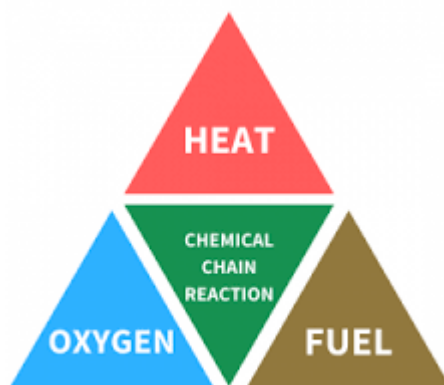


AWD ENVIRONMENTAL LTD

FIRE PREVENTION AND MITIGATION PLAN (FPMP)



Operator: AWD (Group) Ltd
Facility: Byass Works, The Docks, Port Talbot, SA13 1RS
Permit reference: EPR/AB3895CN
Waste returns reference: EPR/AB3895CN

EMS Version	Date	Author	Checked / App'd	Revision
DRAFT	July 2018	Geotechnology	AWD	

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1. Fire Risk Assessment

1 INTRODUCTION

1.1 Background

There have been many waste fires in Wales over recent years. This has led to increased scrutiny and new guidance from NRW. During and following a fire, waste companies are required to pay the cost of clean-up. These costs can be very high as any remaining burnt waste will need to be removed and disposed of, potentially as hazardous waste. There is also reputational damage, potential criminal charges and increased insurance premiums.

As AWD Ltd is a waste operator, the waste regulator Natural Resources Wales (NRW), require AWD to have a Fire prevention and Mitigation Plan (FPMP) in place which is subject to regular update and review.

This FPMP details the methods AWD will use to initially prevent and control fire of combustible materials at their recycling operation at Byass Works, Port Talbot.

This FPMP should be considered a working document subject to internal and external review. Copies of this document should be stored electronically and in hard copy on and off-site. A hard copy will be stored in an Emergency Services Box at the weighbridge that can be provided to the Fire Rescue Service and NRW in the event of a fire. All personnel and contractors should be familiar with this document and its location. Fire prevention measures should be included in Induction Training.

Plans of the site showing its location and key infrastructure are provided in Figures 1 to 3. Section 3 includes a summary of key site details and waste types potentially present.

AWD will aim to ensure that fire prevention is a day to day activity that is delivered through good housekeeping and simple but effective control measures.

1.2 Key Site Information

Key site details are summarised in Table 1-1 and relevant emergency contacts in 1-2.

Plans of the site, layout of the operation, location of receptors and site infrastructure are provided in Figures 1 to 3.

Table 1-1 Summary of Key Site Details

Aspect	Detail	Further information
Building structure	Roof: metal sheets and skylights Walls: Block and metal sheet Floor: Concrete	Site photographs from July 2018 are in Section 3.
Permitted maximum storage of waste	75,000 tonnes	
Drainage	To be confirmed	
Water supply	Mains at alkytheic	
Security	Site surrounded by security fence	
CCTV	24 hr monitoring serviced and supplied by Nite-lite Security Ltd	
Occupants	Typically 15-20 staff and up to 4 visitors at any one time	
Fire risk assessment	Completed by Hartson Fire Ltd	Risk assessment in Appendix 1
Flammable liquids and gases	Oils, diesel and gas cylinders are currently stored in separate shipping containers near site entrance	See Figure 3
Combustible waste	Single streams of wood, cardboard, plastics, textiles and mixed waste (skip waste from construction sites). Low black bag content.	
Plant/Machinery at site	Typically: 1 Shredder 2 360 Excavators 1 Telhandler in Bucket 2 Forklifts 2 Telehandlers with Modified Buckets (for plastics) 1 Telehandler with Forks 1 Generator 1 Baler 1 Picking Line and Sorting Conveyors	

Table 1-2 Emergency contact details

SITE DETAILS			
Location:	Byass Works, The Docks, Port Talbot		
Postcode:	SA13 1RS		
Site Access Grid Reference:	SS 75938 89637		
SITE CONTACTS	Name	Office Hours (specify)	Out of hours
Managing Director:	Alyn Wyn Davies		
General Manager:	David Morgan		
Site Manager:			
Site Supervisor:			
Security Contact:			
Landowner / Agent:			
EMERGENCY SERVICES		Office Hours	Out of hours
Fire Rescue Service		999	999
Ambulance		999	999
Police		999	999
Fire: South Wales Fire and Rescue (non-emergency)		01443 232000	
REGULATORS		Office Hours	Out of hours
Health and Safety Executive (HSE)		0345 300 9923	0151 922 935
Local Authority:			
Natural Resources Wales (Local)		01792 32 6450	
Natural Resources Wales (24hr emergency)			
UTILITY/KEY SERVICES	Name	Office Hours	Out of hours
Water undertaker:	Dwr Cymru	0800 052 0130	0800 052 0130
Sewerage undertaker:	Dwr Cymru	0800 052 0130	0800 052 0130
Electricity supplier:	SSE	0345 026 2658	0800 052 0400
Fuel supplier:	Oils for Wales	01267 275 777	
Oil spill contractor:			
Maintenance contractor:			
Electrician:			
Plumber:			
Locksmith:			
Joiner:	Gareth Cavanagh	07800 646452	
OTHER KEY CONTACTS	Name	Office Hours	Out of hours
Head Office:			
Adjacent landowners:			
Neighbours:			
Specialist advisors:		01639 775293/ 07970 890195	07970 890195

2 SITE SETTING OVERVIEW

2.1 Site Location

The site is located between the residential populations of Aberafan and Port Talbot. Aberavon is some 200m to the west and Port Talbot 250m to the east. Between the site and the residential areas are a range of industrial and commercial operations, main roads and the main Swansea to London railway. The M4 motorway is to the north of Port Talbot and 900m from the site.

2.2 Environmental Setting

2.2.1 Climate

Rainfall totals are approximately 1000mm per annum.

Dominant wind direction is from the southwest.

2.2.2 Ground Conditions

No site specific investigation has been undertaken but it is considered likely that the site is underlain by made ground overlying natural alluvium deposits associated with the River Afan. Beneath these layers are the Llynfi Beds comprising sandstones and coals seams.

2.2.3 Surface Water

The River Afan flows north to south, 100m northwest of the site.

2.2.4 Groundwater

Groundwater is likely to be perched in any made ground beneath the development platform and classified as a secondary aquifer in the underlying bedrock. This means that the ground water will provide base flow to the adjacent River Afan.

2.2.5 Flooding

The site is located in a Zone 2 flood risk area. This means that the site is considered by NRW to have a 1000 to 1 chance of flooding in any year which they consider a low risk.

2.2.6 Air Quality

The site is not in an Air Quality Management Area (AQMA) but the Port Talbot AQMA is approximately 350m to the east.

2.2.7 Human Receptors

The site is close to densely populated areas. Port Talbot is to the northwest and Aberafan to the west.

3 DESCRIPTION OF WASTE OPERATION

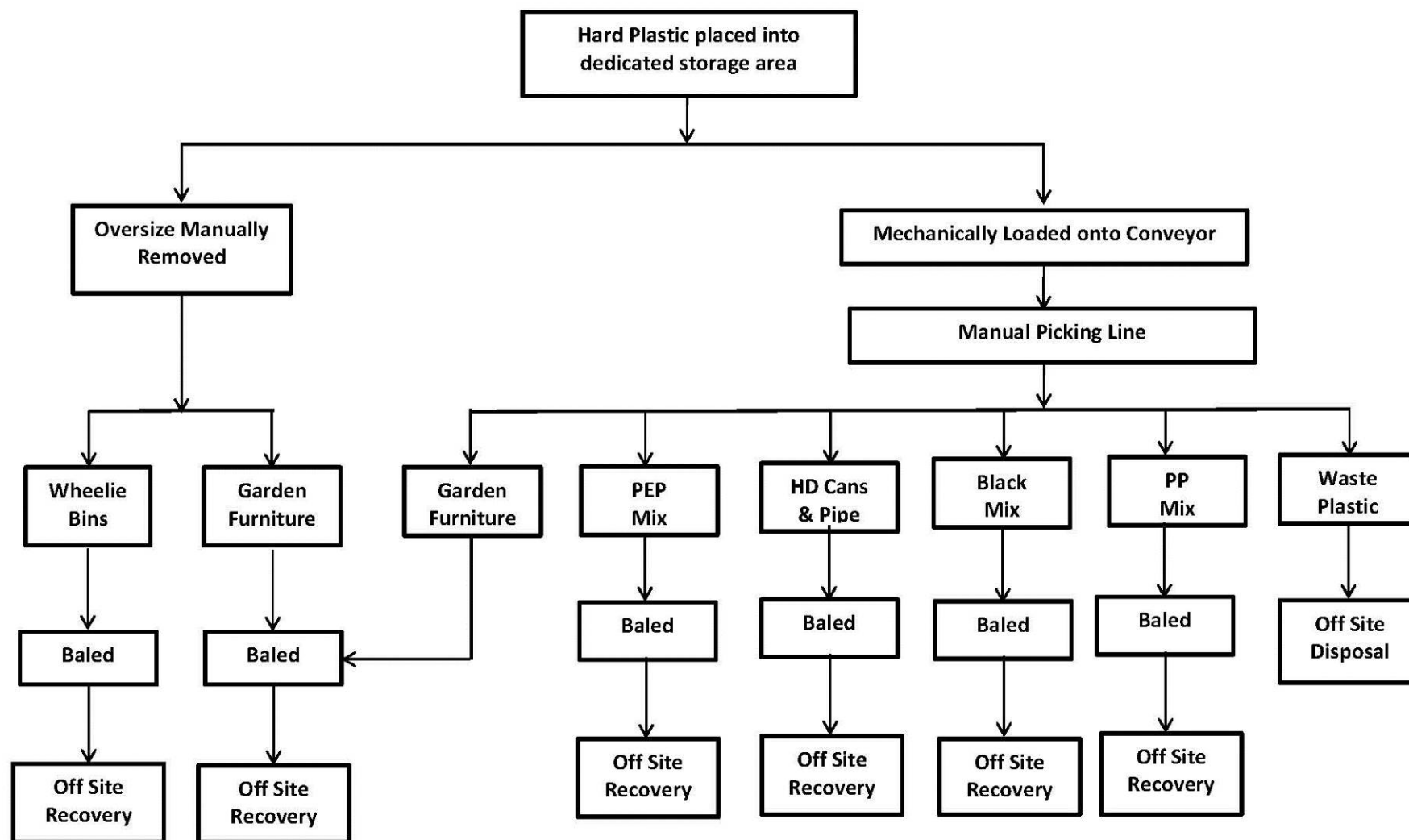
3.1 Waste Acceptance and Processing

AWD process three main waste types. These are processed in accordance with Permit EPR/AB3895CN. The three main wastes accepted are:

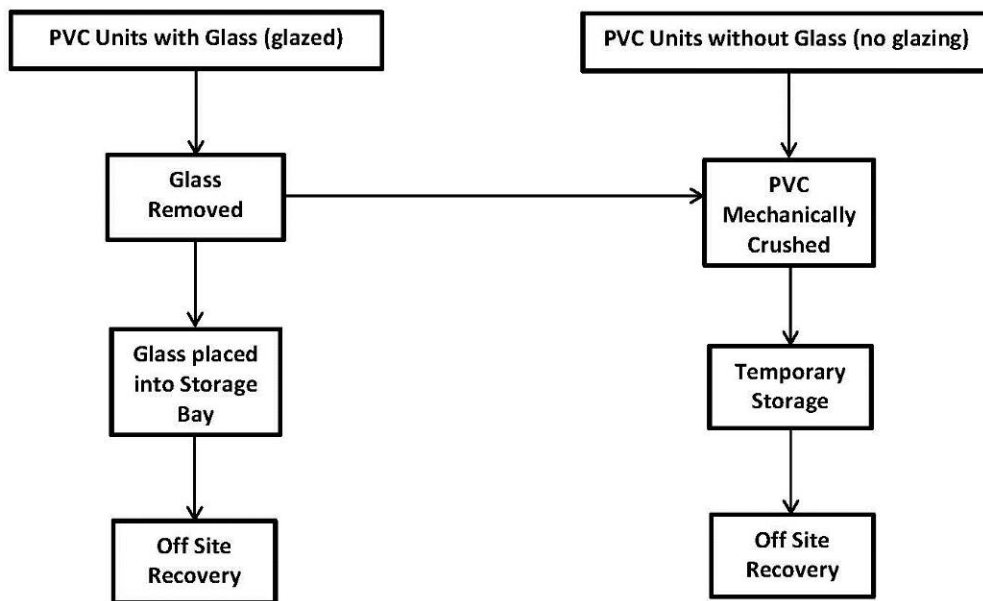
- general skip waste
- hard plastics
- glazed and unglazed

Each of these wastes are subject to different processes to enable the waste to be recovered. Flow charts summarising each process are provided below.

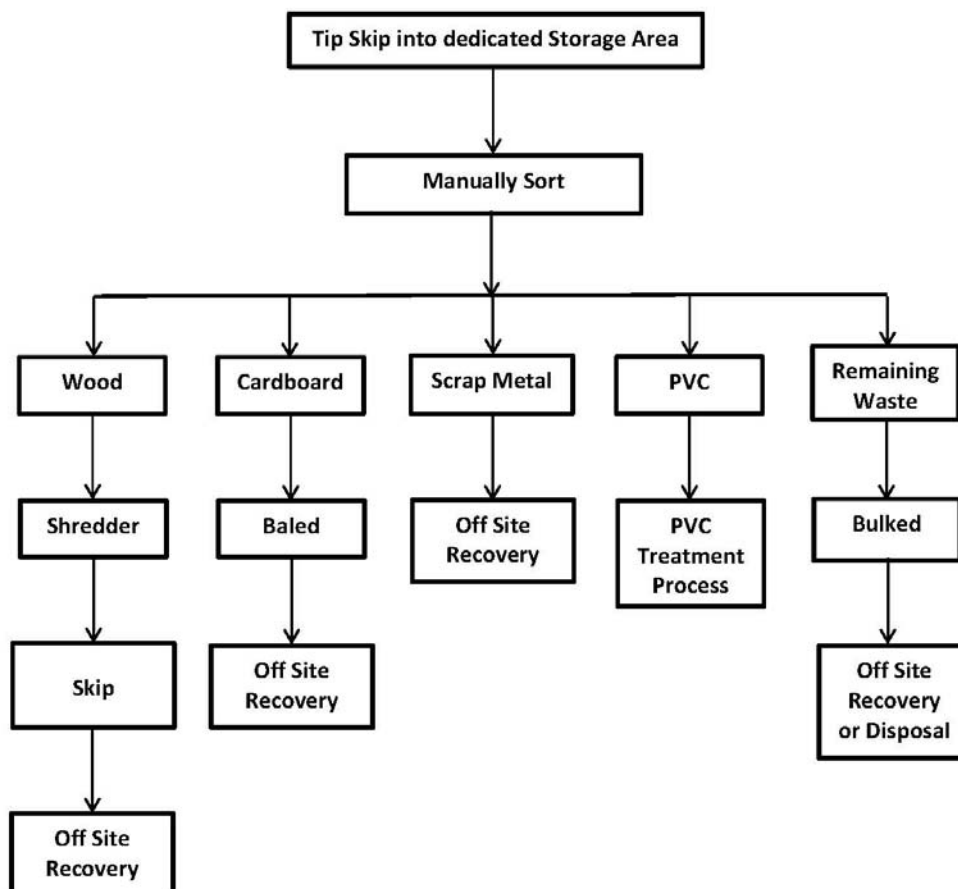
Flowchart 3-1 Processing of Hard Plastics



Flowchart 3-2 Processing of UPVC



Flowchart 3-3 Processing of Skip Waste



3.2 Typical Waste Storage

Details of the waste types and tonnages typically accepted and temporarily stored at the site pending treatment are summarised in Table 3-1.

Table 3-1 Typical Waste Acceptance and Storage Pre Treatment

WASTE INPUTS AND STORAGE						PROCESSING	RECOVERED OUTPUTS	
Waste type	Storage Area Code	Typical Form e.g.	Amount delivered each week / tonnes	Maximum amount in storage / tonnes	Max. time in storage	Recycling Process	Outputs for recovery	Waste Outputs for disposal
General waste	GEN1	Emptied loose from skip	30	30	1 month	Manual sorting	Wood	Mixed Waste
							Scrap metal	
							Cardboard	
UPVC	PVC1	Whole window frames (glazed and unglazed) and PVC off-cuts	150	150	<2 weeks	Deglazing, mechanical crushing and cutting of plastic	Glass	Nothing
							UPVC	
Hard plastic	HP1	Loose tipped size fractions (e.g. 20mm to wheelie bin size)	30	15	<2 weeks	Manual sorting over picking line. Baling of recovered plastic.	Various grades of plastic	Waste Plastic

Once the waste has been processed, the wastes listed in Table 3-2 are temporarily stored prior to off-site recovery or disposal.

Table 3-2 Typical Processed Waste Storage and Throughput

OUTPUTS FROM PROCESSING					ADDITIONAL PROCESSING AND STORAGE			
Recycling Outputs	Maximum amount in storage tonnes	Typical time in storage	Form	Storage Area Code	Further processing	Form	Typical time in storage	Storage Area Code
Wood	<5	1 month	Loose on floor	W1	Shredding	Shredded into RORO	<1 month	W2
Cardboard	<3	1 month	Loose in skip	CARD1	Baling	Baled	<1 month	CARD2
Scrap metal	3	1 month	Loose in skip	MET1	No further processing			
Glass	30	1 month	Loose on floor	GLASS1	No further processing			
UPVC	150	<2 weeks	Loose on floor	PVC2	No further processing			
Plastic Fractions	15	<1 day	Loose on floor under picking line	HP2	Baled	Baled	<1 month	HP3

The layout of the site is shown on Figure 3. Annotated photographs of the typical operation are provided below. The typical storage duration for each waste is summarised in Table 3-1 and 3-2.

3.3 Storage Times and Self-Combustion

Materials that are at risk of self-combustion if stored for more than **3 months** are:

- wood and wood products,
- paper and paper products,
- general/mixed waste including residual waste, RDF and 'fines'
- tyres (whole or processed)

- smaller size or graded materials either stored or mixed
- material that has not had potential hazards removed before stacking e.g. exposed rust (which can generate heat)
- treated materials which are not cold before storage (treatment processes can generate heat)

To avoid self-combustion AWD will ensure a high turnover of stock. Most waste is processed and sent off site for recovery/disposal within 1 month.





**External Receipt and Processing
of UPVC under T10 Exemption**



Virgin UPVC in Concrete Bunker



Glass Storage Bunker



Cylinder and Oil Storage Shipping Containers



Hard Plastic Delivery Area



Typical Hard Plastic for Processing over picking line

Picking
Line



5 Separate
plastic
fractions
beneath
Picking Line

Picking Line



Baler for Plastic and Cardboard



**Stored Bales
(note hard plastic storage in background)**

3.4 Storage of Other Materials

3.4.1 Fuel

Fuel is stored in 45 gallon drums next to the generator shown on Figure 3.

3.4.2 Oil

Oils are stored in 45 gallon drums and 5 gallon drums in shipping containers near the site entrance as shown on Figure 3.

3.4.3 Gas cylinders

Gas cylinders are stored in shipping containers near the site entrance, as shown on Figure 3.

3.5 Contingency

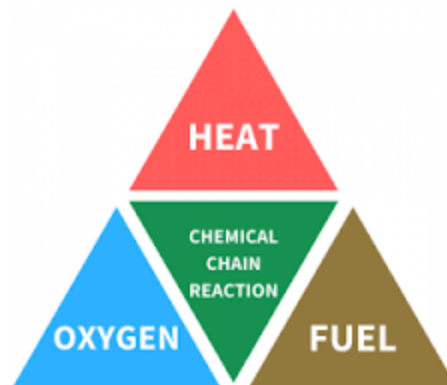
The success of the operation requires rapid processing and turnover of the wastes to be treated. If such turnover cannot be achieved, AWD has off-site recovery and disposal contracts with other waste management companies, including landfill, that will be used to ensure the site does not stockpile either unprocessed or processed waste.

4 FIRE PREVENTION TECHNIQUES

Fire requires 3 components:

1. Fuel e.g. wood, plastic, cardboard
2. Source of ignition e.g. hot exhaust, spark from metal bucket, chemical reaction
3. Oxygen supply

These 3 components are known as the fire triangle with fuel, heat and oxygen being the 3 corners of the triangle



If one of the parts of the fire triangle is missing a fire cannot start. AWD will take preventative measures to avoid the three parts coming together as this will reduce the opportunity for fire.

4.1 Causes of Fire

Fires in the waste industry can be caused by many factors. Each potential cause is identified in the following sections. The likelihood of each cause occurring is ranked as either low, medium or high. The ranking takes into consideration the preventative actions AWD will take during day-to-day operation to limit the possibility of fire occurring.

In addition to the actions identified in the following sections, AWD will also ensure that:

- All potential ignition sources are kept at least 6m away from combustible and flammable waste
- Combustible wastes are stored in the dedicated storage areas
- An inspection of all wastes and machinery will be made at the end of each shift to check for heat or smoke
- All site personnel are trained in fire prevention and fire management
- Emergency procedures are in place
- An independent audit of fire risks is undertaken

4.1.1 Fire caused by Arson or Vandalism (Low risk)

Actions taken to reduce risk of fire:

- 2m perimeter fence
- Daily/Weekly Inspection programme to ensure no breaches in the external fencing.
- 24 hr CCTV

4.1.2 Fire caused by Self-Ignition / Spontaneous Combustion (Low risk)

Chemical and biological processes in some waste materials, such as food waste, green waste, wood and cardboard, can release heat resulting in self-ignition of the waste.

Actions taken to reduce risk of fire:

- Robust waste acceptance procedures will ensure that waste does not represent any increased self-ignition risk
- Daily visual check of all waste stockpiles to identify smoke

4.1.3 Fire caused by discarded Smoking Materials (Low risk)

Actions taken to reduce risk of fire:

- No smoking policy inside building (see site rules)
- Smoking only permitted outdoors
- Smoking inside considered an immediate dismissal (see induction and site rules)
- Cigarette disposal bins provided in smoking area

4.1.4 Fire caused by Poor Housekeeping e.g. build-up of loose combustible waste, dust and fluff (medium risk)

Actions taken to reduce risk of fire:

- Dry brushing of loose combustible waste, dust and fluff to be used to maintain clean working area
- Daily inspections of working area to identify need for cleaning

4.1.5 Fire caused by Visitors and Contractors (Low risk)

Actions taken to reduce risk of fire:

- Ensure all visitors and contractors are signed-in and familiar with site rules
- Brief all visitors with key health and safety information including fire prevention procedures
- Ensure all contractors provide RAMS that include fire prevention

4.1.6 Fire caused by Plant or Equipment Failure (Medium risk)

Actions taken to reduce risk of fire:

- All plant and equipment to be serviced and maintained as per manufacturers' requirements
- Preventative maintenance programme to be implemented
- Daily plant and machinery inspections carried out by trained plant operatives. All defects reported by end of the working day
- All plant to be parked 6 metres from combustible waste where possible
- Combustible waste cleaned out of static plant at end of shift

4.1.7 Fire caused by Tramp material e.g. development of hotspots in machinery (Medium risk)

Actions taken to reduce risk of fire:

- Prevent metal fragments getting into machinery
- Daily inspection of plant and static machinery

4.1.8 Fire caused by Poor Waste Acceptance Inspections e.g. hot waste or batteries not identified (Medium risk)

Actions taken to reduce risk of fire:

- Visual inspection of all waste accepted will include assessment of potentially hot wastes and abnormal loads with increased fire risk
- Visual inspection of all waste accepted to include assessment for presence of batteries, particularly lithium batteries – this is because damaged lithium batteries can cause fires
- Quarantine area to be maintained for problematic loads

4.1.9 Fire caused by Hot Exhausts (Medium risk)

Actions taken to reduce risk of fire:

- Loading of static machinery will take place away from the exhaust system to reduce the amount of combustible material that can be dropped in the area of the exhaust system
- All exhaust systems are to be checked and cleared of any waste at the end of each shift
- Vehicles parked with exhaust facing away from combustible waste

4.1.10 Fire caused by Electrical Faults (Medium risk)

Actions taken to reduce risk of fire:

- All electrical cables will be regularly PAT tested
- Mobile power tools and power supplies will only be used for temporary maintenance tasks
- Firefighting equipment will be available on site at all times (6 powder and 6 foam extinguishers)
- Fire caused by Reactions between Incompatible Materials (Low risk)

4.1.11 Fire caused by Hot Works e.g. cutting and welding (Low risk)

Actions taken to reduce risk of fire:

- All hot works must be carried out (>6m) away from waste processing and storage areas
- All hot works must be carried out under separate RAMS
- Firefighting equipment will be available at all times during hot works
- Following all hot work a fire watch will be maintained in relevant areas until end of shift to ensure there is no residual ignition source or smouldering fire

4.1.12 Fire caused by Open Burning (Low risk)

Actions taken to reduce risk of fire:

- No burning of wastes is allowed anywhere on the site (see site rules)

4.1.13 Fire caused by Sparks from Loading Buckets (Medium risk)

Actions taken to reduce risk of fire:

- Dragging/pushing of buckets along concrete floor should be kept to a minimum
- Dry brushing should be used to maintain site cleanliness
- All operatives to look out for sparking and to inform management immediately

4.1.14 Fire caused by Neighbouring Site Activities (Low risk)

Actions taken to reduce risk of fire:

- Be aware of activities at adjacent site where tyres are stored – adjoining site is currently vacant.

4.1.15 Fire caused by Industrial Heaters

The site does not use industrial heating of any kind.

4.1.16 Fire caused by Reactions between wastes (Low risk)

Actions taken to reduce risk of fire:

- Skip waste to be inspected for Lithium batteries – this is because damaged lithium batteries can cause fires
- Maintain quarantine area for problematic wastes

4.1.17 Fire caused by Incorrect cylinder storage (Medium risk)

Actions taken to reduce risk of fire:

- Few cylinders will be stored in separate shipping container temporarily

4.1.18 Fire caused by Leaks and spills of oils and fuels (Medium risk)

Actions taken to reduce risk of fire:

- Prevent leaks by using appropriate containers
- Prevent leaks by not over-filling appropriate containers
- Prevent spillages by using funnels etc. to fill appropriate containers
- Prevent spillages by using drip trays
- Ensure materials used to absorb combustible liquids are correctly stored before disposal as hazardous waste
- Ensure any container containing a combustible liquid is stored appropriately

4.1.19 Potential Impacts of Fire

Waste fires can cause significant direct and indirect harm to people and the environment. Impacts may include:

- Release of airborne smoke and particulates. This can smother vegetation and cause risk to human health through inhalation
- Transport of potentially contaminated firefighting fluids to drainage systems and controlled water (surface water and groundwater) can impact water quality and wildlife
- Explosions and falling debris may result in physical harm to humans
- Use of firefighting resources that cannot then tackle other emergencies (not related to waste)
- Heat and flames can directly harm people, infrastructure and the environment

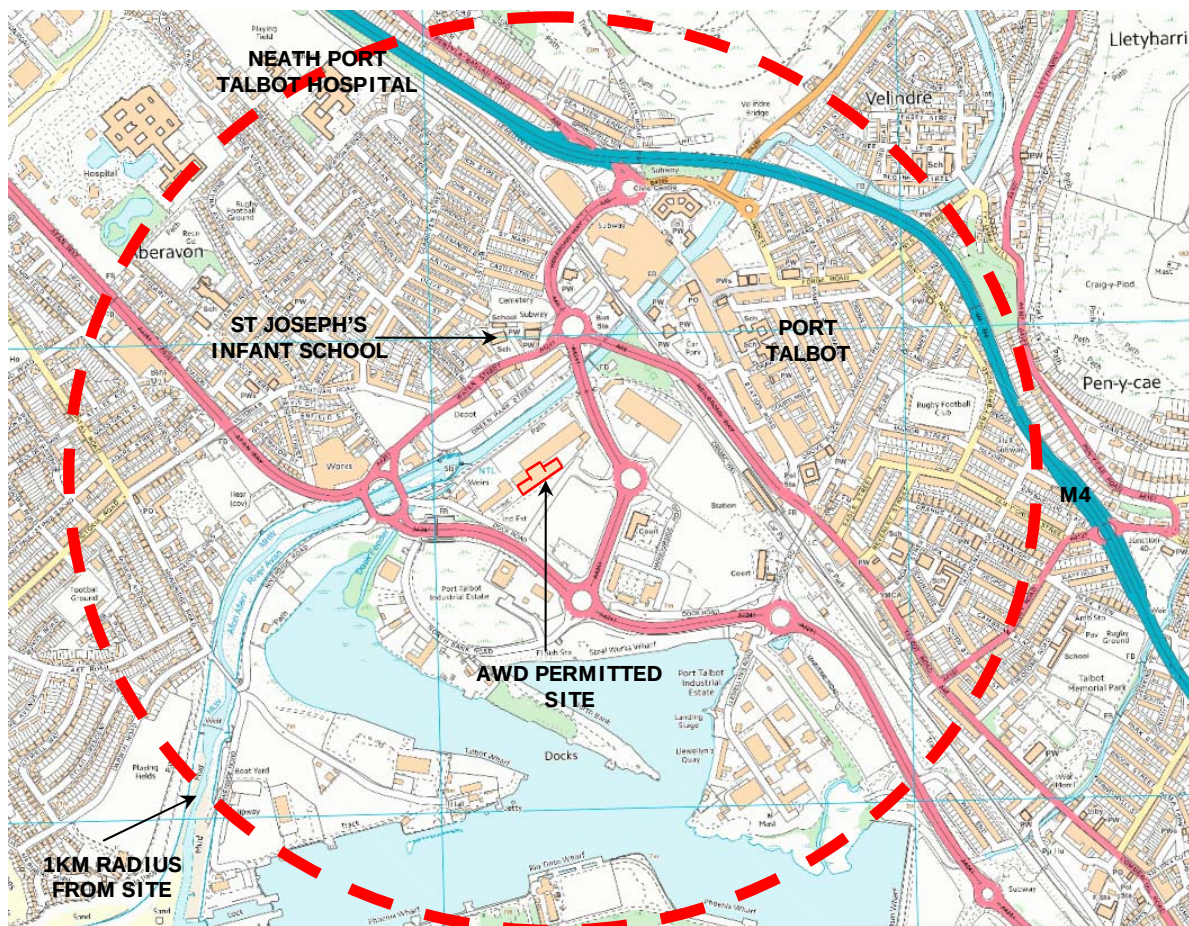
5 IMPACT OF FIRE

On-site and off-site impacts of a fire can be influenced by a number of environmental factors. These include wind direction and rainfall and also run-off and presence of groundwater. At Byass Works:

- Wind direction is typically from the southwest
- Run-off is likely to flow to surrounding hardstanding and infiltrate soil
- Groundwater is a secondary aquifer and also likely to be perched in any made ground

5.1 Human and Infrastructure Receptors within 1km of site

Specific potentially sensitive human receptors within approximately 1km of the site are listed in Table 5-1. Others also exist. Key infrastructure is listed in Table 5-2.



Features within 1km of Site

Table 5-1 Selection of key human receptors

Receptor	Details	Contact Information	Direction from site
St Joseph's Infant School	20 Norman St, Port Talbot SA12 6EL	Tel: 01639 882579	200m North
Neath Port Talbot Hospital	Baglan Way, Port Talbot SA12 7BX	01639 862000	1000m Northwest
Residential areas, shops, playing fields and open areas			Aberavon 150m north/northwest Port Talbot 300m northeast
Port Talbot Bus Station	Port Talbot SA13 1HE	First: 01792 572255	200m north northeast
Industrial units	LBS: Unit 5, Cramic Way, Port Talbot SA13 1RU	LBS Tel: 01639 884433	200m northeast
Court buildings	Harbourside Road, Port Talbot SA13 1SB	Tel: 01639 642267	200m east
Chemical laboratories and testing facilities	Harbourside Industrial Estate		200m east

Table 5-2 Selection of key infrastructure

Receptor	Direction from site
A4241	100m south and north
A48	200m north
M4	900m north
Port Talbot Parkway Railway station	400m east
Swansea - London railway line	300m northeast

5.2 Environmental Receptors within 1km

Key environmental receptors within approximately 1km of the site are listed in Table 5-3.

Table 5-3 Environmental Receptors within 1km of the site

Receptor	Direction from site
River Afan	100m northwest

5.3 Fire Water Run-Off

Fire water run-off has the potential to contain harmful combustion by-products, or un-combusted waste materials washed from other areas of the site. The volume of water involved and the subsequent dilution of these compounds will vary based on the scale and nature of any fire. Minimising potential impacts to the environment and local infrastructure is a key consideration of this FPMP.

5.3.1 Existing Site Drainage

There are no known surface drains within the building apart from a gutter drain with metal grid at the site entrance. A sealed sump is to be installed in the general waste processing area.

6 FIRE DETECTION AND SUPPRESSION SYSTEMS

6.1 Fire Detection Systems

Visual inspection of the site and stored waste will be undertaken daily. The aim will be to identify evidence of fire or potential fire. Any risks will be recorded on the daily inspection sheet and remedial action identified and implemented.

6.2 Fire Suppression Systems

The facility is equipped with fire alarms and extinguishers of a type, size, location and number as recommended by the fire risk assessors (see report in Appendix 1).

Each fire extinguisher will be fully charged and ready for use at all times. The following types of fire extinguisher will be available:

- 6 Dry Powder Fire Extinguisher
- 6 Foam

Each extinguisher will be inspected annually by a qualified service company:

- All operating plant that is used to handle the waste is also fitted with Fire Extinguishers which can be used to suppress small fires should the operator or staff notice them.

7 EMERGENCY FIRE RESPONSE PLAN

7.1 Emergency Fire Response

The sequence of these steps may vary according to the circumstances of the fire emergency, but priority must always be given to the safety of staff and visitors, followed by the prevention of impact on identified local human or environmental receptors.

The following procedures are to be followed on the discovery of fire or smoke;

Upon discovering smoke or fire the alarm must be raised via the site radio/mobile phone call to the Site Manager or Office, or by repeated horn blasts and/or shouting to indicate a fire has been discovered.

The person discovering a fire should inform the Site Manager immediately and provide an assessment of the situation. The Site Manager must immediately go to the vicinity of the fire (if considered safe to do so) to assess the situation and decide upon a course of action.

The person discovering a fire should then call the fire brigade on "999" providing details of the fire's location and scale.

All non-essential persons should be instructed to leave the area and report to the designated site assembly point. Where possible, machine operators are to move their machines to a safe area only returning to assist in the movement of waste at the direction of the senior fire officer.

Persons evacuating must obey Site Managers instructions, ensure other workers also evaluate, assist any person who needs help (if safe to do so), not stop to collect any personal belongings, proceed directly to the Assembly Point and remain there until officially instructed otherwise.

If safe to do so, the person or persons discovering the fire should seal off the area and fight the fire using appliances provided. Persons with no specific training are not expected to fight a fire, but all staff should familiarise themselves with the location and basic operating principles of the equipment, in case they need to use it. Where safe to do so, the person discovering the fire should delegate tasks to available staff members in relation to fighting or preventing the spread of fires.

The Site Manager will collect the roll call list and confirm the presence of staff and visitors at the assembly point.

If it is safe to do so, a search of all work areas of the site will be undertaken by the Site Manager to ensure that everybody has evacuated the site.

The Site Manager is to ensure the fire water management measures are implemented at the earliest opportunity to prevent fire water from discharging into the surface water drains.

Upon arrival, the Site Manager will issue the Emergency services with the site accident plan and the emergency services will assume control of the situation, all instructions/advice given by them will be followed.

The Site Manager/Supervisor is to advise the Officer in Charge of the emergency services if someone is missing.

After all occupants are evacuated and visitors and staff are accounted for, the Site Manager will be responsible for contacting businesses within 500m of the site, starting with those downwind of the fire to advise them of any particular measures required while the fire is being brought under control (e.g. the evacuation of nearby premises, closing of windows, etc.).

After all occupants are evacuated and visitors and staff are accounted for, wait for the 'all-clear' from the fire brigade before returning staff to any affected area.

The Site Manager is responsible for ensuring the conditions that led to the fire are investigated (in association with the Fire Service and South Wales Police as appropriate), plant is safely recommissioned, accident plans and management systems documents are reviewed and improved, training requirements for staff personnel are reviewed and that any remedial measures (including further fire reduction measures and new procedures) are implemented.

7.2 Firefighting Methods

Firefighting methods for burning solid waste include smothering the waste, separating burning material from other waste, or spraying with water from the on-site appliance or retention storage tank.

The Site Supervisor or available staff may attempt to extinguish a fire using the correct extinguisher or the on-site fire appliance if:

- it is safe to do so
- it is a small fire that can be managed by the on-site staff
- staff and visitors have been moved from the danger area and an evacuation has commenced
- the fire brigade has been called
- the person using the extinguisher or fire appliance has been trained in their use

If a fire occurs on a vehicle or piece of equipment, the equipment operator will bring the vehicle or equipment to a safe stop. If safety of personnel will allow, the vehicle will be parked away from fuel supplies, uncovered solid wastes, and other vehicles. The engine will be shut off and the brake engaged to prevent movement of the vehicle or piece of equipment.

7.3 Staff Training

Training of on-site personnel in firefighting techniques, fire prevention, response and the fire protection aspects of the site will be provided by established professionals on an annual basis. Personnel will be familiar with the use and limitations of firefighting equipment available onsite. Records of this training will be included in the operating record for the facility.

7.4 Notification of Fires to NRW

After any fire related to waste management activities that cannot be extinguished within 10 minutes of discovery occurs, NRW will be notified.

The notification will include:

- Contacting by telephone as soon as possible, but no later than 4 hours following fire discovery, and
- Providing a written description of the cause and extent of the fire and the resulting fire response within 14 days of fire detection.

The facility will provide NRW with as much information as possible regarding the fire and fire-fighting efforts, as soon as possible after the fire occurs.

The fire prevention and fire control procedures for the facility will be revisited following the occurrence of a significant fire to determine if modifications are warranted

8 ACCESS AND TRAFFIC MANAGEMENT PLAN FOR EMERGENCY SERVICES

All personal vehicles will be parked in the staff car park to allow emergency vehicular access.

All site vehicles/plant and equipment will be moved to the perimeter of the site to allow emergency vehicular access, if necessary.

A minimum width of road of 3.7m and clearance height of 3.7m will be maintained at all times. This is required for efficient operation of the site during day-to-day operations.

9 FIRE WATER RUN OFF

All attempts will be made to contain the run-off from fire water to prevent pollution. Fire water could potentially escape via:

- the site's surface water drainage system, the precise details of which are not yet known
- direct run-off onto ground, with potential risk to groundwaters
- the foul drainage system, the precise details of which are not yet known
- atmospheric deposition, such as vapour plumes

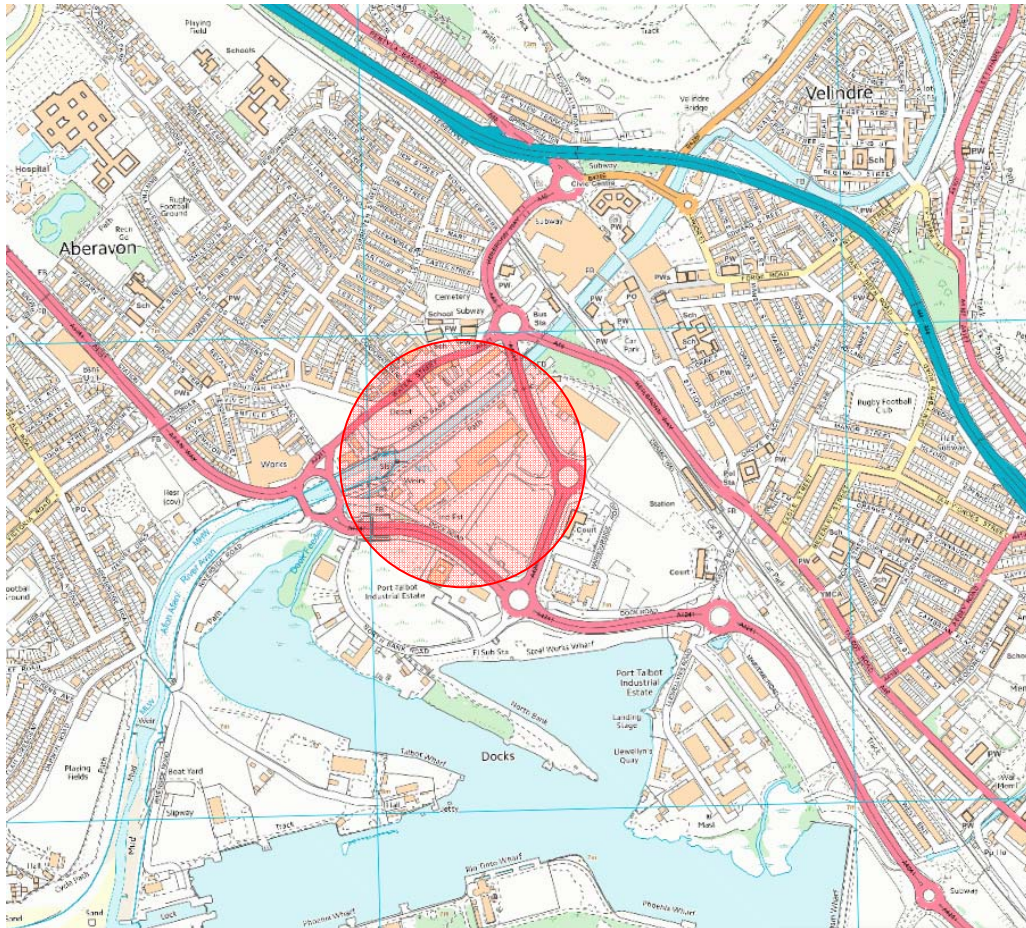
There is no internal surface water drainage system, apart from sealed sump, so fire water will only escape from the building around the edge of the building and via routes of entry/exit e.g. doors. Sand bags will be used to control small quantities of water.

10 REMOVAL OF FIRE WASTE

Following any fire there is likely to be burnt or partially burnt waste and/or their materials requiring off-site waste management. Each of these waste types will need to be classified in accordance with WM3 and appropriate Duty of Care implemented at all stages. This may require the waste to be sampled and tested.

Until the waste is fully classified the waste will be monitored and assessed for residual/smouldering fires in an area separate from other wastes e.g. quarantine. This will be achieved by turning the waste, if possible and safe. During this process the waste will be inspected for residual sources of heat and smoke.

Figure 1 Site Location Plan



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Figure 2 Permitted Site Boundary

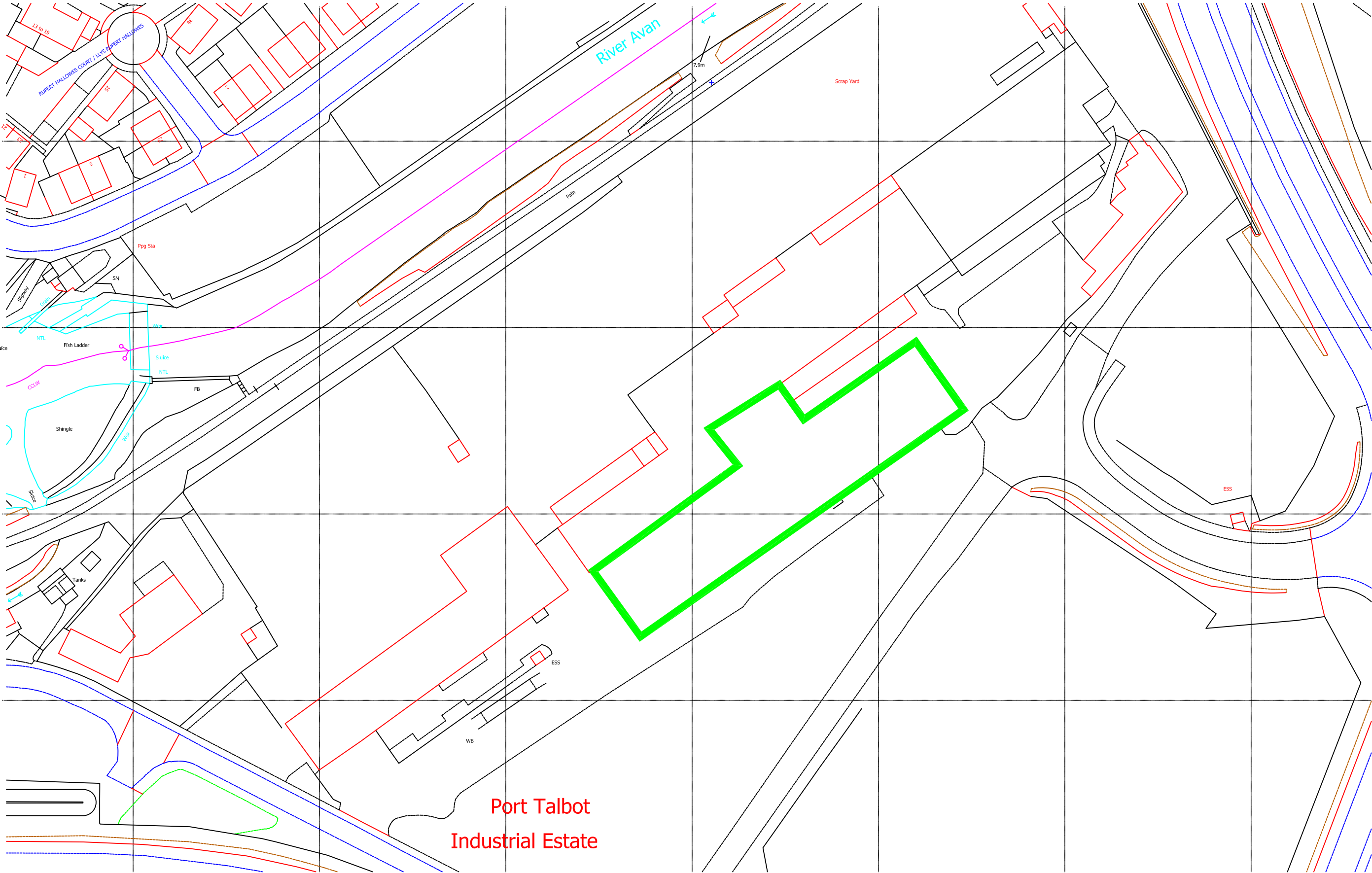
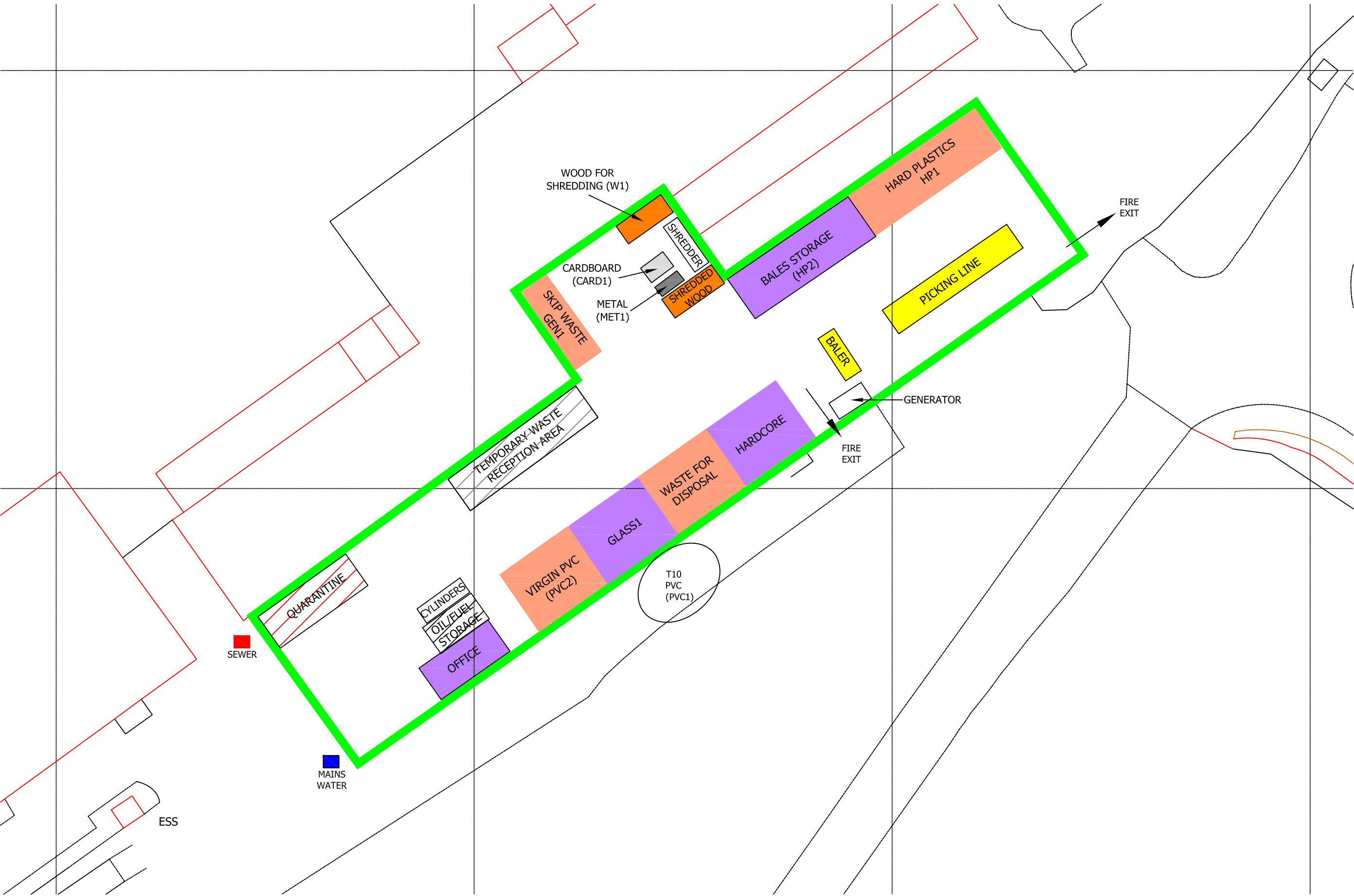
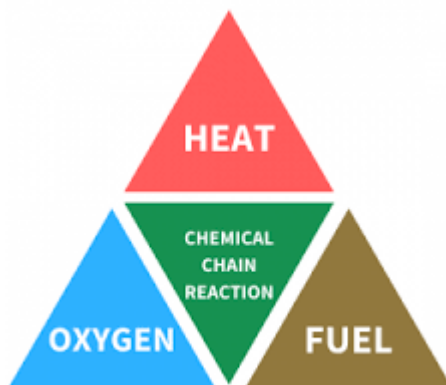


Figure 3 Site Layout



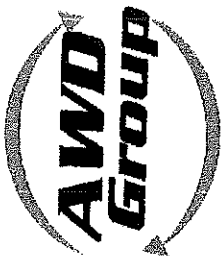
AWD ENVIRONMENTAL LTD

**FIRE PREVENTION AND MITIGATION PLAN
(FPMP)**



Operator: AWD (Group) Ltd
Facility: Byass Works, The Docks, Port Talbot, SA13 1RS
Permit reference: EPR/AB3895CN
Waste returns reference: EPR/AB3895CN

Appendix 1
Fire Risk Assessment



FIRE RISK ASSESSMENT REVIEW

Premises/ Assessment Area	Byass Works Port Talbot West Glam			Depot	Byass Hard Plastic
Date of Review	02/01/2018				
Manager Responsible	Alun Wyn Davies				
Number of fire wardens	One				
Number of Occupants	Staff > 14				
Persons with disabilities, i.e. hearing, visual (Please circle)	Staff		No		Visitors
Occupancy times					Unknown
					Visitors (Up to) > 4
					07.00am to 18.00pm Day only

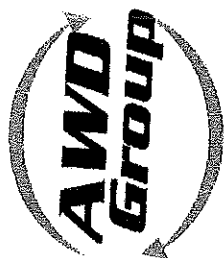
Health and Safety Review by:	Elifion Wyn Davies		Date:	02/01/2018
Category of Building:	Metal block Shed for Recovery of UPVC and Hard Plastics			
Is further assessment required:	NO			
Building Construction e.g. wood, block, slate, concrete, timber floors, steel. Please indicate	Roof (Interior & Exterior)	Walls (Interior & Exterior)	Floor	
	Sheets	Block and metal sheets		



FIRE RISK ASSESSMENT REVIEW

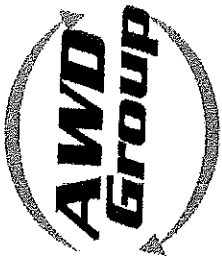
	YES	NO	NA	COMMENTS
Have fire plans been created detailing the outline of buildings and the locations of fire extinguishers, exits, call points, etc and are they displayed within depot	Yes			Extinguishers serviced and placed by Harston Fire Ltd

SUBJECT	YES	NO	NA	COMMENTS
1. General – Building				
a) Are security systems in place to minimise arson	Yes			24 Hour monitoring with camera systems etc Serviced and supplied by Nite-life Security Ltd
b) Does the building contain compartmentation (separate rooms)	Yes			It has a concrete block building 2 x metal store sheds
c) Have openings been created in fire separating walls, e.g. for pipes, cables, ducting?		No		
d) Is there a mechanical ventilation or air conditioning system in the building		No		
e) Is it a multi floor premise		No		
f) Is the building fitted with one or more passenger lifts		No		
g) Is the building fitted with one or more goods lift		No		
h) Does the building contain areas where false ceilings or false walls have been installed		No		
i) Is arson a potential problem, i.e. have there been previous issues, either on the site or close by				Not Known However there apparently was a fire in a yard not far away that recycle tyres.



FIRE RISK ASSESSMENT REVIEW

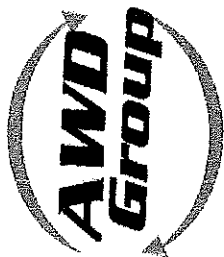
SUBJECT		YES	NO	NA	COMMENTS
2. Means of Escape					
a)	Is there an alternative exit from the workplace	Yes			
b)	Are there any dead end conditions	No			
c)	Do all exits lead to a place of safety	Yes			
d)	Are all exits and routes that lead to a place of safety free from obstructions and trip hazards	Yes			
e)	Are all emergency exits and routes clearly indicated with the 'running person' pictogram?				
f)	Are all emergency exits easily openable without the use of a key	Yes			
g)	Is there a notice indicating the method of operation on emergency exit doors, i.e. push bar to open	Yes			
h)	Are all internal fire resisting doors clearly labelled 'Fire door - keep shut'	Yes			
i)	Are all self closing devices on fire doors working efficiently	Yes			Bar locking devices
j)	Are the types of exits suitable for the number of people likely to use them	Yes			
k)	Are all escape routes adequately illuminated	Yes			
l)	Do stairways lead directly to a place of safety	Yes			See attached certificates
m)	Is the condition of fire doors and escape routes checked on a regular basis	Yes			Both back and site have a small concrete block steps
n)	Do the doors on escape routes open in the direction of travel	Yes			



FIRE RISK ASSESSMENT REVIEW

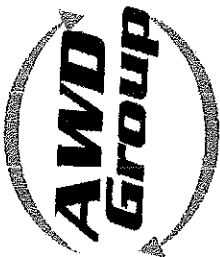
o) Are the people who work in the building aware of the importance of maintaining the safety of escape routes, i.e. not wedging fire doors open.	Yes				
p) Do visitors sign in when entering, and out, on leaving	Yes				

SUBJECT	YES	NO	NA	COMMENTS
3. Fire Alarms & Detection				
a) Is a fire alarm system in place (manual or automatic)	Yes			Automatic and manual Certificate attached
b) Are the fire alarm & detection devices tested regularly	Yes			
c) Are fire alarm call points numbered and cross referenced to fire plan	Yes			
d) Are all fire alarm call points clearly visible and indicated by correct signage	Yes			
e) Can the fire alarm be raised without placing persons at risk	Yes			
f) Do employees know how to operate the system	Yes			
g) Are there instructions for employees on how to operate the fire warning system	Yes			
h) Are there effective arrangements in place for calling the emergency services	Yes			Mobile Phones
i) Can the means of warning be clearly heard and understood by everyone throughout the building when initiated	Yes			
j) If the fire detection and warning system is electrically powered does it have a back up power supply	Yes			Battery System
k) Is the system tested in accordance with relevant standards	Yes			



FIRE RISK ASSESSMENT REVIEW

SUBJECT		YES	NO	NA	COMMENTS
4. Lighting & Emergency Lighting					
a)	Is there adequate emergency lighting on escape routes & where there are changes in direction of travel	Yes			
b)	Is an emergency lighting system in place	Yes			
c)	Is the system tested regularly	Yes			
d)	Is the system tested by a competent person (electrical engineer) annually	Yes			Certificates attached
e)	Is there a back up power supply	Yes			Battery System
f)	Are fire exit signs both internally and externally adequately illuminated	Yes			
5. Fire Fighting Equipment					
a)	Are portable fire extinguishers, fire blankets, etc suitably located and available/ accessible for use	Yes			Extinguishers are supplied There are no blanket requirements
b)	Are fire hose reels provided		No		No Requirement
c)	Are all extinguishers indicated by correct signage	Yes			All serviced and dated
d)	Has each extinguisher been serviced by a competent engineer in the last 12 months	Yes			Harston Fire Ltd
e)	Have steps been taken to prevent the misuse of extinguishers	Yes			
f)	Are the extinguishers suitable for the purpose	Yes			
g)	Have people been trained in the use of fire extinguishers	Yes			Internal training
h)	Are the locations of the fire extinguishers recorded on the fire plan	Yes			



FIRE RISK ASSESSMENT REVIEW

j) Have all aerosol cans in use/ stored been identified	Yes				Engine start, release sprays only on site
g) Are appropriate signs in use detailing flammable liquids/gas	Yes				
h) Are persons trained in their use	Yes				Site mechanic

SUBJECT	YES	NO	NA	COMMENTS
9. Emergency Procedures/ Plans/ Instructions				
a) Are there written procedures in place for evacuation in the event of a fire	Yes			Site plan
b) Have all personnel been trained in the procedures	Yes			Site plan sign off
c) Are fire procedures regularly tested by means of evacuation drills (6 Monthly)	Yes			Site plan sign off
d) Is there a system of training contractors in the evacuation procedures	Yes			Planning a site induction for contractors. Site visitors are accompanied at all times when they are on site.
e) Are notices provided on fire doors	Yes			
f) Are regular checks carried out to ensure premises are inspected	Yes			
g) Are fire hydrants and sprinkler valves adequately marked			N/A	
h) Is there adequate access for fire appliances	Yes			
i) Is there an emergency plan for the building	Yes			
j) Is there a procedure to record the results of tests on fire equipment and fire drills	Yes			Site plan sign off- Certificates to prove that all items are in spec
k) Have fire assembly points been identified and are employees aware of them	Yes			Rear / side of building and front door entrance
l) Have you co-ordinated your fire safety arrangements with other responsible people in the building (if shared premises)			N/A	
m) Have you considered/ liaised with adjacent premises that present a significant risk			N/A	Abandoned units next door and surrounding areas.



Fire Risk Assessment Action Plan

[illegible]