# FIRE PREVENTION AND MITIGATION PLAN

Unit 4, Dinas Isaf Industrial Estate, Williamstown, Tonypandy, CF40 1NY

**Intelligent Lifecycle Solutions Ltd**

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|---|---|---|---|---|---|
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Oaktree Environmental Ltd

Waste, Planning & Environmental Consultants

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

# Document History:

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THIS DOCUMENT IS DUE FOR REVIEW IN **JAN 2023** OR AS A RESULT OF ANY INCIDENTS WHICH MAY LEAD TO THE REQUIREMENT FOR IMMEDIATE REVIEW, WHICHEVER IS THE SOONER

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| | | | |
|---|---|---|---|
| **Site Address:** | Unit 4, Dinas Isaf Industrial Estate, Williamstown, Tonypandy, CF40 1NY | | |
| **Site Operator:** | Intelligent Lifecycle Solutions Ltd | **National Grid Ref:** | ST 00689 90117 |

| **CONTACT** | **DESCRIPTION** | **OFFICE HOURS** | **OUT OF HOURS** |
|---|---|---|---|
| Andrew Morgan | Director | 02921 678003 | 07925671019 |
| Steve Powell | Compliance Manager | 02921 678003 | 07983 096294 |
| Blaine Llewellyn | Operations Manager | 02921 678006 | 07769 227909 |
| Ysbyty Cwm Rhondda – Partridge Road, Llwynypia, CF40 2LX | Local NHS Hospital (Main) | 01443 430022 | 999 |
| | Accident & Emergency (A&E) | 111 | 999 |
| Penygraig Surgery - George Street, Penygraig, Tonypandy, CF40 1QN | Local Doctor Surgery (GP) | 01443 433125 | 999 or 112 |
| South Wales Police – Mill Street, Tonyrefail, Porth, CF39 8AF | Local Police Non-Emergency | 101, or; 01443 670219 | 999 |
| | Police Emergency | 999 | 999 |
| Tonypandy Fire Station – Llwynypia Road, Tonypandy, CF40 2JQ | Fire and Rescue Service (In Emergency Dial 999) | 01443 232000 | 999 or 112 |
| Natural Resources Wales | Environmental Regulator | 0300 065 3000 | 0300 065 3000 |
| Rhondda Cynon Taf County Borough Council – The Pavillions, Cambrian Park, Tonypandy, CF40 2XX | Local Planning Authority | 01443 425004 | 01443 425011 |
| | Environmental Services | 01443 425001 | 01443 425011 |
| Welsh Water | Local Water Supplier / Sewerage Provider | 0800 052 0130 | |
| Oaktree Environmental Ltd Lime House, 2 Road Two, Winsford, Cheshire CW7 3QZ | Specialist Advisor (Waste, planning and training advice) | 01606 558833 | n/a |

# 1 Introduction

## 1.1 Fire prevention objectives

1.1.1 This Fire Prevention & Mitigation Plan (FPMP) has been produced in accordance with Natural Resources Wales's (NRW) - Waste Management; Guidance Note 16 published August 2017 (Version 2.0) to:

- Minimise the likelihood of a fire;
- Reduce impact from emissions during or after a fire on the local community, critical infrastructure and the environment;
- Ensure suitable resources required by the NRW and other emergency responders are available during an incident; and,
- Identify post incident clean-up and remediation costs.

## 1.2 Scope of document

1.2.1 This FPMP details the measures which will be put in place with regards site design, infrastructure and management to ensure the waste operations will be carried out with paramount consideration to the risk of fire. All necessary prevention measures and procedures will be strictly implemented and followed through essential training and inspection regimes as detailed in this document, the Fire Contingency Response and Environmental Incident Plan (Appendix III) and in the site's EMS.

## 1.3 Reviewing and monitoring this FPMP

1.3.1 This document will be due for review two years from the date of approval, as a result of any incidents which may lead to the requirement for immediate review, or the FPMP guidance changing, whichever is the sooner. The circumstances which would warrant a review are the following:

- Experiencing a fire incident.
- Additional combustible waste streams accepted on site.

- Increase waste volumes accepted.
- Development of site infrastructure – new buildings.
- Installation of new equipment or plant – baler/loading shovel/sort-line/ etc.

1.3.2 Reference should be made to Sections 7.3 and 7.4 which details procedures for staff training in the event of any changes in relations to the FPMP.

1.3.3 Reference should be made to the table below which details the methods and procedures to maintain compliance with Section 24 of the FPMP guidance.

**Table 1.1 Monitoring procedures**

| **STAFF TRAINING** | |
|---|---|
| **Item** | **Method** |
| Ensure your FPMP is available and that all staff know where it is kept. | The FPMP will be kept within the off-site main office and also within the office/welfare area of the operational site |
| Ensure staff receive training to enable them to competently carry out the procedures and measures contained within your FPMP | • Staff will be suitably trained in how to raise a fire alarm and how to use the monitoring and extinguishing equipment. Managers will also ensure formal fire extinguisher training has been provided for anyone specifically designated to use such equipment.<br>• A full understanding the procedures outlined in this FPMP document will be required to be demonstrated as part of the site induction for all new staff and any existing staff that are not familiar with the documents. In particular all staff will be trained to ensure that they know what to do in the event of a fire and more importantly how to undertake their work in a way that minimises the risk of a fire occurring.<br>• A full test (drill) of the procedures in this document will be carried out every 6 months. The first test will take place within one month of the agreement of this document with the EA. The outcome and any follow up training for staff will be documented in the site diary and relevant forms in the EMS. The Site Inspection Form in Appendix II will also be used during the drill.<br>• All operational staff will receive fire awareness and firefighting procedures training / tool box talks by trained site management prior to working at the site. This will enable the operational staff to detect early signs of fire and to minimise the chance of a fire breaking. Refresher testing will be mandatory every 6 months or sooner if site operations change which could lead to a greater fire risk. |

| **SITE MONITORING** | |
|---|---|
| **Item** | **Method** |
| Site inspections before, during and after shifts | The daily inspection sheet and waste monitoring forms will be completed daily and staff will be suitably trained to identify ignition sources, mobile plant, electrical equipment is kept 6m from combustible or flammable material when the site is not operational |
| Waste stacks and separation distances are in accordance with your FPMP | The waste monitoring form in Appendix II including suitably trained operational staff will ensure all stockpiles are stored in line with Drawing No. DIIE/2904/03 and do not exceed 50% of each bay |
| Monitor, control and record temperature of waste stacks<br><br>Monitor and record residence times of wastes on site | Due to the infra-red detection systems, nature and duration of the wastes stored, it is considered only visual checks are necessary which are carried out continuously when the site is operational. The operator will also complete the waste monitoring form daily which will include a full check of the wastes stored in each bay. It must also be noted that the wastes stored internally are a valuable commodity and it is not financially viable to hold stock. |
| Plant and equipment are adequately serviced and maintained by qualified personnel. Daily, weekly, monthly checks undertaken and records kept. | The site has a daily preventative mobile plant checklist shown in Appendix II where plant undergoes a daily check prior to use to ensure the item is fit for purpose and a full check prior to the site closing to ensure they are stored in the area shown on Drawing No. DIIE/2904/03. The plant will also be subject to annual manufacturer maintenance. Suitably trained staff (via site management) will be responsible for ensuring the plant is suitable which will also include a check for dust/fluff and an extinguisher is located in the cab of the item. |
| Ensure periodic testing of fire prevention and mitigation equipment is carried out | The site will undergo a full testing of the FPMP every 6 months to ensure all fire-fighting equipment is suitable including containment. Any items which are considered damaged will be replenished as soon as practicable. |

## 1.4 General site information

1.4.1 This document considers the risks associated with fire on site at Unit 4, Dinas Isaf Industrial Estate, Williamstown, Tonypandy, CF40 1NY.

1.4.2 It should be noted that this Fire Prevention and Mitigation Plan (FPMP) forms part of the site's ISO 14001 Environmental Management System (EMS) and is part of our Integrated Management System (IMS).

1.4.3 In addition to this document, the site will be operated by Intelligent Lifecycle Solutions Ltd in accordance with a fully comprehensive Environmental Management System (EMS) and a Bespoke Environmental Permit, regulated by Natural Resources Wales (NRW). All relevant site staff will be issued with a copy of this FPMP and trained in the relevant content applicable to their jobs and activities.

1.4.4 The main operations are the storage and treatment of Waste Electrical and Electronic Equipment (WEEE) and their components. All treatment operations are undertaken within the fully enclosed building. The main treatment regime involves the manual separation of component parts from incoming material wastes outputs arising from the deconstruction of WEEE items. The layout of the site is shown on Drawing No. DIIE/2904/03.

1.4.5 This FPMP document will be kept in the site office the location of which is shown on the 'Site Layout and Fire Plan' (Drawing No. DIIE/2904/03) at Appendix I to this document. All operational staff must be aware and understand the contents of the FPMP and what they must do during a fire.

1.4.6 The receptors are shown on Drawing No. DIIE/2904/04 and in Section 1.8 below and in the event of a fire, the Fire & Rescue Service and NRW would be able to view this FPMP to ensure the actions set out are implemented to meet the objectives shown in Section 1.1.1

## 1.5 Staffing and management

1.5.1 The table below details the staff structure of the site when operating at full capacity. Positions in bold italic print below are the minimum staff requirements when the site is open for the reception of waste and, therefore, shows the minimum number of staff available to tackle a fire on site during operational hours. Only the site manager, machine/plant operators and general operatives will be permitted to tackle fires on-site.

**Table 1.2 Staffing & Management**

| **SITE MANAGEMENT AND STAFF** | | |
|---|---|---|
| **Position** | **Staff** | **Responsibilities** |
| Site manager / Technically Competent Manager | 1 ***(1) ** | Ensuring that the site is being operated in accordance with the Environmental Permit and in-line with attendant regulations and for 20% of operational hours*. |
| Administrative Staff | 2 *(1)* | Office / administrative duties |
| Machine / Plant Operator | 2 *(1)* | Waste handling/processing, reception and plant operation |
| General Operatives | 2 *(1)* | Waste sorting, maintenance and tidying. |

## 1.6 Plant and equipment

1.6.1 Table 1.2 below details the plant/equipment on site. Only trained operators will be permitted to drive/operate the plant/equipment listed below.

**Table 1.3 Plant & Equipment**

| **PLANT & EQUIPMENT** | | |
|---|---|---|
| **Item** | **Number** | **Function** |
| 1.5 Tonne & 2.5 Tonne counterbalance forklift trucks, standard forks | 1 | Movement & storage of waste |
| Hand and battery-operated pallet trucks | 1 | Movement & storage of waste |
| HDD Data Sanitation hardware & software | 1 | Recycling of hard drives |
| One weigh scale, maximum 2,000 kg | 1 | Weighing WEEE & components |
| Vertical Press (Manual fed) Baler | 1 | Compaction of waste for removal |
| Handheld electrical tooling | 17 | Dismantling of WEEE |
| Mobile secure data destruction equipment | 1 | Destruction of WEEE |

1.6.2 The site does not operate any plant that could cause a significant adverse environmental impact. However, if this was to change then the site will establish and will maintain a Planned Preventative Maintenance (PPM) schedule for all operations in-line with manufacturer's recommendations. This will identify all critical environmental equipment that is used to mitigate or prevent environmental impacts. All records associated with these activities will be maintained on-site and controlled as part of the ISO 14001 management system. Any breakdown or malfunction of plant or equipment that could result in abnormal emissions are dealt with promptly and process operations adjusted until normal operations can resume. Any such events are recorded in the site diary and on the company Incident Report forms.

1.6.3 The Warehouse and Offices are fitted with fire heat sensors and fire extinguishers. Mobile plant that isn't being used will be kept away from potentially combustible materials. All site staff and contractors must be aware and understand the contents of the Fire Prevention and Mitigation Plan (FPMP) and the required actions during a fire. Intelligent Lifecycle Solutions Ltd uses a "risk" based approach for assessing the criticality of site equipment in terms of Health, Safety, Environment requirements.

## 1.7 Hours of operation

1.7.1 The site is operated according to the hours specified below:

| | |
|---|---|
| Monday to Friday | 06:00-18:00 |
| Saturday | 06:00-12:00 |
| Sundays, Bank/Public holidays | 06:00-12:00 |

## 1.8 Correspondence with Fire and Rescue Service

1.8.1 Intelligent Lifecycle Solutions Ltd will seek a two-yearly response from NRW and FRS (or sooner should a fire incident occur) with regards to their FPMP and associated operations on site. This regular correspondence will ensure all measures to prevent, mitigate and contain fires on site are up to date and deemed sufficient by the FRS.

## 1.9 Sensitive receptors

1.9.1 To ensure suitable control measures are in place to protect personnel on site there are arrangements in place for adequate means of fire escape that is clearly marked, lit where required, not blocked and kept unlocked during operational hours. There are effective evacuation procedures in place to which all staff are trained, and visitors inducted.

1.9.2 Hospitals – No hospitals within 1 km of the site. The nearest hospital is Royal Glamorgan Hospital, located approximately 6.75km from the site.

1.9.3 Nursing Homes – There is one nursing home within 1km of the site. The nearest nursing home is Ty Nant Care Home located approximately 1.07km from the site.

1.9.4 Schools –The nearest school is Williamson Primary School which is 350m from the site. Other school locations are indicated on the Receptor Plan.

1.9.5 Residential areas – Residential properties are approximately 100 metres above (up the slopes of Dinas Isaf) the site to the Northeast at Heol Glannant in Edmondstown.

1.9.6 Industrial Uses – The small industrial estate at Dinas Isaf (East) comprises three similar industrial factory/warehouse units formed on a common access road on the west side of the hill known as Dinas Isaf.

1.9.7 The fire risk to sensitive receptors from the impact of our operations is low.

1.9.8 It has been identified that there is a Site of Special Scientific Interest at Rhos Tonyrefail which is a large lowland site, consisting of a network of seven groups of fields around Tonyrefail, of special interest. At the closest point to the East and East Northeast of the premises at a distance of approximately 94 metres. This is down a steep wooded bank towards the factory from the SSSI - a fall of approximately 15 metres.

# 2 Managing common causes of fire

## 2.1 Details

2.1.1 The following list outlines common causes of fire and outlines specific examples of these sources, the associated risks and any mitigation measures necessary to manage them:

| Source | Risk | Specific mitigation |
|---|---|---|
| Arson or vandalism | Deliberate ignition of wastes by intruder(s) and/or vandalism of site infrastructure, plant and/or machinery | Site security measures are detailed in Section 2.7. |
| Mobile plant/ equipment | Spillages of fuel, sparks from machinery or malfunction caused by ineffective maintenance | Mobile plant/equipment will be kept 6m from any combustible or flammable material out-of-hours and each item will be visually inspected prior to use for the presence of leaks and its suitability. All plant / equipment undergoes a preventative maintenance checklist as shown in Sections 2.6. The forklifts are battery powered also. |
| Electrical appliances and cabling | Faulty appliances or damaged/ exposed electrical cables may spark as a result of a power surge | All electrics on site are fully certified by a qualified electrician and with written procedures in place that set out the regular maintenance.<br>Any potential ignition sources from suspected electrical faults should be isolated and an electrician will be contacted immediately to rectify the situation. Staff will remove any combustible or flammable material away from the vicinity of the fault area or cable traverse if safe to do so. |
| Discarded smoking materials | Risk of ignition of stored wastes from smoking materials which have not been fully distinguished | Refer to section 2.3. |
| Hazardous materials i.e. gas canisters, fuel tanks | E.g. gas cylinders, fuel tanks, aerosols or combustible liquids and chemicals on site. | There is no fuel stored on site. Dedicated leakproof container for small amounts of substances comprising 2.5 litres. There are no other materials mentioned which are stored at the site. |
| Open burning on site or on adjacent sites | Risk of ignition from radiative heat or flaming from open burning on site or an adjacent site | There will be no open burning at the site. |
| Overheating of stored waste | Sources of heat may include heating pipes, hot exhausts, light bulbs, space heaters or direct | There are no sources of heat at the site. |
| Sparks from loading buckets/shovels | Scraping of loading buckets/shovels causing sparks which may ignite stored wastes | Fire extinguishers are fitted in the cab of all mobile plant to aid in quick suppression. |
| Hot works | Welding/cutting using oxyacetylene | No hot works will take place at the site. |
| Industrial heating | Industrial heaters and/or pipework used to heat internal and external areas on site which may, in turn, supply heat to stored wastes increasing the risk of combustion | There are no industrial heaters (or associated pipework) used at the site. |
| Hot exhausts | Potential source of both primary and residual heat to stored wastes | There are no hot exhausts associated with operations. All mobile plant is electric. |
| Loose material build-up around plant/machinery and exhausts | Light waste and ambient particulates with high combustibility settling and building up in key areas in and around plant/machinery and around exhausts | Plant / equipment undergoes continuous monitoring throughput the day and any dust/fluff is cleared from any plant/equipment which has an ignition source using rags/cloths and/or water prior to shut down. The dust / fluff is stored in a mobile wheelie bin which will be moved around site as required. |
| Hot loads | Imported wastes which may contain materials which are above ambient temperature | All loads are inspected in accordance with strict waste acceptance procedures. If such loads arrive at site, they are intercepted by site operatives who will refuse the acceptance of the waste. If found following tipping, they will be consigned to the quarantine area to ensure the material does not pose a concern/fire risk to the site. The material will if required be treated to ensure the risk of fire is completely negated. All drivers delivering waste to the site are employed by the operator and they have specifically trained in detailed waste acceptance procedures. |
| Overhead power lines | Any overhead power lines on or around the site may ignite in the event of a fire and worsen the effects | There are no overhead power lines which traverse the site. |
| Other combustible non-waste materials on or near the site not mentioned above | Any combustible non-waste materials on or near the site may ignite in the event of a fire and worsen the effects | Apart from those sources and risks mentioned in the table above (or elsewhere in this FPP), there are no combustible or flammable materials accepted or stored on site. |
| Batteries within waste deposits | Ignition of stored wastes via batteries within imported wastes | All loads are inspected in accordance with strict waste acceptance procedures. There are separate storage locations for batteries and different battery chemistries will not be mixed. |
| Visitors or contractors | Misuse of site, plant or machinery, not adhering to site rules | All visitors/contractors allowed onto site will be provided with site induction training and/or be escorted around the site by a site manager (depending on the nature of their visit and scope of works) to ensure site rules are adhered to in full and that they are aware of the potential fire risks of the site and associated plant, machinery and infrastructure. Appropriate risk assessments and full inductions (including training in this FPP document) will be carried out for contractors undertaking work at the site where supervision from site management in not required or is not feasible. |
| Reaction between wastes | Combustible waste piles may ignite in the event of a fire and worsen the effects if wastes react | The acceptance of only one waste type eliminates the risk of rogue wastes being accepted. |
| Cylinders stored at site | Interaction with burning or reactive waste | No cylinders stored at the site. |

## 2.2 Fuel/oil storage

2.2.1 Small volumes (<2.5 litres) of flammable materials will be stored within COSHH approved flammable material storage cabinets adjacent to the site office.

2.2.2 The prevention of leaks and spills will be primarily minimised through the implementation of an adequate planned preventative maintenance schedule combined with reactive reporting. Spill kit stations will be provided around the site and available to clear up leaks/spillages and appropriate disposal of absorbent material will be arranged. However, the risk of spills associated with the waste types accepted is very low.

2.2.3 All operators will be trained in their use. Intelligent Lifecycle Solutions operates a certified ISO 14001 management system that identifies and assess significant environmental impacts. The procedures to deal with and respond to environmental emergencies (e.g. leaks & spills) is further detailed within site Emergency Plans and outlined within the Bespoke Permit Environmental Management Plan.

## 2.3 Smoking

2.3.1 Smoking of cigarettes and e-cigarettes is prohibited on site. Employees who wish to smoke may do so in their own time during lunch breaks at a location outside of the site.

2.3.2 Managers will be responsible for the promotion and maintenance of the no smoking policy by their staff. Managers will receive training and guidance regarding their responsibilities in relation to the policy and enforcement of it. Employees should inform the appropriate manager immediately if anyone fails to comply with the policy. Employees not complying with the policy will be referred to their manager for support subject to the usual disciplinary procedure. Visitors not adhering to the policy will be asked to comply or leave the site.

2.3.3 All job applicants will be made aware of the policy via application packs, where a requirement to abide by it will be part of the role specification. Applicants will be reminded of the policy at interview stage. A copy of the policy will form part of new employees'

induction packs. Training and guidance on enforcing the policy will form part of new managers' induction process.

2.3.4 The policy will be reviewed every 12 months.

## 2.4 Hot Works Procedure

2.4.1 No hot works are undertaken at the site. All waste on site is manually dismantled and all mobile plant is battery powered.

## 2.5 Loose Materials

2.5.1 General dust (i.e. dusts and small particle size combustible wastes, loose wastes etc.) will be controlled by implementing regular housekeeping and cleaning for all site areas including site work benches, tooling and buildings to keep dust and other combustible materials to a minimum. Routine site inspections are conducted to ensure good housekeeping is being maintained and the procedures in this plan are being adhered to.

2.5.2 Flammable materials, such as oils, greases, fuels, paints etc, are always stored correctly and put back in the COSHH approved combustible materials store after use.

## 2.6 Preventative Maintenance

2.6.1 The site does not operate any plant that could cause a significant adverse environmental impact. Site plant consists of two electrically powered forklift trucks and a compaction baler. However, if this was to change then the site will establish and will maintain a Planned Preventative Maintenance (PPM) schedule for all operations in-line with manufacturer’s recommendations. This will identify all critical environmental equipment that is used to mitigate or prevent environmental impacts.

2.6.2 All records associated with these activities will be maintained on-site and controlled as part of the ISO 14001 management system. Any breakdown or malfunction of plant or equipment that could result in abnormal emissions are dealt with promptly and process

operations adjusted until normal operations can resume. Any such events are recorded in the site diary and on the company Incident Report forms.

2.6.3 The baler is compliant with the requirements of current legislation. An EU compliance certificate is provided by the supplier along with a full operation and maintenance instruction manual.

2.6.4 In addition to the above, all mobile and fixed plant is site are subject to annual manufacturer maintenance to ensure proper working order in the form of service contracts.

2.6.5 Site management will undertake or delegate additional preventative maintenance checks on a more frequent basis i.e. daily, before, during and 1 hour at the end of each working day using a checklist similar to that in Appendix II to ensure the following:

- Mobile plant is mechanically sound before use no sparks have been identified when switching on or shutting off the plant/equipment.
- Mobile plant is stored in the out-of-hours plant storage area as shown on Drawing No DIIE/2904/03 following cessation of activities and external separation distances of 6m are observed between plant and any combustible or flammable material.
- In the building, all plant will be powered-down and completely shut off prior to cessation of operations on any given day.
- Plant which is not in use for any extended period is stored at least 6 metres from combustible or flammable material.
- All mobile plant will contain firefighting equipment inside.
- Dust from processing/treatment operations on site can settle throughout the working day onto processing plant and engine parts so a fire-watch will be implemented after cessation of works and equipment powered down for 1 hour each day to remove any dust/fluff using brushes, hoses etc... Any build of dust/fluff will be removed from the equipment and deposited into at refuse bin which will be emptied when full. The location of the refuse bin as it is mobile cannot be specified on the plan as the location will vary, it will however be stored 6m from any other combustible or flammable material before the site closes.

## 2.7 Site security

2.7.1 The site security is as follows:

a) The entire site is enclosed with palisade fencing 2.4 metres high.
b) Access to site is via lockable steel gates. Steel gates to a height of approximately 2.4 metres are available to secure the site when not operating. Entrance is also controlled by electronic tags.
c) Site boundary fencing is checked regularly. Defects are reported to the operations manager and repairs undertaken as appropriate.
d) Site has manned remote outsourced security 24 hours per day 7 days per week all year, Random but frequent security checks of the site are undertaken and recorded when the site is shutdown.
e) The site is served by remotely accessible CCTV technology.

2.7.2 The access into the site is only opened when waste is being delivered or removed from site, all other times the site is closed to prevent any intruders.

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

## 2.8 Electrical faults or damaged/exposed electrical cables

2.8.1 All fixed wiring electrical cabling on site will be inspected daily by staff and serviced in accordance with Legislation (3/5 years) by fully qualified and certified electrical contractors to undertake both Planned Preventative Maintenance and Reactive Maintenance (under contract) of the following:

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

2.8.2 Portable Appliance Testing (PAT), this will be carried out under an annual service contract by qualified and certified electrical contractors.

2.8.3 Daily inspections of cabling, etc. will be undertaken and the daily Fire Checklist can be used as a reference. Any potential ignition sources from suspected electrical faults will be isolated and the appointed electrical contractors will be contacted immediately to rectify the situation. Where possible, staff will immediately remove any stored wastes from the vicinity of the fault area or cable traverse if safe to do so.

# 3 Waste acceptance procedures

## 3.1 General

3.1.1 All operations will be carried out with the intention of protecting the health and safety of site personnel and others on site and to protect the environment and to minimise the effect of the operations upon the local amenity.

3.1.2 The treatment of WEEE, within this or any subsequent specialist treatment facility, will meet the requirements of the WEEE Legislation and adhere to the guidance issued or approved by NRW in respect of the Best Available Techniques.

3.1.3 The following waste management operations are undertaken for the testing of discarded electrical and electronic equipment:

a) Storage of small domestic appliances.
b) Selection and sale onsite of PC Desktop and Laptop appliances that are suitable for repair and refurbishment.

3.1.4 The following waste management operations are undertaken in the recycling of waste electrical and electronic equipment:

a) Receipt of WEEE.
b) Storage of WEEE,
c) Manual and mechanical separation of WEEE into components and materials.
d) Temporary storage of recyclate pending collection for further recycling by third party or controlled disposal.
e) Collection, grading and storage of printed circuit boards prior to dispatch to an approved copper and precious metals refiner.

## 3.2 Waste Activities

3.2.1 Waste types to which this fire plan applies are listed in the table below which details the types of wastes which are being stored and their tonnage. EWC codes for the waste will be as listed in the permit and Chapter 19 codes for outgoing waste.

| **Materials** | **Max Quantity (tonnes)** | **Physical State/form** | **Storage height (m)** | **Storage/ retention time** |
|---|---|---|---|---|
| Ferrous Metals | 12 | Solid, separated & baled from incoming waste (outgoing). | 2.1 | <1 week |
| Non-Ferrous Metals | 30 | Solid, separated from incoming waste (outgoing). | 2.0 | <72 hours |
| Printed Circuit Boards | 20 - 50 | Solid | 2.0 | <72 hours |
| Plastics | 15 | Solid | 2.0 | <72 hours |
| Batteries | <1 | Solid | 1.0 | <4 weeks |
| Total tonnage stored | <100 | | | |

3.2.2 The table overleaf further details storage measure in line with NRWs FPMP guidance which is also shown on Drawing No. DIIE/2904/03.

| **Storage Area Details** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Plan Ref** | **Description** | **Storage type** | **Containment / type** | **Max width (m)** | **Max length (m)** | **Storage height (m)** | **Conversion factor used** | **Max volume (m3)** | **Max storage time** | **Comments** |
| AREA 1 | Baled and manual sorted ferrous metal arising from the WEEE dismantling area | Sealed 35-yard cubic yard roll on roll off skip | Skip acting as containment | 2.44 | 6.09 | 2.1 | 1 | 31 | <1 week | Skip will be removed sooner when full |
| BAYS 1 - 11 | Storage area for wastes arising from repair, refurbishment and dismantling of WEEE. Areas will contain non-ferrous metal, printed circuit boards & plastics | Tonne bags, boxed or wrapped | Sealed building | 12 | 12.5 | 2.1 | 1 | 150 = The bays are never full and in total will never reach 50% capacity | <72 hours | The volume of the bays continually varies throughout the day but the site never stores 50% of the maximum it could store therefore the volume has been based on 50% of the maximum storage available. The waste in the bays is usually removed daily due to the financial value. Not all waste is stored to a height of 2m. |
| BAYS 12 - 15 | Complete set top boxes awaiting dismantling | Tonne bags or boxes | As above | 5 | 9 | 2 (stacked two high) | 1 | 45 = As above | <72 hours | As above |
| **BAYS 1 - 15 TOTAL VOLUME** | | | | 17 | N/A | As above | | **195** | | |
| WEEE sorting & dismantling area | Incoming WEEE (set top boxes) which require assessment prior to repair, refurbishment or dismantling | Free standing | No containment required | 5 | 5 | 1 | 1 | 5 | Working day = 11 hours, area clear 1 hour prior to shutdown | Although the area measures 25m2 the actual storage is much less as they are continually sorted into waste and re-usable items. The area is not a storage area and acts as a sorting area which is clear out-of-hours. |
| Batteries | Lead acid batteries & other batteries i.e. lithium | Sealed plastic container with acid resistant base | Sealed container | 1 | 1.2 | 0.835 | 1 | 1 | <4 weeks | The actual storage volume is much less and is based on what the container could hold. |
| **CONVERSION FACTORS** | | | | | | | | | | |
| **Conversion factors for waste piles are worked out using the following methods set out by Natural Resources Wales** | | | | | | | | | | |
| **The maximum length width pile is based on the largest dimension – the volume of the pile has been calculated using the area x height x relevant conversion factor** | | | | | | | | | | |
| **Conversion of 1 for materials stored within containers, area of storage in stackable containers and waste/bale stacks** | | | | | | | | | | |
| **Conversion of 0.3333 for waste stored in a free-standing stockpile** | | | | | | | | | | |

3.2.3 All deliveries are weighed in at the site weighbridge by the Warehouse Supervisor. The Warehouse Supervisor conducts an initial check of the load which, if found to be satisfactory, is allowed to be stored in the incoming materials section of the Warehouse. In the event of any nonconforming items of waste being identified, these are either returned to the source facility or are stored in a clearly marked quarantine area for authorised disposal.

## 3.3 WEEE Acceptance, Procedures & Control System

3.3.1 Acceptance procedures will be in place to assess and record loads and these are described as follows:

a) Incoming vehicles must report to the goods inwards bay for WEEE. For one off delivery the Duty of Care transfer notes (if WEEE is not from the end user) will be scrutinised to ensure that the source conforms to the schedules. Other regular suppliers will be validated against 'season ticket' arrangements.
b) Loads will be visibly checked and then the weight would be assessed. All deliveries will be relatively clean waste electronic and electrical products and may be unloaded safely at the goods inwards sector.
c) Any unwanted 'suspect' products or contaminated materials will either be loaded back onto the vehicle or removed carefully and placed in an isolated container for further scrutiny or appropriate disposal. The advice of NRW may be sought over any such delivery and a record made in the site records.
d) Approved WEEE will be separated into its appropriate categories and dispatched to intermediate storage prior to entering the relevant process.
e) Following the relevant individual category processes all material streams and components will then be bulked up depending upon the categorisation, destination, and qualities.
f) Components which may have significant hazardous contents will be stored in clearly identified leak proof containers indoors prior to dispatch to a specialized contractor for disposal or recovery.

g) All materials, components and residual waste leaving the site for further treatment, disposal or recovery will be properly described in accordance with the Duty of Care and transported by a Registered Waste Carrier to an authorised facility.

h) All records of delivery and dispatch, including copies of Duty of Care Transfer Notes and Hazardous Waste Consignment Notes, will be maintained and available for inspection by NRW.

## 3.4 Reactions Between Wastes

3.4.1 Waste acceptance checks are in place to prevent unsuitable wastes being received; this is documented within the EMS procedures. These procedures are aimed to prevent unauthorised waste being accepted and where accidentally accepted limiting the impact; and include:

3.4.2 Employees in goods inwards areas must be trained and instructed to look for fires, hazardous materials and items, smoke and signs of smoulders – and know what action to take if they see one i.e. use of mobile plant to move suspect loads to quarantine area, tackling small fires with the appropriate extinguisher where safe to do so.

## 3.5 Monitoring and control of temperature

3.5.1 The waste types handled at the site present a low risk of self-heating. Processing of WEEE containing batteries is carried out manually to remove and store the batteries in clearly labelled containers to minimise the risk of fire.

3.5.2 Measures to control heat to prevent self-combustion include:

a) Visually inspecting stored wastes daily and recording any significant findings within the site diary

b) Separate and segregate potentially combustible content

c) CCTV will be installed to both monitor the yard and Warehouse remotely

d) Materials will be processed and transferred from site well within a 3-month period i.e. ‘first in first out’

e) Materials from the manual dismantling process and segregated through the Warehouse will be processed and transported off site therefor eliminating the need to store for periods longer than 3-4 weeks

# 4 Managing waste storage to prevent self-combustion and the fire spreading

## 4.1 Managing storage time

4.1.1 Combustible waste will be stored as shown on Drawing No. DIIE/2904/03 and reference should be made to the 'waste storage table' in Section 3.2 which demonstrates how the waste will be stored and monitored within the guidelines of the NRW's FPMP document.

4.1.2 The operator will store waste materials in their largest form and minimise pile sizes wherever possible.

4.1.3 Fire break distances and pile locations are also shown on Drawing No. DIIE/2904/03 and the surface areas and dimensions of each storage area is provided in the waste storage table in Section 4.3. All pile sizes, heights, widths, lengths, volumes and separation distances are in accordance with the NRW's FPMP guidance document.

4.1.4 The aim of the site is to process the incoming material and arrange for its export off site as soon as practicably possible, to minimise over-stocking which in-turn minimises the risk of overheating and spontaneous combustion. Therefore, the maximum storage times in the table are considered conservative to allow for market fluctuations, downtime, etc.

4.1.5 Storage on flat ground: Site surfaces where wastes are to be stored are flat, therefore reducing the risk of falling materials accelerating the spread of fire.

## 4.2 Monitoring and control of temperature

4.2.1 It is considered that the wases does not require manual temperature monitoring i.e. with a thermal gun or temperature probe due to the nature of the material as set top boxes including their components are not generally at risk from spontaneous combustion. All wastes are hand sorted and the baler is a manual fed vertical press baler which does not cause the waste to change temperature once processed.

# 5 Managing waste piles

## 5.1 Stored combustible waste/materials

5.1.1 The following list outlines the materials which have been identified on site as having combustible potential.

a) Baled ferrous metal
b) Sorted & separated plastics, non-ferrous metal and printed circuit boards
c) Batteries

5.1.2 Incoming wastes will not be stored at the site and the dismantling area will be clear out-of-hours.

5.1.3 The table below details the wastes stored on site and procedures to reduce the risk of combustion/ignition in line with the NRW's FPMP guidance (reference should be made to the Layout & fire Plan in Appendix 1 for details and locations for each of the storage areas).

**Table 4.1 – Storage/monitoring procedures – free-standing piles**

| Pile Ref: | Storage/monitoring procedures to reduce the risk of fire |
|---|---|
| BAYS 1 - 11<br><br>Storage area for wastes arising from repair, refurbishment and dismantling of WEEE. Areas will contain non-ferrous metal, printed circuit boards & plastics<br><br>BAYS 12 - 15<br><br>Complete set top boxes awaiting dismantling | • Bays 1 - 11 store wastes which have been separated from the manual dismantling of set top boxes and will be non-ferrous metal, plastic and printed circuit boards.<br>• Bays 11 – 15 will store set top boxes which are awaiting dismantling.<br>• The above wastes are not mixed and are stored in separate bags or wrapped.<br>• It is worth pointing out that it is not the operator's intention to store this waste as it is a very valuable commodity, so it is usually removed from site in less than 72 hours.<br>• The bays are labelled 1 – 11 and each bay will contain different wastes i.e. Bay 1 will not contain plastic and non-ferrous metal.<br>• The waste will be deposited at the front of the bay and extracted from the rear ensuring the first in first out principle applies.<br>• The amount of waste stored in the bays is never likely to exceed 50% of their total volume. If the site reaches 50% of the bay storage, the operator will not accept any further material at the site.<br>• The wastes stored have a very low combustibility risk and it is considered wastes would only ignite in the event of arson or staff negligence. As the wastes are not stored for longer than 72 hours, this further reduces any fire risk.<br>• The stored wastes will be on the ground and in bags or shrink wrapped. Some wastes stored could be stacked which could reach a height of 2m; it is worth mentioning that not all storage will be 2m high and there will be access to all of the stored waste for fire-fighting purposes through the two roller shutter doors and the fire doors to the west of the building.<br>• The bays are visually monitored continuously throughout the day and subject to strict waste acceptance procedures by personnel who will be trained via toolbox talks in recognition of fire. Following site closure at 18:00pm, the optical heat and flame detection is initiated which covers the whole waste storage in the bays.<br>• It is considered no additional monitoring procedures are required. |

## 5.2 Waste stored in bale form

5.2.1 The table below details the waste types which are stored in baled form at the site.

**Table 5.2 - Combustible waste storage table for baled waste**

| Pile Ref: | Storage/monitoring procedures to reduce the risk of fire |
|---|---|
| AREA 1<br><br>Baled ferrous metals | • This area comprises a sealed 35 cubic yard container where ferrous metal arising from the dismantling of set top boxes is stored.<br>• Ferrous metal prior to baling is stored in the vertical press baler and once there is enough material, the baler will be switched on to create the bale.<br>• Each bale weighs approximately 460kgs and the site bales approximately 1 tonne per hour.<br>• The skip can hold approximately 10 – 11 tonnes of bales so usually the contents of the skip are emptied daily.<br>• If the skip is full, the site will not accept any further wastes containing ferrous metal and will divert wastes to an alternative facility.<br>• The site will not bale on daily basis and may bale once per week when there is enough material to bale.<br>• No further monitoring required other than visual by trained staff.<br>• Due to the maximum duration the skip would be stored for, it is considered that no further monitoring is necessary. |

## 5.3 Waste stored in containers

5.3.1 The table below details the waste/material types which are stored in containers

**Table 5.3 - Combustible waste storage table for waste stored in containers**

| Pile Ref: | Storage/monitoring procedures to reduce the risk of fire |
|---|---|
| BATTERIES | • This area comprises battery storage at the site.<br>• The batteries stored will either be lead acid or small amounts of batteries found in set top boxes or other WEEE loads.<br>• The batteries are stored within containers inside a building i.e. with weatherproof covering.<br>• The containers are open topped for access, moveable by mobile plant, stored on the ground and replaced by an empty container once a full container has been removed.<br>• All containers will be sealed and checked daily for their integrity. Any damaged containers will be replaced with suitable ones.<br>• The waste stored in the containers will have been sorted so the waste is unlikely to contain any hot loads or incompatible waste which could lead to a spark or overheating causing a fire.<br>• The lead acid batteries will be stored upright in containers with the electrical connector pointing upwards.<br>• Batteries of different chemistry will be stored in separate containers.<br>• As the site does not accept many batteries into the site, they are removed monthly on a rolling contract whether or not the containers are full.<br>• The stored waste will not exceed the height of the containers which is approximately 0.835.<br>• In the event of a fire breaking out in a container, it can be dragged into the quarantine area (if safe to do so) by mobile plant to reduce the spread i.e. to adjacent containers. |

## 5.4 Temperature monitoring for stored waste

5.4.1 **Optical Infra-Red / Heat Detection System inside building** – Although operations taking place in the building are considered a low fire risk due to only manual processing, the stored wastes do not generate heat or will spontaneously combust, due to the high value of the wastes, the building benefits from an automated optical infra-red/heat detection system.

5.4.2 The system was installed by a UKAS accredited installer which is connected to CMS security company and consists 3 no. cameras shown on Drawing No. DIIE/2904/03. The system has a set trigger temperature and due to continuous movements inside the building, the system will regularly log a call to the monitoring centre who can view and contact the operator to

see whether or not it was a false alarm. For waste storage, the trigger temperature is set at 65$^{o}$C however it is envisaged that there will no storage of any waste inside the building other than when it is being fed into the processing plants.

5.4.3 **Processing plant -** All processing lines are installed with heat and pressure ranges which have been set by the manufacturer and the lines benefit from an automated cooling system in the event the plant overheats. The control panel system is linked to the manufacturers mobile and other remote software via 4G Sim Cards who are immediately alerted by the plants control panel system and the Company can remotely access machinery to identify the fault and also shut down if necessary.

## 5.5 Stock rotation and seasonal variations

5.5.1 Details of stock rotation are clearly shown throughout the above sections wastes which are stored and processed on site. The site will not store more than 50% of what the bays can hold so in the event of destination site closures, staff shortages or seasonal demands for wastes leading to a longer storage duration, the operator will:

- Divert incoming waste and send stored waste to alternative sites. The operator can search for additional site's using NRWs public register for alternative sites who could take this material or they would contact the destination sites where waste from the site will be sent. The operator has a number of contracts set up with other waste companies to send material too to avoid overs stockpiling.
- The site will stop accepting waste.

5.5.2 To ensure each bay does not exceed a volume of 50%, site staff will continue to monitor the volume of each bay using the daily waste monitoring form shown in Appendix II. The monitoring will entail a trained member of staff carrying out a check of each bay every 2 hours and if it is evident one of the bays is close to reaching capacity, the staff member will alert site management who will either:

- See if the waste in the bay close to exceeding 50% can be moved to an alternative bay; or,

- Look to initiate the procedures in Section 5.5.1 to prevent over stockpiling.

5.5.3 It must be noted that once the waste has been sorted and is ready for onward recycling, it is a very valuable commodity so the site has more than one outlet for the outgoing material.

# 6 Prevent fire spreading

## 6.1 Waste storage general

6.1.1 The operator will store waste materials in their largest form and minimise pile sizes wherever possible, as shown on Drawing No. DIIE/2904/03. The company has made the decision to limit the storage volumes of waste to ensure effective throughput and to minimise fire risk. There are no load bearing walls at the site which are being used as firewalls, all building walls which are used as firewalls are of steel portal frame structure with concrete panel inserts.

6.1.2 It is recognised that many wastes can self-combust under certain conditions i.e. when a material which self generates heat at a faster rate than it can be lost to the environment. The nature of the waste streams on site means that self-combustion is negligible. However, to prevent self-combustion storage times, piles volumes and height, are carefully managed as shown in Section 5.

## 6.2 Separation Distances

6.2.1 Due to the size of the site and nature of operations, it is not possible to have separation distances in line with the FPMP guidance, however, it must be noted the maximum the site would ever store is <100 tonnes equating to <195m$^3$ as detailed in Sections 3.2. The dismantling and sorting area will be kept clear out-of-hours enabling a suitable >6m fire break between stored wastes and the canteen/welfare area. There will also be a >6m separation distance between stored wastes and any fixed/mobile plant when the site is closed as demonstrated on Drawing No. DIIE/2904/03.

## 6.3 Fire walls

6.3.1 The building has a 1m concrete wall around the base, but it is considered the need for additional fire walls is impracticable and unnecessary due top the following:

- The total storage volume of waste at the site will not exceed 200m$^3$ which is less than half of the maximum permitted for the wastes.
- The site is manned continuously during operational hours by at least 6 staff and also other staff monitoring CCTV – all staff have been suitably trained by site management / TCMs to recognise early signs of fire.
- There is an optical heat / fire detection system meaning any fire on site would be picked up early to prevent a fire spreading.
- No activities on site will generate any heat or lead to a risk of fire.
- The waste is not at risk of self-combustion.
- Waste stored internally will not exceed 72 hours other than batteries where minimal quantities are stored and in sealed, separate containers.
- The only fire risk at the site is considered to be arson or staff negligence. Security measures shown are considered suitable and all staff are trained and monitored daily by site management, TCM and the security monitoring company.
- The site has operated for 8 years under a T11 exemption and has previously not been subject to any fires or the need for fire walls. The transition to the permit is due to a change in EWC code for printed circuit boards meaning all operations are still in compliance with those undertaken on a T11.
- No mechanical treatment of waste takes place at the site, the baler on site is a vertical press manually fed baler.

In summary as the overall fire risk at is considered low despite there being combustible wastes, the inclusion of fire walls has been risk assessed and is considered not necessary for the site.

## 6.4 Quarantine Area

6.4.1 The site will have a quarantine area as shown on Drawing No. DIIE/2904/03 which will only be used as an area for storing unburnt wastes to prevent the fire spreading. It is likely any fire would be extinguished in situ. The separation distance from the quarantine area to other stored wastes is >6m. Although the ferrous metal skip is located within the 6m buffer of the quarantine area, the skip would be moved to area shown on the above drawing to ensure a 6m clearance is available. The skip can be moved using a forklift truck by inserting the forks underneath and lifting it to the designated location. This process would take between 1 -2 minutes and would be done by one of the three out-of-hours staff if a fire occurred out-of-hours or by the same staff during operational hours. Further reference should be made to Section 8.2 in terms of procedures if a fire occurred out-of-hours.

6.4.2 The quarantine area has been based on Bays 1 – 15 which in total have an area of approximately 195m$^2$. It must be noted that this area will never be at 100% capacity and will only store 50% ensuring all waste stored is accessible for firefighting purposes. Therefore, it is considered the maximum volume of waste stored will never exceed the 195m$^3$ and the quarantine area has based on this.

6.4.3 The quarantine area measures 10m x 5m equating to 50m$^2$ meaning if waste was stacked 2m high would have a volume of 100m$^3$ which is >50% of the site's largest stockpile.

6.4.4 The quarantine area will always be kept clear – unless it's being used in the event of a fire.

6.4.5 It is considered that any fire on site would be fought in situ and the quarantine area would not be used to store burnt wastes or an area or to suppress the waste but an area where waste at risk of combusting would be moved to. If the event burnt wastes need to be moved the quarantine are for suppression, then surface water is likely to drain inside the building due to the fall of the site and current drainage situation (see Section 11).

# 7 Site inspection programme

## 7.1 Daily checks

7.1.1 Site management are responsible for carrying out daily site walks for checking drainage systems, security measures and waste storage areas. Site management can reference the fire checklist shown in Appendix II but may use internal check sheets. The site also carries out weekly inspections for firefighting equipment to ensure they are fit for purpose.

7.1.2 Carrying out the above checks daily will keep the levels of dust, fibre, paper and other loose combustible materials, which could aid in the acceleration of a fire, on site surfaces to a minimum and ensure all containment of wastes on site are functioning effectively in accordance with the storage limitations shown on Drawing No. DIIE/2904/03.

7.1.3 Operational staff will be trained by site management to ensure visual inspections of escape routes, fire exits, extinguishers etc. are clear in the event of a fire; Drawing No. DIIE/2904/03 shows all fire exits for buildings, storage locations of firefighting equipment and escape routes.

## 7.2 Buildings

7.2.1 The building is fitted with an optical fire/heat detection system with call points installed throughout the offices, canteen, workshops and storage areas. The system will have two inspection visits per annum as per the recommendation of BS5839 part 1. The location of this system is shown on Drawing No. DIIE/2904/03.

## 7.3 Staff training

7.3.1 Staff will be suitably trained in how to raise a fire alarm and how to use the monitoring and extinguishing equipment. Managers will also ensure formal fire extinguisher training has been provided for anyone specifically designated to use such equipment.

7.3.2 A full understanding the procedures outlined in this FPMP document will be required to be demonstrated as part of the site induction for all new staff and any existing staff that are

not familiar with the documents. In particular all staff will be trained to ensure that they know what to do in the event of a fire and more importantly how to undertake their work in a way that minimises the risk of a fire occurring.

7.3.3 A full test (drill) of the procedures in this document will be carried out every 6 months. The first test will take place within one month of the agreement of this document with the EA. The outcome and any follow up training for staff will be documented in the site diary and relevant forms in the EMS. The Site Inspection Form in Appendix II will also be used during the drill.

## 7.4 Toolbox talks

7.4.1 All operational staff will receive fire awareness and firefighting procedures training / tool box talks by trained site management prior to working at the site. This will enable the operational staff to detect early signs of fire and to minimise the chance of a fire breaking. Refresher testing will be mandatory every 6 months or sooner if site operations change which could lead to a greater fire risk.

# 8 Fire detection procedure

## 8.1 Manual detection/on site detection

8.1.1 If a fire is detected or suspected by a member of staff, it must be immediately reported to the site manager or TCM. The site manager will then conduct the following procedure:

a) Raise the fire alarm (if not already done by another staff member).
b) Initiate evacuation of staff and visitors on site to the meeting point and instruct delegated person(s) to conduct a roll-call to ensure all site users are accounted for.
c) Assess the intensity and scale of the fire and make a judgment as to whether the fire can be managed without the requirement for assistance from the emergency services i.e. using the hose or fire extinguishers.
d) If viable and safe, instruct necessary site staff to commence extinguishment.

## 8.2 Out of hours fire detection (automated)

8.2.1 The site benefits from an optical fire/heat detection system consisting of vision and motion sensor cameras which will full coverage to areas storing waste and other areas of the site. The locations of the cameras are indicatively shown on Drawing No. DIIE/2904/03.

8.2.2 The system will detect any sudden rises in heat or flame which will set off a trigger and email/text the 3 staff who have access to the cameras and the UKAS accredited third party monitoring company (Southern Monitoring) who monitor the system and other CCTV on a 24/7 basis. The on-call staff and monitoring company would then review the site to see if it is a false alarm or ring the emergency services if required. If signs of smoke or flames are visible, the emergency services would be contacted in addition to the 3 staff who would visit the site within 10 minutes to prevent the fire starting/spreading.

8.2.3 The above system was installed and signed off by Imperial Fire & Security who are a UKAS accredited company. Imperial will also inspect the system twice a year to ensure it is suitable.

8.2.4 The site manager and TCM will be trained in the following to ensure reduce the impact of a fire:

- Mobile plant
- Site drainage and surface water protection measures
- Firefighting equipment

8.2.5 In the event the out-of-hours contacts are unavailable due to sickness or holiday, an alternative member of staff who lives within 5-10 minutes if the site (suitably trained) will be provided with a phone contactable by the monitoring company and directors who will stand in temporarily to ensure out-of-hours procedures are sufficient.

8.2.6 It is also considered the FRS would be available within 10 minutes to assist the out-of-hours contact in supressing and controlling the fire.

## 8.3 Fire Alert Procedures

8.3.1 Regular visual inspections will be completed by the site supervisor to check waste stock management and to quickly identify any issues. CCTV system has been installed to monitor the site remotely. The CCTV system has been installed and is maintained by a UKAS accredited security monitoring company.

8.3.2 There must be no hesitation in raising the alarm. Any person discovering a fire must also immediately 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.

8.3.3 Everyone must immediately leave the site and proceed directly to the designated assembly area upon hearing the alarm.

8.3.4 The mobile plant operators are, if possible, to remove their machines from the vicinity of the fire; park and turn off their machines at a safe distance from the fire without blocking any emergency access routes.

8.3.5 No one is to return to the affected part of the site until it is confirmed safe to do so by the person in charge of the premises (site supervisor).

8.3.6 During normal operational hours, the person in control of the site must notify Fire and Rescue Service, and Natural Resources Wales immediately and delegate a member of staff to direct the Fire Service. In addition, the person in control must check that occupants of adjacent sites have been notified. During out of hours external security conducts notification.

8.3.7 The person in control of the site must ensure that the site has been evacuated and in particular:

a) Supervise the evacuation of visitors and staff.
b) Supervise roll calls and collate information e.g. persons not at the assembly point, information about the fire location and source.
c) Ensure first aid is given if required.
d) On arrival the Fire service will take charge and the person in charge must co-operate with the Fire and Rescue Service Officers. See Fire Service Act 2004 Sect. 45 for Fire Service Powers of entry.

## 8.4 Non-waste facilities on site

8.4.1 The main office has a fire/smoke detection system, in line with building standards. Fire extinguishers will be provided with training for personnel likely to use them.

# 9 Fire response procedures

## 9.1 Response procedure

9.1.1 Further to the detection measures in Section 8, the following procedures would apply in the event of a fire at the site:

a) Call the Fire Response Service (FRS) immediately using 999, raise the alarm to initiate staff evacuation and ensure access routes are clear.
b) Call the Natural Resources Wales Emergency Contact Number.
c) A suitably trained employee will initiate fire water containment measures to close the site's surface water drainage system.
d) Prior to the FRS arriving, inform all neighbouring premises likely to be affected.
e) If not previously informed, senior management of the company will be informed at this point of the details, nature and extent of the fire and whether assistance from staff from other locations is required.
f) If safe to do so, site management will inspect the location of the fire, to identify immediate risks to surrounding premises and the FRS.
g) Ensure operators of appropriate machinery are standing by in a safe location to help create fire breaks, under the direction of the FRS when they arrive.
h) Site management will identify themselves to the FRS as soon as they arrive on site and will provide them with a copy of this document and update them with relevant information that will assist them in dealing with a fire more effectively.
i) Implement pollution control measures if safe to do so, including quarantine of hot/burning waste.

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

## 9.2 Staff/Visitor Response Procedure

9.2.1 The following procedure has been issued to staff, who will also inform visitors of the procedure and actions in the event of a fire:

a) Don't panic
b) Inform the site manager or technically competent manager immediately
c) Raise the alarm (if not done so already)
d) Do not try to tackle the fire yourself unless you are trained in doing so and you are sure of the nature of the fire
e) Leave the site using the nearest exit as quickly and as orderly as possible
f) Assemble at the specified fire assembly point
g) The site manager or delegated operative will be in charge of calling the emergency services on "999" and ensuring that all persons who were working in the building are assembled safely
h) Do not return to the site until you have been given the 'all clear' by the emergency services and/or site management / responsible person.

## 9.3 Evacuation of Staff (and Drill Procedure)

9.3.1 A Fire Contingency Response and Environmental Incident Plan has been formulated for the site and all operational staff and is included at Appendix III to this Fire Prevention & Mitigation Plan. The fast and effective evacuation of staff to the fire assembly point will increase safety on site and limit the impact of a fire on any persons on site.

9.3.2 Fire drills will take place every 6 months and 1 month after site operations commence to ensure evacuation times are acceptable and that site staff remain informed of evacuation procedures.

9.3.3 The drill will be a simulation of an emergency with the location of a mock fire notified to staff in order to test the response speed in deploying pollution control equipment i.e. including plugs and ensure all firefighting equipment is sound. The fire check form may also

be completed and a detailed report of the outcome of the exercise will be prepared to assist with staff training.

## 9.4 Event of Fire on Neighbouring Sites

9.4.1 In the event of a fire on a neighbouring site, the alarm will be raised by the person discovering the fire and will initiate safe evacuation of all staff to the assembly area. Staff will ensure that the adjacent operators are notified of the outbreak if not already aware. The procedures in this plan will be followed to ensure that the fire does not have an adverse impact on this site.

## 9.5 Notifying nearby properties

9.5.1 The contact numbers of key sensitive receptors will be stored within the main site office and emergency services box which are both shown on Drawing No. DIIE/2904/03. As it isn't feasible for a contact number to be provided for every individual residential receptor and individual business within 1km, the most sensitive receptors and closest business receptors have only been included.

9.5.2 The receptors will be contacted by a co-ordinated approach where staff from Intelligent Lifecycle Solutions Ltd will contact them by phone and/or email.

9.5.3 Following discussions with Rhondda Cynon Taf County Borough Council, they have advised that once Emergency Services arrive on site i.e. FRS, Police, the lead authority (usually the Police) will co-ordinate a systematic approach to ensure all the relevant sensitive receptors within 1,000m are notified. This will involve via telephone calls, personal visits (knocking on doors) and or using a load speaker while driving around the associated catchment. In addition to this, the Emergency Services would also publicise the fire on their Social Media outlets and contact local news websites, radios who can also provide updates on the incident. The Council will not commit in providing written communication to demonstrate their approach as it would depend on the type/size of fire as they have numerous approaches.

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

## 9.6 Access for emergency services

9.6.1 The site has access from Rhondda Valleys Road, which provides direct access to the site from the A4119 for the emergency services. The width of the surrounding roads and the gateway provide sufficient access onto the site for the FRS. Access routes for emergency services around the site are clearly shown on Drawing No. DIIE/2904/03.

# 10 Suppressing fires and water supply

## 10.1 General

10.1.1 Section 20 of the NRW's FPMP mentions the site should have enough water available for firefighting to take place and to manage a worst-case scenario. A worst-case scenario would be the largest waste pile catching fire.

10.1.2 Based on the above scenario, the largest waste pile of combustible waste on site measures 195m$^3$ (when at full capacity) – this would require 300,240 litres (300m$^3$) of water to extinguish the fire within 3 hours.

**Table 10.1 - Water supply calculations**

| Maximum pile volume in m$^3$ | Water supply needed in litres per minute | Overall water supply needed over 3 hours in litres | Total water available on/off site in litres |
|---|---|---|---|
| 195 (wastes in Bays 1 - 15 | 250 x 6.67 = 1,300 | 1300 x 180 | 234,000 (234m$^3$) |

## 10.2 Site-wide suppression

10.2.1 The site benefits from a manual site suppression system consisting of the following as shown on Drawing No. DIIE/2904/03:

- Hose pipes providing full coverage to internal areas storing combustible and flammable waste.
- A mixture of water, foam, powder and $CO_2$ fire extinguishers located in close proximity to waste piles.
- The skip storing baled ferrous metal will be smothered with a fire blanket in the unlikely event of combustion.

10.2.2 During normal operational hours there are at least 6-8 members of staff) staff who are fully trained in using fire-fighting equipment for suppression and using the above and isolating waste at risk of combusting using mobile plant as shown below.

10.2.3 Mobile plant such as forklifts can be used to move unburned material to the quarantine area and away from waste that is on fire to prevent it from spreading. Access routes into and out of buildings including out-of-hours plant storage is clearly shown on Drawing No. DIIE/2904/03 which consist of two 4m wide roller shutter accesses and a 1.2m wide fire door.

10.2.4 Whilst the above methods may not fully extinguish a fire, they will provide a suitable interim period of suppression and prevention of a large-scale fire until the arrival of the emergency services which is expected to be approximately 10 minutes from notification.

## 10.3 Internal suppression/alternative measures

10.3.1 It is considered the below measures are suitable in ensuring the three objectives of the FPP guidance are met without the need for an automated suppression system. The building has been divided into two areas with each area storing waste/combustible material detailing the available measures for preventing, detecting and suppressing a fire.

**Table 10.2 – Measures to demonstrate suitable suppression without an automated system**

| **AREAS 1 & 2** | | | |
|---|---|---|---|
| **PREVENTION** | **DETECTION** | **SUPPRESSION** | **RISK ASSESSMENT POST PREV, DET & SUPP TO MEET OBJECTIVES OF FPMP** |
| • All the waste stored in BAYS 1- 15 will consist of whole set top boxes or components removed from boxes during the dismantling process. The site has operated for 8 years and will continue to use the same personnel and companies who currently deliver the waste who are aware of the strict site acceptance procedures.<br>• Upon acceptance, all waste is visually checked and undergoes a further check during the sorting and dismantling process which will rule out any risk of spontaneous combustion.<br>• All waste stored internally has not been subject to any form of mechanical treatment which would result in the waste overheating.<br>• Consideration must be given to the wastes stored in that although they are combustible, the likelihood of combustion based on operations taking place at the site are very low.<br>• 60 minutes prior to cessation of activities, the sorting and dismantling area will be removed of all waste material and staff will carry out a full inspection using the daily check inspection form in Appendix I as a reference.<br>• Once the check has been complete, the staff member will radio communicate with the site management to discuss any issues or whether sign off can take place and store the inspection sheet in the office in the west of the unit.<br>• Sign off will only be complete if once site management have agreed the fire risk is low, if not, site management will rectify the issues or communicate with other staff to help assist.<br>• All plant used is electric or battery powered and will be powered down/shut off and checked by trained staff prior to site closing.<br>• There are no<br>• Procedures shown in Section 5 provide suitable monitoring techniques.<br>• No waste stored internally exceeds 72 hours other than small quantities of batteries and the site will not store more than 200m$^3$ of waste at any one time.<br>• Fixed and mobile plant maintenance checks – see Section 2.6.<br>• 24/7 automated and manual security to prevent arson risk.<br>• The site always locked and secured other than when the operator is expecting a delivery of waste or if waste is being removed from the site which prevents a risk of arson. | • During operational hours there will always be a trained members of staff working throughout the building to recognise any fire risk.<br>• Out-of-hours there is 24/7, 365 days per year CCTV with optical fire and heat HD motion sensors covering all areas storing waste.<br>• The above CCTV / detection system is monitored 24/7, 365 days per year by a UKAS accredited security monitoring company. | • Strategically placed powder, foam and $CO_2$ extinguishers.<br>• Out-of-hours, mobile plant storage for two no. forklifts to the west which could be used to isolate material at risk of combusting in the event of a fire.<br>• Access to all areas storing waste from the west of the building via two no. toller shutter doors and a fire door which would allow the FRS to fight the fire externally as there will be access to all waste.<br>• All staff working in the building can operate the extinguishers.<br>• Wastes stored are considerably lower than the maximum permitted in the guidance meaning a fire could be extinguished in line with the FPMP objectives.<br>• Fire hydrant provides nearly three times greater flow than the required water supply and only 100m from the building. | • Low risk due to sources of ignition at the site comprising only from mobile plant or an electrical fault – both of which are suitably maintained as demonstrated throughout this FPMP.<br>• Waste will not self-combust and are all accessible for firefighting from outside the building.<br>• Due to the nature of waste accepted, it is unlikely to combust and storage times / volumes are significantly low – the piles will be continuously moved throughout the day.<br>• Piles significantly less than maximum to extinguish within 4 hours<br>• Suitable access for firefighting via roller shutter doors and fire door.<br>• Quick detection due to trained staff and optical fire/heat detection system.<br>• Mobile plant available to move flammable/combustible material away from an incident<br>• **PROCEDURES MET AND REQUIREMENT FOR INTERNAL SUPPRESSION IS CONSIDERED UNNECESSARY** |

## 10.4 External suppression - fire hydrants

10.4.1 Contact was made with both the FRS and Welsh Water and both are unable to provide a flow rate for the hydrant on and off-site therefore the following guidance extracted from The Local Government Association (LGA) / Water UK National Guidance Document details the following flow rates which should be considered for this site:

**Industry**

10.4.2 In order that an adequate supply of water is available for use by the Fire and Rescue Authority in case of fire it is recommended that the water supply infrastructure to any industrial estate is as follows with the mains network on site being normally at least 150 mm nominal diameter –

- Up to one hectare 20 litres per second.
- One to two hectares 35 litres per second.
- Two to three hectares 50 litres per second.
- Over three hectares 75 litres per second.

10.4.3 As the above site is considered in an area industry and the Dinas Isaf Industrial Estate measures 2 - 3 hectares with the nearest the flow rate of the hydrant should be 50 l/s and 3,000 l/m which exceeds the required flows l/m for the site and suitable for extinguishing the fire within 3 hours.

## 10.5 Out-of-hours fire procedure

10.5.1 It is considered arson would be the only cause of a fire outside of operating hours. Whilst the site is operated on a 24-hour basis, there will be areas of the site which will not be operational after 7pm and before 6am. The site has 24-hour CCTV which is remotely accessible including times when the site is closed (i.e. not operational or open for receipt of wastes). In addition, there is a security guard/watchman or operative(s) who are trained to identify any fires or potential for fire.

10.5.2 If a fire were to occur, once notified by the security guard, the site manager/out-of-hours contact will then conduct the following procedure:

a) Irrespective of whether a company presence is required at the site by the FRS, the out of hours appointed contact (or delegated responsible person) will attend the site to assist in any way possible and to ensure that surface water protection and control measures are deployed, if safe to do so, under the instruction of the FRS.

b) The site appointed out-of-hours contact will subsequently contact as many additional members of staff as required to ensure that surface water protection, smothering and/or separation measures may be effectively deployed. Ideally this will be a minimum of three other staff members (enabling safe working in pairs) with at least one machine operator.

# 11 Managing fire water

## 11.1 Drainage

11.1.1 See Drawing No. DIIE/2904/03 for the location of the key drainage features. From discussions with landlord of the site, the drainage system was decommissioned prior to the operator taking control of the site in 2013 due to the previous use being the storage of highly polluting substances.

11.1.2 As can be seen from Appendix VI of the EMS, a drainage plan was produced in 2013 and within the permitted boundary of site comprised two ACO drains which fed into a surface water drainage system which ran underneath the building to the east and into an existing culvert to the east which assumed to drain not the River Ely. Currently all surface water is captured into the ACO drains which eventually evaporates. As there is no escape point for surface water at the site, the site comprises a fully sealed system.

11.1.3 The internal area of the site is sealed with concrete floors with no internal drainage, thus presenting a large catchment area that could be dealt with appropriately in the event of a spill.

## 11.2 Containment of fire water

11.2.1 The largest pile would require containment for 234m$^3$ of water in accordance with the FPMP guidance.

11.2.2 In the event of a fire in internal areas of the site, the only escapes points are the two roller shutters so to prevent fire water running into the external yard, the shutters are sealed with a 0.15m high ramp and 0.16m high fire water booms would be positioned as shown on Drawing No. DIIE/2904/03. Based on the size of the building, the seal and booms would provide suitable firewater containment as demonstrated in the table overleaf.

**Table 11.1 - Firewater Containment Calculation (Internal)**

| Volume of Water ($m^3$) | Containment Area ($m^2$) | Containment Required | Total Containment On Site (m) |
|---|---|---|---|
| 234 | 1230 | 234 / 1230 = | 0.31 (0.15m seal on access points + 0.16m high boom) |

11.2.3 Due to the following, it is considered that no fire water is likely to require containment in the external yard.

- The primary source of a fire (although unlikely) is inside the building which can contain fire water
- Firefighting externally for the skip would be using a blanket
- The quarantine area would not be used for suppressing waste
- The drainage system is de-commissioned and is therefore is a sealed system

## 11.3 Fire water boom deployment procedure

11.3.1 The site will have access to fire water booms which will be located as shown on Drawing No. DIIE/2904/03 and would be deployed in the event of a fire and positioned as per the plan to contain any fire water runoff. The booms have a 160mm diameter tube each side and using a standard water main i.e. the hose from the site could be filled and provide containment in <5 minutes based on the length of each boom (<12m), the volume required and the 15 l/m from the standard hose.

11.3.2 A key member of senior staff will be responsible for arranging the deployment of the fire water boom will be trained in this procedure.

11.3.3 Upon confirmation that a significant volume of water is likely to be required for extinguishing a fire on site, the following deployment procedure for the fire water booms will be observed:

a) Take the boom roll from the site office.
b) Emplace the boom as shown on Drawing No. DIIE/2904/03 by rolling the necessary length; they will be cut to size prior to being used as part of the fire drill procedure.
c) Use supplied cable ties to seal the front end of the boom.

d) Using a sharp knife, cut the laid-out section from the remaining roll.

e) Using the Hose Reel, begin filling the first of the two chambers of the boom being sure to elevate the 'fill' end to prevent the water leaving the tube.

f) Once the first chamber is filled, repeat in second chamber ensuring the 'fill' end is kept elevated to prevent escape of water.

g) When both chambers are full the 'fill' end should be sealed using a cable tie thus completing deployment.

h) Typically, one side of the roll would be filled which has a 160mm diameter.

11.3.4 The above process should be completed as above for all lengths of boom shown on Drawing No. DIIE/2904/03.

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

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

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

## 11.4 Removal of fire water

11.4.1 Upon successfully extinguishing a fire all standing fire water would be pumped using a hired-in vacuum tanker from a reputable drainage contractor and deposited to a suitably permitted site for treatment. Pre-agreement will be made in advance with NRW and the FRS to see if the firewater could be treated on site.

## 11.5 Control of Combustion Products

11.5.1 Combustion products likely to be associated with the waste stored at the site include; oxides of carbon, nitrogen and particulate matter including white smoke (mixed waste). Additional combustion products may also include PAHs, dioxins and particulate matter including black smoke from plastics.

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

# 12 During and after an incident

## 12.1 Contingency Planning

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

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

12.1.3 Incoming wastes during a fire event will be diverted other waste facilities from the NRW or EA public register. This site can also transport any mobile plant to the site to assist with tackling the fire.

## 12.2 Site decontamination

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

a) Using a bowser, all standing fire water should be sucked up and taken off site or stored in a tank/bowser prior to removal off site.
b) All debris has now been isolated and all contaminated water holding areas have been cleaned and emptied.
c) It is at this stage that site management should decide whether it is appropriate to remove the surface water protection measures, or repeat areas of the clean-up.

12.2.2 If the clean-up operation has been deemed complete, the surface water protection measures can now be removed. This will be achieved using the following methods:

a) Account for all consumables that have been used in the fire and re-order / replace immediately.

b) Restack, and re-locate all items used for the surface water protection during the fire to their storage locations ready for future deployment.
c) Check monthly that items are still present and correct and still serviceable for use in an emergency.

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

12.2.4 Due to the nature of the site's customers, there are no regular waste contracts which need to be dealt with if the site is closed for a period of time due to any incidents. Most waste is accepted on a one-off basis from members of the public or local businesses. In the event that the site is not able to receive wastes the customer will be offered alternative authorised facilities where they can take their waste.

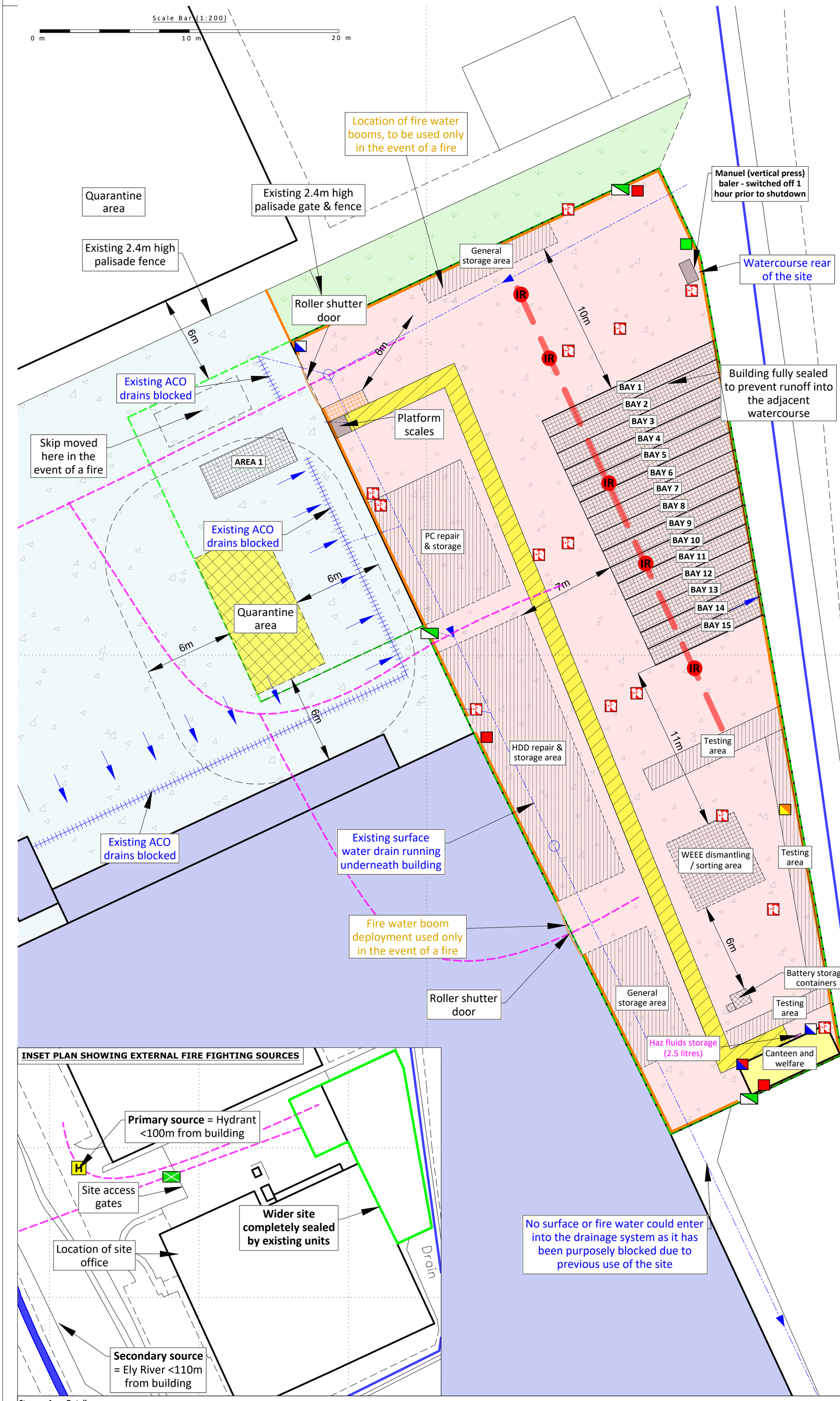
## 12.3 Post fire site recovery

12.3.1 If a recovery procedure is required, Intelligent Lifecycle Solutions Ltd would instigate the following;

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

# Appendix I

# Drawings




**Oaktree Environmental Ltd**
Waste, Planning and Environmental Consultants

**DRAWING TITLE**
SITE LAYOUT & FIRE PLAN

**CLIENT**
Intelligent Lifecycle Solutions Ltd

**PROJECT/SITE**
Unit 4, Dinas Isaf Industrial Estate, Williamstown, Tonypandy CF40 1NY

| SCALE @ A2 | JOB NO | CLIENT NO |
|---|---|---|
| 1:200 | 002 | 2904 |

| DRAWING NUMBER | REV | STATUS |
|---|---|---|
| DIIE/2904/03 | C | Issued |

| DRAWN | CHECKED | DATE |
|---|---|---|
| CP | -- | 06.01.22 |

**Lime House, Road Two, Winsford, Cheshire, CW7 3QZ**
**t: 01606 558833 | e: sales@oaktree-environmental.co.uk**

**NOTES**


REVISION HISTORY

| Rev | Date | Init: | Description: |
|---|---|---|---|
| - | 22.4.21 | CP | Initial Drawing |
| A | 20.7.21 | CP | NRW comments |
| B | 03.11.21 | CP | NRW comments |
| C | 06.01.22 | CP | NRW comments |

Key:
- Permit boundary
- Waste storage areas
- Non-waste storage areas
- Out-of-hours plant storage
- Pedestrian walkway
- Waste storage and treatment building
- Third party building with 24/7 access
- Concrete surfaces
- Unsurfaced areas
- Mains water point (hoses)
- Spill kit & containment kits
- Fire water containment equipment
- Fire fighting equipment (extinguishers, blankets etc.)
- Access routes for emergency vehicles
- Fire alarms including break glass and horns
- Surface water fall direction
- ACO drain (**blocked**)
- Underground surface drainage system (**blocked**)
- Manhole
- Plant /electrics shut off
- Fire assembly point
- Fire doors / escapes
- CCTV cameras (indicative)
- Emergency services box
- 1m high concrete wall with steel cladding to the roof
- H Fire hydrants
- IR Infra red / heat detection camera
- Fire water boom deployment location
- Optical infra-red, heat and flame detection system beam sensor

**Storage Area Details**

| Plan Ref | Description | Storage type | Containment / type | Max width (m) | Max length (m) | Storage height (m) | Conversion factor used | Max volume (m3) | Max storage time | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| AREA 1 | Baled and manual sorted ferrous metal arising from the WEEE dismantling area | Sealed 35 yard cubic yard roll on roll off skip | Skip acting as containment | 2.44 | 6.09 | 2.1 | 1 | 31 | <1 week | Skip will be removed sooner when full |
| BAYS 1 - 11 | Storage area for wastes arising from repair, refurbishment and dismantling of WEEE. Areas will contain non-ferrous metal, printed circuit boards & plastics | Tonne bags, boxed or wrapped | Sealed building | 12 | 12.5 | 2 | 1 | 150 = The bays are never full and in total will never reach 50% capacity | <72 hours | The volume of the bays continually varies throughout the day but the site never stores 50% of the maximum it could store therefore the volume has been based on 50% of the maximum storage available. The waste in the bays is usually removed daily due to the financial value. Not all waste is stored to a height of 2m. |
| BAYS 12 - 15 | Complete set top boxes awaiting dismantling | Tonne bags or boxes | As above | 5.5 | 8 | 2 (stacked two high) | 1 | 45 = As above | <72 hours | As above |
| **BAYS 1 - 15 TOTAL VOLUME** | | | | 17 | N/A | As above | | **195** | | |
| WEEE sorting & dismantling area | Incoming WEEE (set top boxes) which require assessment prior to repair, refurbishment or dismantling | Free standing | No containment required | 5 | 5 | 1 | 1 | 5 | Working day = 11 hours, area clear 1 hour prior to shutdown | Although the area measures 25m2 the actual storage is much less as they are continually sorted into waste and re-usable items. The area is not a storage area and acts as a sorting area which is clear out-of-hours. |
| Batteries | Lead acid batteries & other batteries i.e. lithium | Sealed plastic container with acid resistant base | Sealed container | 1 | 1.2 | 0.835 | 1 | 1 | <4 weeks | The actual storage volume is much less and is based on what the container could hold. |

**CONVERSION FACTORS**

**Conversion factors for waste piles are worked out using the following methods set out by Natural Resources Wales**

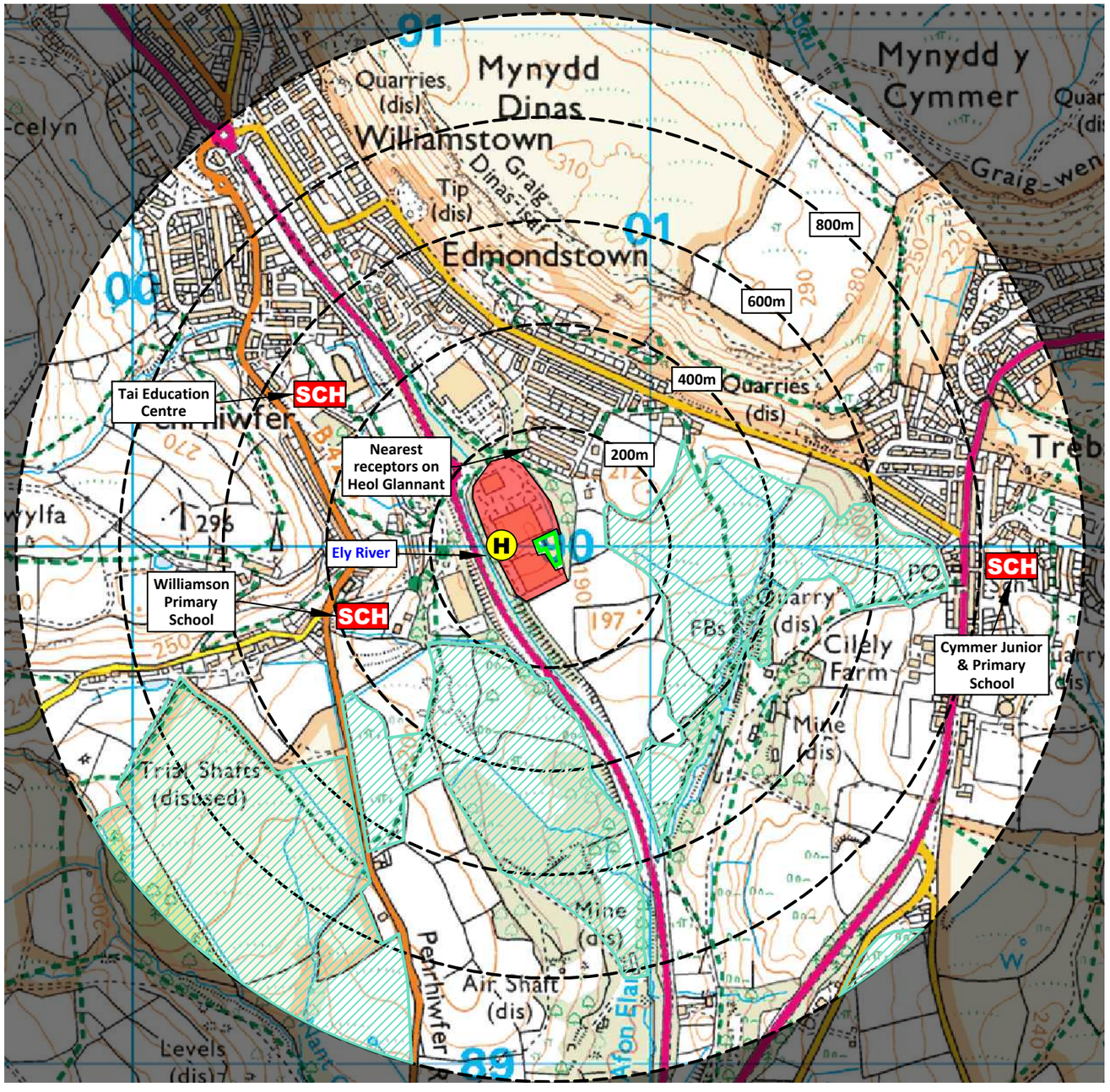
**The maximum length width pile is based on the largest dimension – the volume of the pile has been calculated using the area x height x relevant conversion factor**

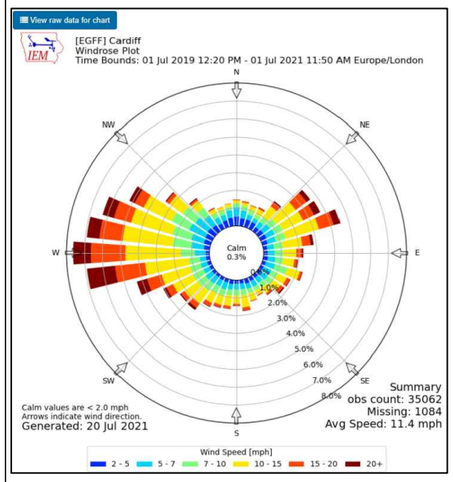
**Conversion of 1 for materials stored within containers, area of storage in stackable containers and waste/bale stacks**

**Conversion of 0.3333 for waste stored in a free-standing stockpile**

**KEY:**

- Permit boundary
- Surface water (river / stream / beck)
- Surface water (estuary / pond / pool / lake / sea)
- Dinas Isaf Industrial Estate
- Workplaces (includes agriculture industry, commerce and retail)
- Residential blocks
- Class A roads
- Class B roads
- Class C roads
- Nearest fire hydrant
- Railway line
- School
- Woodland areas
- Protected sites Rhos Tonyrefail - SSSI




Compass Wind Rose for Cardiff (EGFF) Period 2019-2021
*- source: Iowa State University*

Scale Bar (1:10,000)

0 m 500 m 1000 m

**NOTES**

1. Boundaries are shown indicatively.
2. Wind rose data shows the prevailing wind direction to be blowing from the west.



REVISION HISTORY

| Rev: | Date: | Init: | Description: |
|---|---|---|---|
| - | 20.07.21 | CP | Initial drawing |

Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

**DRAWING TITLE**
RECEPTOR PLAN

**CLIENT**
Intelligent Lifecycle Solutions Ltd

**PROJECT/SITE**
Unit 4, Dinas Isaf Industrial Estate, Williamstown, Tonypandy CF40 1NY

| SCALE @ A3 | CLIENT NO | JOB NO |
|---|---|---|
| 1:10,000 | 2904 | 002 |

| DRAWING NUMBER | REV | STATUS |
|---|---|---|
| DIIE/2904/04 | - | Issued |

| DRAWN BY | CHECKED | DATE |
|---|---|---|
| CP | -- | 20.07.21 |

**Lime House, Road Two, Winsford, Cheshire, CW7 3QZ**
**t: 01606 558833 | e: sales@oaktree-environmental.co.uk**

# Appendix II

# Record Keeping Forms

| **INTELLIGENT LIFECYCLE SOLUTIONS LTD<br>DAILY WASTE MONITORING FORM (MONDAY – FRIDAY)– ILS/RF/3** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DAY:** | | | | | | | |
| **TIME** | **06:00** | **08:00** | **10:00** | **12:00** | **14:00** | **16:00** | **18:00** |
| Bay 1 check <50% | | | | | | | |
| Bay 2 check <50% | | | | | | | |
| Bay 3 check <50% | | | | | | | |
| Bay 4 check <50% | | | | | | | |
| Bay 5 check <50% | | | | | | | |
| Bay 6 check <50% | | | | | | | |
| Bay 7 check <50% | | | | | | | |
| Bay 8 check <50% | | | | | | | |
| Bay 9 check <50% | | | | | | | |
| Bay 10 check <50% | | | | | | | |
| Bay 11 check <50% | | | | | | | |
| Bay 12 check <50% | | | | | | | |
| Bay 13 check <50% | | | | | | | |
| Bay 14 check <50% | | | | | | | |
| Bay 15 check <50% | | | | | | | |

| **INTELLIGENT LIFECYCLE SOLUTIONS LTD<br>DAILY WASTE MONITORING FORM (SATURDAY - SUNDAY)– ILS/RF/3** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DAY:** | | | | | | | |
| **TIME** | **06:00** | **08:00** | **10:00** | **12:00** | | | |
| Bay 1 check <50% | | | | | | | |
| Bay 2 check <50% | | | | | | | |
| Bay 3 check <50% | | | | | | | |
| Bay 4 check <50% | | | | | | | |
| Bay 5 check <50% | | | | | | | |
| Bay 6 check <50% | | | | | | | |
| Bay 7 check <50% | | | | | | | |
| Bay 8 check <50% | | | | | | | |
| Bay 9 check <50% | | | | | | | |
| Bay 10 check <50% | | | | | | | |
| Bay 11 check <50% | | | | | | | |
| Bay 12 check <50% | | | | | | | |
| Bay 13 check <50% | | | | | | | |
| Bay 14 check <50% | | | | | | | |
| Bay 15 check <50% | | | | | | | |

## INTELLIGENT LIFECYCLE SOLUTIONS LTD
## SITE INSPECTION FORM (DAILY INSPECTIONS) – ILS/RF/4

| WEEK STARTING | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TYPE OF INSPECTION** | **DAY** | | | | | | |
| | **M** | **T** | **W** | **T** | **F** | **S** | **S** |
| SITE ENTRANCE/NOTICE BOARD | | | | | | | |
| SECURITY - GATES | | | | | | | |
| SECURITY - FENCING | | | | | | | |
| SITE ROADS (CLEAR FROM HAZARDS) | | | | | | | |
| IMPERMEABLE CONCRETE AREAS (INTEGRITY) | | | | | | | |
| BUND AROUND CONCRETE PAD (INTEGRITY) | | | | | | | |
| HOLDING TANK / SUMP | | | | | | | |
| BAY WALLS (STRUCTURAL INTEGRITY) | | | | | | | |
| FIRE BREAKS IMPLEMENTED (WHERE NECESSARY) | | | | | | | |
| WASTE STORAGE LIMITS | | | | | | | |
| STORAGE LIMITS | | | | | | | |
| COMBUSTIBLE WASTES (AWAY FROM POTENTIAL IGNITION SOURCES) | | | | | | | |
| REJECTED WASTE TYPES / STORAGE | | | | | | | |
| NOISE LEVELS | | | | | | | |
| FIRES (ANY INCIDENTS REPORTED) | | | | | | | |
| QUARANTINE AREA CLEAR OF WASTE | | | | | | | |
| NO SMOKING SIGNS IN PLACE | | | | | | | |
| FIRE FIGHTING EQUIPMENT | | | | | | | |
| PLANT/EQUIPMENT MAINTENANCE CHECKS | | | | | | | |
| FIRE WATCH (DUST/FLUFF ACCUMULATION CLEANED REMOVED) | | | | | | | |
| OFFICE/WELFARE FIRE RISKS CHECKED | | | | | | | |
| LITTER | | | | | | | |
| DUST | | | | | | | |
| ODOUR | | | | | | | |
| VERMIN | | | | | | | |
| RECORDS | | | | | | | |
| COMPLAINTS RECEIVED | | | | | | | |
| OTHER (SEE NOTES BELOW) | | | | | | | |
| INSPECTION CARRIED OUT BY | | | | | | | |

**NOTES/ACTION (CONTINUE ON A SEPARATE SHEET IF NECESSARY):**

| | | | |
|---|---|---|---|
| **CHECKED BY** | | **SIGNATURE** | |
| **POSITION** | | **DATE** | |
| ***Sheet*** | | ***of*** | |

## INTELLIGENT LIFECYCLE SOLUTIONS LTD
## PREVENTATIVE MAINTENANCE CHECKLIST – ILS/RF/5

| | |
|---|---|
| **CHECKED BY** | **POSITION** |
| **DATE** | **DATE OF LAST CHECKLIST** |

| | **EQUIPMENT ITEM** | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| **OFFICIAL MAINTENANCE CHECK REQUIRED (Y/N)** | | | | | | |
| **IF NO, DATE OF LAST CHECK** | | | | | | |
| **IF YES, DATE OF NEXT CHECK** | | | | | | |
| **IS ITEM IN CORRECT WORKING ORDER** | | | | | | |
| **LEAKS /FAULTS?** | | | | | | |
| **IF NO, WHAT REPAIRS ARE REQUIRED (USE SEPARATE SHEET IF REQUIRED)** | | | | | | |
| **WERE REPAIRS DETAILED ON THE LAST CHECKLIST** | | | | | | |
| **IF YES, HAVE THEY BEEN CARRIED OUT** | | | | | | |
| **ADDITIONAL REPAIRS OR ACTIONS REQUIRED** | | | | | | |

# INTELLIGENT LIFECYCLE SOLUTIONS LTD - EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW

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

# Appendix III

# The Site's Emergency Plan (Working Document)

Intelligent Lifecycle Solutions

# Emergency Plan


## Unit 4, Dinas Isaf Industrial Estate, Williamstown, Tonypandy, CF40 1NY

## WEEE REUSE FACILITY

| | |
|---|---|
| **Date Plan Prepared:** | 1st October 2014 |
| **Prepared by:** | Stephen Powell (Compliance Manager) |
| **Date Plan Reissued:** | 19th January 2021 |
| **Issued by:** | Andrew Morgan (Operations Director) |
| **Date Plan Revised:** | 19th January 2021 |
| **Revised by:** | Stephen Powell (Compliance Manager) |

Intelligent Lifecycle Solutions

## Emergency Plan Contents

## 1. Introduction:

This Emergency Plan has been drawn up to provide advice and guidance on the necessary steps to follow in the event of an emergency situation. In general terms, the plan will be brought into operation if there has been, or if there is likely to be, significant personal injuries or damage to physical property.

## 2. Objective:

To make maximum use of the combined resources of the internal and external support services in the event of an emergency situation occurring on site, in order to:

- Safely evacuate the premises
- Save life and effect the rescue and treatment of casualties
- Minimize damage to property and to the environment
- Initially contain and then to bring the incident under control
- Provide authoritative information for the news media
- Secure safe and rapid return to normality
- Preserve records

## 3. Emergency Controller & Deputies:

The Emergency Controller for the site is the Site Operations Manager who is responsible for making the decision to initiate the Emergency Plan. In his absence, a Deputy will take charge.

Currently these posts are held by:

- Emergency Controller — Andrew Morgan – Company Director
- Deputy Controller — Blaine Llewellyn – Operations Manager
- Deputy Emergency Controller: — Stephen Powell – Compliance Manager

## 4. Types of Emergency:

There will be a very limited range of incidents which will trigger the use of the Emergency Plan. In general, these Emergency Incidents may include:

- the discovery of a fire
- the discovery of explosives and/or bombs and shells
- the discovery of radioactive sources e.g. isotopes
- the discovery of drums/items of highly toxic materials
- the discovery of potential terrorist activities and security breaches

For detailed advice on the site procedure to be followed to deal with one or more of the above emergencies, please see 14.1-14.6 inclusive.

## 5. Organization:

| | | |
|---|---|---|
| • Emergency Controller (EC) | Andrew Morgan<br>02921 21678007 | Operations Director<br>Mob. 07925 671019 |
| • Deputy Controllers (DC) | Blaine Llewellyn<br>02921 21678007<br>Stephen Powell<br>Compliance Manager | Operations Manager<br>Mob. 07769 227909<br><br>Mob. 07983 096294 |
| • Emergency Control Post (ECP) | Main Evacuation Point = Front Entrance Main Car Park | |

## 6. Implementation:

On being informed of an emergency situation, the Emergency Controller or his Deputy, will assess the situation and then make the decision whether to implement the Emergency Plan. He or his Deputy will man the Emergency Control Post throughout the incident and be responsible for:

- Advising the Operations Director of the situation
- Assembling the Emergency Team
- Informing the Rescue Services (Police, Fire, Ambulance as required)
- Authorizing holding action pending the arrival of offsite assistance (this may include total evacuation)
- Keeping a log of events
- Dealing with all media enquiries, by involving Graham Davy, (Chief Executive Officer: Global Intelligent Lifecycle Solutions), or in his absence Andrew Morgan, (Operations Director) to prepare a press release.
- Deciding when the emergency is under control and re-occupation may take place

## 7. Initiation of the Emergency Plan:

- When the Emergency Controller has decided that there is an emergency situation, he will authorize the continuous sounding of the siren (aka fire alarm), if not already triggered.
- A roll call including visitors' book will be obtained from appropriate places (communications officer)
- If the siren is sounding continuously, all staff will switch off the plant under their control and evacuate to then Emergency Assembly Point Fire Zone Areas at the Front Gate at the front gate in the main car park and await further instruction.
- The Communications officers will be at the front gate in the Main Car Park to carry out a roll call. Here the employees and non-employees (i.e. contractors, visitors) on site will be identified and checked of the log. This is via the employee listing, allied with the roll call report, Visitors Book.
- Staff will remain at the Front Gate in the Main Car Park Fire Zone Areas until the all clear is given.
- Visitors are allowed to leave the premises when and only when they have had their name marked off and got approval from the communications officers.

## 8. Review:

After an emergency, the circumstances and action taken to deal with the emergency, will be reviewed and a report prepared outlining recommendations, both to prevent a recurrence and, if necessary, to improve the response or to modify the Emergency Plan arrangements.

## 9. Training:

All staff should be familiar with the Emergency Plan and will receive appropriate training during their induction. The Emergency Plan will be tested via a controlled exercise at least once a year and reviewed to ensure that it is consistent within the current operations on site. Copies of the Emergency Plan are to be found in the following areas:

- General notice boards
- Main Office
- Health & Safety master file
- All employees given personal copies, which will be signed for

## 10. List of Useful Telephone Numbers:

| Contact | Telephone Number |
|---|---|
| **Andrew Morgan**<br>**Operations Director** | Tel. 02921 21678007or 07925 671019 |
| **Stephen Powell**<br>**EQS Manager ILS Global** | Tel. +44 (0) 7983 096294 |
| **Fire & Rescue** | Tel: 999 |
| **Ambulance** | Tel: 999 |
| **Police** | Tel: 999 |
| **Hospitals A&E**<br>Llantrisant Royal Glamorgan Hospital | Tel:<br>01443 443443 |
| **Property maintenance- e-Cycle** | Landlord |
| **Security** e-**Cycle** | Landlord Internal Gilbert Csemer |
| **Natural Resources Wales** | 0800 807060 |

## 11. Dealing with the Media:

If the media wish to gain information after a major incident or emergency situation on site, e.g. fire, explosions and accidents involving our personnel or vehicles/equipment which cause serious injuries or fatalities, please refer all reporters from local or national media (press, radio, television etc.) to Andrew Morgan, (Director), or in his absence, Blaine Llewellyn (Operations Manager) Stephen Powell, (Compliance Manager).
Whenever possible, contact Andrew, Blaine or Steve (by phone) to pre-warn that a member from the media will be phoning.

Ideally, is best to contact Andrew if you think the incident may attract or warrant media attention.

If articles, news items do occur, forward copies or a note on its impact to Graham Davy, (Chief Executive Officer: Global Intelligent Lifecycle Solutions), or in his absence Andrew Morgan, (Operations Director).

## 12.1 Summary Information for Operational Site Staff Emergency Plan - Porth

**Summary:**

The Emergency Plan has been designed to deal with emergency incidents i.e.

1. Discovery of fire, especially potentially involving gas and cylinders.
2. Discovery of explosives e.g., bombs and shells.
3. Discovery of radioactive sources e.g., isotope holders
4. Discovery of highly toxic materials e.g., toxic materials which could result in significant personal injuries or damage to plant.
5. Discovery of potential terrorist activities and security breaches.

Note, small, localised fires or incidents will be tackled as a matter of routine by those people trained to use fire extinguishers or deal with such incidents.

## 12.2 Procedure to be followed on site:

1. In the event of an emergency, the person first on the scene must immediately raise the alarm, and then inform their Supervisor/Manager or the Emergency Controller. The person must then evacuate to the Emergency Assembly Points - Fire Zone Areas - and stand in their zone.
2. If the siren (aka fire alarm) sounds continuously, all persons on site should switch off the power of plant under their control and evacuate to the evacuation/assembly point - located in the Front Gate in the Main Car Park. A roll call will be taken and you will remain there until the ALL CLEAR is given.
3. The communications officers situated in the Office foyers will collect the grab bag and take the information over to the Emergency Assembly Points - Fire Zone Areas - to pass to the Fire Brigade if necessary.
4. All operational site staff must sign-in and out of site, to enable the Emergency Team to account for them quickly when completing the roll call in the Emergency Assembly Point. Designated Fire Wardens have been established to make sure that all personnel leave their areas calmly and quickly in the event of a fire evacuation. You must follow their instructions.

Note every 4th Monday morning, a fire alarm practice will take place, this is a short Spells of the fire Alarm, this is testing different zones.

**12.3 Pollution Incidents:**

- In the event of all pollution incidents affecting or likely to go down the sites drains or through the interceptors, therefore affecting controlled waters, report it IMMEDIATELY to the Emergency Controller.
- Always remember to wear the appropriate Personal Protective Equipment (PPE).
- NEVER wash the spill into drains or manholes or allow them to seep into the ground.
- Never use to detergents to clean area.
- Keep the spill as small as possible by using oil granules, sand or dammit mats and place this down slope.
- Use the correct spillage kit for the job:

| Oil Only | General Purpose | Chemicals |
|---|---|---|
| Oil, Petrol and Lubricants | Oil, Diesel, Coolants, Mild Solvents and Water | Acids, Caustics and when liquid unknown |

- Always replace the spillage kits that you have used as soon as the spill has been cleaned up properly.
- Prevent vehicles, plant and pedestrians entering the area.
- Cover / block up any nearby gullies and drains with the booms and dammit mats.
- Clean up the area as soon as possible to prevent any access liquid entering the drains.
- Ensure that all the used spill kits and absorbent materials are stored in an appropriately bunded container - take the container to the spill record details on the resister on the spill kit.

**Oil and Diesel Spills:**

Remember to follow all the general guidelines but also do the following:

- Remove all possible sources of ignition.
- Ensure that the container, tank, plant or equipment does not require repairing / maintenance modification to prevent another spillage.
- Inform the Emergency Controller as soon as possible.

**Leaks:**

**Chemicals:**

Remember to follow all the general guideline but also do the following:

If there has been contact with the chemicals - GET FIRST AID

**Lead Acid – Car and Server Batteries:**

Remember to follow all the general guideline but also do the following:

If there has been contact with the chemicals – GET FIRST AID

- Remove all sources of ignition.
- Ensure the container has not got any holes in it, if it does inform your Supervisor / Manager immediately

**12.4 Organisation:**

**The Emergency Plan:**

All employees will have received an individual copy of the Site Emergency Plan and received instruction on how the Plan will function.

Any further queries on the Site Emergency Plan should be discussed with your Supervisor / Manager or the Emergency Controller or his Deputies.

## 12.5 Summary Information for Office Staff Emergency Plan – Porth

**Summary:**

The Emergency Plan has been designed to deal with emergency incidents i.e.

1. Discovery of fire, especially potentially involving gas and cylinders.
2. Discovery of explosives e.g., bombs or shells.
3. Discovery of radioactive sources e.g., isotope holders.
4. Discovery of highly toxic materials e.g., toxic materials which could result in significant personal injuries or damage to plant.
5. Discovery of asbestos contaminated in feed material.
6. Discovery of potential terrorist activities and security breaches.

**Procedure to be followed on site:**

1. In the event of a major emergency, the person first on the scene must immediately raise the alarm, and then inform their Supervisor/Manager or the Emergency Controller. The person must then evacuate to the Emergency Assembly Points - Fire Zone Areas and stands in their zone.
2. If the siren sounds continuously, all personnel should evacuate their areas of the building immediately and go straight away to the Emergency Assembly Points - located at the front gate in the Main Car Park. A roll call will be taken, and you will remain there until the ALL CLEAR is given.
3. Banksman/ Security Guard (including temps) must monitor closely the signing in and out of all staff and visitors. All visitors should **sign and print** their names into the Visitors' Book and be issued with a Visitors Pass and information sheet, and then the visitor should return the pass and **sign and print** their name to book out again. In the event of an evacuation the Banksman/Security Guard is to take the signing in and out sheet and Visitors Book to the RED ZONE. All temporary Banksman/Security Guards need to be inducted on the Emergency Plan by the permanent staff.
4. All office staff must tick **in and out** of the building, on the Attendance Sheet every morning upon arrival, and every evening before leaving, they must also remember to book out whenever they leave site for any reason, and then tick back in upon their return to the office.
5. Designated Fire Marshalls have been established to make sure that all personnel leave their areas calmly and quickly in the event of a fire evacuation. You must follow their instructions.
6. All office staff should ensure all visitors including temporary staff not on the standard Attendance Sheet have a Visitor Pass.

Note every 4th Monday a fire alarm practice will take place, this is a series of spell of the fire alarm, this is testing different zones.

**Organisation:**

**The Emergency Plan:**

All employees will have received an individual copy of the Site Emergency Plan and received Instruction on how the plan will function.

Any further queries on the Site Emergency Plan should be discussed with your Supervisor / Manager or with the Emergency Controller or his Deputies.

Intelligent Lifecycle Solutions

# ILS e-Recycling Porth

## SECURITY, HEALTH & SAFETY INFORMATION SHEET
## ARRANGEMENTS FOR VISITORS

### WELCOME & REQUEST.

Welcome to ILS E-Recycling Porth SW. The following information has been compiled for your own health and safety. Please take a few minutes to read this information and familiarise yourself with the fire exits and other health and safety arrangements on site.

Visitors entering the buildings have a legal duty of care to themselves and other so are asked to co-operate and comply with any measures taken by ILS to ensure their health and safety whilst on site.

Visitors are required to return to the Security desk to book out of the premises, and return their Visitors Pass to the Banksman/Security Guard.

You will be notified when you arrive if a fire practice is planned – Note.

### IDENTIFICATION / SAFETY

For your own safety and for security purposes, all Visitors are required to book in at the Main Office Reception by signing the Visitors Book and receive a Visitors Pass. Please keep this Visitors' Pass with you until you leave when you must sign out in the Visitors' Book and return your Visitors Pass.

### KEY HEALTH & SAFETY PERSONNEL

Here at Porth SW, the Site Operations Manager, and deputies act as our Emergency Controller, for the whole site including Head Office, in the event of a site evacuation when he or they will take control of the situation. He is supported by a team of trained Deputies and Fire Wardens across the site and offices.

### FIRE INSTRUCTIONS

If you discover fire

- Go to your nearest fire exit and activate the fire alarm, by pushing the glass seal inwards or raise the alarm with staff.
- Evacuate to the Fire Zone Areas, located in the Main Car Park.
- All Visitors should go to the evacuation point, to be checked off the Visitors list by the communications officer who is responsible for roll call checks.

On hearing the fire alarm

- Leave the building by the nearest fire exit.
- Do not run.
- Do not stop to collect your belongings.
- Assemble in the Emergency Assembly point, located in the adjacent the main office block.

### SMOKING

There is a no smoking policy at ILS Porth. People wishing to smoke **must** go outside to the designated smoking areas.

### FIRST AID

First Aiders officers for the office area are:

The first aid room is situated in the training room, located on the mezzanine floor above the electronic waste section. All accidents must be recorded in the Accident Book, which is held in the main Office. First aid kits are kept in the First Aid Room and by the First Aiders and aid will be administered by a trained First Aider.

Thank you for taking time to read this Information Sheet we trust you have a safe and pleasant visit. If you need help or assistance during your visit, please ask a member of staff.

## 12.7 Summary Information for Contractors
## Site Emergency Evacuation Plan - Porth

**Summary:**

The Emergency Plan has been designed to deal with emergency incidents only i.e.

1. Discovery of fire, especially potentially involving gas or cylinders.
2. Discovery of explosives e.g., bombs and shells.
3. Discovery of radioactive sources e.g., isotope holders.
4. Discovery of highly toxic materials e.g., toxic materials which could result in significant personal injuries or damage to plant.
5. Discovery of potential terrorist activities and security breaches.

**Procedure to be followed on site:**

In the event of a major emergency the contractor, must immediately inform a ILS employee who will inform their Supervisor/Manager or the Emergency Controller.

The need for an emergency evacuation will be signified by the continuous sounding of the siren (aka fire alarm). When the alarm sounds continuously, switch off the power to the plant under your control and evacuate to the evacuation /assembly area - located at the front gate at the front gate in the main car park and roll call will be taken. All contractors will remain there until the ALL CLEAR is given or the communications officer has said it is ok to leave.

Note every 4th Monday morning, a fire alarm practice will take place, this is a series of short spells of the fire alarm, this is testing different zones.

**Organisation:**

All contractors will be given a copy of this summary for Contractors from the site Emergency Plan and individuals will have also received a copy of the arrangements for Visitors.

| | |
|---|---|
| Andrew Morgan | Office area |
| **Communications Officers** | **Area Covered** |
| Andrew Morgan | Office Area |
| Blaine Llewellyn | Production Floor |

## 13 Procedures for Dealing with Emergencies:

### 13.1 Discovery of Fire:

Raise the fire alarm by breaking the glass at the nearest fire alarm point. Then evacuate the building, using the nearest fire exit route and go to the Emergency Assembly Points (Fire Zone Area) at the front gate in the main car park, and stand in your appropriate zone.

**BEFORE YOU TACKLE ANY FIRE - THINK: UNLESS YOU ARE 100% CONFIDENT - JUST RAISE THE FIRE ALARM EVACUATE THE BUILDING IMMEDIATELY.**

**Fires Potentially Involving Gas Cylinders:**

Such incidents are very rare and usually develop from an uncontrolled situation involving small local fires. If, however, an uncontrolled fire starts then action should be taken as the hazards associated with such incidents is that of exploding cylinders and the projection of missiles for some considerable distance. It is therefore essential that persons do remove to a safe distance and raise the fire alarm.

**Action:**

1. All persons on site should be withdrawn (via sounding the alarm) and the Emergency Controller who will assess the need for the local emergency fire services notified.

2. Consideration should also be given to the possible risks to offsite persons and the consequent need to evacuate nearby businesses and/or closing off public roads. In this respect the advice of the police and/or emergency fire services should be sought.

3. No firefighting should be attempted without the express authority of the Emergency Controller. However, the Emergency Team will ensure that the emergency fire services have uninterrupted access to the incident and that water hydrants are available for use.

**Discovery of Explosives:**

**Action:**

1. Any person discovering an explosive device, e.g. bombs should immediately take steps to prevent the device from being moved e.g. stopping machinery such as cranes and conveyors in the vicinity.

2. The Emergency Controller should be informed who will then notify the Police and ensure the area is cordoned off.

3. All persons on site should be evacuated until the situation is made safe and the all clear given.

## 13. Procedures for Dealing with Emergencies:

### 13.3 Discovery of Radioactive Sources (e.g., non conformant wastes):

The basic problem is one of recognition as X-rays and isotope holders come in a wide range of sizes and shapes. It is therefore more important to look for the international symbol for radiation which is the TREFOIL. This is a black triangle on a yellow background. In the Centre is a symbol not unlike a three bladed propeller. This symbol is shown below.

The weighbridge has radiation detectors, and a safe system of work to detect and isolate the radioactive item from the main load. Handheld detectors will be able to measure the level of radiation emission and evaluate the potential thread this poses.

**Action:**

1. **Contact:** Stephen Powell Radiation Protection Supervisor

2. As with electric fires, the dose of radiation falls off very quickly with distance. Hence once a significant source is found, ensure that it is not moved and then rope off the area to a minimum of 10 meters'.

3. Notify the Radiation Protection Supervisor –telephone or mobile.

4. Attempt to establish who supplied the source to site.

### 13.4 Discovery of Highly Toxic Materials:

**Action:**

1. If drums of highly toxic materials are identified, the Emergency Controller should be informed, and steps taken to ensure that the drums are not moved until the situation has been assessed.

2. If the drums are not leaking, they should be removed to a roped off area by persons wearing suitable protective clothing. If necessary, such clothing should be regarded as being contaminated and disposed of with the drums in question.

3. The Emergency Controller will seek advice as to the disposal of the drums.

4. If the drums are leaking, they should not be handled. Where possible, sand should be used to restrict contamination of the immediate area, until further advice is received.

### 13.5 Discovery of Potential Terrorist Activities & Security Breaches:

**Security Background:**

The site perimeter fencing is designed to prevent unauthorized access to the site. In addition, the site gate, site office and any machinery, plant, tanks and containers will be left secure at the end of each working day.

All storage area and waste containers / bunkers will also be left in a secure state at the end of the working day.

Emergency telephone numbers are displayed on the main site sign and also detailed at the beginning of this plan.

The site is manned outside of operational hours by security personnel who are trained on the contents of this Plan.

**Terrorism:**

A potential terrorist threat may be assumed if a suspicious unidentified package or potentially explosive devices is discovered on site.

**Action:**

1. If you discover any suspicious unidentified package left lying around the site or if any unusual potentially explosive devices discovered, e.g., bombs and or shells, you must immediately take steps to prevent the device from being moved e.g. stopping machinery such as cranes and conveyors in the vicinity.

2. The Emergency Controller should be informed who will then notify the Police and ensure the area is cordoned off.

3. All persons on site should be evacuated until the situation is made safe and “the all clear” is given.

### 13.6 Security Breaches:

Security breaches could include the following:

- Arson - follow what to do in case of a ‘Fire’ i.e., procedure outlined in section 14.1.
- Theft - contact the Police immediately and do not disturb anything.
- Protestors - contact the Emergency Controller.
- Vandalism - contact the Police. Do not attempt to stop the vandals.

**Action:**

In all cases of Security Breaches contact the Emergency Controller as soon as possible, in line with any other specific separate procedure, e.g., after contacting the Police or Fire Service, and advise him of the situation and / or your course of action.

### 13.7 Mercury Spillage:

When liquid mercury (also known as elemental mercury) is spilled it forms droplets that can accumulate and emit vapour to the air. Airborne mercury is odourless, colourless, and very toxic. Most mercury exposures occur by inhalation or by direct skin contact. **All mercury spills, regardless of quantity, should be treated seriously.**
In the event of a mercury spillage, try to confine the affected area to a minimum. Put on protective Gloves and Mask to reduce dust inhalation. Increase ventilation by opening the window. Try to reduce the spread of the spill as much as possible, in particular avoid getting mercury on the floor. NEVER USE A VACUUM CLEANER OR ASPIRATOR TO PICK UP MERCURY AND NEVER DISPOSE OF MERCURY IN THE SHARPES BIN.

What **NEVER** to do with a mercury spill

1. **Never** use a vacuum cleaner to clean up mercury. The vacuum will put mercury into the air and increase exposure. The vacuum appliance will be contaminated and have to be thrown away.
2. **Never** use a broom to clean up mercury. It will break the mercury into smaller droplets and spread them.
3. **Never** pour mercury down a drain. It may lodge in the plumbing and cause future problems during plumbing repairs. If discharged, it can cause pollution of the septic tank or sewage treatment plant.
4. **Never** wash mercury-contaminated items in a washing machine. Mercury may contaminate the machine and/or pollute sewage.
5. **Never** walk around if your shoes might be contaminated with mercury. Contaminated clothing can also spread mercury around.

**Cleanup Instructions:**

1. Put on **rubber** or **latex** gloves and a Dust mask.
2. If there are any broken pieces of glass or sharp objects, pick them up with care. Place all broken objects on a paper towel. Fold the paper towel and place in a zip lock bag. Secure the bag and label it as mercury waste.
3. Locate visible mercury beads. Use a piece of cardboard to gather mercury beads. Use slow sweeping motions to keep mercury from becoming uncontrollable. Take a torch, hold it at a low angle close to the floor and look for additional glistening beads of mercury that may be sticking to the surface or in small, cracked areas of the surface. **Note:** Mercury can move surprising distances on hard-flat surfaces.

4. Use an eyedropper to collect or draw up the mercury beads. Slowly and carefully squeeze mercury onto a damp paper towel. Place the paper towel in a thick polythene bag and secure. Make sure that the bag is labeled.
5. Sprinkle the powdered absorbent granules from the mercury spill kit on to the larger mercury beads. The absorbents will then bind the mercury so that it can be easily removed and suppresses the vapor of any missing mercury.
6. Place all materials used with the cleanup, including gloves, into a bag. Place all mercury beads and objects used in the cleanup into the bag. Secure the bag and label it.
7. This must then be disposed of as a hazardous waste.
8. Remember to keep the area well-ventilated to the outside (i.e., roller shutter doors open) for at least 24 hours after the cleanup. If sickness occurs, seek medical attention **immediately.**

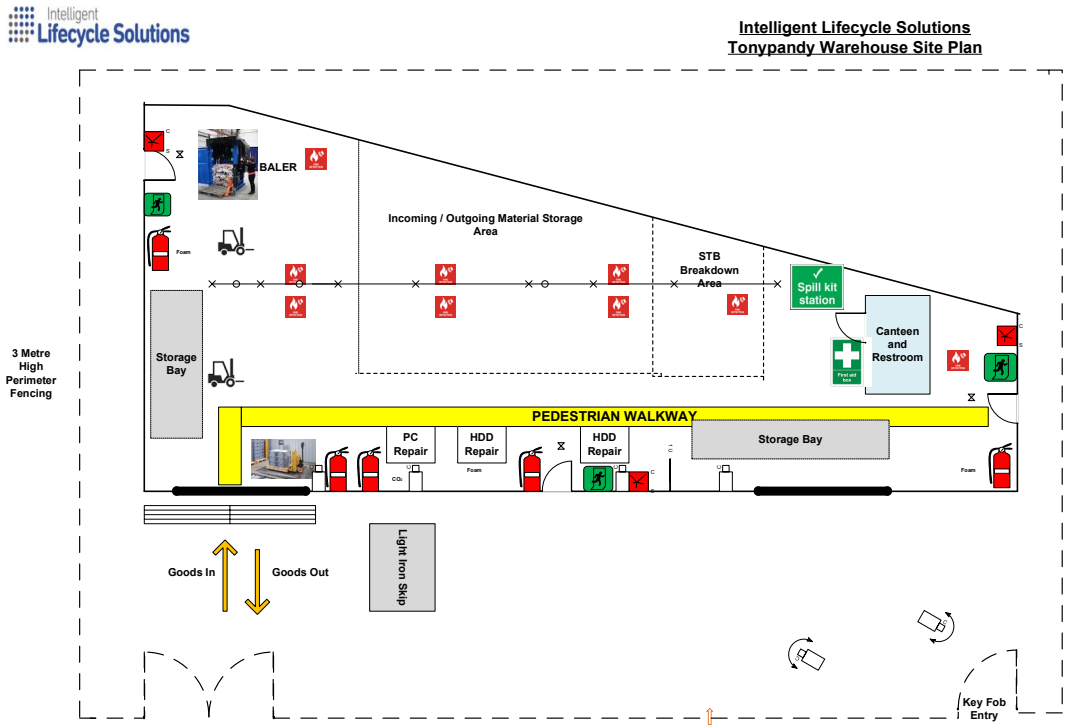
### 13.8 Toner Spillage:

Toner is a fine dust, and such materials can be irritants in themselves even when the material itself is not a problem. Avoid breathing toner particles in. Minimize skin exposure as well. A strong mix of toner and air will be combustible and quite likely to ignite with a spark. Toner is intended to carry strong electric charges on its surface. Vigorously stirring any quantity of toner in air is quite likely to produce an explosion. Special toner vacuums have motors rated as dust explosion proof and conductive hoses to dissipate charge to ground before an explosive condition exists. When cleaning any toner dust a dusk mask gloves safety goggles must be worn at all times. Toner cartridges must be placed into a completely sealed and lined container.

**Do Not** use hot water - it will melt the toner in place.

**Do Not** rub vigorously with a cloth or hard brush - vigorous action will tend to melt and smear any wax components.

# Appendix (i) SITE EMERGENCY PLAN WAREHOUSE SCHEMATIC




| Revision Date | Rev | Originator / Department | Approval / Department | Page |
|---|---|---|---|---|
| 19/01/2021 | 1 | S Powell Compliance Manager | Andrew Morgan / Director | 18 of 19 |

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## STAFF DECLARATION

I have received a personal copy of the Porth Site Emergency Plan with various attachments including the Emergency Assembly Points (Fire Zone Area), I agree to read the Plan so that I understand my obligations and what action I should take in case of discovering an actual or potential emergency including fire, and/or on hearing the continuous emergency siren (aka fire alarm) and how to evacuate the building.

If I have any queries on the Plan, I can speak to my Line Manager or Supervisor for clarification at any time.

Signature: _____ Date: 2nd March 2021

Name: _____