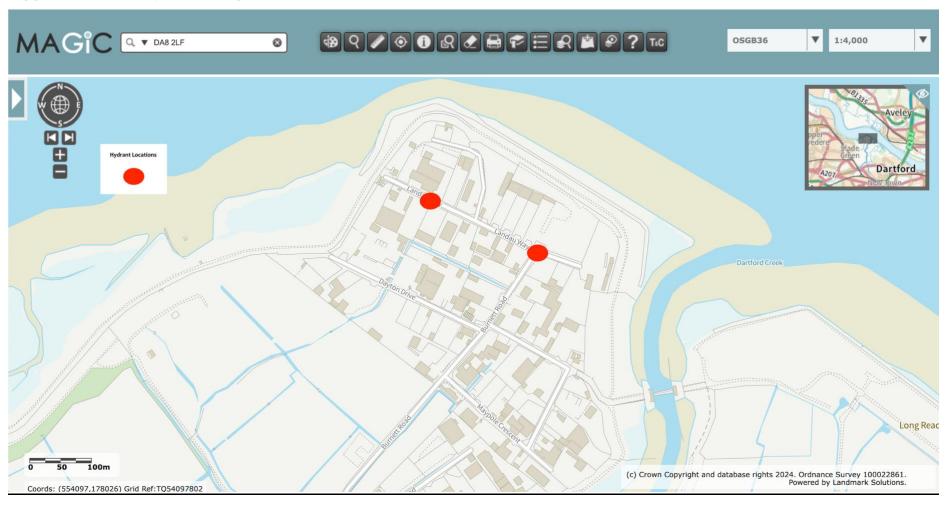
# <u>Appendix FPP3:</u> Site Drainage Plan



Location: Erith

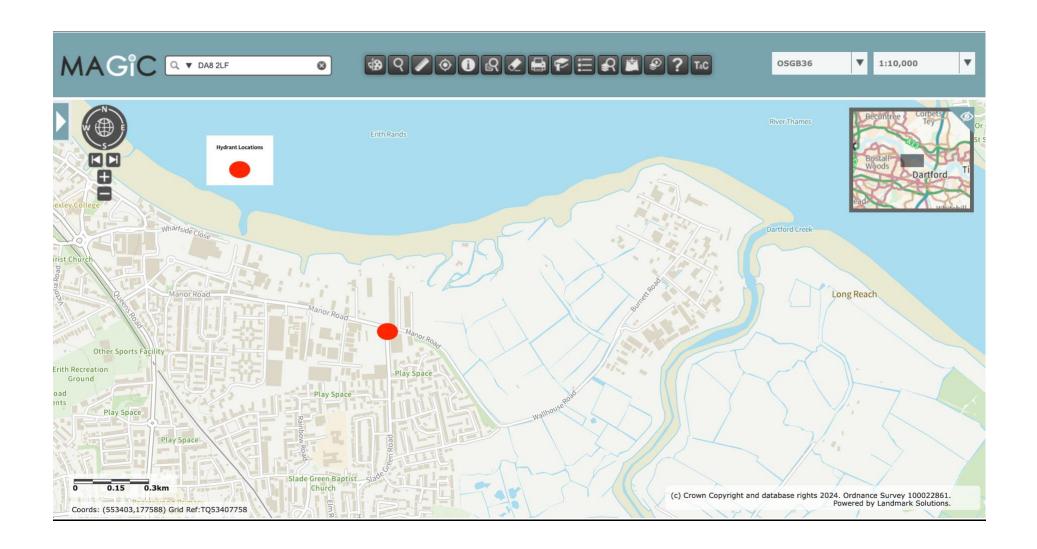
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# **Appendix FPP4: Hydrant Map**



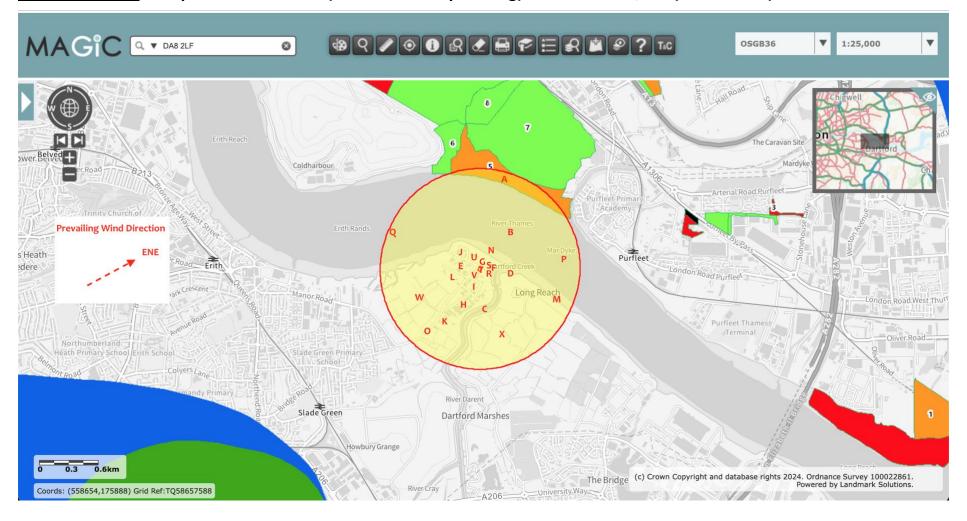
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## Appendix FPP5: Receptor Location Plan (Smoke & Fire Spreading) Scaled @ 1:25,000 (1KM Buffer).



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# Appendix FPP6: Receptors Identified Contact Details (If Applicable).

Receptor	Receptor Description	Direction From	Approximate Distance
Reference		Site	From Site Boundary
			(Metres)
A	SSSI	North/Northeast	797
В	River Thames	North/Northeast	162
C	River Darent/Coastal	South	129
	Salt Marshes (Priority		
	Habitat)		
D	Dartford Creek	Southeast	188
E	Industrial/Commercial	West	230
	Areas		
F	Scrapco Metal	Applicant	Applicant
	Recycling Limited		
G	Truckbusters/Erith	Northwest	177
	Scrap Metals Limited		
Н	Industrial/Commercial	Southwest	390
	Areas		
1	Industrial/Commercial	Southwest	192
	Areas		
J	Industrial/Commercial	Northwest	259
	Areas (J H Hearnden &		
	Enviroclear)		
K	Industrial/Commercial	Southwest	652
	Areas		
L	Industrial/Commercial	West	349
	Areas		
М	Dartford Long Reach	Southeast	769
N	Mudflats (Priority	North	112.5
	Habitat)		
0	Wallhouse	Southwest	825
	Road/Burnett Road		
Р	Mar Dyke	East	760
Q	Erith Rands	Northwest	972
R	AJW Vehicle Services	Adjacent	Adjacent
S	Mercygrace Limited	Adjacent	Adjacent
Т	MK Autobreakers	West	50
	Limited		
U	Millennium	Northwest	187
	Scaffolding/Orchard		
	Fencing		
V	Truckbusters	West	170
W	Open Fields	Southwest	690
X	Open Fields/Dartford	Southeast	466
	Crossing Walking Trail		

#### Risk-Assessment: -

The prevailing wind direction is from the South-South Westerly direction so any smoke generated would be blown in a North-North Easterly direction

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### **Appendix FPP7: Waste Acceptance Procedures (Extracted from EMS)**

- 15.1.2 Compliance with the permitted waste types is assured by the following measures:
  - 1. When a skip/container is hired prohibited material is clearly stated and reflected in terms & conditions of hire;
  - 2. When collecting the full skip/container the driver will inspect and check to see if any prohibited material is present. If it is, the customer will be notified and advised of the following courses of action available:
    - a) Removed and left at the customers premises
    - b) Accepted and disposed of directly to a site permitted to accept the waste
  - 3. On delivery to site the driver will hand all paper copies of any Duty of Care Documentation to the Weighbridge Office; and
  - 4. Once all Duty of Care Documentation has been approved the wastes will be deposited in the Waste Acceptance Area for inspection, acceptance & processing (machine operatives will spread out the loads to aid the visual inspection process).
- 15.1.3 If any prohibited materials are present the following course of action will be taken:
  - a) Require the individual to load the non-permitted materials back onto the delivery vehicle; or
  - b) Accept, isolate & arrange for removal to an authorised waste management facility.
  - c) Under no circumstances will non-permitted wastes be retained on site and dealt with as if it is permitted.
  - d) The Agency will be notified if a delivery is rejected.
- 15.1.4 If the prohibited material becomes apparent only after the above waste acceptance checks have been completed the following action will be taken:
  - a) The load will be isolated within the isolation facility (appropriate PPE will be worn if necessary) and removed from site to a suitably permitted facility at the earliest opportunity.
  - b) In each case, the incident will be recorded in the Site Diary (taking note of the vehicle registration, date & time of the incident). If identifiable the individual will be notified of the event and reminded of the terms on which waste is accepted onto site. (It will be at the discretion of the Management Team if they wish to ban an individual/company following an incident).

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- c) Under no circumstances will prohibited waste be retained on site and dealt with as if it is permitted.
- d) The Agency will be notified if a delivery is rejected.
- 15.2 Rejection Procedure
- 15.2.1 Any wastes identified as being unsuitable for disposal at the site will be rejected & recorded on the Weekly Compliance Inspection Check Sheet.
- 15.2.2 A record will be kept of the following pieces of information:
  - a) Date & time
  - b) Person rejecting the waste(s)
  - c) Haulier/customer name and address including carriers' number
  - d) Vehicle registration number
  - e) Procedure name and address
  - f) EWC number
  - g) Transfer Note Number
  - h) Waste Description

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