**Fire Prevention Plan**

Prepared on Behalf of:

# X-Bert Haulage Limited

Site Name:

250 Progress Way

Toddington Road

Luton

Bedfordshire

LU4 9DZ

## Environmental Permits:
## KB3703TS

**DOCUMENT CONTROL SHEET**

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|---|---|
| **Site:** | **X-Bert Haulage Limited** |
| **Project:** | **Bespoke Permit Consolidation & Variation Application** |
| **Title** | **Fire Prevention Plan** |
| **Issue** | **1.1** |
| **Date** | **12.12.24** |
| **Status** | **Submission Version** |
| **Author** | ***Shane Ronald Tasker AssocMCIWM PIEMA EA (IEMA Qualified Auditor)*** |

**Distribution List**

**Environment Agency**

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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 Published January 2021 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 Section 4 Table 1 underpins the measures adopted.

# 4 Fire Risk Assessment

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

| Potential Source of Ignition | Prevention/Management |
|---|---|
| Arson; | Enclosed site perimeter<br>Security cameras (24-hour operation) & out of hours security watchman.<br>Access difficult due to condition of surrounding land/infrastructure.<br>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.<br>Full annual inspection of all equipment/service contracts (LOLER/PUWER).<br>End of Day Procedures<br>Fuel storage tanks provide 110% secondary containment (over 6 metres from combustible material accumulations). |
| Plant or equipment operation | Inspection procedures as detailed above.<br>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.<br>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 around office areas. |
| Hot works e.g., welding, cutting | Only trained operatives are authorised to conduct operations involving hot cutting equipment.<br>Activities will not take place with 6 metres of any risk materials.<br>End of Day Procedures.<br>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.<br>End of Day Procedures. |
| Open burning onsite | No open burning takes place onsite. |
| Incompatible materials | All materials are stored within designated areas.<br>Detailed waste acceptance procedures are followed by all Operatives |
| Neighbouring site activities | Adjacent site is not sensitive in nature as it is owned by the operator and the operator. |
| Hot loads deposited at the site | Hot loads are not accepted.<br>Monitoring for hot loads takes place as loads arrive at site with procedures to manage materials.<br>Separation, isolation & storage of combustible materials within identified storage bays or containers. |
| Weather, e.g., lightning strikes | Naturally occurring and uncontrollable. |

## 4.1 Operational Flow Diagrams (Combustible Materials).

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

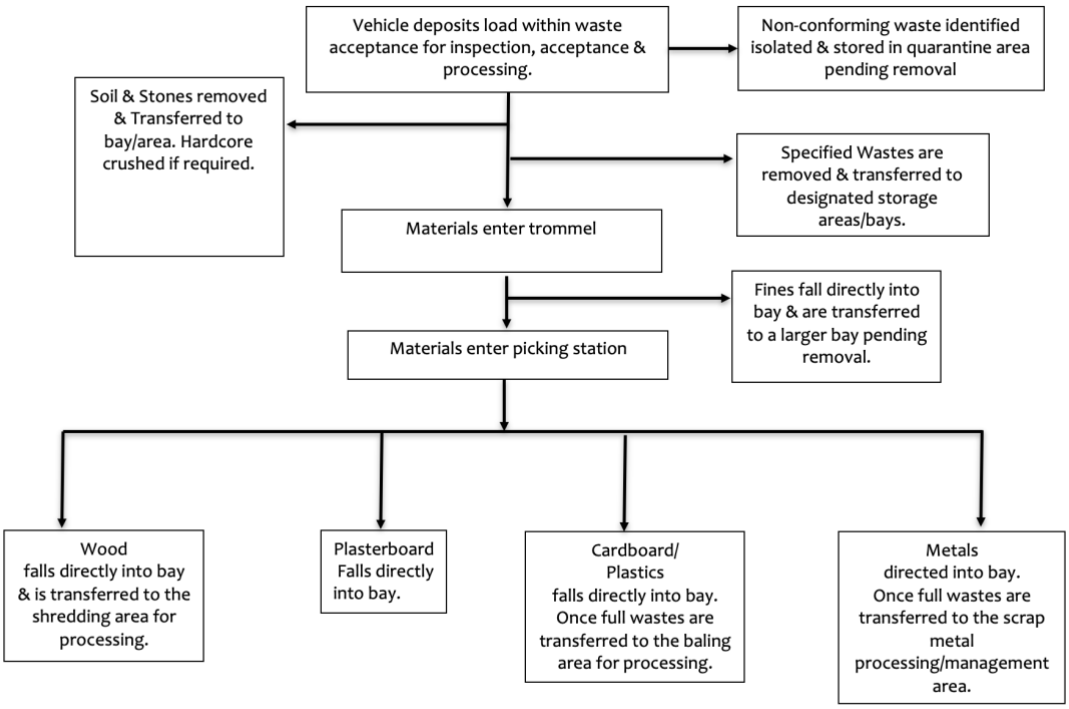



**Figure 1: Operational Flow Diagram (Physical Treatment)**

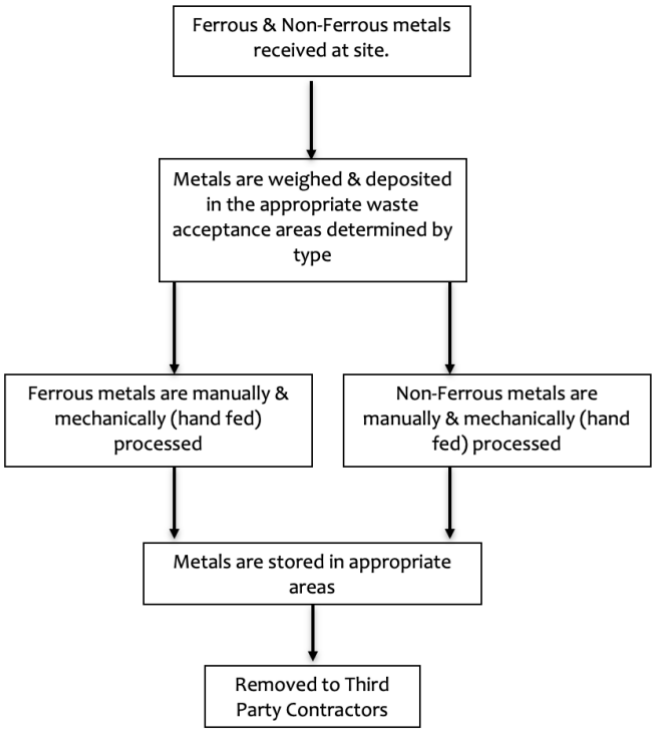



**Figure 2: Operational Flow Diagram (Metals)**

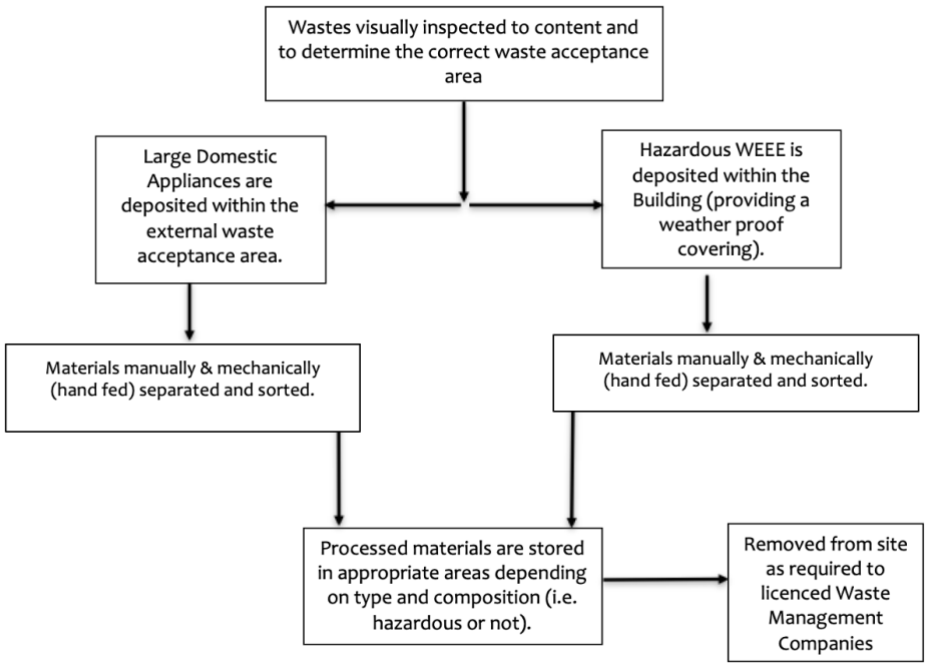



**Figure 3: Operational Flow Diagram (WEEE Wastes)**

# 5 Preventing Fires

5.1.1 X-Bert Haulage Limited operates a Household, Commercial and Industrial Waste Transfer Station, which will become a Hazardous Waste Transfer Station (including the management of Scrap Metals & WEEE Wastes) at their site at Progress Way.

5.1.2 The site will receive between 75-125 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 Appendix FPP6).

5.1.4 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.

5.1.5 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.

5.1.6 Acceptable materials are stored in areas/bays/skips around the facility dependant on type & composition, as shown on the Site Layout Plan within Appendix FPP2. Combustible materials will be removed from site within one month of acceptance.

5.1.7 Materials stored pending inspection will be constantly monitored & worked (as necessary) to prevent the build up of heat.

5.1.8 A Fire Quarantine Area of at least $64m^2$ (8m x 8m) 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 $256m^3$ of waste (stacked to a height of 4 metres). The fire quarantine area is located on an impermeable concrete surface benefitting from a sealed drainage system as shown on the Site Layout Plan in Appendix FPP2.

5.1.9 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.

5.1.10 Potentially explosive & flammable fuels/oils are stored over 6 metres from any accumulations of wastes.

5.1.11 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).

5.1.12 Smoking is only permitted in designated areas.

5.1.13 Only Competent Persons that have completed training will be authorised to perform 'hot work' activities, which are approved by Responsible Persons onsite. A Permit to work system is in place for all hot work activities. 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.

5.1.14 Materials will be stored in their largest form & pile sizes will be minimised wherever possible, according to operational need.

5.1.15 Fire Watch Procedure (During Working Day) Conducted by Operatives every hour:

1. 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.

5.1.16 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 Section 10. 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.

5.1.17 A Responsible Person will carry out a detailed weekly inspection of all onsite equipment.

5.1.18 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.

5.1.19 Maintenance requirements are 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.

5.1.20 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 Appendix FPP1 will be actioned.

5.1.21 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. A replacement may be ordered, if necessary, to cover interim downtime. A sign will be clearly displayed stating that the equipment is not in use.

5.1.22 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 & discharged as required. Spent extinguishers are replaced as soon as identified.

5.1.23 A Responsible Person on a weekly 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.

5.1.24 All Portable Electrical Equipment is inspected annually (PAT Testing).

5.1.25 The whole site is under the control of the operator, which is part of a larger site owned by 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.

5.1.26 The whole site is security controlled by CCTV to reduce the risk of accidental or deliberate ignition (arson).

5.1.27 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.

## 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: -

1. 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 Condition 1 of Table 2 will be implemented immediately.

# 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 'Toolbox Talks' that form part of a programme of appropriate regular refresher training.

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 also be placed on strategically positioned CCTV monitoring system at locations as shown on the Site Layout Plan in Appendix FPP2, with support of the plant/equipment horns & the onsite radio systems during operational hours.

6.1.8 Reliance will be placed on strategically positioned CCTV monitoring system as detailed in Appendix FPP2 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 watchman during non-operational hours. Reliance will be placed on the below provisions as detailed in Paragraph 6.1.9 to combat and extinguish a fire.

6.1.9 Equipment available to tackle a fire:

1. Portable AFFF fire extinguishers located as shown on the Site Layout Plan in Appendix FPP2.
2. Fire Hoses supplied by mains water & water storage tanks, located as shown on the Site Layout Plan in Appendix FPP2.
3. Fire hydrant located as shown on the Hydrant Map in Appendix FPP3.

## 6.2 Detection Out of Hours

6.2.1 The site benefits from an out of hours watchman that will conduct regular patrols (approximately one every hour) to enable a rapid identification of a fire during non-operational hours in the unlikely event that a fire started. The watchman must contact points around the site to register the inspection, which is presented as a printout in the morning for the Directors to review. Therefore, the site is constantly monitored. In the event of a fire the security watchman will contact the FRS immediately and notify two responsible persons to attend site to support the actions as stipulated in Table 3 overleaf.

6.2.2 Responsible Persons can monitor the site during non-operational via the internet on mobile telephones or laptops. Location of the CCTV Camera is shown on the Site Layout Plan (Appendix FPP2).

6.2.3

## 6.3 Fire Conditions

Table 2: Fire Fighting Conditions

| Alert Condition | Characteristics | 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)<br>Responsible Person to be notified if not already present. | Operating Hours Responsible Persons available<br>Closed<br>Responsible Persons available to attend site |
| Condition 2 | Visible Flame | Raise the site fire alarm immediately & initiate Fire Procedures detailed at Sections 13<br>If safe to do so tackle the blaze utilising onsite fire-fighting provisions including: -<br>• Fire Extinguishers (Deploy on small scale fires)<br>• Fire Reel Hoses (x3)<br>• Smoother With Inert Material<br>• Alert FRS<br>Deploy sandbags across designated areas. | Prepare the fire quarantine area, inert material & water provisions for deployment. | Operating Hours<br>Responsible Persons available to deploy equipment.<br>Closed<br>Responsible Persons available to attend site to deploy equipment. |
| 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.<br>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<br>Mechanical Equipment (excavators/ wheeled loader)<br>Responsible Persons available to deploy equipment.<br>Closed<br>Responsible Persons available to attend site to deploy equipment and operate mechanical Equipment (excavators/ wheeled loader) |

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.

# 7 Fire Prevention Equipment Inventory and Procedure

Table 3: 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 FPP3). |

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.

# 8 Material Storage & Management

8.1.1 Rubbish (Waste Acceptance Area) benefits from a concrete retaining wall positioned around the operational areas of the site (4 metres high and 0.2 metres thick) as detailed in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2 (Reference 2).

8.1.2 Residual Rubbish, Wood, Trommel Fines, Plasterboard, Cardboard, Scrap Metals benefit from a concrete retaining wall positioned around the operational areas of the site (4 metres high and 0.2 metres thick) as well as dividing bay walls as shown on the Site Layout Plan in Appendix FPP2 (Reference 3/4/5/6/7/8).

8.1.3 Residual Rubbish, Wood & Trommel Fines benefit from a concrete retaining wall positioned around the operational areas of the site (4 metres high and 0.2 metres thick) as well as dividing bay walls (4 metres high and 0.2 metres deep) as detailed in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2 (Reference 9/10/11/28/30).

8.1.4 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"[1]. The concrete retaining walls will prevent any sparks escaping.

8.1.5 Inert Wastes are stored loose as detailed in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2 (Reference 1).

8.1.6 Hazardous WEEE Wastes (POPS Applicable Materials) are stored loose & in a variety of receptacles as detailed in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2 (Reference 26/27).

8.1.7 Plasterboard is stored in a variety of skips as detailed in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2 (Reference 12/13).

8.1.8 Scrap Metals are stored in a variety of skips/containers/bays as detailed in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2 (Reference 18/19/20/21/22/23/24/25).

8.1.9 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 British Constructional Steelwork Association identified 550 Celsius as the limiting temperature for a steel structure with four sides such as a skip container to

[1] http://www.concretecentre.com/Performance-Sustainability-(1)/Fire-Resistance.aspx

maintain its stability[2]. The risk associated with steel is melting, which happens at around 1365 Celsius.

8.1.10 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.

8.1.11 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.

8.1.12 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).

8.1.13 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.

8.1.14 The site will turn over materials as quickly as practicably possible, operating a 'first in first out' policy, as detailed in the procedure in Section 8.1.15. Materials will be kept onsite until sufficient quantities have accumulated to constitute an economic onward load, or the maximum storage limits detailed at Table 4 have been reached.

8.1.15 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.

8.1.16 A freeboard space of no less than 0.5 metres will be maintained between the apex of materials stored within a bay and the top of the dividing walls. Responsible Persons will ensure the stated freeboard and distance is maintained at all times.

[2] http://www.tatasteelconstruction.com/file_source/StaticFiles/Construction/supplements/Fire_Protection_Supplement.pdf

8.1.17 Due to the separation distances maintained onsite it is considered that the risk of bridging is very low.

# 9 Combustible Material Storage Arrangements

Table 4: 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 | Hardcore | Stored loose in bay. | 10 | 10 | 3.5 | 350 | - | 6 Months |
| 2 | Rubbish (Waste Acceptance Area) | Stored loose in bay | 8 | 8 | 3.5 | 224 | 0.5 | 3 Months |
| 3 | Trommel Fines | Stored loose in bay. | 6 | 5 | 3.5 | 105 | 0.5 | 3 Months |
| 4 | Scrap Metal | Stored loose in bay. | 6 | 4.2 | 3.5 | 88.2 | 0.5 | 3 Months |
| 5 | Wood | Stored loose in bay. | 3 | 5 | 3.5 | 52.5 | 0.5 | 3 Months |
| 6 | Cardboard | Stored loose in bay. | 3 | 5 | 3.5 | 52.5 | 0.5 | 3 Months |
| 7 | Plasterboard | Stored loose in bay. | 3 | 5 | 3.5 | 52.5 | 0.5 | 3 Months |
| 8 | Scrap Metal | Stored loose in bay. | 3 | 5 | 3.5 | 52.5 | 0.5 | 3 Months |
| 9 | Wood | Stored loose in bay. | 8 | 8 | 3.5 | 224 | 0.5 | 3 Months |
| 10 | Trommel Fines | Stored loose in bay. | 10 | 8 | 3.5 | 280 | 0.5 | 3 Months |
| 11 | Residual Rubbish | Stored loose in bay. | 15 | 8 | 3.5 | 420 | 0.5 | 3 Months |
| 12 | Plasterboard | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 13 | Plasterboard | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |
| 14 | Office | - | - | - | - | - | - | - |
| 15 | Weighbridge | - | - | - | - | - | - | - |
| 16 | Toilets | - | - | - | - | - | - | - |
| 17 | Office/Welfare Facilities | - | - | - | - | - | - | - |
| 18 | Scrap Metal | Stored loose in a container | 2 | 6 | 2.8 | 33.6 | 0.5 | 3 Months |
| 19 | Non-Ferrous Metal | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |
| 20 | Non-Ferrous Metal | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |
| 21 | Non-Ferrous Metal | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |
| 22 | Non-Ferrous Metal | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |
| 23 | Non-Ferrous Metal | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |
| 24 | Non-Ferrous Metal | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |
| 24 | Non-Ferrous Metal | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |
| 25 | Non-Ferrous Metal | Stored loose in skip | 1.6 | 4.2 | 1.5 | 10.08 | 0.5 | 3 Months |
| 26 | WEEE/Non-Ferrous Area (1) | Stored loose in area | 2.5 | 12 | 2 | 60 | 0.5 | 3 Months |
| 26 | WEEE/Non-Ferrous Area (2) | Stored loose in area | 2.5 | 12 | 2 | 60 | 0.5 | 3 Months |
| 27 | WEEE/Non-Ferrous Area | Stored loose in area | 5 | 12 | 2 | 120 | 0.5 | 3 Months |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 28 | Wood | Stored loose in bay | 11 | 8 | 3.5 | 308 | 0.5 | 3 Months |
| 29 | Residual Rubbish | Stored loose in bay. | 8 | 8 | 3.5 | 224 | 0.5 | 3 Months |
| 30 | Residual Rubbish | Stored loose in bay. | 5 | 5 | 3.5 | 87.5 | 0.5 | 3 Months |
| Grand Total: | | | | | | 3,893.02$m^3$ | | |

# 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.

# 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 498,960 litres of water (6.6 l/min x 420 = 2,772 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.

Table 5: Fire Fighting Provisions

| Fire Suppression Provisions & Water Delivery Systems | Specification | Cumulative Supply l/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 Equipment (Water Provisions) | | | |
| Fire Hose | 60 l/min connected directly to mains water supply. | 60 | 10,800 |
| Fire Hose | 60 l/min connected directly to mains water supply. | 120 | 21,600 |
| Fire Hose | 60 l/min connected directly to mains water supply. | 180 | 32,400 |
| Hydrant (1) | 920 l/min (approximately) | 1,100 | 198,000 |
| Hydrant (2) | 920 l/min (approximately) | 2,020 | 363,600 |
| Hydrant (3) | 920 l/min (approximately) | 2,940 | 529,200 |
| **Grand Total** | | 2,940 | 529,200 |
| Tertiary Suppression Equipment (Water Provisions) | | | |
| Fire Tender | 45mm standard jet capable of delivering 220 l/min (approximately 6,000 litres) | 220 | 6,000 |
| **Grand Total** | | 220 | 6,000 |

## 11.2 Fire Fighting Water

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

- Fire Hoses:
  Three fixed hoses are installed throughout the site, which are connected directly to a dedicated water storage tank that holds 10,000 litres, that is connected directly to the mains supply via a pumping system. Each hose is capable of delivering 60 l/min each, locations as shown on the Site Layout Plan within Appendix FPP2. In the event of deployment, the fire procedures detailed at Table 2 and in Section 13 will be implemented. Hoses can reach all areas of the site.
- Hydrant:
  Hydrants are capable of delivering 2,760 l/min is situated on the main access road for easy access by the FRS to the site as shown on the Hydrant Map within Appendix FPP3.

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.

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 Table 5 are capable of delivering the required 2,772 l/min as per the EA Fire Prevention Plan Guidance.

## 11.3 Firewater Containment

11.3.1 Resultant firewater will be contained within the drainage system (approximately 20,000 litres) and the Permitted area via concrete retaining walls (approximately 0.2 metres high) and the deployment of sandbags across the site entrance/exit (Locations as shown on the Site Layout Plan Appendix FPP2).

11.3.2 On average a 15kg sandbag is 0.8m wide x 0.76m length x 0.1m high, so 24 sandbags in all would be deployed to build a wall across the entrance/exit totalling 9 metres long x 0.2 metres high (112 sandbags end to end). It is anticipated that it would take 10-15 minutes to construct the sandbag wall. A supply of at least 25 full and 25 empty sandbags will be kept onsite at all times. Sandbags are stored in IBCs for rapid deployment. The location of sandbags and the deployment lines is details on the Site Layout Plan Appendix FPP2.

11.3.3 Given the floor area of the site is over 4,083$m^2$ and the height of 0.1m, up to 816,600 litres (4,083 x 0.1 = 816.6 $m^3$) 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 498,960 litres of water stated in Paragraph 11.1.1.

11.3.4 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.

11.3.5 Sandbag Monitoring & Replacement Procedures

1. 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.

# 12 Contingency Planning

Table 6: Contingency Plans

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

# 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 Appendix FPP4 & 5 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. Notify the Environment Agency that the site has been reinstated.
6. Review and update this Fire Prevention Plan in light of incident & provide a copy to any key stakeholders (EA/FRS).

# 15 Periodic Review

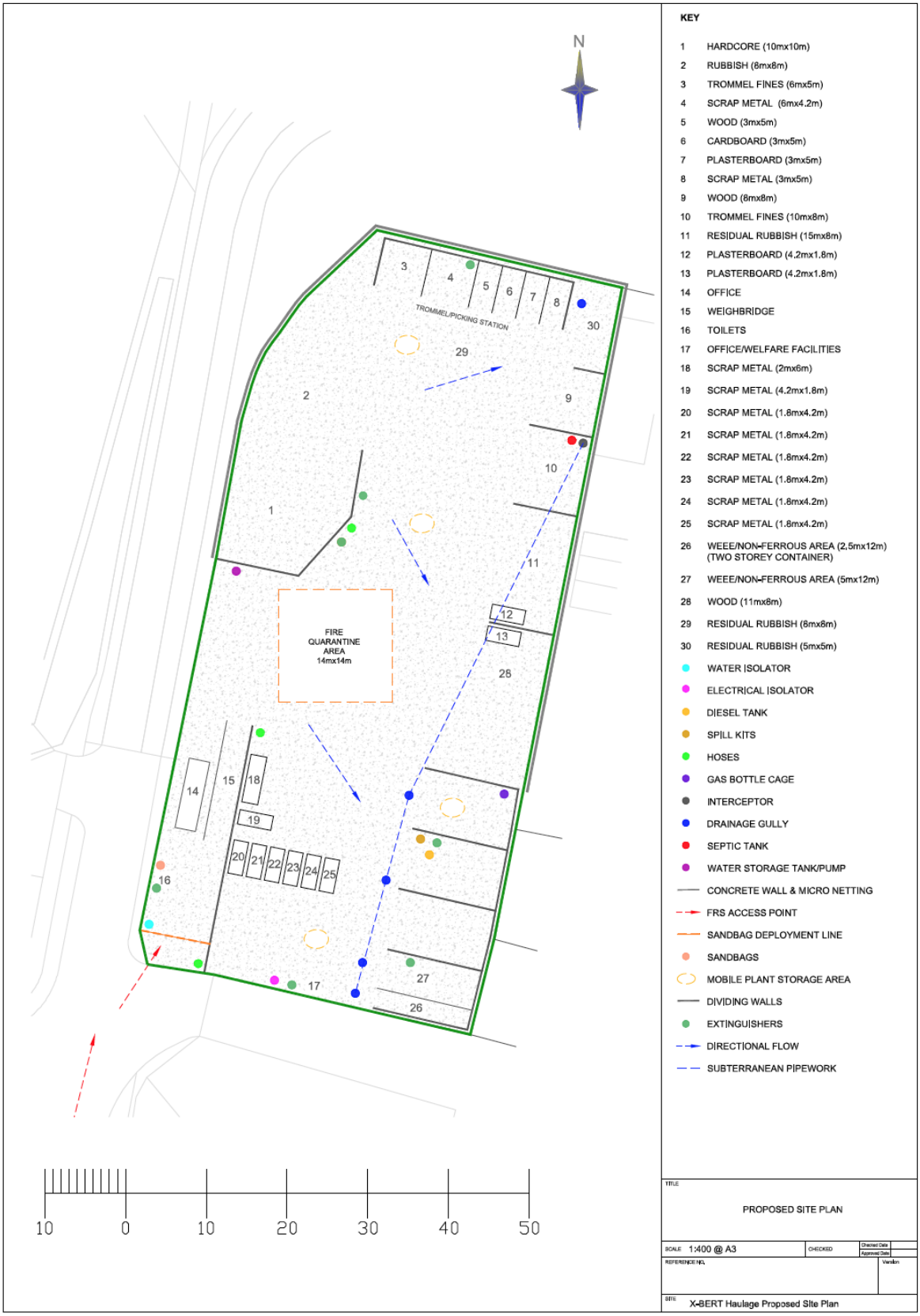
15.1.1 The adequacy of this Fire Prevention Plan will be reviewed as necessary or on an annual basis as a minimum.

## Appendix FPP1: Leakage/Spillage Response Procedure

On identification of a Leak or Spillage 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.

## Appendix FPP2: Site Layout Plan

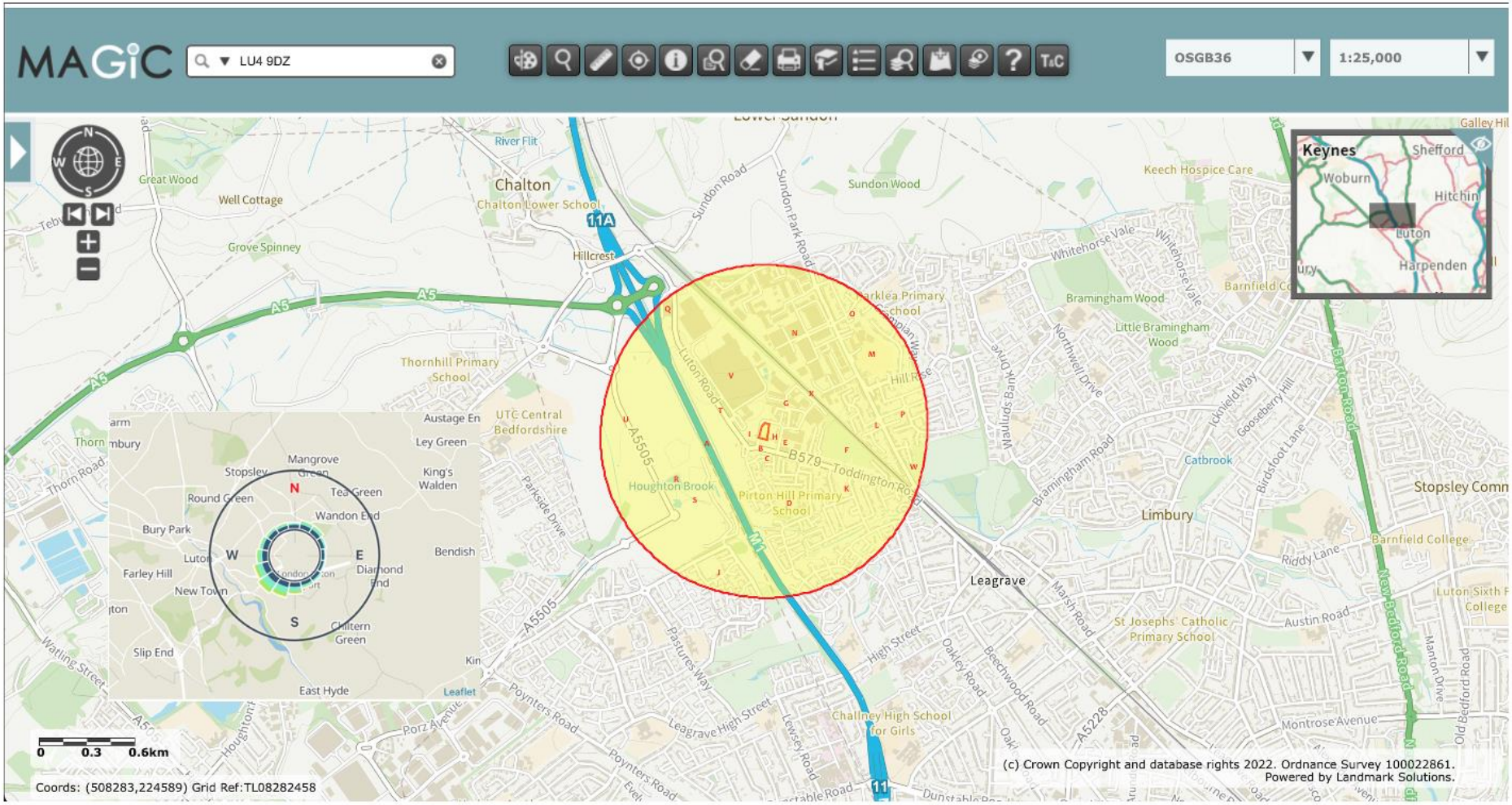


## Appendix FPP3: Hydrant Map


Location: Progress Way

Project: Bespoke Permit Consolidation & Variation Application

**<u>Appendix FPP4:</u> Receptor Location Plan (Smoke & Fire Spreading) Scaled @ 1:25,000 (1KM Buffer).**



## Appendix FPP5: Receptors Identified Contact Details (If Applicable).

| Receptor Reference | Receptor Description | Direction From Site | Approx. Distance From Site Boundary (Metres) |
|---|---|---|---|
| A | M1 | West | 304.3 |
| B | Toddington Road | South | 67 |
| C | Residential Dwellings | South | 80 |
| D | Pirton Hill Primary School | South-East | 357.3 |
| E | Residential Dwellings | East | 237.9 |
| F | Toddington Road Leisure Gardens | East | 356.4 |
| G | Industrial/ Commercial Areas | North-East | Adjacent |
| H | Industrial/ Commercial Areas | East | Adjacent |
| I | Industrial/ Commercial Areas | West | Adjacent |
| J | Residential Dwellings | South-West | 862.5 |
| K | Residential Dwellings | South-East | 495.6 |
| L | Residential Dwellings | East | 693.4 |
| M | Lealands High School | North-East | 661.5 |
| N | Industrial/ Commercial Areas | North | 368.5 |
| O | Residential Dwellings | North-East | 873.9 |
| P | Residential Dwellings | East | 920.5 |
| Q | Deta Electrical | North-West | 897.3 |
| R | Lake St Willz | South-West | 562.8 |
| S | River Lee | South-West | 585.5 |
| T | Road Infrastructure Luton Road | West | 335.6 |
| U | Road Infrastructure A5505 | West | 703.4 |
| V | Ocado Distribution Centre | North-West | 181 |
| W | Leagrave Park | South-East | 971.9 |
| X | Rail Infrastructure | East | 482.5 |

**Risk-Assessment: -**

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

## **Appendix FPP6:** 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).

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