

Client: Checkfire Limited

Address: Sir Alfred Owen Way, Pontygwindy Industrial Estate, Caerphilly, CF83 3HU



**Checkfire Limited, Unit 10B, Sir Alfred Owen Way,  
Pontygwindy Industrial Estate, Caerphilly, CF83 3HU**

**Application for Bespoke Environmental Permit**

**Environmental Management System (EMS)**




10 March 2026

Our Reference: Checkfire Ltd-EMS-RP03-Final, Rev B



**Waste And Industry Compliance Ltd**

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**Checkfire Ltd-EMS-RP03-Final, Rev B**

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# 1 INTRODUCTION

## 1.1 BACKGROUND

1.1.1 This Environmental Management System (EMS) has been prepared on behalf of Checkfire Limited (**the Operator**) for Unit 10B, Sir Alfred Owen Way, Pontywindy Industrial Estate, Caerphilly, CF83 3HU (**the Site**). It has been prepared in accordance with:

- Develop a management system: environmental permits (<https://www.gov.uk/guidance/develop-a-management-system-environmental-permits>), which was last updated on 3 April 2023;
- Guidance for the storage and treatment of aerosol canisters and similar packaged wastes (Environment Agency, NIEA, Version 1, November 2011).

1.1.2 Checkfire Limited was established in 1975 and is a leading supplier of fire extinguishers and high-quality ancillary equipment to trade customers in the UK and overseas. As part of the service to customers, the Operator seeks a bespoke Environmental Permit to authorise the return of fire extinguishers that are out of date or spent or no longer required by the client, so that they can be safely emptied and decommissioned. The proposed permit boundary is shown on Drawing 'Indicative Site Layout and Storage'-DW01.

1.1.3 The Site incorporates an enclosed and roofed concrete block and steel portal framed building fitted with impermeable concrete slab throughout. The building is fitted with a roller shutter vehicular access door and separate pedestrian access door. An external yard in front of the building comprises a combination of engineered concrete and block surface and is used for the storage of packaging waste in an enclosed and lidded skip. All packaging waste arises from the supply or return of fire extinguishers to or from customers.

1.1.4 Deliveries of out of date, spent or no longer required fire extinguishers are off-loaded and transferred into the building for storage and processing. A drainage channel inside the building leads to an internal dedicated concrete sump, where any inadvertent spillage of fire extinguisher media is collected before being pumped to an IBC for authorised disposal off-site.

1.1.5 In addition, a second lateral drain has been installed inside the building across the entire internal width of the roller shutter vehicular access door and pedestrian door to prevent any possible escape of liquid spillages to the external environment. The drain falls to a dedicated concrete sump. Any accidental spillages or leakage of liquid or foam from IBCs or fire extinguishers inside the building that drains towards the entrance doors would collect in the lateral drain then fall to the concrete sump, from where it would be pumped to an IBC inside the building for authorised disposal off-site. There are no drainage outlets inside the building to the external environment or public sewer.

1.1.6 A CCTV drainage survey was undertaken by AR Drainage Solutions on 13 November 2024. The Site Drainage Plan shows the foul sewer and storm water sewer on the external yard.

1.1.7 Site activities are summarised as follows:

- The receipt, storage and decommissioning of up to 60,000 out of date or spent or no longer required fire extinguishers per month (i.e. up to 720,000 units per annum);

- The storage and transfer of small quantities of non-hazardous packaging waste associated with the return of fire extinguishers to the Site (e.g. cardboard, plastic and paper packaging);
- Separately baling cardboard and plastic wastes on site;
- The emptying and transfer of spent or no longer required fire extinguisher foam media to an activated carbon absorption plant, which captures and contains contaminants in the carbon media, with the cleaned liquid media transferred into dedicated IBCs for off-site removal as a non-hazardous waste to authorised facilities. The used carbon absorption media is either transferred to an authorised facility for thermal destruction or returned to the supplier for off-site processing;
- The emptying and transfer of spent or no longer required fire extinguisher powder media to a bagging plant for collection in bulk 1 tonne bags for transfer off-site to an authorised recycling facility;
- The emptying and discharge of spent or no longer required deionised water to foul sewer in accordance with a Trade Effluent Discharge Consent issued by Welsh Water;
- The dismantling of empty foam, powder and deionised water fire extinguishers, with the metal and plastic components supplied to authorised off site recycling facilities. Dismantled metal components are transferred via a conveyor to a 40 cubic yard skip located inside the building for bulking up and transfer off-site to an authorised scrap metal recycling facility;
- The storage of out of date or spent or no longer required CO<sub>2</sub> fire extinguishers, prior to their off-site removal to an authorised facility for emptying of gas media, refilling with new media and reconditioning of the cannister for supply to customers. Any CO<sub>2</sub> cylinders that cannot be reconditioned off site are emptied and then returned to the Site for dismantling and recycling of metal and plastic components etc.

1.1.8 The capacity of fire extinguishers received at the Site typically ranges from 1 to 9kg of foam, powder or deionised water media. The total weight of a fire extinguisher filled with 9kg of media is 14kg, which includes the media, metal cannister, internal dip tube and nozzle. As a worst-case scenario, 720,000 fire extinguishers units per annum each weighing 14kg equates to 10,080,000 kg per annum (i.e. 10,080 tonnes per annum). In addition, up to 5,000,000 kg of packaging wastes (i.e. 5,000 tonnes) may be received at the Site. Therefore, the maximum annual waste throughput at the Site will be **15,080 tonnes**. Of this total, up to 1,500 tonnes per annum may be hazardous waste from foam filled fire extinguishers. However, the receipt of hazardous waste will be less than 10 tonnes per day and the maximum storage capacity of hazardous waste will be significantly less than 50 tonnes at any one time. Further details are provided in Section 3 below.

1.1.9 The Site will not accept nitrogen cylinders/canisters or halon filled fire extinguishers.

1.1.5 This EMS is submitted in support of the bespoke permit application and includes details of how the Site will be managed to minimise the risks of pollution from operations, maintenance, accidents, incidents and any non-conformances.

1.1.6 The Site has been designed to meet the requirements of Natural Resources Wales (NRW) 'Fire Prevention and Mitigation Plan (FPMP) Guidance (version 2, August 2017). A detailed FPMP has been

prepared for the Site (Ref: Checkfire Ltd-Fire Prevention Plan- RP04-Final) and is submitted in support of the permit application.

- 1.1.7 Any fuels or oils stored on Site will be kept in dedicated containers located within the building or in suitable tanks. Any tanks used for the storage of potentially polluting liquids will be either double skinned or located in an impermeable bunded area, with a capacity of at least 110% of the largest tank's contents.
- 1.1.8 No substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) Regulations will be used at the Site for the operation of the facility.

## 1.2 SITE SECURITY

- 1.2.1 The Site is fully secured. The roller shutter vehicle access door and pedestrian entrance and emergency exit doors are securely locked outside of operational hours. A comprehensive CCTV security system will be installed to provide complete coverage of the Site. This will ensure a high standard of site security is maintained. The high standard of site security to prevent and detect any attempts at unauthorised entry minimises the potential for arson attacks or vandalism.

## 1.3 THE SITE

- 1.3.1 The Site is located on the Pontywindy Industrial Estate, Caerphilly. It is bordered by other industrial units to the west, south and east. Sir Alfred Owen Way is located to the immediate north, beyond which there are further industrial units within the Industrial Estate. The Site is accessed off Sir Alfred Owen Way.
- 1.3.2 The nearest residential properties are circa 145m west on Pantycelyn Drive, 150m west on Herbert Drive, 160m southwest on Lewis Drive, 165m south southwest on Howard Drive, 200m southwest on Dyfed Drive and 200m west on Davies Drive. The nearest domestic properties east of the Site are on Pontywindy Road, circa 215m from the facility.
- 1.3.3 There is one European Site (i.e. Special Protection Area (SPA), Special Conservation Area (SAC) or Ramsar Site) within 10km of the Site, namely Cardiff Beech Woods (SAC), which is circa 4,190m south of the facility.
- 1.3.4 There are two Sites of Special Scientific Interest (SSSI) within a 2km radius of the Site, namely Llanbradach Quarry SSSI, circa 983m to the north northwest and Gwaun Gledyr SSSI, circa 1,700 to the southwest of the facility.
- 1.3.5 There are nine Sites of Importance for Nature Conservation (SINCs) within a 2km radius of the Site, namely:
- Nant yr Aber SINC, circa 344m south southeast of the facility;
  - Coed y Brain, Penyrheol SINC, circa 532m northwest of the facility;
  - Mynydd Dimlaith and Cwm-y-Bwch, southeast of Llanbradach SINC, circa 1,036m north northeast of the facility;
  - Rhymney River SINC, circa 1,187m east of the facility;

- Cwm yr Aber, South of Abertridwr SINC, circa 1,316m southwest of the facility;
- Mynydd Eglwysilan, north of Senghenydd SINC, circa 1,736m northwest of the facility;
- Gypsy Lane Wetland, south of Groeswen SINC, circa 1,792m southwest of the facility;
- Caerphilly/ Machen Disused Railway, east of Trethomas SINC, circa 1,848m southeast of the facility;
- Coed y Maerdy, east of Caerphilly SINC, circa 1,988m southeast of the facility.

1.3.6 There are Areas of Ancient Semi Natural Woodland circa 45m west southwest, 255m southwest and 340m southeast of the Site, with a belt of Ancient Woodland (Unknown Category) circa 255m east of the facility.

1.3.7 There are no Marine Special Protection Areas, National Nature Reserves, Biosphere Reserves or Local Nature Reserves within 2km radius of the Site.

1.3.8 There are no National Parks or Areas of Outstanding Natural Beauty (AONBs) within 10km of the Site. The nearest National Park is Bannau Brycheiniog, circa 27km north of the facility, whilst the nearest AONB is the Wye Valley AONB, circa 32km east of the facility.

1.3.9 The Site is not located in an Air Quality Management Area (AQMA).

1.3.10 Sensitive receptors are shown on Drawing 'Receptor Location Plan'.

## **1.4 OPERATIONAL HOURS**

1.4.1 The Site's opening hours are:

- 0630-1800 Monday -Friday
- Saturday 06.30-18.00 (typically once per quarter)
- Sunday and Bank Holidays – Closed.

1.4.2 Waste processing operations will take place throughout this period. The processing plant is not inherently noisy and the enclosed fabric of the building will provide noise attenuation.

## **1.5 METEOROLOGICAL CONDITIONS**

1.5.1 Meteorological Office predictions and recordings of local weather data (<https://weather.metoffice.gov.uk/forecast/gcjtqv99g#?date=2025-03-17>) will be reviewed by the Site Manager to allow forward planning and information gathering on the direction that smoke would travel from the Site in the event of a fire incident. Daily observations of weather conditions, including wind speed, direction and temperature, will be made so that Site operations can be rearranged to adapt to changing conditions where necessary.

## 2 WASTE ACCEPTANCE

### 2.1 WASTE TYPES AND QUANTITIES

2.1.1 The maximum waste throughput at the Site will be 15,080 tonnes per annum. Up to 150 tonnes will be stored on Site at any one time. Of this total, the maximum amount of hazardous foam and spent activated carbon powder (from the carbon absorption plant) stored on site will be 15 tonnes at any one time. The Site operates on a first in first out basis to ensure that wastes are received, processed and dispatched typically within 2 working days, although this may extend to 5 working days during busy periods.

2.1.2 Proposed permitted wastes are listed in Table 1 below.

**Table 1 Permitted Wastes**

ECW Code	Description
<b>15</b>	<b>WASTE PACKAGING</b>
<b>15 01</b>	<b>Packaging (including separately collected municipal packaging waste)</b>
15 01 01	Paper and cardboard packaging
15 01 02	Plastic packaging
15 01 03	Wooden packaging
15 01 04	Metallic packaging
15 01 05	Composite packaging
15 01 06	Mixed packaging
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 05</b>	<b>Gases in pressure containers and discarded chemicals</b>
16 05 04*	Gases in pressure containers containing hazardous substances
16 05 05	Gases in pressure containers other than those mentioned in 16 05 04

### 2.2 WASTE ACCEPTANCE PROCEDURES

2.2.1 Waste pre-acceptance procedures will ensure that only compliant waste types are accepted. Customers delivering waste to the Site will be required to provide the Operator, in advance, with all necessary information/documentation to satisfy the requirements of the Duty of Care and the Waste (England and Wales) Regulations 2011 (see below). The requirements for waste producers to provide pre-acceptance documentation that includes identification of any potential risks to the environment will help to identify any potential loads that should be rejected from the Site prior to delivery.

2.2.2 The Operator will check pre-acceptance documentation from suppliers to ensure that only permitted fire extinguishers and associated packaging wastes are approved for delivery to the Site. Non-permitted wastes, including nitrogen or halon filled fire extinguishers or any associated packaging waste that may be odorous or infected with vermin, flies or insects, will not be accepted. Customers will also be informed that the Site does not accept these types of fire extinguishers or odorous or infected packaging wastes. Pre-acceptance documentation will record:

- The waste description;

- The European Waste Classification (EWC) code;
  - The source and nature of the waste, including its physical form (e.g. if containing foam, liquid or powder media);
  - Type of propellant used in the fire extinguisher (e.g. nitrogen);
  - Whether the fire extinguishers are discharged, partially discharged or unused;
  - Construction material of fire extinguisher canisters, e.g. steel or aluminium or mixture of the two;
  - Any special handling measures;
  - Any potential risks to process safety, occupational safety and the environment;
  - Details of the waste producer (name, address and contact details);
  - Where the waste holder is not the producer, details of the waste holder (name, address and contact details);
  - Information on the nature and variability of the waste production process and the waste;
  - Age of the waste;
  - Type of packaging;
  - An estimate of the quantity to be received in each load and in a year.
- 2.2.3 Checks will also be made to establish whether the haulier is a Registered Waste Carrier or has a valid exemption from registration. Only registered carriers or those who are lawfully exempt from registration will be permitted to use the Site.
- 2.2.4 Waste will not be accepted if for any reason there is insufficient storage capacity available or if the Site is inadequately manned. This is to ensure that all waste is managed effectively to prevent pollution or loss of amenity.
- 2.2.5 Operational staff at the Site will be suitably trained and will follow documented procedures. They will examine the waste descriptions of incoming waste loads and the information will be checked against the previously supplied pre-acceptance documentation, six figure European Waste Catalogue Code(s) and other details on the Waste Transfer Note or Season Ticket or Hazardous Waste Consignment Note (as appropriate) and against the waste types permitted by the Environmental Permit.
- 2.2.6 Every delivery of waste will be recorded, detailing the date of the transaction, volume, waste type, registered carrier, Waste Transfer Note number or Hazardous Waste Consignment Note number, vehicle registration and other pertinent information against a unique reference number. It will allow for tracking of wastes, the generation of reports and waste returns, as well as providing comprehensive, auditable information.
- 2.2.7 The contents of waste loads will be inspected upon receipt, i.e. before storage and processing in the building. In the event that a load is non-permitted or unsuitable for receipt at the Site, e.g. if it comprises nitrogen or halon filled fire extinguishers or if any associated packaging is highly odorous or infested

with vermin and insects etc, it will not be allowed to unload and will be rejected. A record of the non-permitted load will be made.

- 2.2.8 Suitable waste loads will be unloaded by site operatives using a fork-lift truck where fire extinguishers are received in containers loaded on to pallets or manually for any loads that are not received on pallets. Fire extinguishers will be stored upright in dedicated containers, each located on a pallet, according to the media they contain, i.e. foam, powder, deionised water and empty CO<sub>2</sub> containers will be stored separately. This will help to ensure materials do not come into contact and are processed separately, so that the cleanliness of recyclable materials is maintained and wastes are processed on a first in first out basis.
- 2.2.9 In the event that any inadvertently non-permitted or unsuitable wastes are detected following unloading, they will either be reloaded onto the delivery vehicle where possible or if it has already left the Site will be loaded into a fully sealed, enclosed and lidded skip or container for isolation and quarantine. The quarantined wastes will be prioritised for rapid removal off-Site to an authorised facility, i.e. within 2 working days of receipt.
- 2.2.10 Any discrepancies found as a result of the checks detailed above will result in the vehicle being detained whilst some, or all, of the following supplementary management decisions are taken:
- Referral to a Technically Competent Person (TCP) on site;
  - Referral to the waste producer to confirm the nature of the waste load;
  - Referral to the waste carrier's base;
  - Referral to NRW;
  - Redirection of delivery vehicle off site, to a suitably authorised facility; and
  - If the waste has been unloaded in the building, removal of the waste to a secure quarantine skip or container, prior to off-site removal either to the waste producer or suitably authorised facility.

## 2.3 NON-CONFORMING WASTE

- 2.3.1 Any loads arriving at the Site which contain non-permitted wastes or a significant amount of contrary material shall be rejected prior to unloading. In the unlikely event that non-permitted or unsuitable wastes are inadvertently unloaded at the Site, they will be re-loaded where possible. Where the vehicle has already left the Site, the non-permitted or unsuitable wastes will be stored in a quarantine skip or container at the Site, pending removal of the material to the waste producer or authorised facility. Any waste materials dispatched off site to an authorised facility, will be removed in accordance with the Duty of Care. A Registered Waste Carrier will be used.
- 2.3.2 Wastes rejected from the Site will be labelled to include details of any hazards posed by the material and all information necessary to allow proper storage and segregation in a quarantine skip or container.
- 2.3.3 Material rejected from the Site shall be issued with a record stating why, when and from which contract the waste was provided. This record shall be held on Site for NRW to inspect. In addition, the 'Record of Non-Conformance', see Appendix 1, shall be completed and the record will be held on Site.

2.3.4 Customers will be informed in writing if their waste is rejected. The reasons for rejection will be stated.

## 2.4 PREVIOUS WASTE TESTING

2.4.1 The Operator maintains Safety Data Sheets for all types of fire extinguisher that will be received at the Site.

2.4.2 Foam filled fire extinguishers received at the Site may contain Aqueous Film Forming Foam (AFFF) media.

2.4.3 AFFF media can contain PFAS chemicals, including perfluorooctanoic acids (PFOS) and perfluorooctanoic acid (PFOA), which do not degrade easily in nature and can cause environmental damage and serious health risks. These foams are currently being phased out and will be banned for use from 4th July 2025. As a worst-case scenario the Operator classes out of date or spent or no longer required AFFF media as a hazardous waste and following emptying and treatment of the media in a carbon absorption plant, it is transferred to dedicated IBCs for removal off site to an authorised disposal facility, see Section 4.1.

2.4.4 In order to ensure accurate and detailed chemical characterisation of AFFF media before and after treatment, samples were subject to independent laboratory analysis in November 2024 by the Institute for Hygiene and Public Health (IHPH) in Bonn, Switzerland. Samples comprised:

- 5 No samples of untreated AFFF media
- 5 No samples of foam subjected to a single phase of carbon absorption treatment;
- 5 No samples of foam subjected to two phases of carbon absorption treatment.

2.4.5 Laboratory reports are maintained by the Operator and are available for inspection by authorised officers of NRW. Laboratory results are tabulated in Appendix 2.

## 3 WASTE STORAGE

3.1.1 The Site only accepts fire extinguishers that are pre-notified and agreed with trade customers prior to delivery. Pre-notification details provided by the customer must include the number, weight and type of media (i.e. water or powder or foam or carbon dioxide) of each fire extinguisher to be delivered to the Site.

3.1.2 A detailed record is maintained of the exact quantity and type of each fire extinguisher on site, including the number and weight of those that may contain AFFF media and are classed as hazardous. The Operator will only accept a pre-notified order where its delivery will ensure the Site does not exceed the maximum annual waste throughput authorised by the permit and where the total amount of hazardous waste received on site is less than 10 tonnes on any day and the total storage of hazardous waste is less than 50 tonnes at any time.

3.1.3 In addition, the maximum rate of processing foam waste in the carbon filters is 1,000 litres per 60 minutes, i.e. 1 IBC per hour. The site will process a maximum of 9 x IBCs of foam per day, which equates to a maximum of 9 tonnes per day. The number of foam IBCs processed each day is recorded manually on site as part of the record keeping procedures. In this manner, the Operator maintains a record of the exact quantity and type of each fire extinguisher on site, including the number and weight of those that may contain AFFF media and the number of foam filled IBCs that are treated per day.

- 3.1.4 AFFF media can contain PFAS chemicals, including perfluorooctanoic acids (PFOS) and perfluorooctanoic acid (PFOA), and are classed as hazardous. All other types of fire extinguisher received at the Site are non-hazardous. The Operator will only accept a pre-notified order where its delivery will ensure the Site does not exceed the maximum permitted annual waste throughput and where the total amount of hazardous waste remains less than 10 tonnes per day and total storage is less than 50 tonnes at any time.
- 3.1.5 Wastes that pass the pre-acceptance/pre-notification and acceptance procedures detailed above are stored in dedicated containers, each located on a pallet to facilitate their transfer to the relevant dismantling and processing area.
- 3.1.6 Containers measure up to a maximum of 1.1m<sup>3</sup>. They are arranged so that each one is accessible for fire fighting purposes and can be easily accessed by fork-lift truck or hand pallet truck so that they can be removed to a quarantine area in the event of a fire to ensure their safe removal from the area of any incident.
- 3.1.7 Containers are stored according to the type of fire extinguishers inside, e.g. extinguishers containing AFFF media are stored in a separate container to extinguishers containing other media (powder, deionised water, CO<sub>2</sub>). This avoids mixing any of the media types.
- 3.1.8 Fire extinguishers are typically emptied, dismantled and processed within 2 working days, although this may extend to 5 working days during busy periods. Containers will be emptied in series so that materials are processed on a first in first out basis (i.e. containers holding the longest deposited fire extinguishers will be emptied first).
- 3.1.9 The Site Manager or trained site operative will inspect waste storage as part of the daily checks to ensure materials are being suitably stored within the confines of the building and appropriate separation distances are being maintained.

## **4 WASTE TREATMENT**

### **4.1 AFFF MEDIA**

- 4.1.1 All waste treatment activities will take place inside the building.
- 4.1.2 Disused or spent or returned fire extinguishers containing AFFF media will be emptied into dedicated IBCs, labelled for the specific receipt of such materials to avoid the risk of cross contamination.
- 4.1.3 An integral valve is located towards the base of each IBC. One end of a DN 100 hose connects to the IBC valve, whilst the other end feeds into the carbon absorption plant process inlet, via a valve which is opened at start up.
- 4.1.4 The carbon absorption plant is pre-loaded with activated carbon by the supplier. AFFF media is pumped through the unit in a downflow direction. The activated carbon absorbs PFAS chemicals, including PFAS and PFOA, removing them from the treated foam liquor. The process outlet of the unit is directed to above the height of the activated carbon bed with a siphon break at the top. This prevents the vessel draining down when flow is stopped.
- 4.1.5 The flow rate of AFFF media through the carbon absorption plant is controlled via the inlet valve and

discharge valve. Pressure gauges are fitted to determine pressure at the inlet and outlet of the unit. A pressure relief valve is fitted as a safety measure, which is set to open should pressure reach or exceed 3 bar, i.e. to avoid over pressurisation of the unit.

- 4.1.6 Treated foam liquor is pumped from the carbon absorption plant, via a hose, to a clean IBC for removal off-site to an authorised facility. The cap at the top of the IBC is opened and the hose placed inside for filling. A check is made to ensure the valve near the base of the IBC is closed before filling commences. Once full, IBCs are stored on site for loading onto a HGV for removal off-site.
- 4.1.7 Once the activated carbon is saturated, a new activated carbon unit is installed to ensure effective continued use. The saturated unit is either transferred off-site to an authorised thermal destruction facility or returned to the supplier, where it is recovered off-site by thermal reactivation, for reuse. Reactivation involves treating the spent carbon in a high temperature reactivation furnace to over 800°C. During this treatment process, the undesirable organics on the carbon are thermally destroyed. Recycling by thermal reactivation is a highly skilled process to ensure that spent carbon is returned to a reusable quality. Reactivation is undertaken by the supplier at their specialist off-site plant due to their expertise and experience in recycling large quantities of spent carbon.
- 4.1.8 Treated AFFF media has been subject to independent laboratory analysis by the Institute for Hygiene and Public Health (IHPH) in Bonn Switzerland (see paragraph 2.4.4).
- 4.1.9 Laboratory results for AFFF media that were subjected to two phases of carbon absorption treatment were subject to WM3 assessment (Guidance on the classification and assessment of waste: Technical Guidance WM3) by MJCA Limited, see Appendix 3. WM3 assessment demonstrated that the treated foam media is non-hazardous and is not classified as a Persistent Organics Pollutant (POPs) waste.

## 4.2 PROPOSED WASTE TESTING OF TREATED AFFF FOAM AND SPENT ACTIVATED CARBON MEDIA

- 4.2.1 All AFFF fire extinguishers will be delivered to the Site in accordance with the requirements of the Hazardous Waste (England and Wales) Regulations 2005. The efficiency of the carbon absorption plant to treat AFFF media has been demonstrated by laboratory testing and WM3 Assessment (see paragraph 4.1.8).
- 4.2.2 To demonstrate the ongoing efficiency of the carbon absorption plant, it is proposed to routinely test treated AFFF media circa every 4 weeks by subjecting a sample to laboratory testing for PFAS chemicals and a subsequent WM3 Assessment of the results. Samples would be analysed for the parameters shown in Table 2.

**Table 2 Determinands for Laboratory Analysis**

Chemicals for Laboratory Analysis
4:2 FTS 4H - Perfluorohexanesulfonic Acid (AFFF)
6:2 FTS 4H - Perfluorohexanesulfonic Acid (AFFF)
8:2 FTS 4H - Perfluorohexanesulfonic Acid (AFFF)
PFBA Perfluorobutaonic Acid (AFFF)

Chemicals for Laboratory Analysis
PFBS Perfluorobutanesulfonic Acid ( AFFF)
PFDA Perfluorodecanoic Acid (AFFF)
PFDoA Perfluorododecanoic Acid (AFFF)
PFDS Perfluorodecanesulfonic Acid (AFFF)
PFHpA Perfluoroheptanoic Acid (AFFF)
PFHpS Perfluoroheptanesulfonic Acid (AFFF)
PFHxA Perfluorohexanoic Acid (AFFF)
PFHxS Perfluorohexanesulfonic Acid (AFFF)
PFNA Perfluorononanoic Acid (AFFF)
PFNS Perfluorononanesulfonic Acid (AFFF)
PFOA Perfluorooctanoic Acid (AFFF)
PFOS Perfluorooctanesulfonic Acid (AFFF)
PFPA Perfluoropentanoic Acid (AFFF)
PFPS Perfluoropentanesulfonic Acid (AFFF)
PFTeDA Perfluorotetradecanoic Acid (AFFF)
PFTTrDA Perfluorotridecanoic Acid (AFFF)
PFUnA Perfluoroundecanoic Acid (AFFF)

4.2.3 Copies of the laboratory results and WM3 Assessment would be maintained in a site log and made available for inspection by authorised officers of NRW.

### 4.3 POWDER MEDIA

4.3.1 Disused and spent or returned fire extinguisher powder is drawn by a vacuum pump through a dedicated hose that is connected to the fire extinguisher cylinder head at one end and into a 1,200 litres reception silo. The vacuum pump is fitted with a microporous filter. The system has a dedicated counter-current blowing cleaning system for the filter, valve and fire extinguisher suction unit. The main recovery inlets are operated with automatic valves controlled by start and stop mechanisms.

4.3.2 A 1 tonne capacity 'Big-Bag' is attached to the bottom of the silo and is secured by a metal clamp to ensure a tight seal and to minimise any fugitive emission of powder inside the building.

4.3.3 The silo is equipped with a level emitting alarm, which indicates when it is necessary to discharge into the 'Big Bag', via an automatic discharge valve. Once the bag is full, it is sealed at the top opening and transferred via a fork-lift truck to the loading area inside the building. 'Big Bags' are loaded onto curtain sided lorries or other suitable vehicles for transfer off-site to an authorised recycling facility, where the material is used for fertiliser manufacture.

### 4.4 DEIONISED WATER MEDIA

4.4.1 Fire extinguishers containing deionised water media are emptied into dedicated and labelled IBCs, prior to discharge to foul sewer in accordance with a Trade Effluent Discharge Consent issued by Welsh Water.

The Operator ensures that only dedicated IBCs are used for the receipt, storage and discharge of deionised water to foul sewer, thereby avoiding any potential risk of cross contamination from other media, such as foam.

- 4.4.2 The discharge point to foul sewer is shown on Drawing 'Site Drainage', DW04. It is marked as FW1: Foul Sewer Discharge Point. This is the location which forms part of the Trade Effluent Discharge Consent.

#### **4.5 CARBON DIOXIDE FIRE EXTINGUISHERS**

- 4.5.1 Disused or spent or returned CO<sub>2</sub> extinguishers are received as part of a take back scheme from customers, where they are bulked up in containers inside the building prior to transfer off-site to an authorised facility for emptying and discharge of spent or no longer required CO<sub>2</sub> gas, reconditioning of the cylinder and cylinder head and refilling with new CO<sub>2</sub> media. The reconditioned CO<sub>2</sub> fire extinguishers are suitable for reuse, with a design life of 10 years.
- 4.5.2 CO<sub>2</sub> extinguishers are not emptied or discharged at the Site. It is only empty CO<sub>2</sub> cylinders that are dismantled at the Site.

#### **4.6 RECYCLING OF CYLINDER AND COMPONENTS**

- 4.6.1 Once fire extinguishers are emptied, they are dismantled into their component metal and plastic parts for recycling by trained site operatives. All dismantling operations are undertaken inside the building.
- 4.6.2 The brass head cap is removed and is placed in a sealed container located on a pallet to facilitate removal and loading into a lorry for off-site removal to an authorised recycling facility.
- 4.6.3 Metal cylinders and metal dip tubes are transferred to an inclined conveyor, which feeds into the top of a 40 cubic yard roll on: roll off container. Once the container is full it is sheeted and transferred off site to an authorised scrap metal recycling facility.
- 4.6.4 Plastic skirts and plastic tubes are placed in a sealed container located on a pallet to facilitate removal and loading into a lorry for off-site removal to an authorised recycling facility.
- 4.6.5 The dismantling, sorting and separation of fire extinguisher cylinders will enable high rates of recycling to be achieved. A process flow diagram is shown in Figure 1 below.

#### **4.7 RECYCLING OF PACKAGING WASTES**

- 4.7.1 Packaging waste associated with the supply of fire extinguishers to customers and the return of disused or spent or unwanted units by them, is sorted, separated and recycled on site. Cardboard and plastic waste are separately fed to a small compactor unit inside the building, prior to being transferred to an enclosed vehicle for removal off-site to an authorised facility. Only small quantities of cardboard and plastic waste are processed on site and these are taken to a nearby recycling facility on a typically daily basis.
- 4.7.2 Other packaging wastes such as broken pallets and paper etc are stored in a sealed and lidded skip for removal off-site to an authorised facility.

## 4.8 FIRE EXTINGUISHER PROPELLANT

4.8.1 Fire extinguishers contain a trace amount of propellant, either:

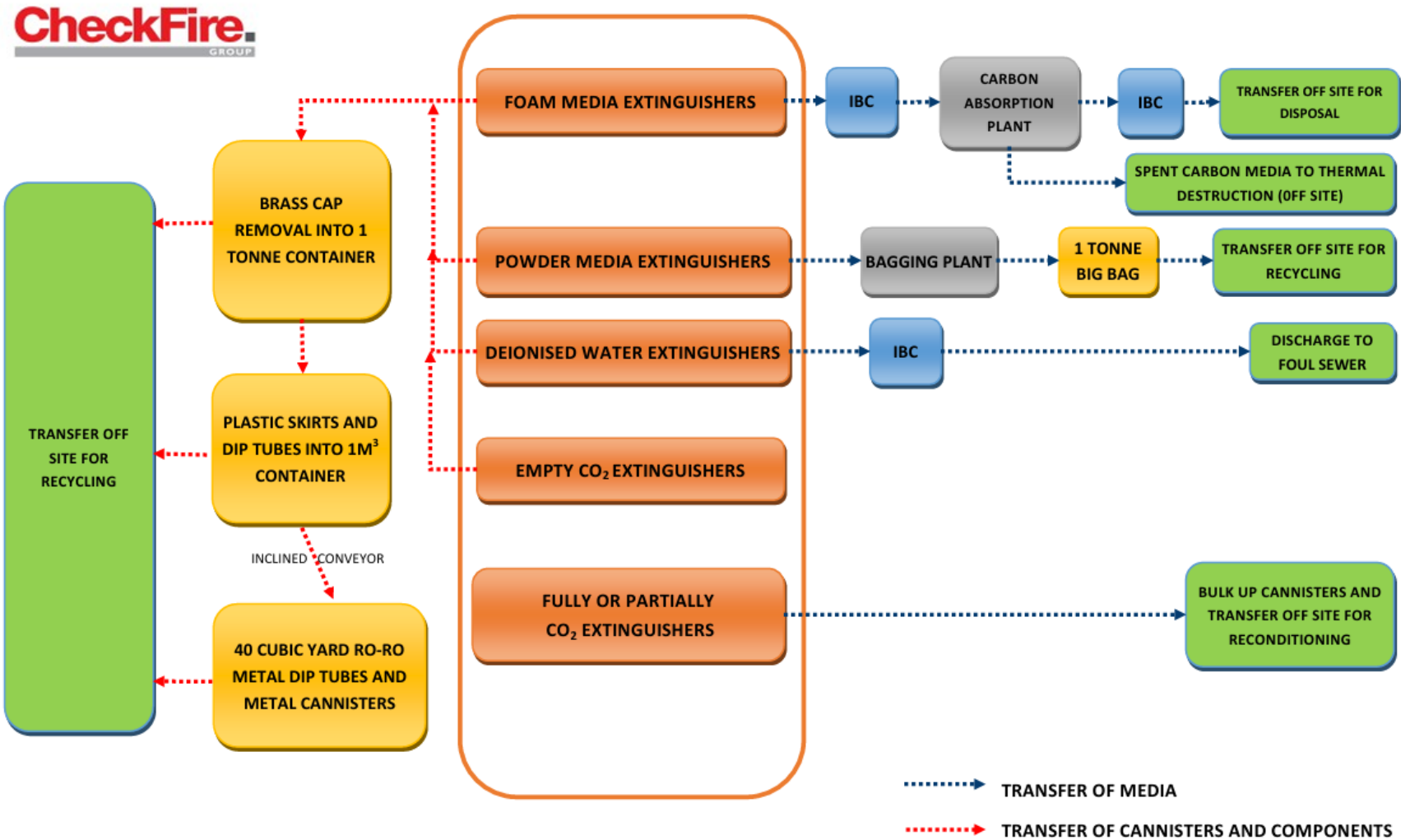
- Pressurised air;
- Nitrogen; or
- Nitrogen with a small amount of helium additive, which is used to detect any leakage at the manufacture stage.

4.8.2 Fire extinguishers manufactured by Checkfire Ltd use nitrogen with a small amount of helium additive.

4.8.3 Due to the trace amounts of propellant used in fire extinguishers, it is not practicable or feasible to capture this for recycling or reuse. Trace quantities of propellant are released inside the building when full or partially full fire extinguishers are manually emptied and dismantled by site operatives. The building is well ventilated and the release of propellant presents no risks to site operatives or the environment.

4.8.4 As stated in paragraph 4.5.2, CO<sub>2</sub> fire extinguishers are not emptied or discharged at the Site.

Figure 1 Process Flow Diagram



## 5 SITE DRAINAGE

- 5.1.1 The building incorporates an engineered concrete base and sealed drainage system.
- 5.1.2 A drainage channel along the inside of the building leads to a dedicated concrete sump, where any inadvertent spillage of fire extinguisher media is collected before being pumped to an IBC for authorised disposal off-site.
- 5.1.3 A second lateral drain has been installed inside the building, across the entire width of the roller shutter vehicular access door and pedestrian door to prevent any possible escape of inadvertent liquid spillages through the doors to the external environment. The drain falls to a dedicated concrete sump and has been installed so that it is not possible for any liquids to by-pass it, e.g. by draining around the sides. The lateral drain ties into the sides of the sealed building walls, thereby preventing any possibility of liquids by-passing the drain, see Plates 1 and 2 below.

**Plate 1**



**Plate 2**



- 5.1.4 Any accidental spillages or leakage of liquid or foam from IBCs or fire extinguishers inside the building that drains towards the building entrance doors would enter in the drain and then fall to the concrete sump, from where it would be pumped to an IBC inside the building for authorised disposal off-site.
- 5.1.5 There are no drainage outlets inside the building to the external environment or public sewer.
- 5.1.6 There is an external lateral drain across the yard that drains run-off water from the building roof. This drain leads to the Nant yr Aber. The Operator has installed a manual shut off valve in the external drain, so that in the event of any potentially polluting liquids from the Site entering the drain, they could be prevented from draining into the Nant yr Aber by closing the shut off valve.

- 5.1.7 In addition, to further reduce risk, a dedicated loading and unloading area has been constructed on the yard, which comprises impermeable concrete pavement circa 5m x 4m in area. It is kerbed to 3 sides, with the unkerbed side enabling access and egress by the fork-lift truck to load and unload lorries.
- 5.1.8 The external yard naturally slopes from the public highway on Sir Alfred Owen Way to the front of the building. The unkerbed side of the unloading area is up gradient, i.e. nearest the public highway, meaning that any accidental spillage or leakage during loading or unloading would be contained by the kerbed area. The size of the kerbed area is such that it can contain the entire contents of an IBC in the event a container was accidentally punctured or tipped over during loading or unloading. Contained liquid would then be pumped into a separate and sealed IBC for authorised disposal off site.
- 5.1.9 A CCTV drainage survey of the Site was undertaken by AR Drainage Solutions on 13 November 2024. The CCTV drainage survey confirmed storm water and foul water drainage in the vicinity of the Site.
- 5.1.10 Clean rainwater that collects in the kerbed area will be discharged to foul sewer in accordance with the Trade Effluent Discharge Consent. In the event of a fire incident, any firewater that collects in the kerbed loading area or is retained in the building using pollution socks or booms will be considered contaminated and tankered off site to an authorised wastewater treatment works.
- 5.1.11 The drainage system is shown on Drawing 'Site Drainage', DW04. The discharge point to foul sewer is marked as 'FW1: Foul Sewer Discharge Point' on the drawing.

## 6 SITE RECORDS

- 6.1.1 The Site records will be maintained and kept secure from loss, damage and deterioration in either the Site office or at a secure location off-site. All records will be maintained for a minimum period of 3 years.
- 6.1.2 Records including waste delivery dates, waste types, quantities, sources/facility and Registered Waste Carrier details of all waste entering and leaving the Site will be recorded on the 'General Waste Management', Appendix 4 and Waste Returns will be produced in a timely manner.
- 6.1.3 Other records include:
- Weekly site inspections by the Site Manager;
  - Completed Complaint Reporting forms (including mitigation measures);
  - Environmental accidents and incidents;
  - Non-Conformance Reports;
  - Maintenance records;
  - Environmental monitoring records;
  - Training records.
- 6.1.4 A copy of the Environmental Permit will be easily accessible by staff members or contractors. Contractors will be briefed on the sensitivity of the Site.

## 7 MAINTENANCE

- 7.1.1 All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist', refer to Appendix 5.
- 7.1.2 NRW will be informed without delay if there is any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution and cause any significant adverse environmental and health effects.
- 7.1.3 Any required maintenance will be carried out as soon as is practicable to ensure continued running of the Site and be recorded on the 'Maintenance Record', refer to Appendix 6.
- 7.1.4 Detailed weekly inspections will be carried out by the Site Manager and Technically Competent Person and recorded on the 'Inspection Record', Appendix 7. The weekly inspections include a review of:
- Site entrance and external yard;
  - Concrete pad;
  - General site cleanliness and sweeping of storage areas (including corners) and other operational areas;
  - Carbon absorption unit, including valves, flanges, pressure valves and connections to eliminate leakages;
  - Bagging plant;
  - Cardboard and plastics baler;
  - Inclined conveyor;
  - Site drainage, including concrete sumps;
  - External drainage cut off valve;
  - Loading area and kerbing;
  - Fire prevention and control system;
  - Litter;
  - Odour;
  - Dust;
  - Mud / dirt;
  - Pests, vermin, insects and scavenging birds;
  - Security.

## 8 ENVIRONMENTAL ACCIDENTS AND INCIDENTS

### 8.1 GENERAL

- 8.1.1 In the event of an environmental accident on Site the 'Environmental Accident and Incident Record', refer to Appendix 8, will be completed.
- 8.1.2 The Site Manager has overall responsibility for the prevention of environmental accidents and incidents at the Site. All staff have individual responsibility for ensuring that their actions do not cause environmental accidents and for reporting any incidents that they become aware of in the Environmental Accident and Incident Record as a priority matter. Accidents must be reported to the Site Manager or, in his absence, the Operations Director or other Technically Competent Person, who will coordinate response measures to ensure the safety of staff, visitors and local people is not compromised and that the environment and local amenity are protected.
- 8.1.3 An Environmental Risk Assessment has been prepared for the Site to cover a range of accident scenarios, including the probability (i.e. likelihood) of occurrence, the consequences of an occurrence, the mitigation measures in place to prevent an occurrence and the overall level of risk. The Environmental Risk Assessment is included as Appendix 14.
- 8.1.4 Emergency response measures are in place in the event that an environmental accident does occur. The Site Manager has overall responsibility for implementation of the emergency response measures that will be used to protect people and the environment in the event of an environmental accident or incident.
- 8.1.5 Emergency response measures include:
- Potential emergency situations;
  - Training of emergency response staff;
  - Post-emergency activities;
  - Personnel roles, lines of authority, training and communication;
  - Emergency recognition and prevention;
  - Safe distance and places of refuge;
  - Evacuation routes and procedures;
  - Emergency medical treatment and first aid;
  - Emergency alerting and response procedures;
  - Personal protective equipment and emergency equipment;
  - Preventing the escape of potentially polluting substances to the foul sewer, surface water sewer, adjoining land or atmosphere.
- 8.1.6 The emergency response procedures are planned and periodically tested (at least once per year). The

results are reported in an annual management review.

## **8.2 STORAGE OF DIESEL, OIL OR OTHER POTENTIALLY POLLUTING LIQUID**

- 8.2.1 Any diesel, oils or other potentially polluting liquids used on Site will be stored in suitable, sealed containers located within the building (which is fully sealed). In the event that dedicated tanks are used, they will either be self-bunded or surrounded by impermeable bunds (base and side walls) with a minimum capacity of 110% of the tank's contents. Where more than one tank is located in a bund, the capacity of the bund will be 110% of the largest tank or 25% of the total storage capacity, whichever is the greater. Bund bases and sides will be impermeable. Vents, sight glasses and pipework etc will be located within the bunded area. Tanks and bunds will be subject to regular weekly inspection by the Site Manager.
- 8.2.2 In the event of damage to a container or tank and the escape of, for example, hydraulic oil from a container or fire extinguisher foam from an IBC, the consequences would be insignificant because all potentially polluting liquids are stored inside the building, which is fitted with a lateral drain across the entire width of the roller shutter vehicular access door and pedestrian door to prevent any possible escape of liquid spillages through the doors to the external environment. The drain falls to a dedicated concrete sump, which has been installed so that it is not possible for any liquids to by-pass it, e.g. by draining around the sides. The lateral drain ties into the sides of the sealed building walls, thereby preventing any possibility of liquids by-passing the drain. Any liquids that collect in the concrete sump (including any potential oil or foam) would be pumped to a dedicated container or IBC inside the building for authorised disposal off-site.

## **8.3 EMERGENCY SPILLAGE PROCEDURES**

- 8.3.1 Emergency spillage procedures are detailed in Appendix 9 of this EMS. Spill kits and absorbent material are kept on site and are used to treat any spillage that may arise. Used spill kits, absorbent and any contaminated materials etc will be removed and stored in a sealed container, prior to authorised disposal.

## **8.4 MAINTENANCE**

- 8.4.1 Maintenance of plant and equipment is detailed in Section 7 above.
- 8.4.2 All processing plant and equipment, including pumps and pipework, are subject to regular visual inspection for any leaks. Maintenance is undertaken in accordance with the manufacturer's specification to ensure efficient and safe performance.
- 8.4.3 Detailed weekly inspections will be carried out by the Site Manager and Technically Competent Person and recorded on the 'Inspection Record', see paragraph 7.1.4 above and Appendix 7.
- 8.4.4 Detailed maintenance schedules are in force for all plant and equipment. Consequently, the risk of critical failure resulting in emissions or accidents is considered unlikely.
- 8.4.5 In the event of plant breakdown operations will not take place that may compromise the safety of the Site, staff, neighbours and the local environment. Typically repairs can typically be made within 24 hours of occurrence, so any shut down is likely to be of short duration.

## 8.5 EMERGENCY FIRE PROCEDURES

8.5.1 Emergency Fire Procedures comprise the following key points:

- Sound an alarm on detection of any fire or smoke;
- Evacuation of the building, including site office by staff and visitors;
- Activation of automated fire suppression system to abate the fire;
- For small fires and where it is safe to do so, suitably trained staff may use fire-fighting equipment such as appropriate fire extinguishers (water, powder, CO<sub>2</sub> or foam) to tackle the incident;
- For larger fires or fires that cannot be safely extinguished by trained site staff, call the fire brigade and any other required emergency service;
- Evacuated staff must go to the designated off-site fire assembly point;
- Diversion of incoming materials;
- Recovery including appropriate removal of burned waste and any residual firewater;
- Report incident to NRW.

**Table 3 Key Actions on discovering a fire**

Key actions on discovering a fire
<ul style="list-style-type: none"><li>• For large fires or any fire that cannot be safely tackled on site by trained site staff, the Fire Service to be informed immediately of the location of the fire and the waste types involved</li><li>• All personnel must follow Emergency Fire Procedures</li><li>• Fire extinguishers and water hoses must only be used by trained fire marshals and when it is safe and appropriate to do so.</li><li>• Consider moving unburnt waste to Quarantine area if safe to do so—only trained staff to do this.</li></ul>

8.5.2 A detailed FPMP is in place at the Site, see Checkfire Ltd-FPMP-RP04-Final. The FPMP includes the measures used to minimise the risk of a fire occurring and its spread. It includes a detailed assessment of local receptors and their associated risk if a fire did take place.

## 8.6 FLOODING

8.6.1 The Site's external yard is located on a combination of low, medium and high flood risk from surface water and small rivers. Despite this, there is no history of flooding at the Site and a Groundsure Report for the facility states that there are no records of historic flooding from rivers, the sea, groundwater and surface water at or within 250m distance. Flood records began in 1946.

8.6.2 The building incorporates an engineered concrete base, with no internal drainage outlets. Therefore there are no discharges from waste storage and processing areas inside the building to surface water, groundwater or public sewer.

8.6.3 A lateral drain has been installed inside the building, across the entire width of the roller shutter

vehicular access door and pedestrian door to prevent any possible escape of liquid spillages through the doors to the external environment (see above). Any liquid that runs into the drain (including possible floodwater ingress) would collect in the concrete sump from where it would be pumped to IBCs inside the building for authorised disposal off-site.

- 8.6.4 There is an external lateral drain across the yard that drains run-off water from the building roof. This drain leads to the Nant yr Aber. The Operator has installed a manual shut off valve in the external drain, so that in the event of any potentially polluting liquids from the Site or, in the unlikely event, flood water entering the drain, they could be prevented from draining into the Nant yr Aber by closing the shut off valve. The polluting liquid or flood water could then be pumped to IBCs for sealed storage prior to off-site removal to an authorised wastewater treatment facility.
- 8.6.5 In the event of a flood, the building doors would be closed and free-standing temporary water barriers, designed for fast response, would be installed across the vehicular access, pedestrian access and emergency exit doors to prevent flood water ingress into the building and therefore the waste storage and processing areas.
- 8.6.6 These barriers are 0.5m high and are designed for use on hard and even surfaces, including concrete. The weight of each barrier section is light, at under 4kg for a 0.5m section. The barriers are anchored by the weight of the water and slotted together to form a continuous barrier (see Plate 1 below). Flexible  $\pm 3^\circ$  coupling makes it possible to create curves, but it is also possible to make inward and outward corners using specific corner pieces.

**Plate 1**



## **8.7 VANDALISM**

- 8.7.1 The Site is fully secured to deter unlawful entry or vandalism. The roller shutter vehicle access door and pedestrian entrance and emergency exit doors are securely locked outside of operational hours. A comprehensive CCTV security system will be installed to provide complete coverage of the Site. This will ensure a high standard of site security is maintained. The high standard of site security to prevent and detect any attempts at unauthorised entry minimises the potential for arson attacks or vandalism.

## 8.8 EXTREME WEATHER EVENTS

- 8.8.1 Wastes are stored and processed inside the building, which is fully enclosed and fitted with roller shutter vehicular access door, pedestrian door and emergency exit door. It has an impermeable concrete base. The storage and processing of wastes inside the building largely protects operations from extreme weather events, such as snow, freezing temperatures and heavy rainfall. Although the packaging waste skip is located on the external yard, it is fully sealed and lidded. The lid is kept closed except when packaging wastes are being deposited inside. The use of a sealed and lidded skip protects the waste from rainfall and snow etc.
- 8.8.2 An internal lateral drain is fitted across the building's roller shutter door and pedestrian door. The internal drain falls to a concrete sump and has been installed so that it is not possible for any liquids to by-pass it, e.g. by draining around the sides. In the event of extreme rainfall, any water that runs to the building entrance would collect in the lateral drain and sump, from where it would be pumped into IBCs inside the building for authorised disposal off-site. In this way it is possible to keep the inside of the building, including waste storage and processing areas, dry in extreme weather events such as heavy rainfall or snow melt. The use of a building also protects operations from high winds and extreme heat (by providing shade).
- 8.8.3 In the event that weather is so extreme that it prevents operations being undertaken in a safe and controlled manner, contingency arrangements are available at short notice to divert incoming waste loads or transfer wastes already received at the Site to other suitably authorised facilities. Incidents that may cause contingency arrangements to be implemented include extreme weather that prevents vehicles or staff safely reaching the Site or compromises the operational efficiency of the facility.
- 8.8.4 A Climate Change Risk Assessment has been prepared for the Site, which assesses the risks of extreme weather events such as increased summer temperatures, high levels of rainfall, colder winter temperatures and dryer summers etc and sets out the mitigation measures that will be used to minimise any impacts. It also includes the likelihood and severity of each impact, which are scored on the basis of Risk = Likelihood x Severity. The residual likelihood and severity of the impact is then re-rated after mitigation to demonstrate the residual risk at an acceptable level.
- 8.8.5 A copy of the Climate Change Risk Assessment is included in this EMS as Appendix 13.

## 8.9 FINE PARTICULATES

- 8.9.1 Dust control measures are detailed in Section 9.3.
- 8.9.2 The fire extinguisher powder emptying and bagging plant is the only activity on site that has a risk of giving rise to dust emissions, including fine particulates, i.e. <2.5µm . However, this activity is located in the rear corner of the building, furthest from the vehicular and pedestrian access doors. Any inadvertent spillage of powder or fugitive escape of dust from the bagging plant is localised to the rear internal area of the building and is vacuumed during the course of the working day to ensure the area is quickly cleaned. There are no visible emissions of powder or dust from the building to the external environment.
- 8.9.3 In the event of breakdown or malfunction of the bagging plant, fire extinguishers containing powder will not be emptied and dismantled until suitable repair has been implemented. The Site maintains detailed maintenance schedules to minimise the risk of plant failure or malfunction. Typically repairs to the

bagging plant can be made within 24 hours of occurrence. The Site does not have any history of dust complaints.

## **8.10 FUMES**

8.10.1 The Site does not produce fumes. All waste processing equipment, such as the activated carbon filtration plant, conveyers, compressed air system and powder bagging plant are powered by mains electricity. The only mobile plant on site is the fork-lift truck, which is also electric. Therefore, there is no combustion of diesel or gas on site etc and therefore no associated fumes.

## **9 EMISSIONS**

### **9.1 ENVIRONMENTAL RISK ASSESSMENT**

9.1.1 An Environmental Risk Assessment has been prepared for the Site, based on the source pathway receptor principle to identify environmental risks and the mitigation measures in place to protect local people, residential properties, businesses, areas of amenity and designated habitat sites etc, see Checkfire Ltd-Environmental Risk Assessment-RP01-Final.

### **9.2 SURFACE WATER AND GROUNDWATER**

9.2.1 All waste deposit, waste storage and waste processing will take place in a fully sealed building with impermeable concrete base. There are no drainage outlets to surface water drain or uncontained land inside the building and internal lateral drains to dedicated concrete sumps have been installed to capture any inadvertent spillage or leakage. A kerbed and concreted loading area has been constructed on the external yard for loading IBCs into lorries for off-site removal to authorised facilities and a cut off valve has been installed on the external surface water sewer. Therefore there are no pathways for pollutants to enter groundwater or surface water and no risk to the water environment.

### **9.3 DUST AND PARTICULATES**

9.3.1 Disused or spent fire extinguishers are enclosed when delivered to the Site and therefore do not give rise to dust emissions during transport to the facility. Dismantled and separated fire extinguisher components are transferred off-site as follows:

- Recycled and empty fire extinguisher cylinders and metal components in a 40 cubic yard roll on: roll off sheeted skip;
- Recycled brass head caps in sealed containers;
- Recycled plastic fire extinguisher skirts and tubes in sealed containers;
- Packaging wastes in a sealed and lidded skip;
- Treated fire extinguisher foam in sealed IBCs;
- Recycled powder wastes in 1 tonne 'Big Bags', loaded onto flat bed, curtain sided and enclosed lorries or sheeted lorries.

- 9.3.2 All wastes will be stored, bulked up and processed inside the building, which is fully enclosed and fitted with a vehicular access roller shutter door.
- 9.3.3 The fire extinguisher powder emptying and bagging plant is the only activity on site that has a risk of giving rise to dust emissions. However, this activity is located in the rear corner of the building, furthest from the vehicular and pedestrian access doors, see Drawing 'Indicative Site Layout and Storage', DW01. Any inadvertent spillage of powder or fugitive escape of dust from the bagging plant is localised to the rear internal area of the building and is swept up or vacuumed during the course of the working day to ensure the area is quickly cleaned. There are no visible emissions of powder or dust from the building to the external environment.
- 9.3.4 Waste storage areas will be emptied and thoroughly swept, including the corners, every 2 days or up to 5 working days during busy periods to ensure all wastes and debris are removed and the potential for dusts to accumulate over time is minimised. Additional sweeping of operational areas will take place during the course of the day to ensure the facility is left clean and tidy.
- 9.3.5 Hose reels will be installed at the Site and used to dampen the site entrance, external yard and other operational areas that have the potential to give rise to dust emissions, e.g. during hot and dry weather.
- 9.3.6 A Dust and Emissions Management Plan (DEMP) has been prepared for the Site and includes a risk assessment of fugitive emissions of dust to the environment and in-depth details of the control and mitigation measures in place to prevent pollution or harm, see Checkfire Ltd-RP05-Final (DEMP).

## 9.4 ODOUR

- 9.4.1 Fire extinguisher media is not inherently odorous and odour has not been detected at the Site from waste operations.
- 9.4.2 The storage, emptying, dismantling and processing of fire extinguishers inside the building will minimise any potential risk of fugitive odour emissions to the external environment.
- 9.4.3 Duration of waste storage times will be minimised and materials will be processed on a first in first out basis to ensure rapid turnaround times. As part of the first in first out policy, waste storage areas will be managed in series so that all waste reception areas are emptied and swept, including the corners, every 2 working days, although this may extend to 5 working days during busy periods.

## 9.5 MUD AND DEBRIS

- 9.5.1 Internal roads on the Pontygwindy Industrial Estate comprise paved surfaces and the site entrance, external yard and building floor are made of engineered surfaces. There is no requirement for lorries to drive over uncontained land at any time. Therefore the risk of mud and debris on the public highway is low.
- 9.5.2 As part of the daily inspection regime, the Site will be visually inspected for the presence of mud and debris. In the unlikely event of any dirty areas that have the potential to give rise to mud or debris, they will be swept and cleaned immediately. Should the adjacent Sir Alfred Owen Way or other industrial estate roads or other neighbouring roads become muddy due to activities on site, a road sweeper will be deployed on an as and when required basis. This likelihood of road fouling from site activities is

considered negligible.

## 9.6 LITTER

- 9.6.1 All wastes will be delivered in sheeted or enclosed lorries and off-loaded, stored and processed in a fully enclosed building. Therefore, the risk of litter escape from the Site is minimal.
- 9.6.2 Small quantities of packaging waste are generated on site, which arises from the return or supply of fire extinguishers to customers. Packaging waste is stored in a sealed and lidded skip on the external yard and transferred off-site to a suitably authorised facility.
- 9.6.3 In the event that litter escapes the Site, it will be collected and appropriately disposed of as a matter of urgency. Areas external to the Site will be kept clean and litter picked should this become necessary.

## 9.7 NOISE

- 9.7.1 The storage and processing of wastes entirely within a fully enclosed building will provide an acoustic barrier to minimise noise emissions.
- 9.7.2 To further minimise noise, all vehicles, plant and machinery operated at the Site will be maintained in accordance with the manufacturer's specification. Preventative maintenance programmes will ensure appropriate lubrication, properly fitting covers, proper operation of bearing and fans and integrity of silencers, thereby minimising the noise generated by site plant. Plant and vehicles will be switched off when not in use.
- 9.7.3 Staff will be made aware that they are close to neighbouring businesses and that unnecessary noise must be minimised.
- 9.7.4 The nearest residential properties are circa 145m west on Pantycelyn Drive, 150m west on Herbert Drive, 160m southwest on Lewis Drive, 165m south southwest on Howard Drive, 200m southwest on Dyfed Drive and 200m west on Davies Drive, see paragraph 1.2.2.
- 9.7.5 A Noise Impact Assessment and Noise Management Plan have been prepared for the Site. They are included as part of the bespoke permit application for the facility.

## 9.8 PESTS

- 9.8.1 The risk of pests, such as scavenging birds, vermin or insects is considered low as fire extinguisher media does not provide a food source and only small quantities of associated packaging wastes are received at the facility, which are stored in a sealed and lidded container.
- 9.8.2 Pest control measures include:
- Refusing any waste loads where pre-acceptance documentation or visual inspection on arrival, shows them to be infested or likely infested with vermin, insects or other pests;
  - Immediate quarantining of any infected loads that are inadvertently received at the Site, by placing them in a sealed, enclosed and lidded skip or container and arranging for their emergency treatment by the pest control contractor and removal off site to a suitably

authorised facility;

- Ensuring wastes are processed on a first in first out basis and within 2 working days of receipt, although this may increase to 5 working days during busy periods;
- Sweeping and disinfecting waste storage and processing areas (the regular emptying, sweeping and disinfecting of the operational area within the building will ensure a high standard of cleanliness and prevent wastes accumulating over a significant period of time or becoming putrescible);
- Ensuring that waste does not accumulate in inaccessible areas such as behind plant and equipment, pipe work or in corners;
- Daily and inspections by trained site operative and weekly inspections by the Site Manager;
- In the event of pest detection, a pest control contractor will be contacted and appointed to monitor pest numbers and to apply rodenticides, insecticides etc, as required.

## 9.9 VOLATILE ORGANIC COMPOUNDS

9.9.1 The Operator will not process wastes containing volatile organic compounds (VOCs) at the Site. Therefore, there is no potential to emit VOCs from waste activities at the facility.

## 10 SITE CLOSURE

### 10.1 BACKGROUND

10.1.1 When waste operations eventually cease at the Site, it will be closed and decommissioned in accordance with a detailed Closure Plan to prevent pollution of the environment, harm to human health or serious detriment to local amenity. Best practice will be used to ensure that the amount of waste requiring disposal at the end of the Site's life is minimised and that infrastructure and plant is decommissioned safely and efficiently.

10.1.2 The building is fully enclosed and fitted with a roller shutter door, concrete base and sealed drainage. It is anticipated that the building, roller shutter door and concrete floor are likely to be suitable for alternative future commercial or industrial uses once waste operations cease and the Site is closed. However, should the Site surfaces require decommissioning, the construction materials will be recycled or recovered where practicable. Concrete and brick can be crushed for reuse, whilst steel and other metal materials within the building cut up and recycled off-Site. It is not anticipated that waste operations will contaminate surrounding land or groundwater due to the concrete floor and sealed drainage within.

10.1.3 Any hydraulic oil, engine oil, gear box oil and waste oils etc will be stored in sealed containers located in the building or in sealed tanks located within impermeable bunds. Any containers or tanks used to store potentially polluting materials will be fit for purpose and located above ground. The capacity of any bunds will be 110% of the tank's contents. Should multiple tanks be used within a single bund, the bund will be designed so that its capacity will be a minimum of either 110% of the size of the largest tank or 25% of the total capacity of all the tanks within the bund, whichever is the greater. All containers and

tanks will be safely removed off site and transferred to authorised facilities for reuse or recovery. Once tanks and bunds have been decommissioned, the area of concrete will be cleaned to remove any residues or staining (the building's concrete floor facilitates efficient cleaning).

## 10.2 CLOSURE PLAN

- 10.2.1 The Site will be closed and decommissioned in accordance with the Closure Plan to ensure that all works are fit for purpose, do not result in pollution or harm or serious detriment to local amenity and ensure that materials are managed in accordance with the waste hierarchy, i.e. the generation of waste will be prevented where possible or otherwise afforded the following priority: reuse at another site, recycling, recovery, disposal.
- 10.2.2 The Closure Plan will be updated during the life of the Site and prior to closure and decommissioning works commencing, to take into account legal requirements at the time and any advances in waste minimisation, recovery etc which may enable more materials to be managed higher up the waste hierarchy than currently envisaged. It will also take cognisance of any improvements in pollution prevention technology and include appropriate procedures for use to ensure that site closure and decommissioning do not cause pollution or harm.
- 10.2.3 It is anticipated that all wastes delivered to the Site will be suitably processed prior to site closure, as follows:
- 10.2.4 Any wastes that cannot be processed at the Site will be removed in IBCs, sealed and lidded skips or dedicated containers to an authorised facility in accordance with the relevant Waste Transfer Note procedure or Hazardous Waste Consignment Note and the Duty of Care.
- 10.2.5 The Closure Plan will identify the types and quantities of waste likely to be generated from site closure and decommissioning. Any properties associated with various wastes that require special handling procedures will be identified and measures put in place to ensure their correct management. Appropriate containers will be identified and brought to site to safely segregate and store any residual materials requiring removal.
- 10.2.6 Measures include:
- Any untreated foam must be correctly segregated and stored in dedicated and labelled IBCs to prevent any mixing with non-hazardous media or risks to personnel;
  - Any powder media will be transferred into sealable 'Big Bags' or other sealed containers and transferred off-site to an authorised facility;
  - Decanted deionised water will be discharged to foul sewer in accordance with the Trade Effluent Discharge Consent;
  - CO<sub>2</sub> fire extinguishers will be removed off site to an authorised refurbishment facility;
  - Emptied and dismantled fire extinguisher cannisters, brass heads and metal dip tubes will be transferred to authorised scrap metal recycling facilities;
  - Plastic skirts and dip tubes, cardboard and packaging wastes will be stored in sealed containers and transferred off-site to authorised recycling facilities;

- Plant such as the carbon absorption plant, cardboard and plastics baler, inclined conveyor and forklift truck will be transferred off-site for reuse, resale or for authorised recycling;
- Provision of a water supply from a hose if potentially dusty materials arise.

10.2.7 Once waste operations cease, site plant will be decommissioned. Any materials that cannot be viably recovered will be disposed of at authorised facilities.

10.2.8 Any concrete and brick waste that arises from demolition work will be crushed and supplied as a secondary aggregate or in accordance with a suitable WRAP / end of waste protocol prevalent at the time.

10.2.9 A hose will be used during decommissioning works to ensure that any potentially dusty materials are suitably damped down to minimise any particulate emissions. Site surfaces will also be damped down to minimise emissions associated with lorry and mobile plant movements during the closure and decommissioning phases.

10.2.10 As the engineered surfaces are likely to remain in-situ there is no pathway for potential contamination of groundwater.

10.2.11 Suitable records will be maintained during the site closure and decommissioning phases. Records will relate to the types and quantities of wastes produced during decommissioning, Consignment Notes and Waste Transfer Notes relating to materials removed off site, Registered Waste Carrier details of the hauliers used, details of the types and amounts of wastes reused, recycled, recovered and disposed of. Records will be made available for inspection to authorised officers of NRW.

## **11 TRAINING**

11.1.1 Site staff will be trained and instructed in the procedures required to operate the Site and will be aware of the permitted waste types accepted at the facility as well as the requirements of the Environmental Permit, Fire Prevention and Mitigation Plan (FPMP) and EMS etc.

11.1.2 A record of all training will be kept on Site or at a suitable secure location off site, see Appendix 10. A staff training matrix will also be maintained, based on the requirements of Appendix 11.

## **12 SITE DIARY**

12.1.1 A Site diary consisting of accurate and complete reporting and record keeping will be maintained at all times and will be made available for inspection by authorised officers of NRW when requested.

## **13 COMPLAINTS**

### **13.1 PROCEDURES IN THE EVENT OF A COMPLAINT**

13.1.1 Any complaints about the Site, e.g. from members of the public, local residents, neighbouring businesses, visitors, staff and regulatory bodies, including NRW, will be reported to the Site Manager and the Operations Director who are responsible for site management.

13.1.2 The following actions will be taken on receipt of an external complaint:

- The responsible person receiving the complaint at the Site will immediately record the key details, initiating the investigation process. Details will be entered on the Complaint Report Form, see Appendix 12. The form sets out the key information that should be recorded at this time in order to facilitate further suitable investigation.
- The Site Manager and Operations Director will be informed of the complaint as soon as possible, including the location, time and date of the complaint being lodged.

13.1.3 In recognising that some complaints can be transient and short-lived, timely notification of complaints directly from the complainant or NRW is imperative to allow for appropriate investigation. If the complaint occurs more than 12 hours before notification is provided to the Operator, it may not be possible to substantiate the complaint or pinpoint the cause. The Operator will, however, contact the complainant where possible, review any operations at the time which had the potential to cause the complaint and complete and record a comprehensive complaint investigation. For complaints received within 12 hours of the incident the following actions will be undertaken:

- The Site Manager, Operations Director or other suitably trained person will visit the complaint location as soon as possible, with the aim of undertaking monitoring within 2 hours if this is possible within the working day. The Site Manager, Operations Director or other suitably trained person will subjectively determine the presence or absence of the cause of the complaint. Opportunities to meet the complainant to discuss the matter directly will be pursued, wherever possible.
- If the cause of complaint is present, the key 'FIDOR' criteria will be assessed at the complaint location, as follows:
  - Frequency – is the cause of the complaint, intermittent or persistent; is there a history of complaints at this location?
  - Intensity – is the cause of complaint faint, moderate, strong, or very strong?
  - Duration – how long is the cause of complaint present at this location?
  - Offensiveness – provide a description of the cause of complaint; is it high, moderate, or low offensiveness?
  - Receptor sensitivity - is the cause of complaint present at a remote or highly sensitive location; is it localised or widespread?

13.1.4 The Site Manager, Operations Director or other suitably trained person will subsequently undertake the following further assessment process:

- Review of the operations at the Site prior to and at the time of the complaint;
- Review of the environmental control systems prior to and at the time of the complaint;
- Review of the previous complaint history at the location identified.

13.1.5 Where a significant complaint is substantiated by the Site Manager, Operations Director or other suitably trained person, the Operator will contact NRW to discuss the incident as soon as possible following receipt of the complaint details, allowing sufficient time for the above investigation to be

completed, and within a maximum target response period of 24 hours from complaint receipt. If the necessary contact details are available and direct feedback has been requested the Operator will also contact the complainant directly to discuss the issue, the findings of the subsequent investigation, and any actions arising.

- 13.1.6 Once actions have been completed the Site Manager, Operations Director or other suitably trained person will visit the complaint location to ensure that the cause of complaint has subsided.

## 13.2 MITIGATION MEASURES

13.2.1 In the event of a substantiated complaint, the investigation undertaken by the Site Manager or Operations Director or other suitably trained person will incorporate detailed assessment of the Site infrastructure and waste operations to determine any diversion away from 'normal' site operating conditions.

13.2.2 Key items for consideration will be as follows:

- Material inputs – change in waste type, volume, dust characteristics;
- Mechanical breakdown – e.g. of processing plant or delays in waste handling;
- Procedural failure (human error);
- Short-term abnormal weather patterns – wind direction, temperature, inversions, etc;
- Abnormal operating conditions – temporary highly dusty activities.

13.2.3 Upon identification of the likely cause, the appropriate corrective and preventative measures will be identified and implemented under the direction of the Site Manager or Operations Director. Additional support and technical expertise will be provided by internal / external technical specialists, as required.

## 13.3 TIMESCALES

13.3.1 In the event that it proves impracticable to carry out adequate remedial measures within one working day, the Site Manager or Operations Director will notify and agree with NRW the proposed actions and the timescales for their completion as a programme of works.

## 14 REVIEW AND AUDIT

14.1.1 The Operator maintains a Non Conformance Register, which includes a unique reference number for any non-conformance or complaints incidents, the date of the incident, who reported the incident, a description of the incident, who investigated the incident, what were the actions or outcomes of the investigation (including any mitigation measures) and whether the incident has been addressed and closed or is still ongoing.

14.1.2 The Non-Conformance Register will be reviewed each month as part of the monthly management meetings. Any complaints about amenity issues such as dust, odour or pests will be discussed and actions suggested and agreed to ensure improvements are made and the likelihood of such incidents reduces going forward.

14.1.3 The Operator will undertake an annual audit of the EMS, the Non-Conformance Register (including complaints history), environmental performance, objective and targets and future planned improvements. The purpose is to ensure the Site is:

- Continually improving;
- Minimising the risk of pollution incidents and preventing any significant impacts to sensitive receptors, including detriment to local amenity;
- Operated in accordance with the latest regulatory guidance;
- Meeting environmental objectives independent of the Environmental Permit.

14.1.4 The findings of the annual audit and the Non-Conformance Registrar etc will form part of the senior management annual meeting.

## **APPENDICES:**

Appendix 1	Record of Non-Conformance
Appendix 2	Tabulated Institute for Hygiene and Public Health Laboratory Results
Appendix 3	WM3 Assessment of Carbon Filtered Fire Extinguisher Foam (MJCA Ltd, Feb 2025)
Appendix 4	General Waste Management
Appendix 5	Preventative Maintenance Checklist
Appendix 6	Maintenance Record
Appendix 7	Inspection Record
Appendix 8	Environmental Accident and Incident Record
Appendix 9	Emergency Spillage Procedure
Appendix 10	Training Record.
Appendix 11	Training Needs Checklist
Appendix 12	Complaints Record
Appendix 13	Climate Change Risk Assessment

**APPENDIX 1:**

**Record of Non-conformance**

Record of Non-conformance	
<b>Date and time non-conformance identified</b>	
<b>What happened, what was it about?</b>	
<b>What caused it?</b>	
<b>What have you done to make sure that it does not happen again?</b>	
<b>Was there any significant pollution – for example foam entering a surface water drain or public sewer?</b>	
<b>If there was then you must notify the NRW on 0300 065 3000 (open 24hours/day)</b>  <b>Have you done so?</b>	<b>Yes/No/not applicable</b>  <b>Time:</b>  <b>Date:</b>  <b>NRW Incident number:</b>
<b>Please print name and sign:</b>	



**APPENDIX 3:**

**SUBJECT TO COMMERCIAL CONFIDENCE AGREEMENT**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[Atmospheric Emissions](#) [Waste Management](#)



General Waste Management – Waste Received on Site							
Date	Origin (e.g. Swansea)	EWC Code	Disposal or Recovery Code	State (liquid, powder, foam)	From another waste facility?	Amount (tonnes)	Comments





## APPENDIX 7:

### Site Inspection Record

Site Inspection Record			
Date	Item	Inspected (yes/no)	Comments
	Site entrance and external yard		
	Concrete pad		
	General site cleanliness and sweeping, including corners		
	Carbon absorption unit (including valves, flanges, pressure valves and connections)		
	Bagging plant		
	Cardboard and plastics baler		
	Inclined conveyor		
	Site drainage, including concrete sumps		
	External drainage cut off valve		
	Loading area and kerbing		
	Fire prevention and control system		
	Litter		
	Odour		
	Dust		
	Mud / dirt		
	Pests, vermin, insects and scavenging birds;		
	Security		

**APPENDIX 8:**

**Environmental Accident**

<b>Environmental Accident and Incident Record</b>	
<b>Date and time of the incident</b>	
<b>What happened, what was it about?</b>	
<b>Was anyone else aware of this – other witnesses? If so who?</b>	
<b>What caused it?</b>	
<b>What action did you take to fix the problem? Were external agencies involved?</b>	
<b>What have you done to make sure that it does not happen again?</b>	
<p><b>If there was then you must notify the NRW on 03708 506 506 (open 24hours/day)</b></p> <p style="text-align: center;"><b>Have you done so?</b></p>	<p style="text-align: center;"><b>Yes/No/not applicable</b></p> <p style="text-align: center;">Time:</p> <p style="text-align: center;">Date:</p> <p style="text-align: center;">NRW Incident number:</p>
<b>Please print name and sign:</b>	

## APPENDIX 9

### EMERGENCY SPILLAGE PROCEDURE

#### Environmental Risk

Risks of environmental pollution incidents from Unit 10B, Sir Alfred Owen Way, Pontygwindy Industrial Estate, Caerphilly, CF83 3HU are considered to be from spillage or leakage of fire extinguisher media from the treatment and transfer of spent or unused waste fire extinguishers, including foam, water and powder, and fuel or oil in the event of a spillage or leakage from the fork lift truck or delivery vehicles accessing and exiting the Site.

The Site is equipped with 4 chemical spill kits that are located inside the building. In addition, absorbent granules are stored in a sealed and lidded container on the external yard.

A blind lateral drain, with covering metal grid, is located across the entire internal width of the building entrance to prevent any inadvertent escape of liquid to the external environment. The blind drain falls to a concrete sump. Any inadvertent escape of liquid or foam from IBCs or fire extinguishers inside the building that drains towards the building entrance doors would collect in the lateral drain then fall to the concrete sump, from where it would be pumped to an IBC inside the building for authorised disposal off-site. The blind drain has been installed so that it is not possible for any liquids to by-pass it, e.g. by draining around the sides. The entire building floors comprises engineered concrete and the lateral drain ties into the sides of the sealed building walls thereby preventing any possibility of liquids by-passing the drain, see Plates 1 and 2 below.

Plate 1



Plate 2



Spent or unused waste fire extinguisher foam is transferred to IBCs by site operatives inside the building. Any IBCs containing waste foam or water removed from the site require loading onto lorries on the external yard area.

There is an external lateral drain across the yard to drain roof water run-off. This drain leads to the Nant yr Aber. Checkfire Limited has installed a manual shut off valve in the external drain, so that in the event of any potentially polluting liquids from the Site entering the drain, they could be prevented from draining into the Nant yr Aber by closing the shut off valve.

In addition, to further reduce risk, a dedicated loading and unloading area has been constructed on the external yard, which comprises impermeable concrete pavement circa 5m x 4m in area. It is kerbed to 3 sides, with the unkerbed side enabling access and egress by the fork-lift truck to load and unload lorries.

The external yard naturally slopes from the public highway on Sir Alfred Owen Way to the front of the building. The unkerbed side of the unloading area is up gradient, i.e. nearest the public highway, meaning that any accidental spillage or leakage during loading or unloading would be contained by the kerbed area. The size of the kerbed area is such that it can contain the entire contents of an IBC in the event a container was accidentally punctured or tipped over during loading or unloading. Contained liquid would then be pumped into a separate and sealed IBC for authorised disposal off site.

### **Emergency Spillage Procedure**

#### ***Aim***

To ensure that any fire extinguisher media, fuel or other potentially polluting liquid spillages are contained within an area and cause minimal environmental impact.

#### ***Steps to be Followed***

##### ***Small scale***

A small-scale fire extinguisher media, fuel or other potentially polluting liquid spillage is one caused by things such as a splash or spill whilst filling an IBC or item of plant or machinery. The volumes involved are small and are confined to a small area.

If a small spill does occur the spill needs to be covered with absorbent granules from the external sealed storage area or treated with a chemical spill kit located inside the building.

The absorbent material or spill kit should be allowed to cover the spill for a sufficient amount of time to allow it to soak up the liquid contamination.

Once the absorbent material has soaked up the spill it should be removed to a quarantine skip for non-conforming waste. From there the waste should be exported off Site to a facility permitted to accept the waste types and all relevant documentation should be maintained by Checkfire Limited, e.g. Hazardous Waste Consignment Note or Waste Transfer Note.

Report to the Site Manager any materials that have been used and need replacing.

##### ***Large Scale***

In the event of a major spillage of fire extinguisher media (e.g. an entire IBC), fuel or other potentially polluting liquid, the essential action to be taken is to prevent the spillage migrating to a position / sensitive receptor where it could cause contamination.

This can be done by:

- Ensuring any spillage inside the building is contained by the internal lateral drain and that the contents that fall to the integral concrete sump are pumped into a sealed IBC for removal off site to an authorised facility.
- Ensuring any spillage on the external yard is prevented from passing via the external lateral drain to the Nant yr Aber, by immediately closing the manual shut off valve.
- Ensuring that any spillage in the external loading area, which will collect in the 3-sided kerbed area, is pumped into a sealed IBC for removal off site to an authorised facility.
- Placing absorbent materials or chemical spill kits on the spillage.

If the spillage is major, it is essential that instant action is taken, including closing the manual shut valve, pumping captured liquids into sealed IBCs for removal off site to authorised facilities and using the chemical spill-kits and absorbent material.

Where possible, site operatives should try to prevent any further spillage from the source e.g. by turning off any valves or blocking any holes or punctures in a leaking IBC etc.

The spill should be reported as soon as reasonably possible to the Site Manager and NRW.

Use the absorbent materials and chemical spill kits to clear up the spillage and seek specialist advice from appropriate contractors.

Once the absorbent material/chemical spill kit has soaked up the spill it should be removed a sealed and lidded quarantine skip. From there the waste should be exported off Site to a facility permitted to accept the waste types and all relevant documentation should be held on site.

Report to the Site Manager any materials that have been used and need replacing.

**Consequences of not following procedures:**

If a spill occurs and the above procedures are not followed, then the Site runs the risk of causing pollution to the surrounding land and water courses. This may result in action being taken against the company.

**APPENDIX 10:**

**Training Record**

Training Record						
Employee Name				Job Title		
Training Required	Date Due	Date Done	Passed as competent? (yes/no)	Reviewers signature	Date of refresher	Comments

**APPENDIX 11:**

**Training Needs Checklist**

Training Needs Checklist																
Employee	Permit role and responsibility, compliance with conditions	Training Required*														Comments
		Environmental Awareness						Maintenance / Operations				Accidents and Emergency				
		EMS, FRMP, Odour Management Plan, Dust and Emissions Management Plan, Noise Management Plan	Waste receipt including pre-acceptance and acceptance checks, Duty of Care	Waste storage and processing, compliance with maximum storage limits	Operation of carbon absorption plant, bagging plant and cardboard baler	Awareness of local sensitive receptors and complaints procedures etc	Maintenance of plant and equipment	Tanks, containers, bunds and pipework	Fire extinguishers, fire hoses	Spill kits,	Spill response	Fire Emergency Procedures	Failure of Services	Dust and litter emissions, pests, mud on road etc	Odour emissions	

Training Needs Checklist															
Employee	Permit role and responsibility, compliance with conditions	Training Required*												Comments	
		Environmental Awareness						Maintenance / Operations			Accidents and Emergency				
		EMS, FRMP, Odour Management Plan, Dust and Emissions Management Plan, Noise Management Plan	Waste receipt including pre-acceptance and acceptance checks, Duty of Care	Waste storage and processing, compliance with maximum storage limits	Operation of carbon absorption plant, bagging plant and cardboard baler	Awareness of local sensitive receptors and complaints procedures etc	Maintenance of plant and equipment	Tanks, containers, bunds and pipework	Fire extinguishers, fire hoses	Spill kits,	Spill response	Fire Emergency Procedures	Failure of Services		Dust and litter emissions, pests, mud on road etc

**APPENDIX 12**

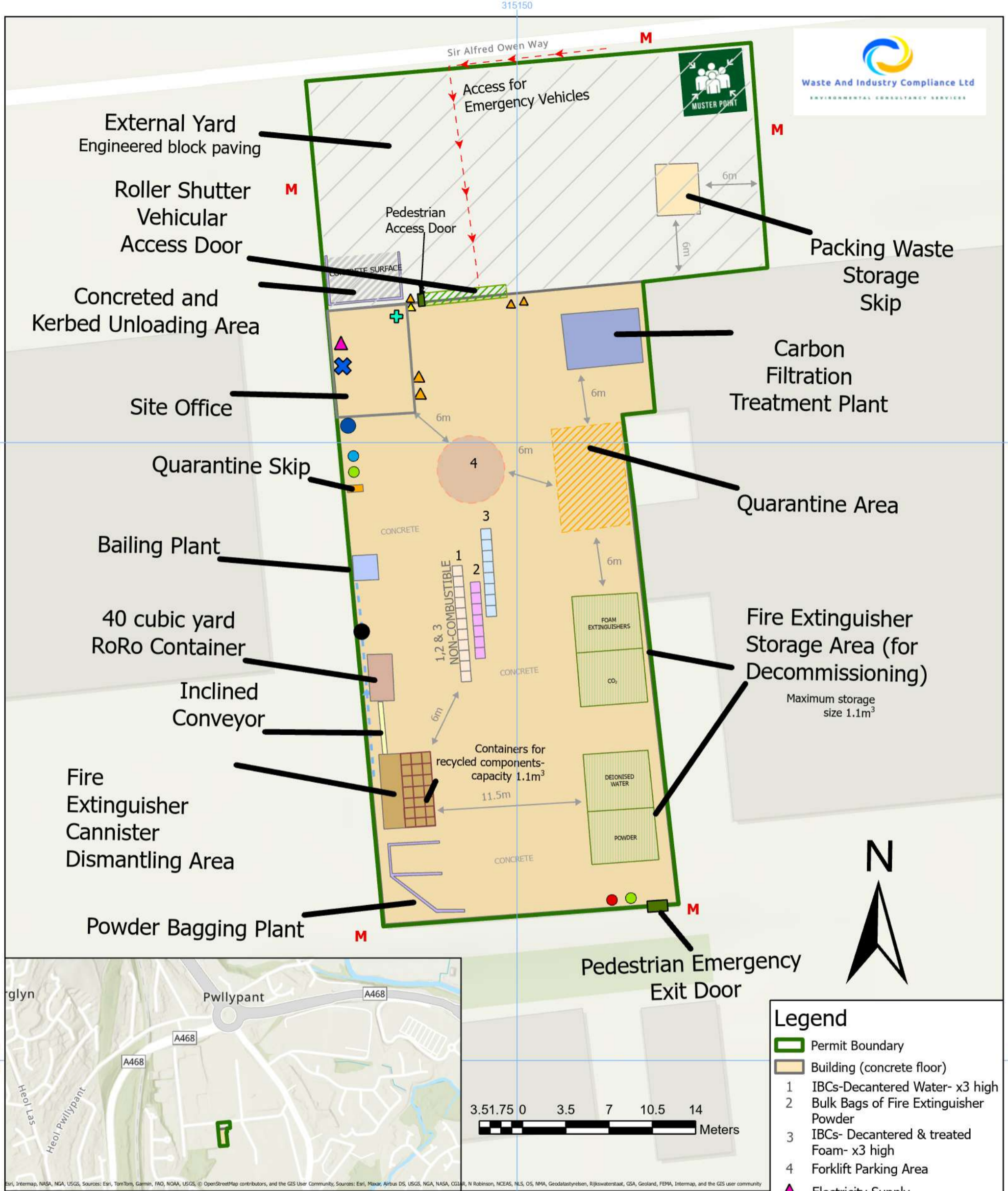
**Complaints Form**

<b>Complaints Record</b>	
<b>Who made the complaint?</b>	
<b>Name:</b>	
<b>Address:</b>	
<b>Phone No:</b>	
<b>Date and time of complaint</b>	
<b>What caused it?</b>	
<b>Was anyone else aware of this? If so who</b>	
<b>What was the source of the problem, what went wrong? If source is unknown contact a suitably qualified person to investigate.</b>	
<b>What have you done to make sure it won't happen again?</b>	
<b>Was there any significant pollution – for example oil entering a surface water drain?</b>	
<p style="text-align: center;"><b>If there was then you must notify NRW</b></p> <p style="text-align: center;"><b>Have you done so?</b></p> <p><b>You must also notify the local NRW Office via email or letter.</b></p>	<p style="text-align: center;"><b>Yes/No/not applicable</b></p> <p style="text-align: center;"><b>Date and Time:</b></p> <p style="text-align: center;"><b>NRW Incident number:</b></p>
<b>Please print name and sign:</b>	

<sup>(i)</sup> Chemical abstract service number of fluoroalkyl surfactants is confidential and withheld from the SDS, however analysis of the species of fluoroalkyl surfactants is provided.

<sup>(ii)</sup> <https://www.gov.uk/guidance/identify-and-classify-waste-containing-persistent-organic-pollutants-pops>

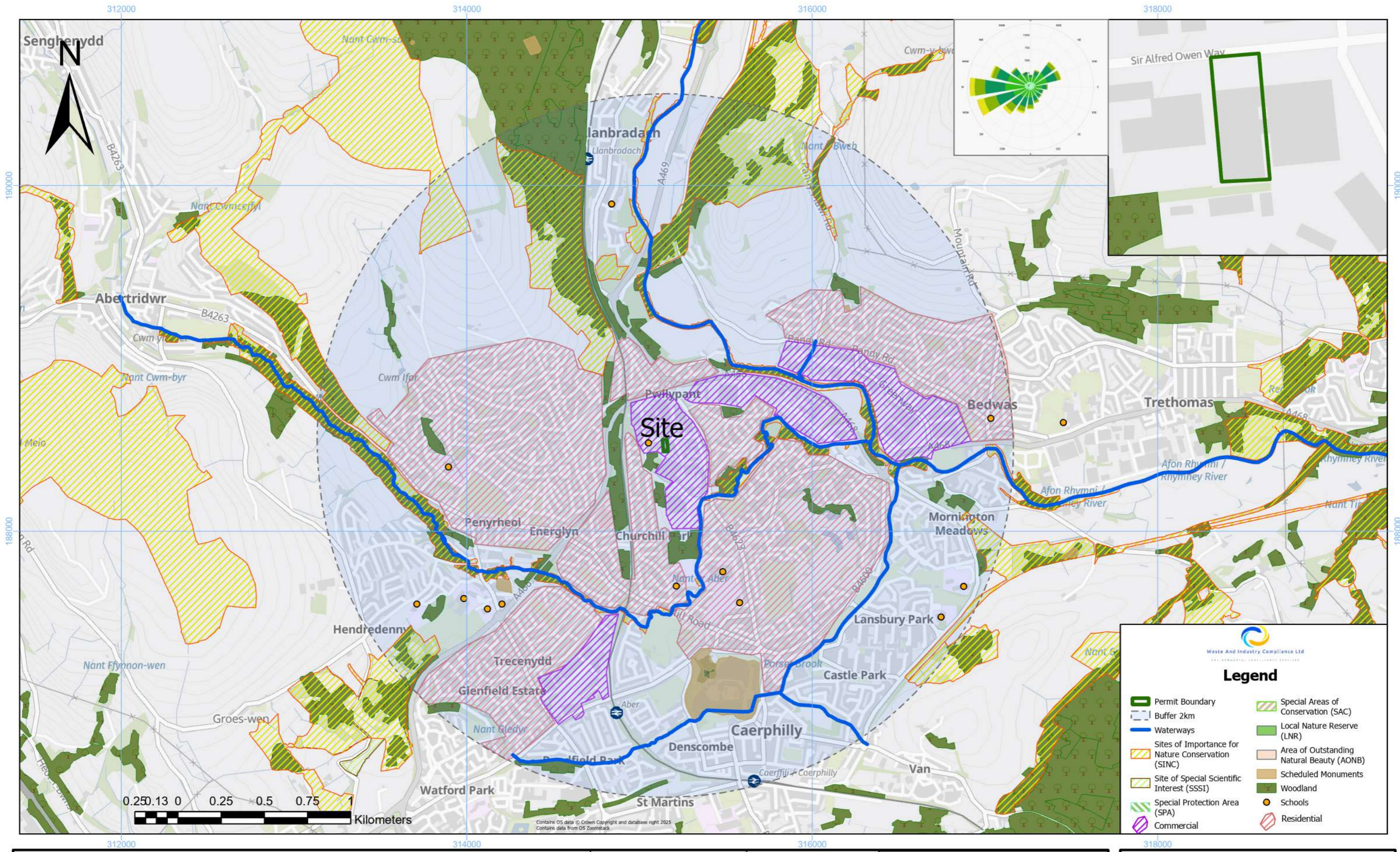
Published 19 December 2022



Drawing Number: SiteLayout-DW03
Page Size: A3
Date: 04/07/2025
Scale: 1:300
Version: FINAL
Grid reference: ST 15149 88490

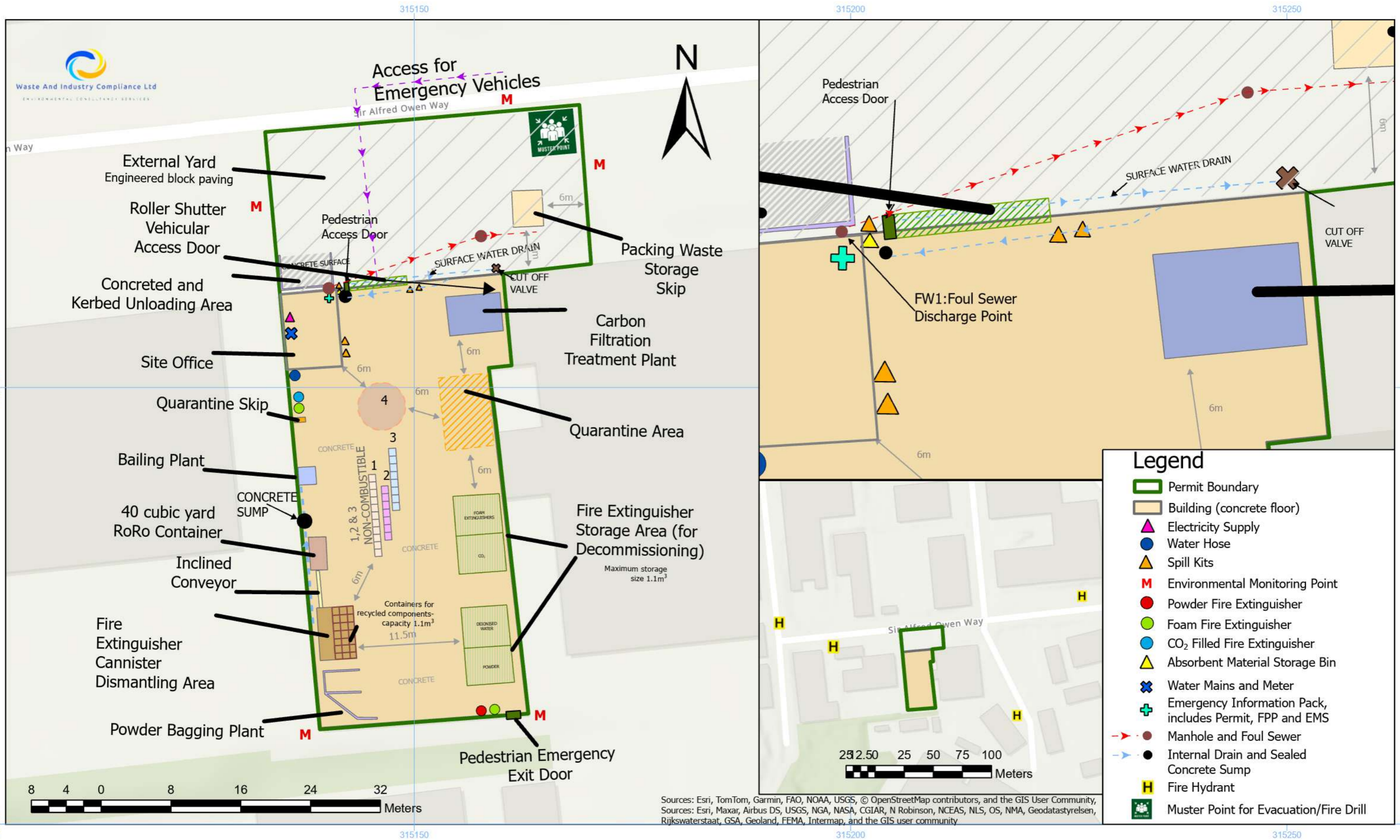
Title: indicative Site Layout & Storage	
Site Location: Unit 10B, Sir Alfred Owen Way, Pontyglyndy Industrial Estate, Caerphilly, CF83 3HU	
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<b>Legend</b>	
	Permit Boundary
	Building (concrete floor)
	1 IBCs-Decanted Water- x3 high
	2 Bulk Bags of Fire Extinguisher Powder
	3 IBCs- Decanted & treated Foam- x3 high
	4 Forklift Parking Area
	Electricity Supply
	Water Hose
	Powder Fire Extinguisher
	Foam Fire Extinguisher
	CO <sub>2</sub> Filled Fire Extinguisher
	Absorbent Material Storage Bin
	Water Mains and Meter
	Emergency Information Pack, includes Permit, FPP and EMS
	Spill Kits
	Environmental Monitoring Point
	Muster Point for Evacuation/ Fire Drill

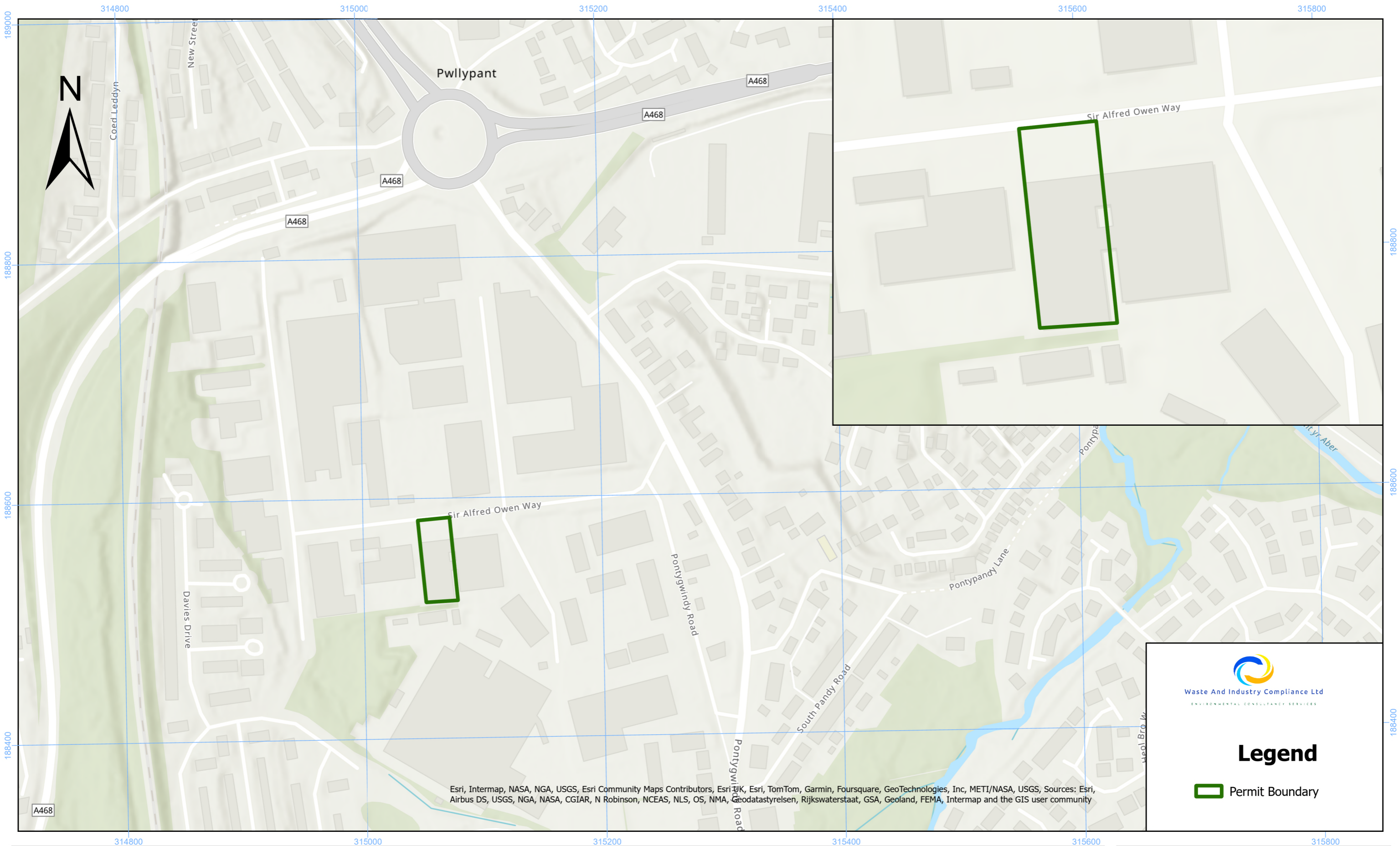


<b>Title:</b> Sensitive Receptors	<b>Date:</b> 03/04/2025	<b>Page Size:</b> A3	<b>Drawing Number:</b> CheckfireLtd-Receptors-DW02
<b>Site Location:</b> Unit 10B, Sir Alfred Owen Way, Pontygwindy Industrial Estate, Caerphilly, CF83 3HU	<b>Version:</b> FINAL	<b>Scale:</b> 1:20000	<b>Grid reference:</b> ST 15149 88490

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<p><b>Title: Site Drainage</b></p>	<p><b>Date: 11/07/2025</b></p>	<p><b>Page Size: A3</b></p>	<p><b>Drawing Number: CheckfireLtd-Sitedrainage-DW04</b></p>	<p>Author: S. Barnes. Contains OS data © Crowncopyright [OS OpenMap Local][2025]. All Dimensions to be checked on site and not scaled from this drawing. This drawing is not for construction This document and its design is copyright of Waste &amp; Compliance Ltd. and should not be reproduced in part or whole without permission. It shall be read in conjunction with accompanied consultant documents and associated project documents. All services to be checked on site and not scaled from this drawing</p>
<p><b>Site Location: Unit 10B, Sir Alfred Owen Way, Pontygwindy Industrial Estate, Caerphilly, CF83 3HU</b></p>	<p><b>Version: FINAL</b></p>	<p><b>Scale: 1:400</b></p>	<p><b>Grid reference: ST 15149 88490</b></p>	



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**Legend**

Permit Boundary

<b>Title: Site Location</b>	<b>Date: 29/10/2024</b>	<b>Page Size: A3</b>	<b>Drawing Number: CheckfireLtd-SiteLocation-DW01</b>	<small>Author: S. Barnes. Contains OS data © Crowncopyright [OS OpenMap Local][2024]. All Dimensions to be checked on site and not scaled from this drawing. This drawing is not for construction. This document and its design is copyright of Waste &amp; Compliance Ltd. and should not be reproduced in part or whole without permission. It shall be read in conjunction with accompanied consultant documents and associated project documents. All services to be checked on site and not scaled from this drawing</small>
<b>Site Location: Unit 10B, Sir Alfred Owen Way, Pontygwindy Industrial Estate, Caerphilly, CF83 3HU</b>	<b>Version: FINAL</b>	<b>Scale: 1:1900</b>	<b>Grid reference: ST 15149 88490</b>	