AC ENVIRONMENTAL CONSULTING

Fire Prevention & Mitigation Plan

Blancomet Recycling Ltd

Unit 18C, Freemans Parc, Penarth Road, Cardiff, CF11 8EQ

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Issue 1, Version 2

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AC Environmental Consulting Ltd

Environment House,

Werrington Road,

Stoke-on-Trent

ST2 9AF

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1. INTRODUCTION

This Fire Prevention & Mitigation Plan has been formulated to satisfy the conditional requirements for Blancomet Recycling Ltd and reflects the guidance detailed within the Natural Resources Wales document Fire Prevention & Mitigation Plan Guidance –Waste Management (published August 2017).

Blancomet Recycling Ltd is seeking to obtain a bespoke environmental permit to operate a Catalytic Converter (CAT) centre at Unit 18C, Freemans Parc, Penarth Road, Cardiff, CF11 8EQ. The permitted area will be a small-scale operation situated within an industrial unit that will store CATs, alongside lead-acid batteries, wiring looms, and alloy wheels.

A maximum of 650 tonnes of CATs will be accepted per annum, and it is expected that 2-3 tonnes per day will be accepted on average. The annual tonnages for lead-acid batteries is 1500 tonnes, wiring looms is 1500 tonnes per annum, and alloy wheels has a maximum tonnage of 500 tonnes per annum. The site will handle both hazardous and non-hazardous waste. The non-hazardous waste consists of the steel matrix CATs.

The site's operating hours will be as follows:

Monday – Friday: 07.00 – 18.00

Saturday: 07.00 – 14.00

Sundays and Bank Holidays: Closed

2. AMOUNT AND TYPE OF WASTE RECEIVED

Material Type	Form	Amount (Daily)
CATs	Loose	Average: 2-3 tonnes
Lead-acid batteries	Loose	Average: 4-5 tonnes
Wiring looms	Loose	Average: 4-5 tonnes
Alloy wheels	Loose	Average: 1-2 tonnes

In accordance with the company's Environmental Management system, the company shall only accept waste materials in accordance with the waste types permitted in the Bespoke Environmental Permit.

The permitted area comprises of a small unit building which will house all site operations. There is one roller shutter door on the eastern boundary which will remain closed at all times deemed appropriate. The unit consists of a toilet, mobile plant storage area, and designated areas for the storage of lead-acid batteries, CATs, wiring looms, and alloy wheels. The site has an existing concrete surface.

3. MATERIAL STORAGE QUANTITIES

Wastes will be brought on to site mainly by Blancomet Recycling's own vehicles and occasionally through third party contractor vehicles and will be delivered directly to the roller shutter door for immediate visual inspection and sortation. CATs will be sorted between those with a steel matrix and those with a ceramic internal matrix in the designated sorting area.

All wastes are be stored in either Dolav boxes, or bulk bags pending dispatch to Blancomet's other business site which will then process and treat the wastes. The CATs and lead-acid batteries are to be stored Dolav boxes, with there also being bulk bags for the storage of wiring looms and alloy wheels.

Materials stored in a single area will be stored in clearly separated waste stacks of a maximum size as shown below. The waste stack numbers below are in accordance with the Fire Prevention & Mitigation Plan Ref: 230718BC101 provided in Appendix 2.

The table below illustrates the waste stacks on site and the maximum volume for each. As per the Natural Resources Wales guidance, a 6m distance between waste stacks is preferable, however waste stacks 1, 3, and 4 have been combined due to the lack of 6m distance and has been mirrored in the table below:

Waste stack Number	Material Type/Waste stacks	Form	Location	Maximum Amount in each area (m^3)
1 3 4	Lead-acid Batteries Wiring Looms Alloy Wheels	Solid	Covered Building	(x 22 Dolav boxes) 19.54 (x16 bulk bags) 11.66 (x8 bulk bags) 5.83 **Total= 37.03**
2	CATs	Solid	Covered Building	(x21 Dolav boxes) 18.65

Due to the nature of operations, the only wastes stored on site are CATs, lead-acid batteries, wiring looms, and alloy wheels. Each waste stack will be always accessible from at least one side to allow for ease of extinguishing in the event of a fire.

4. MATERIAL STORAGE DURATION

A maximum of 2-3 tonnes of CATs will be accepted per day, with the site expected to accept up to 650 tonnes annually. Lead-acid batteries, and wiring looms are accepted up to a maximum tonnage of

1,500 each per year (4-5 tonnes per day each), whereas alloy wheels are accepted up to a maximum tonnage of 1-2 tonnes per day, for a total tonnage of 500 tonnes annually.

CATs will be delivered directly to the roller shutter door for immediate visual inspection and sortation. CATs will be sorted between those with a steel and those with a ceramic internal matrix. Other wastes brought onto site are also inspected on arrival and sorted to be stored in their designated areas.

CATs will be stored within the Dolav boxes in the western area of the site, pending dispatch to another Blancomet site which is permitted to process and treat the CATs. Lead-acid batteries are also stored in Dolav boxes, however these are clearly separated from the CAT storage boxes and situated on the southeastern boundary. Adjacent to this waste stack are two other waste stack areas for the storage of wiring looms, and alloy wheels; both these waste types are stored in bulk bags and are separate waste stacks.

The site will handle both hazardous and non-hazardous waste. The non-hazardous waste consists of the steel matrix CATs, alloy wheels, and wiring looms. The hazardous material on site is the ceramic matrix CATs, due to them containing refractory ceramic fibres (RCFs), wiring looms (containing POPs), and lead-acid batteries. The non-hazardous material will be retained on site for a maximum of 30 days.

Material Risk Rating	Timescale
Low Risk Material (steel matrix CATs, alloy wheels, wiring looms)	Material will be retained for 30 days
Higher risk material (ceramic matrix CATs, lead-acid batteries, wiring looms)	Material will be retained for 7 days.

5. COMBUSTIBLE STORAGE DIMENSIONS (MAXIMUM)

The various waste stacks of wastes and products on site are maintained at a certain maximum size depending upon the need to maintain separation distances and the availability of space. The table below details the maximum waste stack size for each category of waste. The waste stack sizes in the table below are in accordance with those given on the Fire Prevention Plan Drawing Ref: 230718BC101.

It is key to note that due to all wastes on the site being contained within boxes or bags, the maximums given are not necessarily correlated to the reality, as the maximum length of some stockpiles are only relevant to a single row of the stockpile. The maximum volume, therefore, relates to the total volume of the stockpile as a whole, rather than the total volume of the maximum.

Material	Length (Metres)	Width (Metres)	Height (Metres)	Maximum Waste Volume (m^3)
Waste stack 1: Lead-acid Batteries	9.6 (1.2 per box)	2 (1 per box)	0.74	19.54 (0.888 per box)
Waste stack 2: CATs	21.6 (1.2 per box)	2 (1 per box)	0.74	18.65 (0.888 per box)
Waste stack 3: Wiring Looms	7.2 (0.9 per bag)	1.8 (0.9 per bag)	0.9	11.66 (0.729 per box)
Waste stack 4: Alloy Wheels	7.2 (0.9 per bag)	0.9	0.9	5.83 (0.729 per box)

Stock rotation is extremely unlikely to be an issue due to the small volume of waste retained on site and the quick turnover. Due to the materials on site only being in small waste stacks, the operator will have a quick turnover of 7 days.

FIFO – Due to the nature of waste on site and the storage of the waste, FIFO is automatically achieved due to the waste being stored in a Dolav boxes and bulk bags. The waste will be removed as containers will therefore be entirely removed from site. Site management will undertake daily inspections of each waste stack to ensure they are being removed from site as such.

Technical Assessment- As a result of the waste accepted on site, the site is not affected by seasonality due to the waste types accepted not being impacted by external factors i.e. weather affecting green waste. Furthermore, the site itself has a quick turnover with wastes being stored within boxes/bags before being shipped to other outlets within the same company (Blancomet), therefore the outlets this site delivers to, will be resilient as management will be aware of any alterations in the chain.

Waste stack levels will be recorded by the COTC holder weekly. The records will be reviewed by site management and action will be taken in the event where waste stacks are not being reduced as planned. This could involve investing in new equipment, hiring new staff, further staff training or changes in the site's current procedures.

All hazardous materials are stored on site for no longer than 7 days.

6. OTHER COMBUSTIBLE MATERIALS STORED/PRESENT ON-SITE

The following combustible materials are stored/present on-site:

Material Type/Waste stacks	Form	Location	Maximum Amount in each area (m^3)
Paper/Cardboard/Plastic (Office materials)	Loose	Adjacent to site toilet	<1m^3
Textiles (PPE)	Loose	Adjacent to site toilet	<0.5m^3

The nature of the materials stored on-site potentially increases the risk of fire, but the extremely low flammability of wastes stored coupled with the very low level of activity on site mitigates this. The company therefore considers itself to be a low-risk operational site, with regards to fire risk.

The above materials are not wastes but are used in the management of the business.

7. CONTROLS AND SOURCES OF IGNITION

A Fire Risk Assessment is carried out annually at site and this identifies potential sources of ignition. As well as the normal sources that every site may have, the site has others that must be controlled. The potential sources of ignition identified are:

Naked flames: There are no naked flames on site.

Hot Work: The site operated a variety of Health and Safety systems and part of this is a Permit to Work system.

No hot work is required as part of normal site operations. Any hot work which may be required e.g. any work which may give risk to sparks, e.g. drilling, grinding, cutting of metal or stone/concrete, or electrical work will be subject to the Permit to Work system.

Each job under this system is risk assessed prior to work commencing and suitable measures taken to prevent ignition of waste and to deal with any nascent fire promptly before a fire can take hold. This work will be carried out more than 6m away from any combustible waste.

Precautions taken include:

- Cleaning the area of combustible materials prior to work commencing.
- Have suitable fire extinguishers places close to the area of work.
- Maintaining a careful watch throughout the work.
- Inspecting the work are after work has finished and for an hour after.
- A Permit to Work (PTW) system to help manage the risk.

Smoking: The site operates a no smoking policy in all areas of this site. Management brings the rules on smoking to the attention of all workers and visitors to the site and enforce them.

- No smoking is allowed on site.

Electrical installations: should be sufficient capacity for the intended use and designed, installed, inspected, and maintained by a qualified and registered electrician.

- A maintenance programme is in place to inspect and service equipment in accordance with manufactures recommendations.
- An annual inspection of site electrics is undertaken by a qualified and registered electrician. If a fault occurs, it will be repaired within 48 hours.
- Attention shall be made to accumulations of dusts/fluff near sources of ignition such as build up on or around electrical equipment, panels etc.

Bonfires: Under no circumstances shall an open fire be allowed on site.

Arson: Measures are in place to prevent unauthorised site access.

- Site security is robust with 7 CCTV cameras and intruder sensors. An automatic fire extinguisher system that is designed, installed, and maintained by a UKAS accredited installer is also present. Further information on the site's security system can be found in Section 9.8. The site is also entirely indoors within an industrial unit, within an industrial estate. The unit's roller shutter doors will be patrolled and locked at the end of each day.

Accumulation of materials: Whilst not strictly a source of ignition, build-up of dusts, fluff and litter can provide ideal material for a fire to start.

- Managed cleaning is in place to ensure that dusts/fluff/litter is not allowed to build up.
- The site shall be inspected daily by the site manager who holds a COTC. Any accumulations of dust, debris, fluff etc., shall be brought to the attention of the site management. Any accumulations shall be recorded on the site inspection sheet and cleaned immediately.
- Attention shall be particularly made to accumulations near sources of ignition such as dust/fluff build up on or around electrical equipment, panels etc.

Self-combustion: In certain circumstances, certain waste materials can have the ability to generate heat through biodegradation or oxidation, to a point where self-combustion occurs. Due to the nature of waste accepted on site and the storage procedures in place, this is very unlikely to occur.

Hot exhausts: The risk from hot exhausts is extremely low as there is only one consistent form of plant operating on site (forklift truck) which is fully electric, therefore no hot exhaust can cause any risk of ignition. The forklift truck is stored in the designated plant storage area when not in use and out of hours. The only other vehicle used for operations is the Ford Connect company car which may be used

to transport waste to the site. It is important to note however, that this vehicle does not enter the permitted area and so is always 6m from flammable waste as it is also stored off the site premises overnight. Despite this, a fire watch is carried out to ensure that fires caused by dusts settling on exposed exhausts and engine parts is detected at the earliest opportunity. Specifically, the fire watch at the start and end of the day shall incorporate an inspection of exhausts and a further fire watch shall take place during the midday break.

Industrial heaters: No industrial heaters, incinerators or braziers will be used on site.

Batteries: Batteries are stored in designated Dolav boxes for no longer than 30 days.

Incompatible Waste: As the site is a low-level waste storage centre, the issue of incompatible and unstable wastes, whilst possible, is very unlikely to arise. However, the site operates a waste acceptance procedure which aims to deal with this, and which is described below.

8. WASTE ACCEPTANCE

The site has procedures designed to ensure that wastes received at site do not present a risk of fire. Checks to ensure the suitability of wastes accepted begin on receipt.

Wastes are collected by site staff, or occasionally third-party companies. Loads are inspected by site staff at the point of collection prior to being accepted. Wastes are also supervised to that any issues which were hidden and not identified prior to receipt can be seen. The aim of this is to ensure that problematic load is not accepted.

The site only accepts wastes that have been pre-booked in the form of CATs, wiring looms, lead-acid batteries, and alloy wheels, so the potential for fire arising from mixtures of wastes or incompatible wastes is very limited. However, it is also recognised that some loads may contain other wastes and although these are likely to be in very small quantities, it is theoretically possible that a residual risk from incompatible waste remains. If such a load is identified at collection it shall be rejected and site management advised.

During the inspection immediately upon receipt, checks shall be made for hot spots or hot loads. This will be both visual and using a handheld IR thermometer.

Following the inspection, it is extremely unlikely that incompatible waste will be let onto the site. However, if such an issue is identified at site, the load shall be segregated and stored temporarily within the mobile plant area pending removal to a suitably permitted site. No such wastes shall be stored on site overnight. Action taken may be to segregate and removed the problematic waste to a

secure area or to sort the load, removing acceptable waste to recycling and to invite suitably qualified contractors to collect the problematic waste.

9. QUARANTINE AREA

9.1 The location of the quarantine skip allows for ease of access from the site entrance when moving stockpiles and for quick access by the fire service.

9.2 The site has a quarantine skip located to the southwestern area of the site, on the outside of the unit building. The size of the site does allow a 6m distance between the quarantine area and any of the flammable stockpiles on site, therefore complying with guidance for 6m separation distances between flammable stockpiles.

9.3 Despite potential storage capacity of the quarantine skip, it is intended that waste fires will be tackled in-situ (with use of fire extinguishers) rather than moving potentially burning waste into other areas of the site. In this instance the site area would be available for use by the Fire and Rescue Service to park fire tenders and allow them to tackle the fire effectively. The quarantine area will then be used to move some of the non-burning wastes from the affected stockpile to reduce the potential scale of the fire.

9.4 The quarantine skip can handle more than half the largest stockpile (37.03m^3) on site due to its capacity being 30.58m^3 and therefore meets the requirements of the Natural Resources Wales Fire Prevention and Mitigation Plan guidance.

10. FIRE PREVENTION AND DETECTION MEASURES

Several measures are taken to prevent fire, these include:

- Fire risk assessment in place.
- Fire exit and fire safety warning signs displayed.
- Fire awareness raised as part of employee induction training.
- Automatic fire extinguishers and AFFF fire extinguishers are distributed throughout the unit building for strategic tackling of fire in the various waste stacks.
- Daily check to ensure correct operation of fire-fighting equipment by employees.
- Material inspection procedure.
- Dedicated hot work procedure.
- No naked flames on site and other sources of ignition, as stated in Section 6.
- No space heaters, burners, furnaces etc will be used on site.

- Contractor control programme which includes a site induction.
- The entire site is a non-smoking area.
- The only form of plant on site is an electric Forklift Truck which will be stored in the assigned plant storage area in the eastern area of the site when not in use and out of hours. The Ford Connect which is occasionally used for the transport of wastes is not stored on site.
- Any spillages shall be dealt with in accordance with procedures and staff are trained in the use of the spill kit which is stored in the site office.
- The sealed Dolav boxes will be used to prevent any fuels and combustible liquids leaking or trailing from CATs and lead-acid batteries.
- Ensuring all electrical equipment is routinely tested and certified by a qualified electrician.
- Maintain site security such as a security system consisting of CCTV cameras with an intruder alarm sensor that is monitored 24/7. The system is designed, installed, and maintained by a UKAS accredited installer. The CCTV is monitored by a central station upon alarm activation. They will liaise with a member of the management team who will await further instructions whether police are required. The cameras can be viewed remotely by management. The site is contained within an industrial unit building with roller shutter doors which will be patrolled and locked by site management at the end of each day.
- If there is an intrusion out of hours, the burglar alarm system that has been installed and maintained by a UKAS accredited installer will alert staff before contacting the police.
- There are 8 automatic fire extinguishers installed in the unit. The automatic fire extinguishers cover all the flammable waste stacks and are operational 24/7. The extinguishers will be automatically triggered in the event of a fire.
- FloodSax will be deployed across the site entrance and the roller shutter doors of the buildings to contain fire water.
- Inspecting every waste stack on a regular basis which involves taking the temperature to ensure the waste has no chance of ignition from the heat.
- Ensuring all plant equipment is kept in good condition and undergoes routine maintenance.
- The site shall be inspected daily by the site manager who is a COTC holder. Any accumulations of dust, debris, fluff etc., shall be brought to the attention of site management. Any accumulations shall be recorded on the site inspection sheet and cleaned immediately. Attention shall be made to accumulations near sources of ignition such as dust/fluff build up on or around electrical equipment, panels etc.
- Ensuring that spill kits are used to clear up any spillages on site immediately. Spill kits will be kept in the depollution area which is the first covered area. All site operatives will be trained

in the deployment of spill kits. However, the site management will be responsible for ensuring that they have been deployed appropriately.

10.1 Fire Watch

Throughout the day the site management will conduct dynamic fire inspections on an ongoing basis. These involve a visual inspection of waste waste stacks and exhausts.

At the end of each working day a documented Fire Watch will be undertaken in accordance with the Fire Watch Procedure and the Fire Watch Form (Appendix 5 and 6). This shall include thermal monitoring waste stacks and equipment. The nominated member of staff shall inspect the site using a hand-held IR non-contact thermometer / infra-red thermal imaging device.

The device shall be used to “scan” over a waste stack to seek for “hotspots” on the surface of the waste stack. Hotspots are considered to be any area significantly higher in temperature than neighbouring areas and any area over 50°C. Temperatures will be recorded on the fire watch form. Records shall be kept in the site office.

If any “hotspots” are identified, then measures described in the Fire Watch Procedure shall be undertaken to manage the waste stack.

After any hot work is carried out, an operative will keep the area under observation for an hour to ensure that a fire does not occur.

At management meetings, recorded temperatures will be reviewed, and any concerns identified will be addressed at this point. The changes could involve changes in the procedures, resetting trigger temperatures, purchasing of new equipment or re-training staff as deemed necessary.

Temperatures of up to 50°C could be expected in wastes stored outside which are exposed to the sun. It is crucial to note that all waste stacks are stored in a covered area so are not exposed to direct sunlight. Temperatures higher than this may indicate another source of heating such as a hidden fire. Where monitoring shows temperatures above this level a fire watch shall be set up and temperatures monitored at 30-minute intervals until such time as temperatures fall below this trigger level in accordance with the Hit / Fire Watch Procedure.

If temperatures increase, or show no signs of decreasing, then action should be taken to reduce the temperature in accordance with Section 9.3 ‘Inspections & Monitoring’ below.

10.2 Inspections and Monitoring

In addition to the Hot / Fire Watch, dynamic inspections will be carried out by the site staff throughout the working day with further daily inspections carried out by the site manager who is a COTC holder to ensure that waste stack sizes and rotation remain within the limits.

These inspections will all involve perimeter and security inspections, together with a review of Fire Watch records and temperature monitoring.

To avoid hot weather heating wastes, temperatures and waste stacks will be monitored by site management. This will involve checking surface temperatures of all wastes. A fire watch will be undertaken every day to ensure that the wastes on site do not exceed the guidance temperatures. It is crucial to note that all waste will be stored within the unit building and will not be exposed to the sun, therefore no solar heating can occur and therefore there is almost no risk of fire from this source. The final procedure used to prevent hot weather heating would be to douse the waste with cold water.

10.3 Site Design

The site layout is designed to ensure freedom of movement. The site is fully concreted with an impermeable concrete surface and is contained within an industrial unit building which is part of a larger industrial estate.

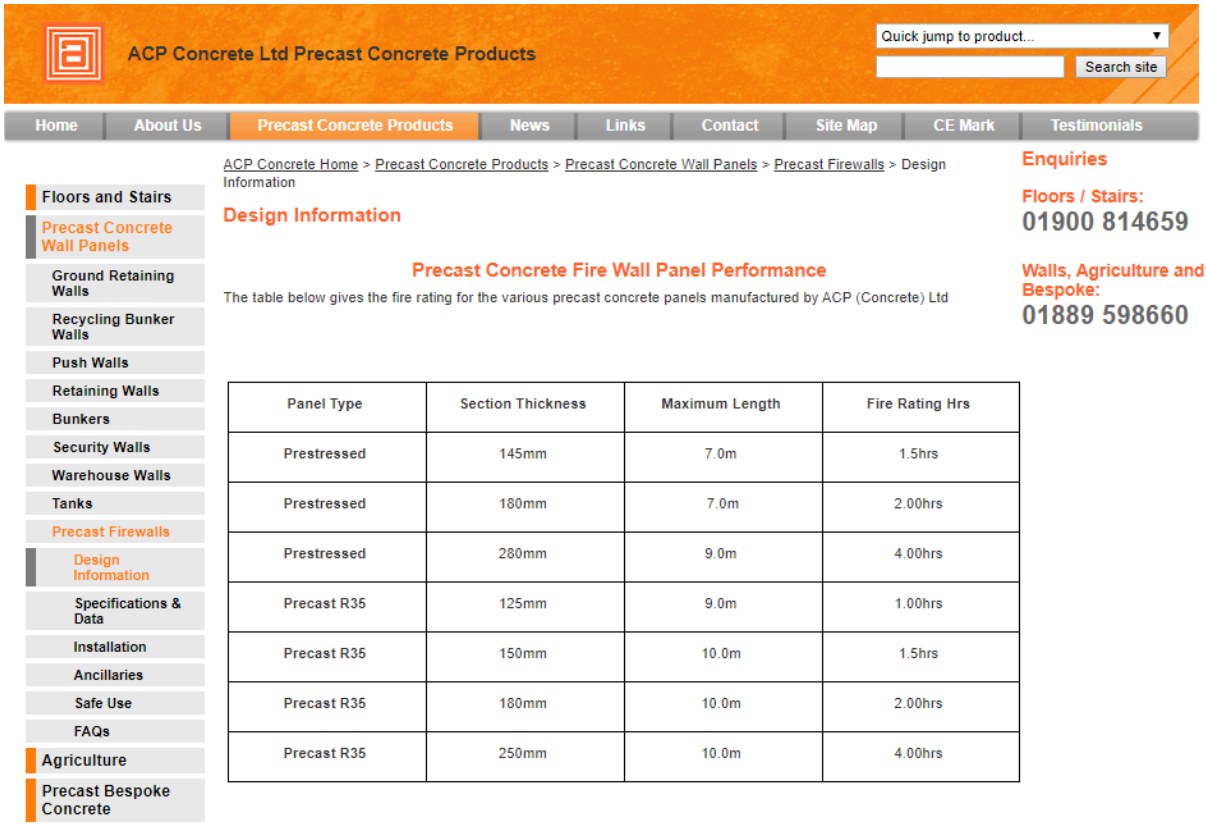
Access for the Fire and Rescue Service will be gained from the roller shutter doors on the on the eastern side of the unit building. The fire service will be able to gain access to the site due to Cardiff, Ely, and Penarth Fire Stations all having WRL's (Water Ladders), as per information from South Wales Fire and Rescue (appendix 12). The entrance to the industrial site is approximately 6.2m wide, which will give the WRL's ample room to manoeuvre to position themselves at the site entrance.

The unit consists of a toilet, mobile plant storage area, an area for the hand-sorting of wastes, and storage areas for the different waste types.

Wastes will be brought on to site mainly by Blancomet's own vehicles and occasionally through third party contractor vehicles and will be delivered directly to the roller shutter door for immediate visual inspection and sortation. CATs will be sorted between those with a steel and those with a ceramic internal matrix before being stored in the Dolav boxes. Wiring looms will be separated according to the waste transfer note, as this will tell operatives if the wiring looms contain POPs. Both lead-acid batteries, and alloy wheels are sorted according to their waste stacks.

CATs are stored in Dolav boxes in the western area of the site, with there being a concrete fire wall to ensure the waste stack sizes are a manageable size for firewater containment. To the east of the

firewall, there are 8 bulk bags for the storage of alloy wheels, 16 bulk bags for wiring looms, and 22 Dolav boxes for lead-acid batteries. All the waste stacks to the east of the firewall are separated to ensure that each of the storage boxes/bags can be accessed from at least one side. It is key to note that the fire wall has a fire resistance period of at least 120 minutes as outlined the table below:



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Design Information

Precast Concrete Fire Wall Panel Performance

The table below gives the fire rating for the various precast concrete panels manufactured by ACP (Concrete) Ltd

Enquiries

Floors / Stairs: 01900 814659

Walls, Agriculture and Bespoke: 01889 598660

Panel Type	Section Thickness	Maximum Length	Fire Rating Hrs
Prestressed	145mm	7.0m	1.5hrs
Prestressed	180mm	7.0m	2.00hrs
Prestressed	280mm	9.0m	4.00hrs
Precast R35	125mm	9.0m	1.00hrs
Precast R35	150mm	10.0m	1.5hrs
Precast R35	180mm	10.0m	2.00hrs
Precast R35	250mm	10.0m	4.00hrs

There are 7 UKAS accredited CCTV cameras installed within the unit building. The unit is also equipped with an automatic fire extinguisher system and AFFF fire extinguishers will be distributed throughout the building to work alongside the Fire and Rescue Service when extinguishing a fire.

10.4 Drainage

The permitted area is entirely indoors and therefore there is no concern regarding run-off from rainfall and therefore no site drainage is necessary. Any potential spillages will be dealt with appropriately within the permitted area using the spill kit that is provided on site.

The site is entirely surfaced with an impermeable concrete surface.

Contaminated flood and fire water will be contained by deploying the FloodSax barriers which will prevent water from draining off site into the main sewer.

10.5 Incoming Waste

Incoming waste is down entirely to purchasing of site management. Deliveries are primarily undertaken by Blancomet Recycling with occasional third party. As such, the input of wastes is entirely within the control of site management and can be stopped at any time.

Loads enroute during the event of a fire will be diverted to other suitably permitted sites around the country; the location of which will be up to and determined by site management, depending on the location of the collection point.

10.6 Security

The site has not experienced any trespass or vandalism in the last few years. The security system consists of 7 CCTV cameras and intruder sensors that are designed, installed, and maintained by a UKAS accredited installer. This system has been designed to conform to PD 6662:2017 (which is the UK implementation of the European Standard EN 50131), BS 8243:2010, and SSAIB Codes of Practice. The system is capable of generating Sequentially Confirmed Alarms, for the purposes of obtaining Police response. The primary notification (signalling) will be a Dualcom Digi Air GRADE 2 modem operating via GPRS. The modem will normally relay all alarm signals to an NSI Gold monitoring station that will filter out any false alarms and failures before passing the call direct to the police.

The system CCTV is monitored by a central station upon alarm activation. They will liaise with a member of the management team who will await further instructions whether police are required. The cameras can be viewed remotely by management 24/7. The locations of the CCTV cameras are shown on Drawing Ref: 230718BC101.

The detection/security systems used are proportionate to the nature and scale of the waste management activities carried out on site. The design, installation and maintenance of all automated systems are covered by an appropriate UKAS-accredited third-party certification scheme. The detection and security system installed on site will effectively contact site management and subsequently the police in the event of an intrusion.

10.7 Housekeeping

The site shall be inspected weekly by the COTC holder. Any accumulations of dust, debris, fluff etc, shall be brought to the attention of site management. Any accumulations shall be recorded on the site inspection sheet and cleaned immediately.

Attention shall be made to accumulations near sources of ignition such as dust/fluff build up on or around electrical equipment, panels etc.

The risk of fire is managed by very careful attention to housekeeping, keeping areas clean, free from litter and detritus, especially electrical infrastructure, through inspections and monitoring, including temperature monitoring throughout the day and as part of the end of day fire watch.

The self-ignition point of wastes is actually very high; plastics typically self-ignite above 260°C, petrol 247°C and diesel 210°C. By ensuring that there are no sources of ignition and no elevated temperatures at the end of a day, management is essentially ensuring that ignition overnight cannot occur.

10.8 Storage of Flammable Materials

The only flammable materials held on site are:

- CATs
- Lead-acid batteries
- Wiring looms
- Alloy wheels

The unit building is equipped roof mounted fire extinguishers that will cover the flammable waste stacks in each area.

No gas cylinders are stored on site. CAT shells, and lead-acid batteries will be stored within a Dolav boxes, with the bulk bags storing wiring looms, and alloy wheels.

All storage areas are easily accessible from at least one side to ensure that if a fire occurs inside of them, it can be put out.

There are no other flammable materials held on site other than those stated above.

10.9 Fire Exercises

Routine fire exercises will take place every year. This will take the form of a practice run through of the procedures to be following on discovering a fire, from raising the alarm to notifying the authorities to evacuating the site and notifying residents.

A fire procedure has been produced and forms part of the site's management plan. Each exercise shall be recorded and any deficiencies in the exercise shall be noted, reviewed by site management and any appropriate corrective action taken. Corrective action may include re-training of staff, amendments to procedures, or purchase of alternative equipment as deemed necessary.

10.10 Plant and Vehicles

The only form of plant frequently used on site is an electric Forklift Truck which is stored on site in the plant storage area shown on Drawing Ref: 230718BC101. The forklift truck is stored in the designated plant storage area out of hours and when not in use. The site also uses a transit van, however this is not stored on site out of hours. This reduces the risk of fire by keeping hot exhausts away from any waste when the site is unmanned. In addition, any act of vandalism is much less likely to result in a waste fire. The forklift truck is fitted with a fire extinguisher.

There is no fuel stored on site. Spill kits are retained on site to deal with any spillage which may occur. These are located within the depollution area which is the covered area to the eastern perimeter of the site.

10.11 Plant & Vehicle Maintenance

Maintenance is required on all site transport vehicles; this includes a mix of daily checks by site staff and routine planned maintenance by specialist sub-contractors. Specialist sub-contractors also carry out maintenance on the vehicle ramps. A service schedule is maintained to ensure all servicing and statutory testing is undertaken at the specified intervals.

If a defect is discovered during the routine daily inspection, this shall be rectified as soon as possible. Generally, this will mean within 48 hours. If the defect is on a part which could give rise to a source of ignition or on a fire suppression system, the equipment will be immediately taken out of service until a repair can be affected.

Part of daily maintenance is also a detailed clean to prevent the build-up of dusts, waste etc. in parts that may not be readily visible. Attention shall be paid to the engine bay and exhaust systems. This is subject to a Site Working Procedure.

Any equipment showing evidence of a leak, either through damage or expansion of fuel within the tank, will be removed from the permitted area and repairs effected immediately. Any spillages will be cleared using Spill-Dri or similar and the residues disposed of to a suitably authorised facility.

All maintenance will be carried out by certified contractors.

10.12 Training

The requirements of the Fire Prevention and Mitigation Plan and the Site Management Plan shall be communicated to all staff and copies made available on site in site welfare facilities. Staff shall be trained by use of induction training and toolbox talks, reinforced annually or when the FPP is amended. Refresher training will be carried out to ensure that all site staff are up to date on how to tackle the

occurrence of fires. Any contractors and visitors will be briefed on the Fire Prevention and Mitigation Plan fire prevention measures to ensure that they are aware of site practices.

10.13 Electrical Safety

The site has a current electrical test certificate and electrical infrastructure is included in the service schedule to ensure that this is maintained. All plug-in equipment is tested annually, and electrical infrastructure is tested every 3 years.

All testing and maintenance of electrical equipment and infrastructure is carried out by a suitably qualified and accredited electrician.

11. INCIDENT MANAGEMENT

In the event of a fire being reported by a person, site management will immediately investigate. Once a fire is confirmed, several actions will take place (concurrently not sequentially).

- Site staff will attempt to extinguish the fire using the AFFF fire extinguishers in the early stages of a fire if is it considered safe to do so.
- If a fire cannot immediately be extinguished, site management will immediately notify the Fire and Rescue Service (FRS).
- A member of staff will be detailed to guide the FRS on arrival and to provide the senior officer with a copy of the up-to-date Fire Prevention & Mitigation Plan.
- Management will also have emergency information pack with site plan stored at their home alongside the up-to-date Fire Prevention & Mitigation Plan.
- The automatic dry powder fire extinguishers would be triggered immediately by the fire and activate over the flammable waste waste stacks in the covered areas.
- Site management will then direct staff to deploy the FloodSax barriers.
- Site management will order the evacuation of the site in accordance with the fire drill for all events of fire and will assist in the safe evacuation of all staff, contractors, and visitors.
- A fire however small will be considered an emergency. In addition to this. The site manager will immediately suspend all inputs to the site and all vehicles present on site at the time will be sent off site as a precaution until management are assured that the fire is out, and risk of ignition has passed.
- Site management will inform the Natural Resources Wales of the incident.
- The site would cease all operations instantly and would direct all its efforts into fighting the fire using the AFFF fire extinguishers alongside the automatic dry powder extinguishers. The roller shutter door would remain open and would be manned to allow for the FRS. No other

parties other than the FRS and Natural Resources Wales would be allowed access. Throughout the duration of the fire and the cleaning process afterwards, no wastes will be accepted on site.

Wastes are only brought on to site when needed and are only brought on to site by site management who have purchased the waste. Therefore, during and after an incident, the site will not be expecting any further deliveries of waste if it has not been purchased. In the unlikely event that a purchased waste is already in transit to the site, the driver will be contacted immediately to inform them to not deliver the waste to site and to return it to the original destination where it will be collected once the site has been recovered to suitable and operational conditions.

Following a fire, once the Fire and Rescue Service deem the site to be safe, an inspection of the site shall be made, and a decontamination plan produced.

Residual waste will be sent for recycling at a suitably permitted facility or disposal to landfill as appropriate. Once the site is cleared of the products of combustion, an inspection of the site infrastructure shall take place to determine the extent of damage to site surfacing etc.

A plan of action shall then be created to repair or replace any elements of site infrastructure damage by fire and such remedial works as are required shall be carried out before the site is re-opened and any wastes are accepted (see Section 18 for the detailed fire procedure).

12. FIRE SUPPRESSION

The site handles catalytic converters (CATs), lead-acid batteries, wiring looms, and alloy wheels for storage. The two key forms of fire suppression used on site are AFFF fire extinguishers and a roof mounted automatic dry powder fire extinguisher system.

12.1 AFFF Foam Fire Extinguisher

There are four AFFF foam fire extinguishers on site that will be used in the early stages of a fire by staff that are trained in the use of fire extinguishers. The locations of the fire extinguishers are shown on Drawing Ref: 230718BC101. The storage areas ensure ease of access in the early stages of a fire and the extinguishers will be used alongside the automatic fire extinguishers to extinguish a fire on waste stacks.

The fire extinguishers on site are at a size of 6 litre 10kg and are maintained in accordance with the manufacturer’s recommendations.

12.2 Automatic Fire Suppression

The site benefits from an automated fire suppression system that is detailed below in section 11.3 and has a low level of risk regarding a fire occurring due to the scale and nature of operations. The largest flammable waste stack on site is the entirety of the waste stacks on the site, this is due to the small nature of the area and therefore the waste stacks have had to be combined to a total volume to 112.02m^3. The automatic fire suppression system is designed, installed, and maintained by a UKAS accredited installer and is maintained in accordance with the manufacturers recommendations.

Each waste stack can be easily accessed from at least one side to be extinguished in the event of a fire.

The automatic dry powder system will be triggered by the increase in temperature and will deploy over the flammable waste stacks, therefore taking immediate action in the event of a fire.

All waste and products will be subject to temperature monitoring (Hot / Fire Watch) prior to closing each night.

12.3 Automatic Dry Powder System

There are eight automatic dry powder extinguishers that are roof mounted covering all the flammable waste stacks as shown on Drawing Ref: 230718BC101.

The CE approved 10kg FireChief automatic dry powder fire extinguisher system can deploy over a maximum area of 18m² and this involves 20 seconds of discharge. The extinguisher will be fitted with a 68°C red bulb sprinkler head. The temperature range is from -20°C to 60°C. The extinguisher system placements will cover the whole permitted area flammable waste stacks as the effective range of the extinguisher will cover the inside of the building that contain flammable waste.

The automatic fire suppression system is designed, installed, and maintained by a UKAS accredited installer and will be maintained in accordance with the manufacturers recommendations.

12.4 Alternative Measures

The site complies with all aspects of the published Fire Prevention Guidance, and therefore alternative measures are not required. The site will meet the three main aims of the guidance by implementing the site layout, detection measures, fire suppression system, and housekeeping procedures in place at all times as detailed throughout this document.

13. SOUTH WALES FIRE & RESCUE SERVICE AND WELSH WATER

The nearest fire station is Cardiff Central Fire Station located at Adam St, Cardiff, CF24 2FL. This station is approximately 2.85km to the northeast of the site, implying a travel time of 11 minutes. However, this is expected to be considerably lower for the Emergency Services.

A second fire station is Ely Fire Station located at Cowbridge Rd W, Cardiff CF5 5BQ, which is located approximately 3.46km to the northeast of the site, implying a travel time of 15 minutes. However, this is expected to be considerably less for the emergency services.

A third station, Penarth Fire Station, is located on Hazel Rd, Penarth CF64 3PY. This station is approximately 3.56km to the south of the site, implying a travel time of 8 minutes. However, this is expected to be considerably lower for the Emergency Services.

Despite the primary defence against fire being the automatic suppression and fire extinguishers, a fire hydrant lies some 119m to the southeast of the site entrance on Penarth Road as a secondary measure. An enquiry has been sent to the South Wales Fire & Rescue Service to find out if the FRS maintain the fire hydrant and if they undertake pressure tests. It has been stated that they 'do maintain a hydrant in that location. In the event it was required to be used, it would be accessible, however, appropriate standpipes would need to be used in line with Welsh Waters requirements.' In terms of access to the site, the minimum appliances stationed:

- Cardiff Central: 2x WRL
- Ely: 1x WRL
- Penarth: 1x WRL

Indicating that the FRS will be able to gain sufficient access to the site, due to the access route being approximately 10m wide, whereas the WRL require a clear width of 3.7m.

As part of the response from South Wales Fire & Rescue Service, they stated that Welsh Water will need to be contacted in order to obtain information whether or not the hydrant has confirmation of use, access and pressure. This document will be updated when Welsh Water respond to the request of information.

14. WATER SUPPLY

A fire hydrant lies some 119m to the southeast of the site entrance on Penarth Road, with access being on the public highway.

The largest flammable waste stack on site is 37.03m³ (combined waste stacks 1, 3, and 4). In accordance with the guidance, a total supply 44,436L ($(\frac{37.03}{300} \times 2000) \times 180)$) would be needed to extinguish a fire. As the fire would need to be extinguished within 4 hours, a flow rate of 185.15L/min (44,436L / 240min) would be required.

The site's fire suppression system does not depend on water, using the automatic dry powder fire extinguishers and the AFFF fire extinguishers instead and so no water tanks are provided for firefighting. The close proximity of the three local fire stations and the fire hydrant also renders the need for onsite tanks of water for firefighting superfluous.

Due to the small-scale nature of the site and the small quantity of water to be used for tackling any fires, it will not be possible for re-use of fire water. In fire fighting terms, not a lot of water will be used in the event of a fire at the site. Fire service will remain in control of the situation and will determine if it is suitable to re-use the firewater on site; it is important to note however, that there is amply water supply to the site due to the nearby fire hydrant.

15. FIRE WATER CONTAINMENT

The site has been built on a sealed impermeable concrete surface. We have therefore assessed the potential effect of firewater on:

- The local groundwater and surface water bodies.
- Any well, spring or borehole within 50 metres used for the supply of water for human consumption, including private water supplies.

Fire water will be contained by concrete surfacing throughout the whole site together with the FloodSax barriers that will be deployed by assigned site staff. If there is an incident out of hours, site management are alerted through the security system and will promptly arrive at the site to deploy the FloodSax barriers.

The maximum volume of water required to extinguish a fire in the largest waste stack (37.03m³) in the permitted area is calculated to be 44,436L ($(\frac{37.03}{300} \times 2000) \times 180)$). This equates to 44.44m³ of water.

Fire Water Containment Calculations

Permitted Area

Volume of firewater 44.44m³

Area = 260.67m²

Height of containment required = 0.17m ($\frac{44.44m^3}{260.67m^2}$). This is equivalent to 17cm.

15.5 Aqueous Film Forming Foam (AFFF) will also be used to tackle fires on site. The foam extinguishes a fire by rapidly cutting the oxygen supply by expanding over the surface of the waste stack. This has an average expansion rate of 5:1 to 7:1. The alternative fire suppression method of a water-based fire extinguishing system would be unsuitable due to an automatic dry power extinguishing system being installed. AFFF are considered the most suitable to operate alongside the automatic dry powder fire extinguishing system during the early stages of a fire prior to the arrival of the FRS. The foam works in the following ways:

- "The foam blankets the fuel surface smothering the fire".
- "The foam blanket separates the flames/ignition source from the fuel surface".
- "The foam cools the fuel and any adjacent metal surfaces".
- "The foam blanket suppresses the release of flammable vapours that can mix with air". (Chemguard, 2005).

Based on the worst-case scenario, (e.g. 5:1 water to foam solution ratio), 37.03 L/m ($\frac{185.15L/min}{5}$) of water is all that is required to extinguish a fire in the largest flammable waste stack.

Using AFFF greatly reduces the runoff and potential for pollution which is also a concern for the Fire Service.

<u>FloodSax Barrier</u>

A barrier of up to 0.17m high, as calculated above, is needed to contain water at the roller shutter door which measures 3.5m in width. Each FloodSax weighs just under 1lb (0.37 kilos) before it encounters water and is 520mm (52cm) by 470mm (47cm) by 12mm (1.2cm) in size. After it has absorbed the water, it will be about 170mm (17cm) deep and the same length and width and will weigh around 20kg. Therefore, a barrier of 1 FloodSaxs high would be enough to contain the firewater flooding produced (0.17m) when tackling the largest waste stack on site with the strongest water flow. A total of 7 FloodSaxs in length would be needed to cover the roller shutter entrance, and 2 FloodSax along the entrance door. A total of 9 FloodSax are required at the site. A FloodSax barrier can therefore be used for the containment of flood water.

The FloodSax barriers weigh less than 0.5kg prior to contact with water and can be easily stored in bulk for 5+ years before they are needed. The barrier is capable of absorbing and locking up to 20 litres of water, which equates to a weight of 20kg. The FloodSax storage is shown on Drawing Ref:

230718BC101. Further details on the specifications for the FloodSax barriers are provided within Appendix 10.

A risk assessment has been conducted and the procedures are a reasonable request of all the staff in the event of a fire.

It is important to note that due to the wastes on site, it is not suitable for recycling of firewater to occur due to the nature of the operations producing dust that is hazardous.

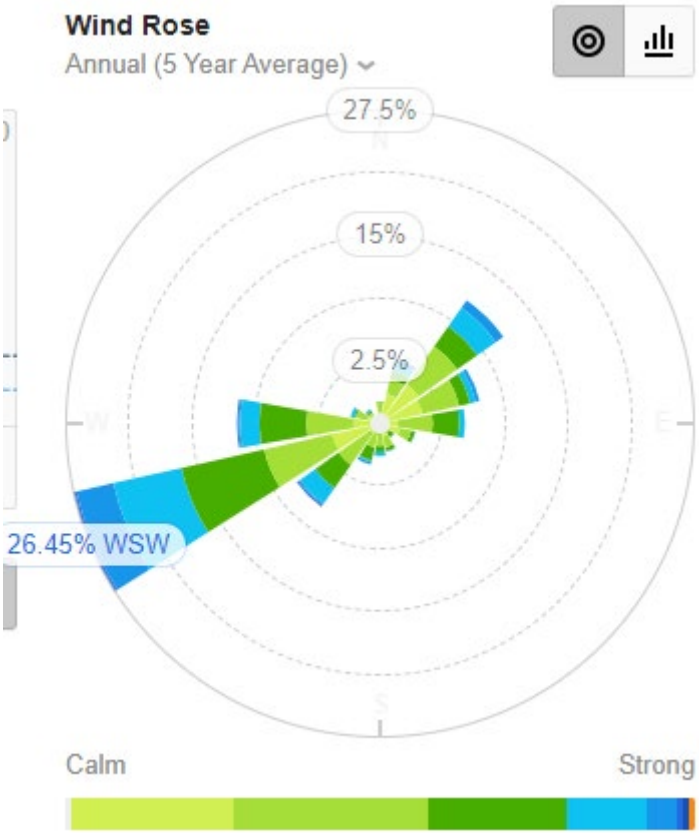
16. SENSITIVE RECEPTORS

Current guidance from the Natural Resources Wales on Fire Prevention & Mitigation Plans, states that schools, nursing homes, residential area, workplaces etc are all sensitive receptors. In a fire event, sensitive receptors will be contacted by either knocking on doors or by a phone call. They will be advised to close all doors and windows until the fire has been extinguished. This will be achieved by site management calling where possible and by staff being deployed to knock on doors of neighbouring properties. A plan of sensitive receptors has been produced and can be seen in Appendix 3.

17. PRODUCTS OF COMBUSTION

17.1 Smoke / Plume Dispersion

A wind rose for Cardiff has been obtained.



In the case of this site, it has a flat concrete surface and is entirely enclosed within the industrial unit building. This would therefore affect the wind force and direction.

The prevailing west-southwestern winds mean that smoke will move towards the additional industrial and commercial businesses at Freemans Parc and beyond.

17.2 Storage and Disposal of Residues

Following any fire, an assessment of the products requiring disposal shall be made by site management and a plan produced for the most appropriate means of disposal. Following approval by the fire services, Natural Resources Wales and site manager, the residues from the fire will be disposed of accordingly at a suitably permitted facility.

17.3 Staff Training & Awareness

The key to any plan is to ensure that all staff are aware of their duties and act accordingly. This plan and the duties required of staff in accordance with related procedures is communicated to staff through induction training and toolbox talks.

The Fire Prevention & Mitigation Plan is distributed freely, in full, to all staff. All copies of the FPMP, both individual staff members' copies and the Master Copy kept on site. Another copy is kept at the managements home. Staff are trained in the requirements of the FPMP at induction and at annual

toolbox talks. Quarterly exercises are held to test the response to an incidence of fire. All such exercises shall be recorded in the site diary.

18. FIRE PROCEDURE

In the event of a fire the following procedures are:

- Site management will immediately be informed, and all operations will cease. All expected vehicles will be notified and unable to enter the site.
- Site staff will be trained in the use of fire extinguishers. They will attempt to tackle minor fires in the early stages to extinguish or prevent a fire from spreading. The FRS and emergency services will be contacted by site management during this time if the site cannot be dealt with using onsite resources.
- Site staff will also attempt to move unburning wastes away from the fire using suitable heavy plant.
- If the fire becomes uncontrollable for site staff, the site shall be completely evacuated until the emergency services arrive.
- Neighbours and other receptors within a 1km range will be notified of the site.
- Once fires have been tackled the site will inform the Natural Resources Wales of the fire and make amendments and actions to prevent this from happening again in the future.

After fires have been extinguished, procedures are taken to decontaminate and get the site to an operational use again. Procedures taken are dependent on the severity of the fire. These may include:

- Informing the Natural Resources Wales of the incident and review of the site management and Fire Prevention & Mitigation Plans.
- Analyse the retained fire water to see if this is contaminated. Once analysed and deemed to be acceptable it will be pumped out and released into the sewer. If the water is contaminated, then it may be removed from site by a tanker and disposed of to a suitable permitted facility.
- PPE will also be removed and disposed of at a suitably permitted facility.
- Certain wastes may need to be disposed of as they may no longer be allowed to be treated and recycled.
- If the fire is severe and large, then the concrete may become damaged. In this event the site may need to be resurfaced prior to re-opening. Any other repairs to removals that are required e.g. buildings will be carried out to manufacturers recommendations.

Once the contaminated water has been removed, the concrete has been deemed acceptable, other repairs have been made and the quarantines and contaminated waste have been removed, the site will be inspected by the COTC holder. If after the inspection the site is of an acceptable nature, then it can reopen and continue with its usual operations.

APPENDIX 1 – SENSITIVE RECEPTORS

Sensitive Receptor	**Contact Number**
Ninian Park School	02920388991
St Patrick's R C Primary School	02920226237
Grangetown Primary School	02920233379
St Pauls Primary School	02920235854
Railway Line (Transport for Wales)	03333 211 202
Formaction (Freemans Parc)	07970 441758 / 07900 811458

APPENDIX 2 – DRAWING REF: 230718BC101

1. 22 x Dolav Boxes - Storage of Lead Acid Batteries - 19.54m^3
2. 21 x Dolav Boxes - Storage for CATS - 18.65m^3
3. 16 Bulk Bags - Storage for Wiring Looms - 11.66m^3
4. 8 Bulk Bags - Storage for Alloy Wheels - 5.83m^3

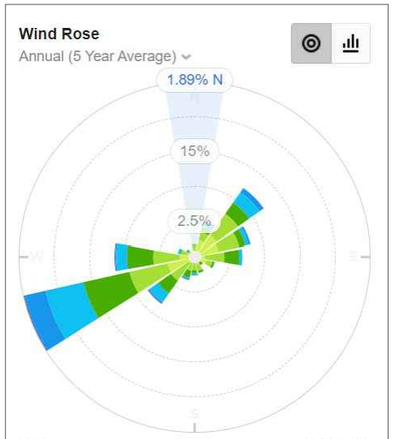
Access for Fire Service

Fire Hydrant 119m approx

(see drawing number 230718BC102)

AC ENVIRONMENTAL
Environment House
Werrington Road
Stoke-on-Trent
ST2 9AF

N



- Fire Wall
- Fire Extinguisher
- Auto Fire Extinguisher
- Spill kit
- PPE storage
- Flood sax
- Flood sax storage
- Covered area with concrete surface

CLIENT
Blancomet - Cardiff

SITE
Unit 18C, Freemans Parc, Penarth Road, Cardiff, CF11 8EQ

REV	DATE	DETAIL
A	22/01/25	40cyd RoRo quarantine skip added

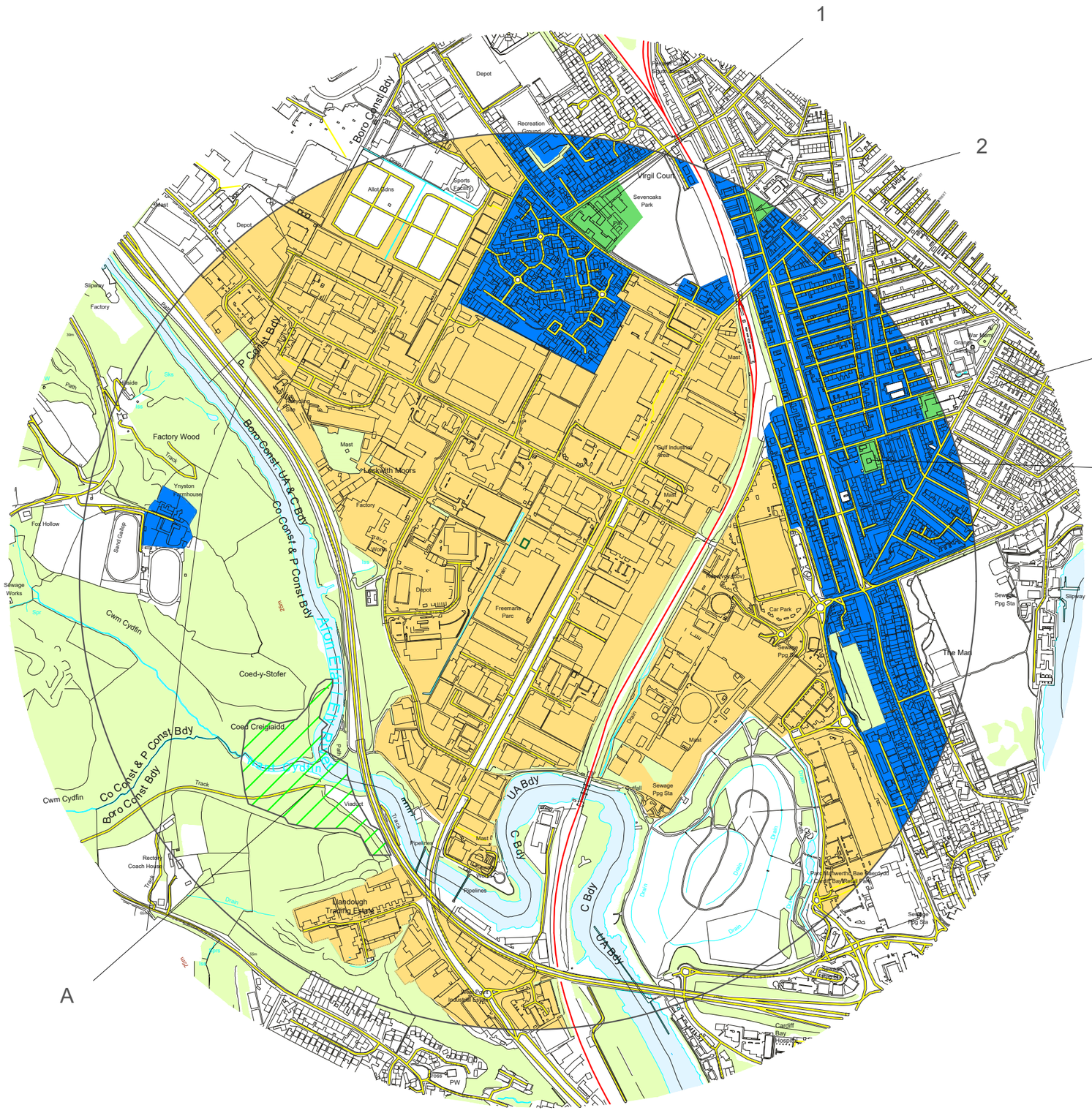
PROJECT
Permit Application

TITLE
Fire Prevention Plan Plan

SCALE @A3	DATE	DRAWN BY	CHECKED BY
1:150	Jan 2025	T Kearns	D Alcock

DRAWING NO	REVISION
230718BC101 v1	A

APPENDIX 3 – SENSITIVE RECEPTORS DRAWING



EDUCATIONAL

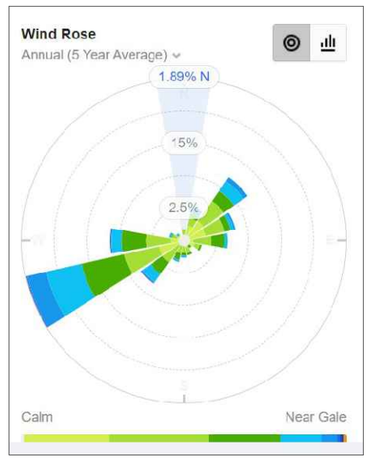
1. Ninian Park School
2. St Patricks Roman catholic Primary School
3. Grangetown Primary School
4. St Pauls Primary School

SSSI

A. Cwm Cydfin, Leckwith

AC ENVIRONMENTAL
Environment House
Werrington Road
Stoke-on-Trent
ST2 9AF

N



- Residential
- Commercial / Industrial
- Educational
- Site of Special Scientific Interest
- Road
- Rail

REV	DATE	DETAIL

CLIENT
BLANCOMET

SITE
Unit 18C,
Freemans Parc,
Penarth Road,
Cardiff, CF11 8EQ

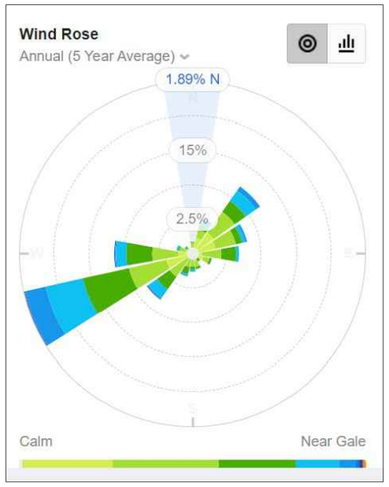
PROJECT
PERMIT APPLICATION

TITLE
KEY RECEPTOR PLAN

SCALE @A3	DATE	DRAWN BY	CHECKED BY
1:10000	July 2023	T Kearns	D Alcock
	DRAWING NO		REVISION
	230718BC103		

APPENDIX 4 – SITE LOCATION PLAN

AC ENVIRONMENTAL
Environment House
Werrington Road
Stoke-on-Trent
ST2 9AF



FLEET WAY

PENARTH ROAD

FH

FH

FH

Freemans
Parc

0 15 40 100
Scale (meters)

REV	DATE	DETAIL
A	24/07/23	Fire hydrant locations added

CLIENT
BLANCOMET

SITE
Unit 18C,
Freemans Parc,
Penarth Road,
Cardiff, CF11 8EQ

PROJECT
PERMIT APPLICATION

TITLE
SITE LOCATION PLAN

SCALE @A3	DATE	DRAWN BY	CHECKED BY
1:1250	Jan 2025	T Kearns	D Alcock
	DRAWING NO		REVISION
	230718BC102		A

APPENDIX 5 – FIRE WATCH FORM

Fire Watch Form

To be completed every day by the Operations Manager or nominated person. Keep completed forms in file in Site Office. This is in addition to the Daily Diary

Fire Watch Inspection	**Checked by (initial)**	**Time**	**State condition & action taken**
Mobile and fixed plant and equipment - Hot exhausts and engines			
• Check for signs of fire, smoke, heat, and dust settling on hot exhausts & engines. • Ensure parked in correct overnight area at least 6m from waste or other combustible materials. • Check for leaking fuels and oils from fixed and mobile plant and vehicles. • Check all waste at least 6m from processing machinery			
Forklift Truck			
All waste waste stacks and containers of waste			
• Check for signs of fire, smoke, heat, and dust settling on piles / containers. • Check all containers are always accessible on one side. • Check all waste stacks are accessible on one side			
Wastes			
CATs **Alloy Wheels** **Lead-acid Batteries,** **Wiring Looms**			
External containers			
N/A			

APPENDIX 6 – FIRE WATCH PROCEDURE

Site Working Procedure - Fire Watch Procedure SWP021			
Issue:	1	Date:	17/08/2023
Written/Revised By:	Mary Simcock	Approved By:	Edward Manzano

1. Purpose

1.1 To identify situations that may lead to fire and to discover fire early to minimise the impact of any fire and to ensure that the safety of site staff, visitors, and neighbours and to ensure that actions comply with the Fire Prevention & Mitigation Plan, Environmental Permit, and the planning permission.

2. Responsibility

2.1 It is the responsibility of all site staff to follow this procedure and the site manager to ensure this procedure is implemented & followed.

2.2 Failure to follow this procedure will be considered a disciplinary matter and may lead to dismissal.

3. Fire Watch

3.1 A fire watch is a formal inspection of all waste stackd of waste held on site.

3.2 The fire watch shall be carried out by the nominated person, usually the Site Manager or supervisor.

3.3 The fire watch shall take place at the start and end of each day with one further inspection in the middle of the operating day.

3.4 The fire watch shall be a visual inspection of all waste stacks to identify steam, vapours, smoke of charring, the precursors of a fire. In addition to the visual inspection, temperature monitoring shall be undertaken to identify heating within waste stacks.

4. Actions in the event of discovering an issue.

4.1 If a fire is discovered, the Fire Procedure (SWP020) shall be implemented immediately.

4.2 If one of the precursors to fire (smoke, charring etc) is discovered, site management shall immediately investigate further. Investigations shall include excavation of suspicious materials to identify the extent of the issue discovered. If localised heating of materials is discovered, then this can be dealt with by smothering with inert waste or turning to allow cooling in the air.

4.3 Any waste stack which has been identified as having the potential to ignite due to evidence of smoke charring etc., once the immediate issue has been dealt with, shall be prioritised for removal from site for disposal at the earliest opportunity.

5. Actions to be taken.

5.1 The site gates shall be closed to prevent unauthorised access by shall be manned to allow access for emergency services.

5.2 Site staff trained in the use of extinguishers and firefighting shall tackle the fire to attempt to extinguish it or to prevent the fire spreading. The fire may be fought with extinguishers, pumped water from the fire hydrant. The Leader Stop fire blanket may also be used to put out any fires. Site management shall direct efforts to fight the fire until the emergency services arrive.

5.3 At all times full consideration shall be given to staff safety and if there is any doubt as to the ability of site staff to extinguish the fire, the site shall be fully evacuated until the emergency services arrive.

5.4 If the fire is large enough to warrant attendance of the emergency services, then neighbours shall be visited by site staff and advised to close windows and doors until such time as the Fire Service declare the fire is over and there are no lingering effects from smoke.

6. Reporting

6.1 The immediate actions of staff shall be to ensure the safety of staff and visitors. The secondary actions shall be to minimise the effect of the fire by attempting to extinguish or cover the fire with a Leader Stop blanket to prevent it from spreading.

6.2 When it is safe to do so, site management shall next notify the Natural Resources Wales of the fire, providing details of the incident and the actions being undertaken.

APPENDIX 7 – SITE INSPECTIONS PROCEDURE

Site Working Procedure – Site Inspections SWP016			
Issue:	1	Date:	17/08/2023
Written/Revised By:	Mary Simcock	Approved By:	Edward Manzano

1. Purpose

1.1 To ensure the efficient operation of the site, mitigation of risk and to fulfil the requirements of the environment permitting regulations.

2. Responsibility

2.1 It is the responsibility of site manager to ensure this procedure is implemented & followed.

2.2 It is the responsibility of the site manager or duty COTC holder to carry out supporting inspections and monitor the operation of the site.

3. Daily and Weekly Inspections

3.1 The site manager will undertake a daily inspection of the site and record their findings in the Site Diary.

3.2 The COTC holder shall carry out regular visual checks of the site and to check for procedural integrity.

3.3 Either the Site Manager of the COTC holder shall undertake a formal weekly inspection and record findings on the Site Inspection Sheet.

3.4 In the event that the Site Manager conducts the Inspection, the COTC holder shall review this and countersign the Site Inspection Sheet as evidence of such review being carried out.

3.5 All issues to be reported to the site manager, who will allocate responsibilities to action any remedies that can be completed.

3.6 Complaints or reports of problems from neighbours or visitors shall be investigated in accordance with the Complaints Procedure.

4. Reporting & Records

4.1 Any problems to be noted in the site diary and incident logbook.

4.2 Any incident or breach of this procedure must be reported immediately to the site manager.

4.3 Records must be kept for 3 years.

APPENDIX 8 – FIRE PROCEDURE

Site Working Procedure - Fire Procedure SWP020			
Issue:	1	Date:	17/08/2023
Written/Revised By:	Mary Simcock	Approved By:	Edward Manzano

1. Purpose

1.1 To minimise the impact of any fire and to ensure that the safety of site staff, visitors, and neighbours and to ensure that actions comply with the Fire Prevention & Mitigation Plan, Environmental Permit, and planning permission.

2. Responsibility

2.1 It is the responsibility of all staff to follow this procedure and the site manager to ensure this procedure is implemented and followed.

2.2 Failure to follow this procedure will be considered a disciplinary matter and may lead to dismissal.

3. Discovering a Fire

3.1 A fire may begin in any waste stack of flammable waste or may be brought into site in a load of waste.

3.2 Fires may also be discovered through the routine daily fire watch, temperature monitoring, seeing smoke, charring or flame in flammable waste waste stacks.

3.3 Any sign of fire, however small, such as smoke or charring shall be treated as if it is a fire until proven otherwise.

4. Discovering a Fire

4.1 The person discovering the fire shall raise the alarm on site by shouting “FIRE” and shall then immediately notify site management in the site office.

4.2 Site management shall then assess the fire and if any doubt as to the ability of site staff and resources to effectively extinguish the fire immediately, shall call the Fire Service on 999.

5. Actions to be taken.

5.1 The site gates shall be closed to prevent unauthorised access but shall be manned to allow access for emergency services.

5.2 Site staff trained in the use of extinguishers and firefighting shall tackle the fire to attempt to extinguish it or prevent the fire spreading. The fire may be fought with extinguishers and pumped water from the fire hydrant. The Leader Stop blanket may also be used to cover waste and put out fires. Site management shall direct efforts to fight the fire until the emergency services arrive.

5.3 At all times full considerations shall be given to staff safety and if there is any doubt as to the ability of site staff to extinguish the fire, the site shall be fully evacuated until the emergency services arrive.

5.4 Due to the small scale of the site, the quarantine area is in a suitable location to move burning objects into to be extinguished.

5.5 If the fire is large enough to warrant attendance of the emergency services, then neighbours shall be visited by site staff and advised to close windows and doors until such time as the Fire Service declare the fire is over and there are no lingering effects from smoke.

5.6 All actions will be taken in accordance with the approved Fire Prevention & Mitigation Plan.

6. Reporting

6.1 The immediate actions of staff shall be to ensure the safety of staff and visitors. The secondary actions shall be to minimise the effect of the site by attempting to extinguish or cover the fire with a Leader Stop blanket to prevent it from spreading.

6.2 When it is safe to do so, site management shall next notify the Natural Resources Wales of the fire, providing details of the incident and the actions being undertaken.

APPENDIX 9 – HOT WORKS

Hot Work Permit-to-Work

Department or Project:	Permit Number:
Contractor / Person/s involved:	
Location:	
Description of Work:	Equipment:

Date of Permit (Supervisor in charge of work to sign permit on day specified for single shifts)	Day and Date:	Time: Between And

Precautions to be taken:

- Hot works must cease one hour before the end of shift.
- Hot works must be carried out more than 6m way from any flammable/combustible materials or liquids.
- All gas cylinders must be transported and kept upright.
- Valves and hoses must be in good condition and all gas cylinders must be fitted with back arresters.
- When not in use, gas cylinders must be shut off.
- Gas cylinders must not be left in the building overnight without formal approval.
- Minimum radius of hot works from other workers must be 1.5m (screens should be erected where necessary)
- Work areas to be kept tidy and free from combustible materials.
- Services affected must be isolated before work commences.
- A suitable fire extinguisher should be available.
- The supervisor must ensure that suitable personal protective equipment is provided and worn, and that there is a good working platform.
- Isolate smoke detectors in the vicinity of hot works
- Spent welding rods must be immersed in a bucket of water.

Employees Must:

- Understand the fire and safety precautions and be in possession of a permit.
- Stop work if required to do so by an authorised person.
- Report immediately any hazard likely to affect the fire and safety precautions.
- Remain in the area for 15 minutes following completion of work to check that no fire starts

Confirmation by Contractor or Supervisor

I can confirm that the precautions specified above will be maintained and I will ensure that the persons carrying out the work will comply with these precautions.

Signed:	Print Name:	Date:

Authorisation by Manager

I certify that the above work can commence with the precautions listed above.

Signed:	Print Name:	Date:

Cancellation by Contractor or Supervisor

I can confirm that the work has been completed / stopped and I have checked the area which is safe.

Signed:	Print Name:	Date:

Cancellation by Manager

I confirm that the work has been completed / stopped, and that I have checked the area which is safe.

Signed:	Print Name:	Date:

APPENDIX 10 – FLOODSAX SPECIFICATIONS

FloodSax®
Alternative Sandbags

Give facilities management far more than just flooding protection

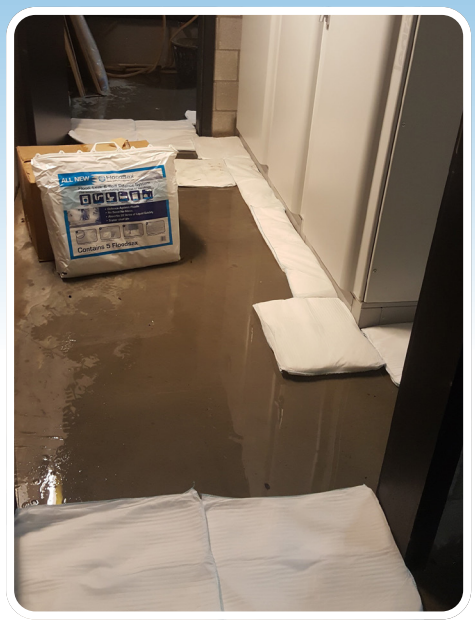
The new 2020 FloodSax® alternative sandbag is bigger, even easier to take to the scene of a flood or water leak and more environmentally-friendly than ever before. Brilliant at holding back floodwater from homes and businesses and ideal for soaking up leaks and spills inside.

Here's how FloodSax® keep saving the day

A broadcasting company had a leaking flat roof which meant when it rained water was getting into the ventilation system. This wall of FloodSax immediately solved the problem until the roof could be fully repaired.

Several FloodSax were used to deal with a major flood inside this hospital in the USA.

A row of FloodSax stopped water from wrecking high technology equipment worth £360,000 in this Yorkshire warehouse. FloodSax are used by all the main utility companies along with local authorities and the armed forces.



The computer server for a care home was vulnerable to flooding yet had not been put on a raised floor. Water was actually around the bottom of the server and if it had got in, the damage would have been exceptionally disruptive to the home as well as being very expensive to repair. The server is now protected by FloodSax.

How FloodSax® work

FloodSax are transformed from being as light as a pillowcase to become more effective than traditional sandbags in around three minutes.

To do that, all you need to do is add water. The semi-porous inner liner within FloodSax contains a special gelling polymer which absorbs the water to become taut.

It weighs around 20 kilos when energised and each row of FloodSax will keep around 20cms (8ins) of water out. Unlike sandbags, FloodSax soak up some oils and chemicals. More than 2.5 million have been sold worldwide.

FloodSax® mean you're ready for flooding 24/7

When you're responsible for managing property you need to be ready for anything day and night all year round.

Businesses are at risk of water getting in from the outside but there is always the danger of leaks and spills inside too.

FloodSax 'sandless sandbags' are easy and compact to store yet once they come into contact with water they miraculously expand to become better than traditional sandbags at keeping floodwater out.

You can also put FloodSax on leaks and spills inside and they will soak the liquid up.

FloodSax® can help with flooding disasters including:

- Burst pipes
- Leaking radiators
- Overflowing toilets
- Taps left on
- Rainwater seeping in through a faulty roof
- Faulty sprinkler system
- Flooding from outside caused by everything from torrential rain to a burst water main

And finally … in a complete twist you need to contain water ON your site after it has been used to douse a fire at your premises. The Environment Agency's Fire Prevention Plans for businesses clearly states: "You must be able to contain the run-off from fire water to prevent pollution of the environment … either into the ground or into surface waters."

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UKAS MANAGEMENT SYSTEMS 0026

Cert No. 14462
ISO 9001:2015

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TÜV AUSTRIA

www.floodsax.co.uk
phone: +44 (0) 1484 641009
email: info@floodsax.co.uk

THE QUEEN'S AWARDS FOR ENTERPRISE