PAPERBACK COLLECTION & RECYCLING LTD

FIRE PREVENTION & MITIGATION PLAN

PENRHOS STORAGE

Version 1.8 December 2017

Revision Schedule

Rev	Date	Details	Prepared by	Approved by
Version 1.0	17/5/2017	Draft	Ceri Environmental Consulting Ltd	Drafted by Clare Walters
Version 1.1	1/6/2017	Draft	Ceri Environmental Consulting Ltd	Drafted by Clare Walters
Version 1.2	1/6/2017	Draft - after comments	Ceri Environmental Consulting Ltd	Drafted by Clare Walters
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Version 1.6	6/9/2017	Final - minor typo errors corrected and wording changes	Ceri Environmental Consulting Ltd	Drafted by Clare Walters
Version 1.7	Nov 17	Draft -Amendments to take account of NRW guidance document Fire Prevention & Mitigation Plan Guidance - Waste Management Version 2 Dated August 2017	Ceri Environmental Consulting Ltd	Drafted by Clare Walters
Version 1.8	20/12/17	Final - minor typo errors and addition of appendices	Ceri Environmental Consulting Ltd	Approved by Gordon Anderson

Table of Contents

Appendix 1 - Emergency Contact details

Appendix 2 - Relevant SOPs and documents from EMS

note that the EMS is a living document and so will be reviewed regularly.
These documents may be reviewed and so may not remain as in Appendix 2.

Appendix 3 - Plans

1. INTRODUCTION

This Fire Prevention and Mitigation Plan has been developed by Ceri Environmental Consulting Ltd, using Natural Resources Wales, Fire prevention and mitigation plan guidance - Waste Management, Version 2, August 2017.

The Fire Prevention and Mitigation Plan (FPMP) does not seek to address Health and Safety issues and it will not replace any statutory requirements under the Regulatory Reform (Fire Safety) Order 2005 or any other applicable legislation. Advice on these matters should be sought from a competent person.

The Environmental Management System on the Site will include a separate written fire risk assessment in accordance with the Regulatory Reform (Fire Safety) Order 2005. This will be undertaken before the Site is operational.

The main emphasis of this plan is to prevent a fire happening but also to ensure that the course of action taken, if there is a fire, will reduce the impacts on the environment and sensitive receptors as far as possible. This Fire Prevention and Mitigation Plan forms part of the Environmental Management System (EMS) for the Site (meaning the permitted site as applied for) which has been developed by the operator, Paperback Collection & Recycling Ltd.

The Environmental Management System (EMS) includes monitoring, inspections, record keeping requirements, procedures and training requirements.

1.1 Paperback Collection & Recycling Ltd

Paperback Collection & Recycling Ltd (PCR Ltd) propose to operate a plastics storage facility (material recycling facility) facility at Penrhos Storage, Penrhos Works, Anglesey, LL65 2UX, grid ref SH 26215 81132.

PC&R Ltd also has a processing facility on Deeside which takes in a limited range of plastics which are sorted and separated for recycling. One of the outputs from that facility is baled plastics, EWC 19 12 04. It is these waste baled plastics which are to be stored at the Penrhos facility.

1.2 Roles and Responsibilities

The overall responsibility for the operations at the Site lies with Paperback Collection & Recycling Ltd. Gordon Anderson, MD of PCR Ltd, will, along with its EMS & H&S Manager, Tony Whittaker, be responsible for liaising with North Wales Fire Service and ensuring that Site operatives are suitably trained and made aware of the need to prevent fires from occurring and the measures in place to ensure that any fires are dealt with in an safe and effective manner.

2. SITE SETTING AND LOCATION

2.1 Site Layout

The proposed permitted Site is located within a large industrial area (which was originally the Anglesey Aluminum site and is now owned by Ortios Eco Parks (Anglesey) Ltd.) with the main entrance off the A5 London Road. Site access is via a 24 hour security gated and manned access road. The site location is shown on Boundary and Location Plan CEC/PA/001 and the Receptor Plan CEC/PA/ 002.

Storage of baled plastics will be carried out inside the A Frame building which makes up most of the proposed permitted Site. Within the Site there will be no further processing and the primary and only use of the building will be for storage. The permitted area around the building consists of an access road, unloading areas in front of the two main doors to the building and quarantine areas outside the building in case of emergencies. See drawing no CEC/PA/001.

2.2 Site Security

The overall site and its main entrance at Penrhos has 24 hour manned security. There is an access gate which is manned during opening hours and has fob key entry only to the site. The perimeter of the entire site complex is fenced. All baled plastic will be stored inside the A Frame building which will be locked at night.

In order to reduce the risk of arson caused by intrusion the storage building will be linked by CCTV to the gatehouse security building and the 24 hour site security.

2.3 Site Access Points

The overall site complex is accessed by an entrance off the A5 London Road. There is a second emergency access point to the south east of the overall industrial complex (The East Gate Entrance see drawing no 53-1570-P) which the emergency services can use if needed. The A Frame building has two vehicular access doors at the front of the building and a number of emergency exits for personnel (see plan no CEC/PA/004).

2.4 Sensitive Receptors

An assessment of sensitive receptors has been carried out as part of the Risk Assessment for the application for the Environmental Permit. The location of the receptors is shown on the receptor plan CEC/PA/002.

An online search and a site visit identified the following receptors :-

Receptor	Distance from site metres
Businesses and potential office accommodation within the site complex	Adjacent the site and further away
Commercial and retail area	approx 330m to WNW
Local Housing – house by Penrhos beach	approx 230m to NNE
Local Housing - main residential area	approx 630m to NW of
Hospital- Ysbyty Penrhos Stanley	approx 600m to NW of
Care Home	non found
Schools - Ysgol Morswyn	approx 850m to NW
Railway line	approx 355m to SW
A55	approx 400m to SW
Surface waters	approx 24m to N
Groundwaters	No Source Protection Zones or ground water designations in bedrock or superficial deposits. Groundwater vulnerability zone (Minor aquifer high) at Penrhos beach at approx 260m
Beddmanarch-Cymyran SSSI	approx 950m to NE

Surrounding businesses and housing may be impacted by fire smoke, subject to prevailing wind conditions on the day. There is a hospital approximately 600m from the site and a school at approximately 850m which may also be affected by fire smoke, depending upon prevailing wind conditions. The main A55 road and railway to Holyhead could also be affected. There is also slight potential for surface waters to be affected to the north east of the site.

The Wind Rose for Valley Airfield (approximately 6.5km from the Site to the SE), (see Drawing Nos CEC/PA/002 & 003), shows that the prevailing winds are from the South South West.

Likely impacts assessment

Fire hazards

Fires involving combustible wastes can cause significant harm to people and the environment. There is the risk of death and/or serious injury and health damage associated with high thermal energy and smoke inhalation.

Combustion products release airborne pollutants which can cause both short and long term effects on human health and the environment. The combustion products generated by plastic wastes will vary depending upon the material

burning and also the conditions of the burn. The cleanest burn will result if there is an intense burning phase with a minimised smouldering phase.

Firewater run-off can transport pollutants into drainage systems, rivers and lakes, groundwater and soil, threatening water supplies, public health, wildlife and recreational use. However, there would be no direct run off of water from the Site, during a fire, if firewater were contained. Firewater containment, therefore, forms a key part of this FPMP.

Ash from a fire may contain contaminants which, if left in situ, could result in land contamination.

Explosions, sparks and projectiles can harm people and spread any fire to unaffected areas.

Assessment of hazard – risk - receptor

In order to assess the risks posed by fire a consideration of potential receptors has been made. These are detailed above and are considered individually below :

a) Local residential properties
A fire would potentially release smoke and airborne pollutants which could affect human health and cause nuisance.

The principal air quality concerns regarding the combustion of all types of plastics and their associated effects on health and the environment are summarised below :

Table 1

Potential Pollutant	**Health Effects**	**Environmental Effects**
Carbon Monoxide	Headache, nausea, tiredness, confusion. Prolonged exposure can lead to death.	Oxidises to carbon dioxide in the atmosphere.
Dioxins & Furans	Carcinogenic; causes growth defects; affects DNA, affects immune and reproductive systems.	Increased toxic loading on environment; leads to contaminated water/ land, affects animal health.
Polycyclic Aromatic Hydrocarbons (PAHs)	Carcinogenic in most animal species including mammals, fish and birds.	Increased toxic loading on environment; leads to contaminated water/ land, affects animal health.
Volatile Organic Compounds (VOC)	Dependant on VOC species. Potentially directly toxic including problems ranging from carcinogens to nervous disorders. Respiratory irritation, chronic lung disease.	Contributes to low level ozone, causes vegetative damage. leads to contaminated water/ land, affects animal health.

Semi-Volatile Organic Compounds (SVOC)	Species can include animal carcinogens. Causes eye and respiratory illness and headaches.	Increased toxic loading on environment; leads to contaminated water/ land, affects animal health.
Particulate Matter (PM)	Irritation of respiratory tract, aggravated asthma, contributes to chronic obstructive pulmonary disease (COPD).	Increased toxic loading on environment; leads to contaminated water/ land, affects animal health.

The nearest residential property is approximately 230m from the Site. There are also a number of other properties in this vicinity.
Taking account of prevailing wind directions these receptors are likely to be impacted upon in the event of a fire.

If the wind speed is significant it is likely to take any pollutants out towards the sea and may potentially impact some residential properties on the north west coast of Anglesey.

Several important prevention and mitigation measures will be put in place to address the risks identified. These are detailed in the following sections of this FPMP.

b) Ysbyty Penrhos Stanley Hospital
A fire would potentially release smoke and airborne pollutants which could affect human health and cause nuisance.

Principal air quality concerns regarding the combustion of plastics and their associated effects on health and the environment are detailed in Table 1.

It is understood that the hospital has a minor injuries unit and also approximately 43 inpatient beds including a care of the elderly unit. Staff, patients and visitors could potentially be impacted as a result of aerial emissions from a fire at the site. Some of the patients could be sensitive to smoke emissions.

However, the hospital is not downwind of the prevailing wind direction.

Prevention and mitigation measures will be put in place to address any risk. These are detailed in the following sections of this FPMP.

c) Ysgol Morswyn
A fire may potentially release smoke and airborne pollutants which may affect human health and cause nuisance.

Principal air quality concerns regarding the combustion of plastics and their associated effects on health and the environment are detailed in Table 1.

The school is not downwind of the prevailing wind direction.

Prevention and mitigation measures will be put in place to address any risk. These are detailed in the following sections of this FPMP.

d) Main residential area
A fire may potentially release smoke and airborne pollutants which may affect human health and cause nuisance.
Principal air quality concerns regarding the combustion of plastics and their associated effects on health and the environment are detailed in Table 1.

The main residential area is not downwind of the prevailing wind direction.

Prevention and mitigation measures will be put in place to address any risk. These are detailed in the following sections of this FPMP.

e) Potential Office accommodation
A fire may potentially release smoke and airborne pollutants which may affect human health and cause nuisance. The principal air quality concerns are detailed in Table 1.

Office accommodation is close to the storage building and so thermal heat issues may also impact people within the accommodation. We understand that the office accommodation is to remain unoccupied for the foreseeable future.

Communication and evacuation procedures will be in place within the EMS if any fire alarm is triggered for the Site.

f) On Site Industrial area
A fire may potentially release smoke and airborne pollutants which may affect human health and cause nuisance. The principal air quality concerns are detailed in Table 1.

Within the overall industrial site parts of the industrial area are close to the proposed permitted area and there is shared access. A fire may impact upon any people within this area and access to and from the site may be disrupted. There is a second access to the overall industrial site from the south east (East Gate Entrance) which could be used in an emergency for access and evacuation purposes.

Communication and evacuation protocols and procedures will be in place if any fire alarm is triggered for the Site.

g) Railway line and A55
There is a main railway line and the A55 runs close to the eastern boundary of the main industrial site, furthest from the proposed permitted area itself. There is some potential for smoke to possibly cause problems for trains or vehicles using the A55 in the event of a fire. Smoke impairs visibility and fires may damage signaling equipment. However, it is unlikely that a fire on the Site would spread to the railway line and cause any damage to signaling or

property. Visibility may be an issue subject to prevailing conditions at the time.

Due to the prevailing wind direction these receptors are less likely to be impacted in the event of a fire.

Nevertheless, prevention and mitigation measures will be put in place to address the perceived risk. These are detailed in the following sections of this FPMP.

h) Local businesses in commercial and retail area
There are some local businesses on the industrial and retail area to the north west of the Site, in the direction WNW, at an approximate distance of 330m. A fire may release smoke and airborne pollutants which may affect human health and cause nuisance.

The prevailing wind direction is away from these receptors and so the potential for impact is reduced. These receptors are also likely to be less sensitive than the residential receptors due to their light industrial nature.

i) Surface and ground water features
There are surface water ditches to the north of the main site, shown on drawing number CEC/PA/003. Under normal operating conditions there should be no discharge of water from the building, which will be used for storing all of the waste. The site surface water drainage (rainfall) from the outside of the building (non waste areas) combines with surface water drainage from the larger overall industrial complex and outfalls to an isolation penstock controlled discharge point. This point then discharges to the Penrhos beach (see 53-1570-P. Please note that this plan contains details of buildings and features within the larger Orthios Eco Parks (Anglesey) Limited site which are outside the proposed permitted area). In the event of a fire at the storage site, firewater run off will be initially contained within the building. There is a concrete bund wall around the inside of the building which will contain firewater within the building and there is also an internal drainage system within the building (see section 4.12 for details). In order to prevent firewater escaping from the building via the two main entrance doors, the Site will be equipped with inflatable booms and sand bags which will be deployed across these doors to contain fire water within the building and its drainage system.

Pedestrian fire exit and access points from the building will be outside of the internal bund wall so fire water run off will not be able to escape from this area.

If the building and internal drainage capacity were overwhelmed, firewater would be allowed to escape to the external drainage system. As this area discharges via a system of penstock isolation valves to surface water, in the event of a fire, the penstock valves would be closed to ensure containment of firewater within the site. The firewater could then be re-circulated for use in tackling the fire, if the fire command approved its re-use.

In addition to containment of firewater on these two fronts, a fire protocol/procedure would also be in place to provide mobile tankers for removal of firewater from the drainage systems both inside and outside of the building. This method of firewater management would add a third containment measure with mobile removal and treatment at an off-site water treatment facility. As a result of the above measures surface and ground water receptors will be protected and should not be impacted in the event of a fire.

j) BEDDMANARCH-CYMYRAN SSSI

The BEDDMANARCH-CYMYRAN SSSI citation states :

"This site, which includes a variety of coastal habitats between Holy Island 'mainland' Anglesey is selected primarily for its ornithological and botanical interest. There are large areas of sandbank, mudflat and saltmarsh, as well as two stands of dune heath. The site also has marine biological interest. A wide range of water-birds, both on passage and in winter, are attracted to the area which is especially important for overwintering ringed plover, greenshank, red-breasted merganser and goldeneye. A number of coastal bird species also breed in the area, but the former importance of the rocky islands in the Inland Sea for their tern breeding colonies has diminished considerably in recent years.

On the mudflats there are beds of eelgrass Zostera spp and all three British species have been recorded. Saltmarsh vegetation fringes most of the site but only forms extensive stands in sheltered bays and estuaries; among the more abundant saltmarsh species present are common saltmarsh-grass Puccinellia maritima, thrift Armeria maritima, lax-flowered sea-lavendar Limonium humile, sea rush Juncus maritimus and the invasive cord-grass Spartina anglica; the uncommon golden samphire Inula crithmoides occurs in both saltmarsh communities and on parts of the rocky shoreline. The coastal dune heath at both Traeth y Gribin and Cymyran are interesting examples of this locally uncommon habitat type. "

In assessing the potential risk to the SSSI the possible effects of a fire at the site will be considered in terms of :

• Toxic contamination from	toxic leachate toxic wastes contaminated dusts
• Habitat loss from	land encroachment explosive wastes
• Siltation	suspended solids
• Smothering	dust/particles
• Disturbance	visual human presence noise/vibration

Toxic contamination

The storage facility is non hazardous in nature. However, in the event of a fire there would be emissions to air which may potentially impact the environment.

Table 1 details potential impacts on animal and plant life and the potential for toxic substances to build up in the event of a fire.

The scale of the impact can be assessed by a consideration of the likely exposure of the SSSI to the potential emissions. The SSSI is not downwind of the prevailing wind direction and is approximately 950m from the proposed permitted site. Any fire would be a restricted and short term event.

The impact, therefore, from toxic air emissions is likely to be low on the receptor environment and flora and fauna.

Polluted fire fighting water run off should not escape from the site and so is unlikely to impact the SSSI (see assessment above in terms of surface water risk). The facility has an engineered containment and drainage system which has been designed to prevent the escape of firewater from the site. There is an inspection and maintenance system for this containment system within the EMS which should ensure that its integrity is maintained. In the event of an unforeseen escape of firewater run off, firewater would be unlikely to reach the SSSI in any concentration to have a significant effect

Habitat Loss

Habitats loss could result from the physical take up of habitat or buffer zone. However, there will be no encroachment resulting from the Site and no potential for explosive wastes which could impact the site.

Siltation

Siltation may potentially result from suspended solids from fire ash being discharged from the site to the receptor site. The likelihood of this is low and the potential impact insignificant as the pathway would be the same as that for toxic contamination above and any potential discharge would be diluted to insignificant levels of concentration.

Smothering

Smothering may potentially occur from dust and airborne particulates being generated at the site in the event of a fire and being deposited on the receptor site. Due to a combination of distance from the facility and prevailing wind direction it can be concluded that there is no significant risk posed to this receptor.

Disturbance

Given the distance of the Site from the SSSI and the intervening features, such as the rest of the industrial estate, there will be no impact on the SSSI from disturbance. Human presence from the site will again not affect the SSSI because of distance. It will also be insignificant compared to other noise sources between the SSSI and the site.

3 WASTE OPERATIONS

3.1 Baled Plastic Waste Deliveries

The Site will only accept processed baled plastic from its sister site at Deeside, also operated by Paperback Collection & Recycling Ltd. All baled plastic waste delivered to the site is Quality Controlled checked before it leaves the Deeside site to ensure that it is as specified for the Penrhos Storage facility. Each consignment will be checked/recorded to ensure that it corresponds to the description on the waste transfer note and to ensure that the materials are acceptable under the terms of the Environmental Permit.

Baled plastic waste will also be checked at the point of delivery at the Penrhos site to ensure that compliance with the waste transfer note requirements and acceptance for storage.

Consignments containing only materials listed in the Permitted Wastes List (ie only 19 12 04), will be unloaded and the bales placed within the storage building. The bales will be stored in accordance with the layout specified in drawing number CEC/PA/004.

If there is any waste which should not be in the load (ie not compliant with) then this will be removed by the same delivery vehicle and returned to the Deeside facility or taken to another suitably permitted facility.

There is an inspection and recording procedure in place to record the date of delivery of each load and to which storage pod the load relates. This will allow a "first in first out" policy for baled plastic waste to be stored at the facility. The building and surrounding permitted area will be kept clean to reduce the risk of fire spread in the storage area or outside the building.

3.2 Throughput of Waste and Storage Duration

The site will have a maximum storage capacity of 15,000 tonnes and a maximum annual throughput of 45,000 tonnes. It is unlikely that the maximum capacity will be reached in any twelve month period of storage.

The type of baled plastic waste being stored is dry, does not contain foodstuffs, biodegradable or putrescible items and since it is not RDF or its equivalent there is an extremely low risk of self heating and self combustion.

The operator currently has many years experience of the type of waste it is proposed to store at the Penrhos site. Bales are stored at the Deeside facility and temperature probing of this material, over some period of time, has shown that the temperature of the bales is stable and self heating does not occur. In addition, storage within the building will remove any significant effects of the sun on the temperature of the bales

Given the nature of the waste operations and the volumes stored, temperature monitoring of the stored materials is not considered vital but will nonetheless form part of the standard storage protocols/procedures within the A Frame building.

No baled plastic waste shall be stored for longer than 12 months.

3.3 Storage Areas

The storage areas are shown on Drawing No CEC/PA/004

Baled plastic waste will be stored in the building and so is under cover.

The building is approximately 190m x 60m in total. The building will be accessible to fire fighters in the event of a fire via two main entrances at the front of the building and also via pedestrian access points to the building. The entire external perimeter of the building will also be accessible.

The storage building and outside areas should not contain any loose materials. However, if any bales break or materials become loose, the building and outside areas will be cleared of loose debris to prevent the build up of potentially combustible material and to prevent litter. This clearing is carried out in accordance with the EMS inspection and recording procedure.

The layout of the storage building has been carefully considered with maximum allowance of fire breaks, access areas and storage pods set out in accordance with the Drawing no. CEC/PA/004. Fire breaks along with limitations on total capacity and access afforded within and outside the building will significantly reduce the risks for a fire to spread from storage pod to pod. The layout of the internal and external areas will also provide the added opportunity for removal and quarantining of non-burning baled materials to the quarantine areas (as shown on drawing no. CEC/PA/001). In addition the bales will, whenever possible, be stacked in a brick pattern rather than simply on top of each other. This will have the effect of reducing the "vertical tunnel" effect of any fire spread.

Although it is considered that, due to the nature of the material to be stored and its dry condition, there will be no significant, if any, risk of self heating, the management of stock inside the storage building will be structured on the "FIFO" basis. That is bales will be removed on a first in first out principle. This will reduce storage time, aid rotation of stock and assist in maintaining the best materials handling principles whilst avoiding build-up of loose litter and debris within the warehouse storage area.

3.4 Hazardous Wastes

Hazardous wastes will ***not*** be permitted at the Site.

3.5 Fuel Storage

There will be ***no*** fuel or gas cylinder storage at the Site.

3.6 Plant and Equipment

There will be materials handling plant on Site ie vehicles delivering and removing the baled plastic, an excavator type piece of plant and at least 2 x fork lift trucks. All vehicles and plant are fitted with fire extinguishers. All plant is maintained and inspected in accordance with the EMS.

This plant will be available on Site if required for use by the fire service. The plant will be fitted with heavy duty pneumatic tyres to enable them to enter the building safely for removal of stock to quarantine areas in the event of a fire. Site staff will be trained in the use of equipment for such an eventuality. In the event of a fire in the storage building the removal of stock would be carried out only were it is safe to do so and under the supervision of the Fire Command at the time. This will reduce the risk posed to life in tackling a fire.

4 FIRE PREVENTION AND CONTROL MEASURES

4.1 Potential Causes of a Fire and Sources of Ignition

A Site storage area, by nature, will have very few potential sources of ignition or other activities taking place which may cause a fire. The potential causes of fire are likely to be any electrical faults, sparks or leaks from plant and equipment or arson. The risks are deemed to be low but the impacts of a fire could be significant.

There are no office areas within the building.

The risk of self combustion (as discussed in section 3.2) is considered to be extremely low. The building will not be heated. Nevertheless there is a temperature monitoring procedure within the EMS (See Appendix 2).

There is a robust plant maintenance and inspection programme in place for al plant on Site. Vehicles and plant are fitted with fire extinguishers, dust filters and spark arrestors. There will be no bucket loaders on the Site. When plant is not in use it will be stored away from the baled plastic, at the inside of the buildings main doors (see Appendix 2) .

There will be a visual check at the end of any day when works have taken place on site to detect any signs of fire caused by dust settling on hot exhausts or engine parts. These checks will be made by the last person to leave the site on any day when works have taken place at the site or plant has

been used. The check will be recorded in accordance with the EMS see Appendix 2.

There is no possibility of reaction between incompatible or unstable wastes and there should be no batteries in the waste accepted due to the treatment processes which have taken place at the company's sister site at Deeside. There is a Waste Acceptance Procedure in place within the EMS see Appendix 2.

To reduce the risk of electrical faults causing a fire all electrical wiring will be fully tested and certified by a qualified electrician and will be tested at regular intervals with the results recorded in the EMS.

To reduce the risk of leaks contributing to fire risk all equipment will be maintained and inspected in accordance with the requirements of the EMS and the results recorded.

Hot works are not routinely or likely to be carried out within the building. In case they are, there is a hot works procedure (see Appendix 2) within the EMS to reduce the risk of sparks or other ignition sources.

There will be **no** smoking, naked flames, furnaces, incinerators, gas cyclinders or industrial heaters permitted or used at the permitted Site.

In order to reduce the risk of arson caused by intrusion the storage building will be linked by CCTV to the gatehouse security building and the 24 hour site security (See section 2.2) . This will reduce the risk of intruders starting a fire at the site. The building will also be locked at night.

Visitors to the site will always be supervised and any contractors will be informed of Fire prevention and Control measures applicable to their activities on site in accordance with the Environmental Management System for the site.

4.2 Causes of Fire Spreading and Mitigation

Once a fire has started it can spread through heat to adjacent materials or through sparks or airborne embers falling onto other combustible materials.

Fire suppression has been considered for this development. However, water sprinklers may prevent a fire spreading, but will not put out the fire, so other firefighting medium is required to achieve this (see detail below). In order to stop or reduce the risk of fire spreading the layout of the baled plastic waste within the storage building is within discrete storage pods/stacks with fire breaks around all sides of the bale stacks. There are two wider fire breaks (>10m) at the two main access points to the building which separate the baled plastic waste into three sections (see drawing CEC/PA/004). This stack/pod separation significantly reduces the risk of fire spreading and thereby further reduces the likelihood of the entire stored materials being on fire at the same time.

In the event of a fire there is the provision for the removal of baled plastic waste in close proximity to the fire to be moved, if it is safe to do so, to the quarantine areas thereby further reducing the risk of fire spreading.

In addition the bales will, whenever possible, be placed in a brick pattern rather than simple on top of each other. This will reduce the vertical tunnel effect which can result in fire spread.

4.3 Fire Detection Methods

There will be UKAS accredited fire detection systems within the building as well as CCTV. The fire detection systems will be linked to the 24 hour security at the overall Anglesey site.

4.4 Emergency Services Access and Egress

The site access is from the A5 London Road and can be used to access all parts of the site.

The site can also be accessed from the alternative entrance off the A5 at the East Gate Entrance.

All escape routes, fire exits, alarm call points and fire extinguishers and hoses will be kept clear and free from waste and obstruction at all times.

The site has roller shutter doors which, when open, will assist in clearing smoke from the building. This will aid fire-fighting.

4.5 Fire Box

A fire box is to be maintained at the site access gatehouse with the Fire Prevention and Mitigation Plan, contact names and numbers and a set of drawings showing the locations of the drainage system and layout of the site. This will enable the Fire Service to assess the site more effectively and implement pollution prevention measures in accordance with the EMS and established protocols.

4.6 Water Supply

There is a 1.8 million litre concrete chamber below the A Frame building. The chamber is being converted into a water reservoir and will be maintained in a full capacity, to be utilized as firewater. The configuration is such that any water released into the A Frame building will immediately drain back into this chamber where it can then be recirculated to the fire pumps (via a filter). This closed loop system affords the A Frame an almost limitless supply of fire fighting water.

In addition, there is a fire hydrant system within the main industrial site and the fire hydrant points are in close proximity to the A Frame storage building (see drawing 53-1560-P). There is extensive firewater capacity on site as

part of the overall industrial site and this will be available for use by the proposed facility.

4.7 Firefighting Materials

Plastics can give rise to a range of noxious gases when burned and produce dense smoke and the fire service will decide the most appropriate means of extinguishing the material.

Water is available as detailed in section 4.6. Water hoses are available outside the two main site entrances. Fire extinguishers are available in the building and all the plant is equipped with fire extinguishers.

4.8 Plant and Equipment

There will be very little plant on site: vehicles delivering and removing the baled plastic, excavator type plant and fork lift trucks. All vehicles and plant are fitted with fire extinguishers. All plant is maintained and inspected in accordance with the EMS. This plant will be available for use if there is a fire under the instruction of the Fire Command.

4.9 Quarantine Areas

Quarantine areas will be established outside of the A Frame building maintaining a break between the quarantine areas and the building. These indicative areas are shown on drawing no CEC/PA/001.

4.10 Ground Conditions

All baled plastic waste stored on site will be within the A Frame storage building which has a sloped concreted floor leading to a drainage system. The building contains an internal bund with openings for the two main entrances. The building drains to a sealed chamber containing fire fighting water.

The outside areas are used only for access to the building and are clear areas around the outside of the building.

The surfaces ensure that vehicles and plant can move around all areas of the site easily.

4.11 Volume of Water Required

NRW guidance states that there must be sufficient water supplies available on site to manage a worst case scenario.

At the maximum storage capacity there will be 34 pods each at 600m3 = 20,400m3

The NRW guidance states that 300m3 will require a water supply of at least 2,000litres a minute for a minimum of 3 hours.

Therefore 20,400m3 will require 136,000litres per minute = 24,480,000litres over three hours. This equals 24,480m3 of water.
The layout of the building has been designed to place the storage pods into three separate sections. There is a separation distance of over 10m between these three areas.

The worst case scenario is, therefore, likely to be that the largest central area of pods is on fire. This consists of 16 pods at 600m3 = 9600m3.

9600m3 will require 11,520,000litres over three hours. This equals 11,520m3 of water.

4.12 Firewater Management

In the event of a fire at the storage Site firewater run off will be initially contained within the building. There is a concrete floor and bund wall around the inside of the building which will contain firewater within the building and within the internal drainage system and chamber under the building.

In order to prevent firewater escaping from the building via the two main entrance doors, the site will be equipped with inflatable booms and sand bags which will be deployed to contain water used in tackling a fire. Pedestrian fire exit and access points from the building will be outside of the internal bund wall so firewater will not be able to escape from this area

The building is 190m x 60m and has a 1m bund = 11,400m3 containment capacity plus sub floor drainage and floor slope of in excess of 1,800m3. In addition there is the capacity via the underground chamber to remove water from the building for recirculation or for disposal off site.

This would provide sufficient containment for the proposed worst case of the middle section of stored pods being on fire.

As firewater is used for fire fighting from the chamber below the A frame building firewater will flow back into this system. If the entire building drainage and bunding capacity were overwhelmed fire water would be allowed to escape to the drainage system external to the building. As this area discharges via a system of penstock isolation valves to surface water then the penstock valves would be closed in the event of a fire to ensure containment of firewater within the site. This water could then be re-circulated for use in tackling the fire if the Fire Command approved its re-use.

A fire protocol/procedure would also be in place to provide mobile tankers for removal of fire water from the drainage systems both inside and outside of the building. This method of further firewater management would add a third measure of containment, ie mobile removal and treatment at an off-site water treatment facility. As a result of the above measures surface and ground

water receptors will be protected and should not be impacted in the event of a fire.

All firewater will be classed as contaminated so will ultimately need to be tankered off Site for disposal at a suitable facility.

5 ACTIONS IN THE EVENT OF A FIRE

5.1 Actions on Finding a Fire

In the event of a fire, close the Site to vehicles and only allow essential personnel onto the Site.

In the event of a minor fire that can be dealt with using on Site extinguishers and hoses this will be undertaken by Site staff BUT ONLY IF CONSIDERED TO BE SAFE TO DO SO. After the fire has been extinguished the Site manager shall investigate and record the causes of the fire and issue instructions to prevent a recurrence.

In the event of a larger fire, where Site staff attempt to extinguish it or start to move non burning material to a quarantine area in order to reduce the risk of fire spread, the Fire Service and Natural Resources Wales shall be called. The key action in this case will be to prevent the spreading of fire whilst maintain the safety of site operatives.

The management shall close the Site to incoming materials and inform the following if needed (this may depend upon the time of day, wind direction and advice from the Fire & Rescue Service and Natural Resources Wales) :-

Nearby businesses
Adjacent offices
Hospital
Residential properties
School
Adjacent industrial area
Welsh Government for the A55
Network Rail for railway

(see Appendix 1 for contact details)

The surface water penstock valve will be closed.

When the fire service arrives they will take over control and direction of staff to use plant and equipment as required. Staff will show the fire service the location of the drainage system to allow for water recirculation.

Staff will assist wherever possible but must maintain a safe distance from the fire and only work under the instruction of the Fire & Rescue Service Command.

For a fire when the site is closed the Fire Box will contain contact details for the site owner and management. The owner/ manager shall attend the scene and assist the fire service where possible and contact the list above.

5.2 Actions After a Fire

An assessment will be made, by the management, of the effects of the fire on infrastructure and the pollution risks from the site. If water has been used to fight the fire the manager shall arrange for the removal of contaminated water to a suitably permitted facility.

Arrangements will be made for wastes that need to be moved for off site disposal.

If there is no significant damage to the Site infrastructure the Site shall re open in consultation with NRW.

Where essential repairs are needed to any pollution control measures, the Site will remain closed until the repairs are completed.

A thorough investigation shall be conducted as to the cause of the fire and appropriate measures put in place to ensure that the risk of further fires is reduced.

6.0 Training and Competence

All staff shall undergo relevant training, covering all relevant aspects of Fire Prevention and awareness etc.

All staff also undergo New Starter training by the supervisor of the work area, this includes, specific, environmental issues associated with their job, emergency procedures etc.

Toolbox talks at various periods include environmental sessions.

In addition to the above, staff have various associated environmental training as part of existing courses & qualifications i.e. Operators Competence Certificate, etc. The site supervisor will be WAMITAB Level 4 qualified.

Refresher training is given on an annual basis.

Any staff undertaking monitoring, recording and reporting for the purposes of fire control will be suitably trained and instructed as to their duties.

Fire marshals have been nominated and trained.
Regular fire drills are conducted.

This Fire Prevention & Mitigation Plan will be available in hard copy at the Site both within the A frame building but also at the 24hour security gate office so

that both NRW and the FRS have access to it during an emergency. It will also be available in electronic form at the company's site at Deeside.

7.0 Review of FPMP

The FPMP will be kept up to date to ensure that compliance with guidance will be maintained to ensure that all details such as contact details are still relevant.

The FPMP will be reviewed on a regular (at least annual basis) but also if :
- there is a fire incident at the Site
- there is any new Site infrastructure
- there is new plant on site
- there are any relevant new activities on site
- there are any relevant changes to site access and surrounding areas.

APPENDIX 1

EMERGENCY CONTACT DETAILS

Nearby businesses	**Contact**
Morrisons	01407 763065
Pets at Home	0845 608 0174
The Standing Stones	01470 761350
Wilko	01407 762825
Mon Maintenance Services	01407 764211
Argos	0345 165 7698
B&M	0330 838 9513
Iceland Foods	01407 761072
Tesco	0345 677 9356

Adjacent offices	
Orthios	0330 3371125
Hospital	
Ysbyty Penrhos Stanley	01407 766000

Residential properties
Contact in person at property or via emergency services

School	
Ysgol Morswyn	01407 762233
Adjacent industrial area	
Orthios	0330 3371125
Welsh Government for the A55	
North & Mid Wales Trunk Road Agent	0300 123 1213
Network Rail for railway	
Network Rail	03457 11 41 41

APPENDIX 2 Relevant SOPs and Documents from EMS

SOP 1
WASTE ACCEPTANCE PROCEDURE

General
This procedure details the steps to be taken to ensure compliance with the waste permit. The site accepts waste from Paperback Collection & Recycling Ltd's own site at Deeside.

Key Responsibilities

Gordon Anderson has overall responsibility for the operation and running of the site. The acceptance of waste follows several stages and the staff involved at each stage will have responsibility to carry out the operating procedure. Any problems encountered will need to be referred to the site manager or his designated foreman.

Supporting Documents

- Permitted Waste Types List
- Site Permit
- Duty of Care A Code of Practice

Waste Characterisation

Waste will be brought to the site from Paperback Collection & Recycling Ltd's own site at Deeside.

Paperback Collection & Recycling Ltd's Deeside management team will be required to establish if the waste it is proposed to bring to Penrhos will be compliant with the requirements of the Permit.

For wastes with EWC codes and descriptions which are listed below there will be no need to have samples analysed further (they have been produced to a specification) :

19 12 04 plastic

Under the Duty of Care all waste must be adequately described to allow the subsequent holder to deal with it in a way that will not cause pollution of the environment. It is therefore the responsibility of the producer of the waste to characterise the waste before it is accepted at the Penrhos site.

In addition to the production specification being established, there will be a visual examination of the waste before it leaves the Deeside facility and also when it is delivered to Penrhos. This is covered in SOP No 02.

SOP 3
SITE INSPECTION

PURPOSE

The site inspection is to be carried out by the Site Manager or Site Foreman or any other member of staff who has been trained in the requirements of the inspection process. The inspection is to ensure that the site permit is being complied with. Any problems arising from the inspection shall be dealt with to ensure compliance.

Key Responsibilities

Gordon Anderson has overall responsibility for the operation and running of the site and for ensuring that staff are suitably training in this procedure.

Instructions

The following items will be inspected in accordance with the site check sheet. Inspection results and any remedial actions will be noted on the site check sheet. The check sheet will be passed to the site manager or their nominated deputy for action if needed.

- Effective storage of waste
- Condition of the site access road and yard
- Visible dust emissions for the active areas of the site
- Excessive noise
- Any spillages or leakage
- Surface water run off – any problems with drainage system. Check for blockages and operation of penstock valve on point of discharge to surface water (this will be in agreement with Orthios)
- Condition of the perimeter fence and gates
- Evidence of pests and vermin
- General cleanliness of site
- Temperature of bales

SOP 13
MONITORING OF STOCKPILES FOR TEMPERATURE AND STACK ROTATION

PURPOSE

From the Company's experience of this type of waste it is not anticipated that there will be any self heating of the baled plastics. Nevertheless this procedure is to ensure that the site has a system for monitoring the plastic bale stockpiles which ensures any temperature rise is noted and an assessment can be made of any actions which may need to be taken to reduce any fire risk.

Key Responsibilities

Gordon Anderson has overall responsibility for ensuring that sufficient, suitable equipment and training is provided to allow staff to implement this procedure.

PROCEDURE

Paperback Collection & Recycling Ltd will rotate stock to ensure older wastes are not retained for excessive periods. For example, we will process the oldest stockpiles first before using newer stockpiles.

We will record the stack rotation with a simple plan of the site and the date of stack formation and number of bales within each stockpile.

Inspection of stored wastes will take place frequently and at least once a week. A written record will be made of these inspections on the daily check sheet.

The stockpiles will be assessed for any visual emissions. Any unusual odours from the stack will also be investigated. One method of investigation will be a temperature probe.

Weekly heat readings will be taken from bales within ***each*** of the stockpiles with hand a held temperature probe. At least 10% of the bales within the warehouse will be sampled and the probe will be placed into the centre of the baled being monitored. The thermometer will be allowed to return to normal temperature between readings. Each reading will be recorded.

The manager may reduce the frequency and/or sampling rate if the monitoring confirms that the bales show no self heating. The reasoning for any reduction will be recorded.

If the bales show any trend of heating the monitoring will be extended to bales within the core of the stockpiles and the frequency of monitoring will be increased.

The matter will be reported immediately to the Site Manager for assessment and determination of further action to be taken. Further action could include rearranging stacks, breaking open and cooling bales.

DO NOT WALK ON THE STOCKPILE TO TAKE TEMPERATURE READINGS OR FOR ANY OTHER REASON.

SOP 12
HOT WORKS PROCEDURE

Purpose

This procedure details how to undertake hot works on site. This relates to such activities as welding, soldering, grinding and other similar activities.

Hot Work should only be undertaken if alternatives have been discounted, i.e. mechanical fixing, sawing, adhesives etc.

Key Responsibilities

Gordon Anderson has overall responsibility for the operation and running of the site. All hot works activities undertaken on site are under the overall responsibility of the manager. However, the site manager will specify an Authorised Person who will be responsible for carrying out the risk assessment of the Hot Works job. An Authorised Person is someone who has sufficient technical knowledge, training and practical experience of the Hot Work Processes and their associated hazards to undertake a Hot Work Risk Assessment. He/she is responsible for specifying the necessary precautions, e.g. isolations, site preparations, emergency procedures. There will be a senior person carrying out the hot work they are the Competent Person. All staff on site have responsibility to carry out this operating procedure fully. Any problems encountered will need to be referred to the site manager or their designated foreman.

Hot works

The use of a Hot Work Permit is required for all hot work on this site. A Permit-to-Work involves a methodical assessment of the task to identify and specify the precautions to be taken.

The Permit-to-Work should be issued by the Authorised Person responsible for carrying out the risk assessment of the job. He/she is responsible for specifying the necessary precautions, e.g. isolations, site preparations, emergency procedures. The precautions should be discussed with the senior person carrying out the hot work (Competent Person) to ensure that the nature of these and the hazards is clearly understood. It is the joint responsibility of the Authorised Person issuing the Permit and the Competent Person receiving it to fully understand the contents, limitations and scope of the Permit-to-Work and its full implications, prior to commencement of work. The Permit-to-Work should be validated for a maximum of one day only. If additional time beyond the expiry of the Permit is required then this should be formally extended on the Permit-to-Work by the Authorised Person who issued it, or in their absence another appropriate authorised person after reviewing the criteria under which it was issued.

Hot work carried out by contractors should be covered by the same procedures. Method statements should accompany complex jobs. Where

contractors are engaged it is essential that liaison occurs between the site management and the contractor if the hot work might affect the normal activities of the area.

A copy of the Permit-to-Work should be available at the hot work location.

Before undertaking hot works the Authorised Person will need to establish or ensure :

- that a risk assessment of the activity is undertaken and a hot works permit issued. If the Hot Work involves or produces substances hazardous to health, e.g. cleaning solvents, acids, welding fumes etc. then the work must include any additional control measures as necessary under the Control of Substances Hazardous to Health Regulations.
- a suitable area in which to undertake hot works. This will include ensuring that flammable or combustible materials are at a suitable distance from the hot works or are protected from the hot works.
- hot works are not undertaken within 1 hour of the close of the site, unless in an emergency
- only approved and properly maintained equipment is used to undertake the work
- only suitably training staff or contractors undertake hot works
- ensure that fire fighting equipment is properly located and readily available
- ensure good ventilation to avoid the build up of smoke and fumes
- ensure that there will be no transfer of heat from the hot works to combustible items such as through walls, along pipes etc
- during hot works ensure that precautions are taken to avoid accidental operation of fire detection systems
- ensure all nearby personnel are protected from heat, sparks etc

Fire Watch
A fire watcher shall be placed in charge whilst the “hot work” operations are in progress and shall patrol in or about any structure of building close to the “hot work” operations, where the risk of fire may arise. The Authorised Person must inspect the site of the “hot work” operation at least once per day on the dates the permit is valid.

A final inspection of the area will be undertaken approximately 1 hour after the completion of any hot works to ensure there is no smouldering fire and hot areas.

Operational Checklist for those involved in Hot Work
Typical Precautions for Safe Hot Working

1. Care to be taken when using and storing materials used for ignition purposes, i.e. matches, lighters.
2. Hot work equipment is in good repair and adequately secured.

3. All combustible material of a portable nature shall be removed from the site of operations and floors swept clean of combustible materials. Flammable substances such as paints and adhesives must be removed from the Hot Work area.
4. All combustible material remaining in the vicinity shall be either
a) thoroughly drenched with water or
b) cover with damp sand or
c) covered with non combustible sheets – whichever is suitable.
5. Combustible floors, walls, ceilings protected by wetting down and covering with damp sand or covered or screened by sheets of non-combustible material – whichever is suitable.
6. Where work is above floor level, non-combustible curtains or sheets suspended beneath the work to collect sparks.
7. All gaps in walls and floors through which sparks could pass covered with sheets of non-combustible materials.
8. Means for fire extinguishing must be in close proximity to the “Hot Work” operation. If a fire point is not in the immediate vicinity, then portable fire extinguishing equipment must be available at the site of operations.
9. Ensure that the correct Personal Protective Equipment is worn in relation to the task being carried out.
10. Smoke/heat detectors that could be affected by the “Hot Work” operation must either be a) isolated or b) “Bagged off”.
In both cases, site management must be informed that smoke/heat detectors are not in operation. When the work has been completed the smoke/heat detector must be put back into operation.
11. Those concerned have had the nearest fire alarm/telephone pointed out to them and have been told what to do in the event of a fire or other emergency.
12.Any pipes affected have been assessed for hazardous contents or residues, isolated and vented. Precautions have been taken to prevent the release of sparks or other hazardous emissions from open ends. Consider the potential for conduction of heat.

HOT WORK PERMITS ALONE DO NOT COVER WORK CARRIED OUT IN CONFINED SPACES

Hot Work Checklist – to be secured to cylinder trolleys
• Condition of pipes/fittings checked?
• Enclosed fabrications (e.g. tanks, pipes) checked for hazardous contents?
• Combustible materials in area removed
or covered?
• Combustible floors protected?
• Wall/floor openings protected?
• Where is the nearest:
- fire extinguisher?
- fire alarm call point?
- phone?
• Smoke/heat detectors protected – management informed?
• Check for signs of fire after work completed
• In the Event of Fire,

- raise alarm,
- phone 999 - state location,
- use extinguishers if safe to do so.

Duties of the Authorised Person
An Authorised Person is someone who has sufficient technical knowledge, training and practical experience of the Hot Work Processes and their associated hazards to undertake a Hot Work Risk Assessment. The Authorised Person has the following duties:
(i) To assess the risks associated with the hot work activity and it's potential effect on the surrounding area and processes.
(ii) Prepare a permit to work.
(iii) To issue the appropriate documentation to the Competent Person, discussing the practicalities of the safety precautions and control measures required.
(iv) To monitor that during the hot work activity, the work is carried out in line with the permit to work. Where the work extends beyond one day, to extend the permit if the conditions are still applicable.
(v) To ensure that on completion of the hot work the Competent Person has left the area in a safe condition and to cancel a permit if issued.

Duties of the Competent Person
A Competent Person is someone who is trained and experienced in the actual Hot Work activity and has duties as follows:
(i) Ensure receipt from the Authorised Person (Hot Work Assessor) of a Hot Work Permit, prior to starting work.
(ii)Discuss the safety precautions required with the Authorised Person (Hot Work Assessor). Sign for acceptance of the permit to confirm understanding of the requirements and the obligation to carry out the instructions correctly.
(iii)Work in compliance with the job instructions and control procedures.
(iv)Adhere to any provision in the Permit to Work.
(v)Supervise, erect and maintain any barriers, screens or other protective measures.
(vi) Ensure/arrange communication and/or reporting procedures for emergency situations as appropriate.
(vii) Observe all fire precautions.
(viii) Comply with any monitoring required by the documentation.
(ix) Keep the Hot Work Area clean, tidy and free from any combustible materials.
(x) Restrict the use and application of heat to the stated points of work.
(xi) Leave the area in a safe condition if the hot work is suspended. The permit will need to be formally extended or a new permit issued if the hot work is to continue on a different day.
(xii) Comply with any requirements laid down in the Hot Work safety document to carry out a personal inspection after a specified period following the last application of heat.
(xiii) On completion or cessation of the Hot Work,confirm that the Hot Work area is safe and free from any source of ignition or any signs of any

smouldering materials, tidy up the work area, remove/replace any fire fighting equipment, if a permit was issued, sign it off and return it to the Permit Issuer (Authorised Person).

SOP 4
PLANT AND EQUIPMENT

PURPOSE

This procedure is to ensure that the site plant and equipment is operated in a manner which will protect the environment.

Key Responsibilities

Gordon Anderson has overall responsibility for ensuring that sufficient, suitable plant and equipment is provided to operate the facility. The Site Manager is also responsible for ensuring that all scheduled and other essential maintenance is carried out and that the plant and equipment is maintained in accordance with the manufacturer's recommendations. The Site Foreman and Operators of the plant are responsible for completing the checks and notifying the Site Manager of any defects.

Daily Checks Prior to Using and Plant and Equipment

Before using any item of equipment at the start of each day the Site Foreman or Equipment Operative must check the following :

- Check the general condition of the item of equipment
- Ensure that all safety guards (as appropriate) are in place
- Check the condition of cables for electrical equipment
- Inform the site manager or his nominated deputy of any defects

At the end of each working day the Site Foreman or Operative must :

- Check that all equipment is turned off (as appropriate) and left in a safe condition
- Securely lock away all tools and small items of equipment as directed by site Foreman or manager

The Site Manager must :

- Arrange for regular servicing of all items of plant and equipment in accordance with the manufacturer's recommendations
- Arrange for the provision of replacement plant to cover plant being serviced or repaired.

SITE RULES

These regulations apply to all persons working at or otherwise entering the site and are in addition to the Site Rules for Drivers. Failure to follow the rules could result in dismissal or expulsion from Paperback.

1. All employees must familiarise themselves with the Site Rules, for Delivery Drivers and ensure these rules are adhered to at all times.

2. All employee and visitors motor vehicles must be parked and remain situated on the main car park by the security gate. Vehicles are not permitted inside the building without the express authority of the Managing Director or the Site Services Co-ordinator. An exception can be made to allow contractors vehicles on site to complete the task they are undertaking.

3. Under no circumstances may employees' private vehicles be driven within the permitted site. Authority must be gained from the M.D or Services Co-ordinator.

4. Nothing is to be removed from the site without the permission of the Managing Director. Any valuables or money found on site is to be brought to attention oft e Managing Director or the Services Co-ordinator.

5. All persons on site must be unaffected and not be under the influence or possession of alcohol or drugs (other than prescribed medication from your Doctor)

   It is your responsibility to inform the management if you are on medication.

6. Failure to comply with regulation 5 will result in dismissal/ expulsion from the site.

7. Only personnel holding an in-house ticket for the site or hold an HGV licence are permitted to operate vehicles on site.

8. Only personnel holding the correct plant/forklift truck licence are permitted to operate these vehicles on site.

9. Vehicles, including but not limited to forklift trucks and HGVs are not to be left running when unattended.

10. Hi Vis clothing, protective safety boots must be worn at all times while on site when deemed necessary additional PPE may have to be worn. All work wear issued to employees must be regularly cleaned/washed and not work in a dirty condition.

11. Paperback employees are to keep all kit on the lockers provided when not being worn; all personal possessions should be putaway.

12. All welfare amenities provided by the Company must be respected at all times and kept in an orderly and hygienic state.

13. Smoking is NOT permitted anywhere on site. Anyone found to be smoking anywhere within the permitted Site will face dismissal/expulsion from the site.

14. No fire, matches, petrol/gas lighters or other apparatus for causing ignition may be used within the permitted Site by any person.

15. All personnel or visiting the Site should familiarize themselves with the location of the FIRE ALARM CALL POINTS, EMERGECY EXITS, EVACUATION ROUTES and FIRE EXTINGUISHER LOCATIONS. The fire alarm is tested on a weekly basis at time advised to all present proper to the test. The fire assembly point is located on the front car park by the security gate.

16. If the Fire Alarm sounds and you have not been informed that a fire test is taking place; Stop all activities proceed immediately via an evacuation route to the FIRE ASSEMBLY POINT located on the front, main car park area by the security gate and await instruction from the appointed Co-ordinating fire marshal.

17. Upon discovering a fire, activate the nearest FIRE ALARM CALL POINT and follow the instructions shown in 16. All main access doors must be kept clear for Emergency Vehicles. Unless otherwise instructed, NO VEHICLES should be moved once the Fire Alarm has sounded.

18. In the event of a fire no vehicle movements are permitted unless specific instruction has been given by site supervisor or the Fore Commander.

19. In the event of a fire or fire drill all staff and persons on site must remain at the fire assembly point until a roll call is completed unless specific instruction has been given by the Co-ordinating fire marshal. Do NOT leave the site until authorised by the site Co-ordinating fire marshal.

20. At all times personnel must not deviate from their designated and authorised working/visiting area.

21. Management reserve the right to refuse access to any

individual found to contravene site rules, abuse or interfere with equipment or otherwise carry out action considered as misconduct.

4. Training Checklist

JOB	TRAINING REQUIRED (tick boxes to show who needs which training)																		COMMENTS
	Environmental awareness							Maintenance/operations						Accidents and emergency					
	Certificate of Technical Competence	Supervision of waste management sites	Environmental and permit awareness	Waste receipt inc Duty of Care	Waste separation and storage			Maintenance of mechanical grab	Maintenance of separation conveyor	Maintenance of Forklift	Maintenance of Telehandler			Fire procedure	Spill response procedure	Flood Procedure	Failure of services		
Managing Director																			
Operations Co-ordinator	√	√		√										√	√	√	√		
H & S Supervisor			√		√			√											
Supervisor																			
Assistant Supervisor																			
QC Lead Operator																			
Site operator																			

EMS REVISION LOG

EMS Revision Date	Change details	Document Ref	Date Issued to Employees

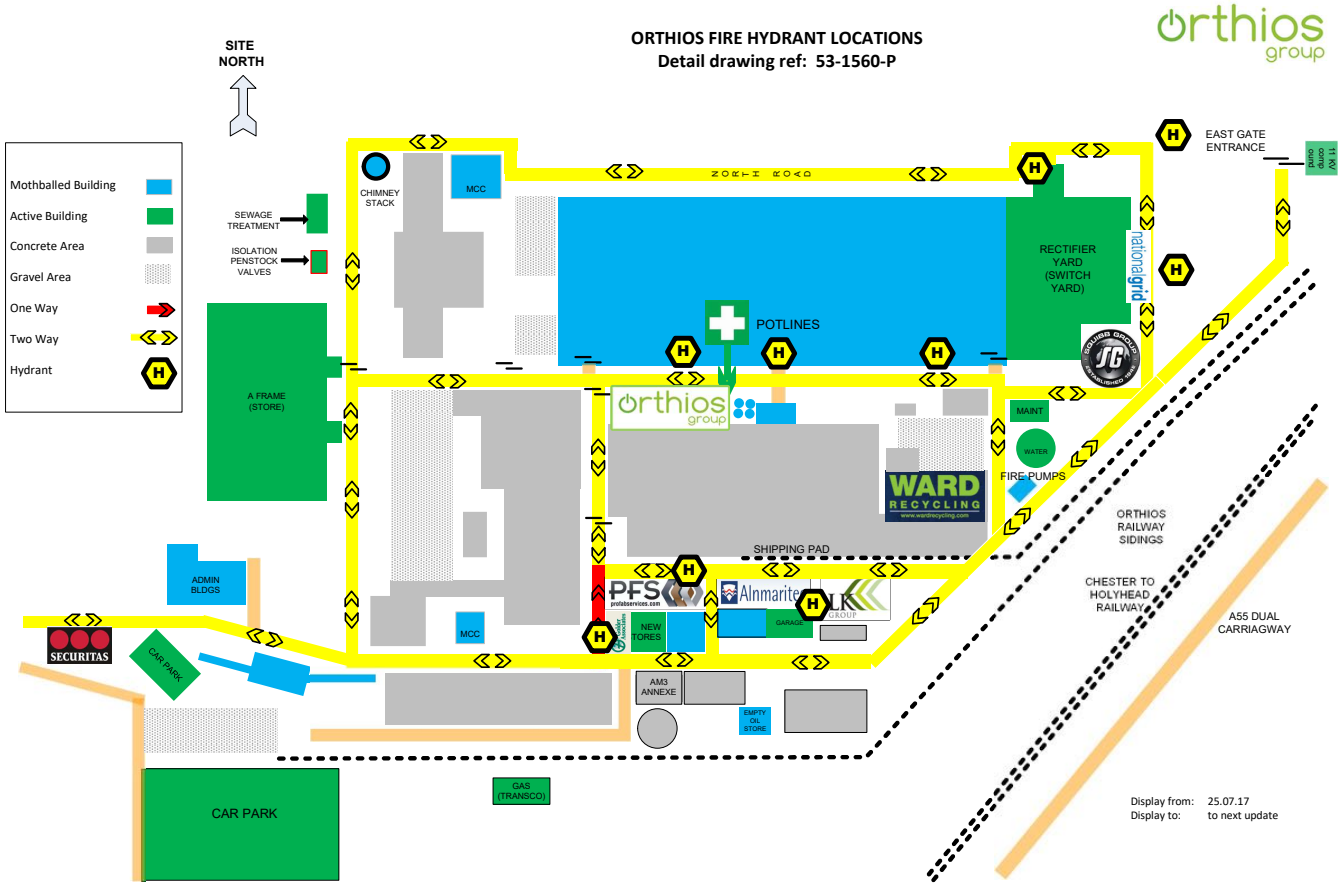
Accident / Pollution Incident Management Plan
Paperback Collection & Recycling Ltd

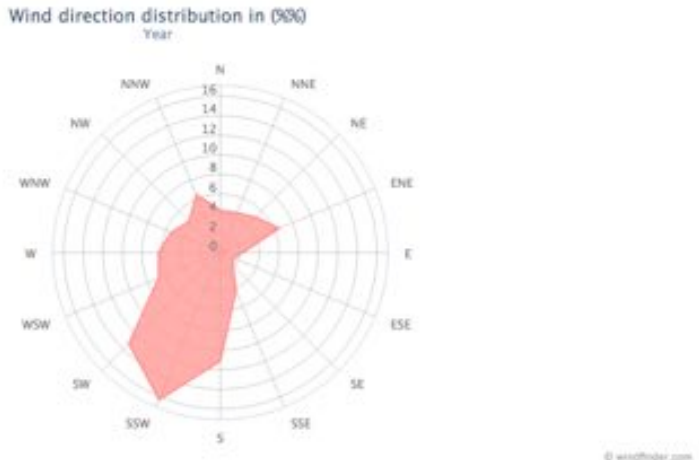
Date: December 2017
Review Date: December 2018
Version: 1.0

Accident / Pollution Incident Management Plan Contents

A – SITE PLANS


Paperback Collection & Recycling Ltd
Plan CEC-PA-001
Site Boundary and Location
Date 2 September 2017 Version 1.1
UK MAP CENTRE
Permit boundary
Quarantine areas
Scale 1:1250
North


ORTHIOS FIRE HYDRANT LOCATIONS
Detail drawing ref: 53-1560-P
orthios group
SITE NORTH
Mothballed Building
Active Building
Concrete Area
Gravel Area
One Way
Two Way
Hydrant
NORTH ROAD
EAST GATE ENTRANCE
CHIMNEY STACK
MCC
SEWAGE TREATMENT
ISOLATION PENSTOCK VALVES
A FRAME (STORE)
POTLINES
RECTIFIER YARD (SWITCH YARD)
nationalgrid
MAINT
WATER
FIRE PUMPS
WARD RECYCLING
SHIPPING PAD
ADMIN BLDGS
SECURITAS
CAR PARK
PFS
Alnmarine
NEW TORES
GARAGE
AM3 ANNEXE
EMPTY OIL STORE
GAS (TRANSCO)
ORTHIOS RAILWAY SIDINGS
CHESTER TO HOLYHEAD RAILWAY
A55 DUAL CARRIAGWAY
Display from: 25.07.17
Display to: to next update



Surface Water, Sensitive Receptor Plan

Ref : CEC/PA/003

Date : 16/5/2017

Version 1.0

CERI ENVIRONMENTAL CONSULTING LTD
Specialists in Waste & Environmental Management
SAWMILLS COTTAGE
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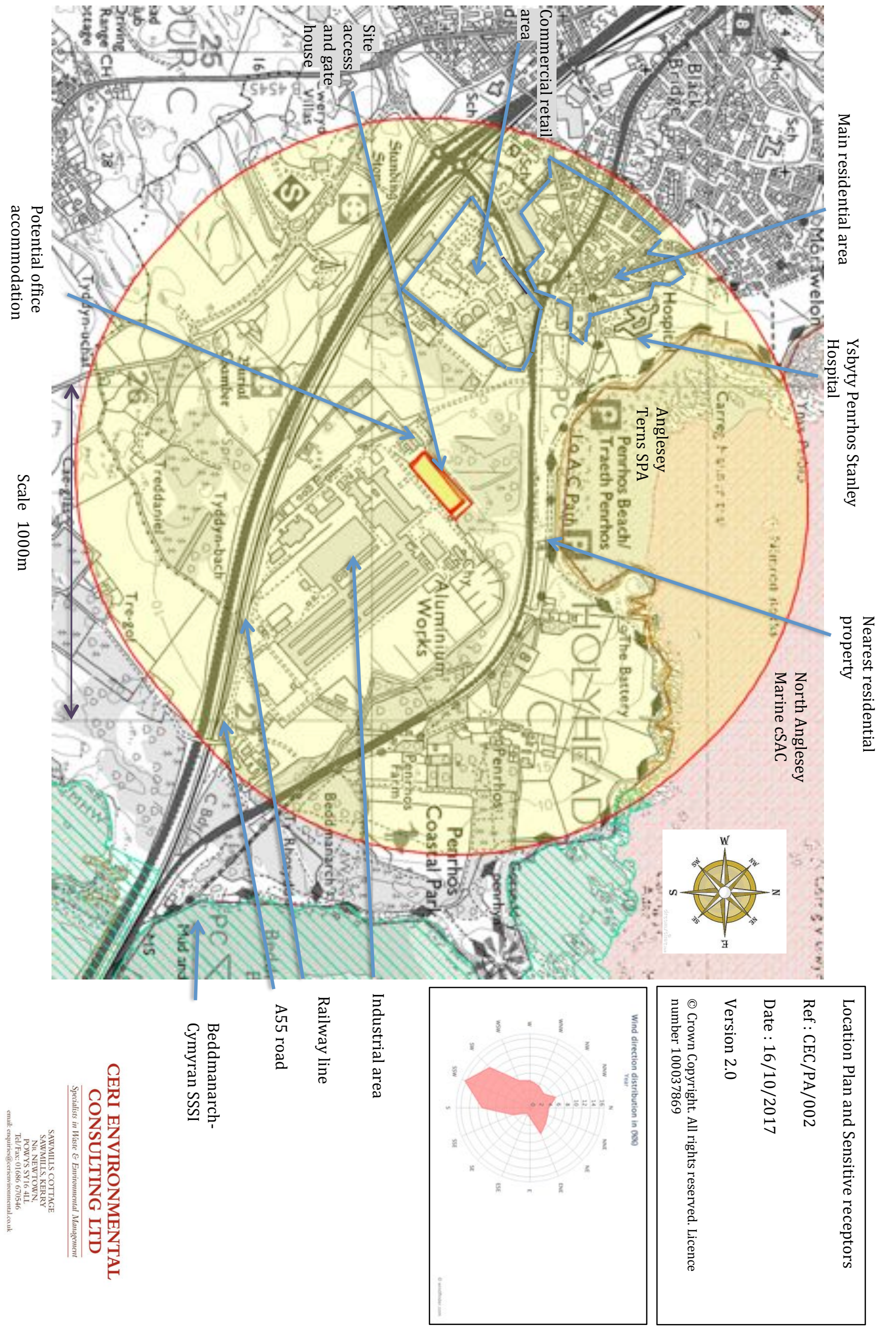
Main residential area
Ysbyty Penrhos Stanley Hospital
Anglesey Terns SPA
Nearest residential property
North Anglesey Marine cSAC
Commercial retail area
Site access and gate house
Potential office accommodation
Scale 1000m
Industrial area
Railway line
A55 road
Beddmanarch-Cymyran SSSI
Location Plan and Sensitive receptors
Ref : CEC/PA/002
Date : 16/10/2017
Version 2.0
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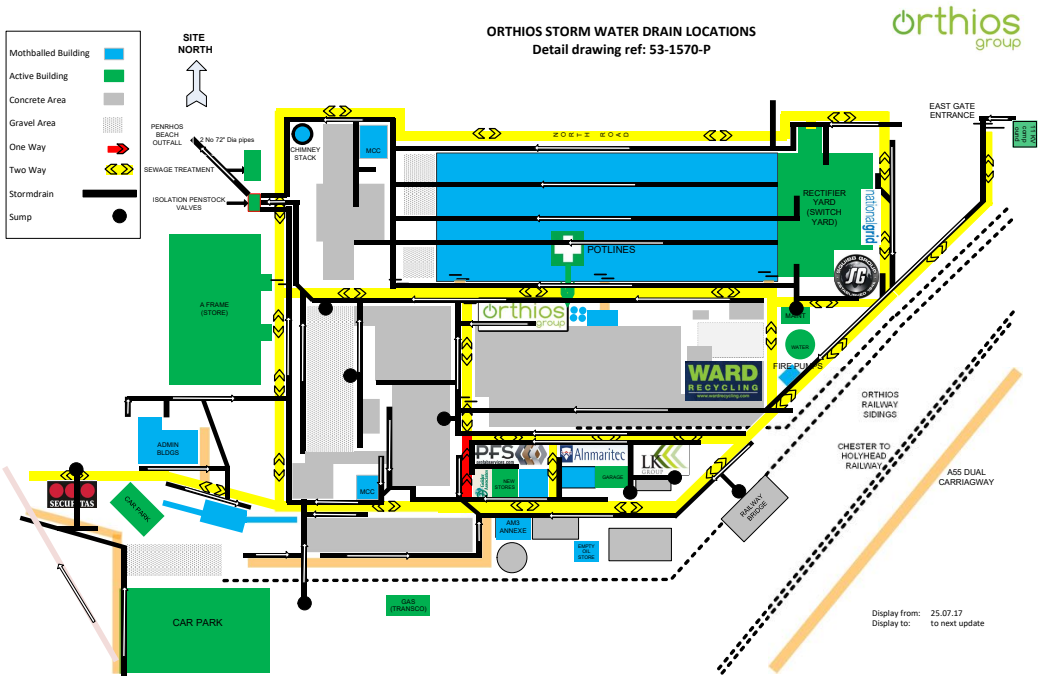
Wind direction distribution in (%)
CERI ENVIRONMENTAL CONSULTING LTD


ORTHIOS STORM WATER DRAIN LOCATIONS
Detail drawing ref: 53-1570-P
orthios group
SITE NORTH
Mothballed Building
Active Building
Concrete Area
Gravel Area
One Way
Two Way
Stormdrain
Sump
PENRHOS BEACH OUTFALL
2 No 72" Dia pipes
SEWAGE TREATMENT
ISOLATION PENSTOCK VALVES
CHIMNEY STACK
MCC
NORTH ROAD
EAST GATE ENTRANCE
RECTIFIER YARD (SWITCH YARD)
electrogrid
POTLINES
A FRAME (STORE)
WARD RECYCLING
FIRE PUMPS
ORTHIOS RAILWAY SIDINGS
CHESTER TO HOLYHEAD RAILWAY
A55 DUAL CARRIAGWAY
ADMIN BLDGS
SECURITAS
CAR PARK
AMO ANNEXE
RAILWAY BRIDGE
GAS (TRANSCO)
Display from: 25.07.17
Display to: to next update

B – Key Site and Emergency Contacts

This table contains information and contacts you may need in an emergency

SITE DETAILS			
Location: Penrhos Storage, Penrhos, Anglesey			
Postcode: LL65 2UX			
Site Access Grid Reference: SH 26215 81132			
SITE CONTACTS	Name	Office Hours	Out of hours
Owner:	Gordon Anderson	**01244 833370**	07768392242
Manager:	Richard Cooper	**01244 833370**	07583069701
Security Contact:			
Landowner	Orthios		
H&S Supervisor	Tony Whittaker	**01244 833370**	07582533014
EMERGENCY SERVICES		Office Hours	Out of hours
Emergency		999	999
Medical:		999	999
Police:		999	999
Fire:		999	999
REGULATORS		Office Hours	Out of hours
Health and Safety Executive (HSE)		0845 300 9023	0151 922 9235
Local Authority: Gwynedd			
Natural Resources Wales		0300 065 3000	
NRW (24 hour emergency hotline)		0300 065 3000	0300 065 3000
UTILITY / KEY SERVICES	Name	Office Hours	Out of hours
Water undertaker:			
Electricity supplier:			
Oil supplier:			
Chemical supplier:			
Oil spill contractor:			
Maintenance contractor:			
Electrician:			
Plumber:			
Locksmith:			
Joiner:			
OTHER KEY CONTACTS	Name	Office Hours	Out of hours
Adjacent landowners:	Orthios	0330 3371125	
Neighbours: Nearby businesses	Morrisons Pets at Home	01407 763065 0845 608 0174	

	The Standing Stones	01470 761350	
	Wilko Mon	01407 762825	
	Maintenance Services	01407 764211	
	Argos	0345 165 7698	
	B&M	0330 838 9513	
	Iceland Foods	01407 761072	
	Tesco	0345 677 9356	
Adjacent offices	Orthios	0330 3371125	
Hospital	Ysbyty Penrhos Stanley	01407 766000	
Residential properties	Contact in person at property or via emergency services		
School	Ysgol Morswyn	01407 762233	
Adjacent industrial area	Orthios	0330 3371125	
Welsh Government	for the A55 North & Mid Wales Trunk Road Agent	0300 123 1213	

Network Rail	for railway Network Rail	03457 11 41 41	
Specialist advisors:	Ceri Environmental Consulting Ltd	01686 670546	07751112118

C - LIST OF SUBSTANCES AND STORAGE FACILITIES

The following is a list of liquids, powders etc that are stored on the permitted site and could be harmful to the environment if they escape.

Material	Maximum Quantity	Type and size of storage	Type and size of Secondary Containment
Baled plastic	45,000 tonnes	stacked bales	water reservoir below A frame building penstock valve at discharge point

D - PREVENTING ACCIDENTS / INCIDENTS ….. AND WHAT TO DO IF THEY HAPPEN

The following table is a list of the things that could go wrong and harm the environment.

Possible Accident / Incident	What would the harm be?	How do we reduce the chances of it happening?	What to do if it happens
Spillages			
Slow seepage of liquids from imported contaminated materials. Slow seepage can be less noticeable than 'spills'.	Contamination of land, groundwater and watercourses.	Inspect and validate all in-coming wastes. Train the staff . No plant and equipment will be refuelled on site Unauthorised wastes removed as a matter of urgency	Follow the spill response procedure. It describes what to do in the event of a spill and where the kit is kept.

Possible Accident / Incident	What would the harm be?	How do we reduce the chances of it happening?	What to do if it happens
Overfilling			
Overfilling of oil / fuel tanks during delivery.	Contamination of land, groundwater and watercourses.	No fuel/oil tanks on site	.
Failure of Plant or Equipment			
Leakages; due to faulty pipe work, valves, over-pressure, blockages, corrosion, severe weather, ground movement etc.	Contamination of land, groundwater and watercourses.	Plant and equipment maintenance programme	Spill response procedure as described above.
Puncture; of vessels and tanks etc due to impact – such as trucks.		Daily visual inspection and completion of inspection checklist record	
Fire			
Fire from plant and equipment and waste stored	Smoke and pollution, Firewater causes contamination of land, groundwater and watercourses.	No smoking policy. Fire training and emergency drills. Incorporation of fire breaks into site layout and containment of fire water Maintain tidy site and minimise stockpiles .	Follow Fire procedure describing what to do in the event of a fire.
Flood			
Due to ingress of watercourse floodwater, blocked drains, burst water main, use of fire water.	Contamination of raw materials, buildings, land, drainage system, groundwater and watercourses with fire and flood water.	Maintenance of drains No hazardous waste stored on site All waste contained within building	Pump any contaminated water from site to tanker and remove to specialist facility – not likely to be contaminated due to nature of waste on site
Failure of Services			
Due to failure of supply; water, electricity. Due to utility supply being struck and broken / cut.	No significant hazard to environment	.	Repair services asap
Vandalism			
Unauthorised entry and tampering or malicious damage to property, plant and equipment.	Contamination of land, groundwater and watercourses.	Secure gate and perimeter fence. No tanks or valves on site except on plant. Plant and equipment locked out of hours. 24 hours security	Spill response procedure as described above.

Paperback Collection & Recycling Ltd

Fire Wardens – Daily Duties

A Fire Warden's daily duties may include checking that:

- Exit doors are available for use, unlocked and unobstructed.
- Escape routes are clear of storage and combustible materials.
- Fire extinguishers are in position with seals in place.
- Fire safety signs are in position.
- Fire alarm call points are unobstructed.
- Fire-resisting doors are closed and functioning properly.
- Any malfunction of the weekly fire alarm test is reported.
- Any person with a disability who may need help to evacuate is facilitated.
- Any faults on the emergency lighting are reported.

Fire Wardens – Duties in an Emergency

These are generic procedures that apply to most work environments. Please remember to check your site specific procedures for any variations.

On hearing the alarm:

- Instigate the evacuation of your area.
- Check your allocated area to ensure that everybody has left.
- Ensure that anybody with evacuation difficulties is being seen to.
- Proceed to the assembly area.
- Report to the Fire Co-ordinator.
- Take a roll call if appropriate.

Instructions to the Fire Warden

- Take control of the evacuation.
- Collate information provided by other members of staff and Fire Wardens.
- Report to the officer in charge from the Fire Service.
- Notify the officer in charge from the Fire Service;
- If all persons are accounted for.
- Where the fire is located.
- What is involved?
- Other relevant information.

PAPERBACK FIRE SYSTEM TEST REPORT FORM

Alarm activated	11.00am	Action required	
Test completed Date			
Test completed Date			
Test completed Date			
Test completed Date			
Test completed Date			
Test completed Date			
Test completed Date			
Test completed Date			
Test completed Date			
Test completed Date			
Test completed Date			
Test completed Date			

Completed by: Fire Warden

Name

Signature

Fire system test to be completed every Friday 11:00am

PAPERBACK FIRE DRILL REPORT FORM – Date

Alarm activated	11.00am	Action required	
Evacuation completed			
Everyone aware of correct assembly points			
Marshalls Richard Cooper Tony Whittaker			
Visitor book			
Any other points			

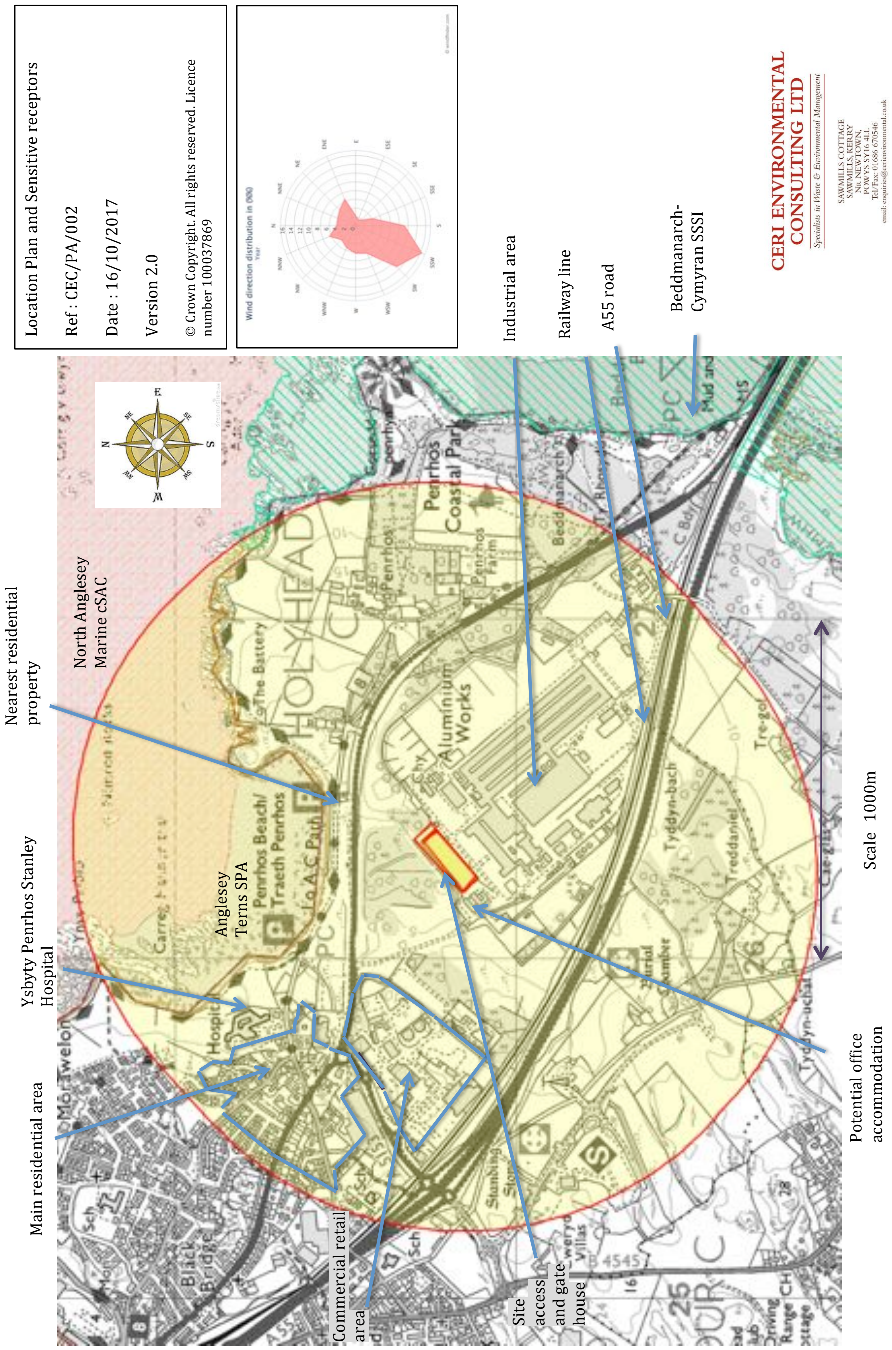
Completed by: Fire Warden

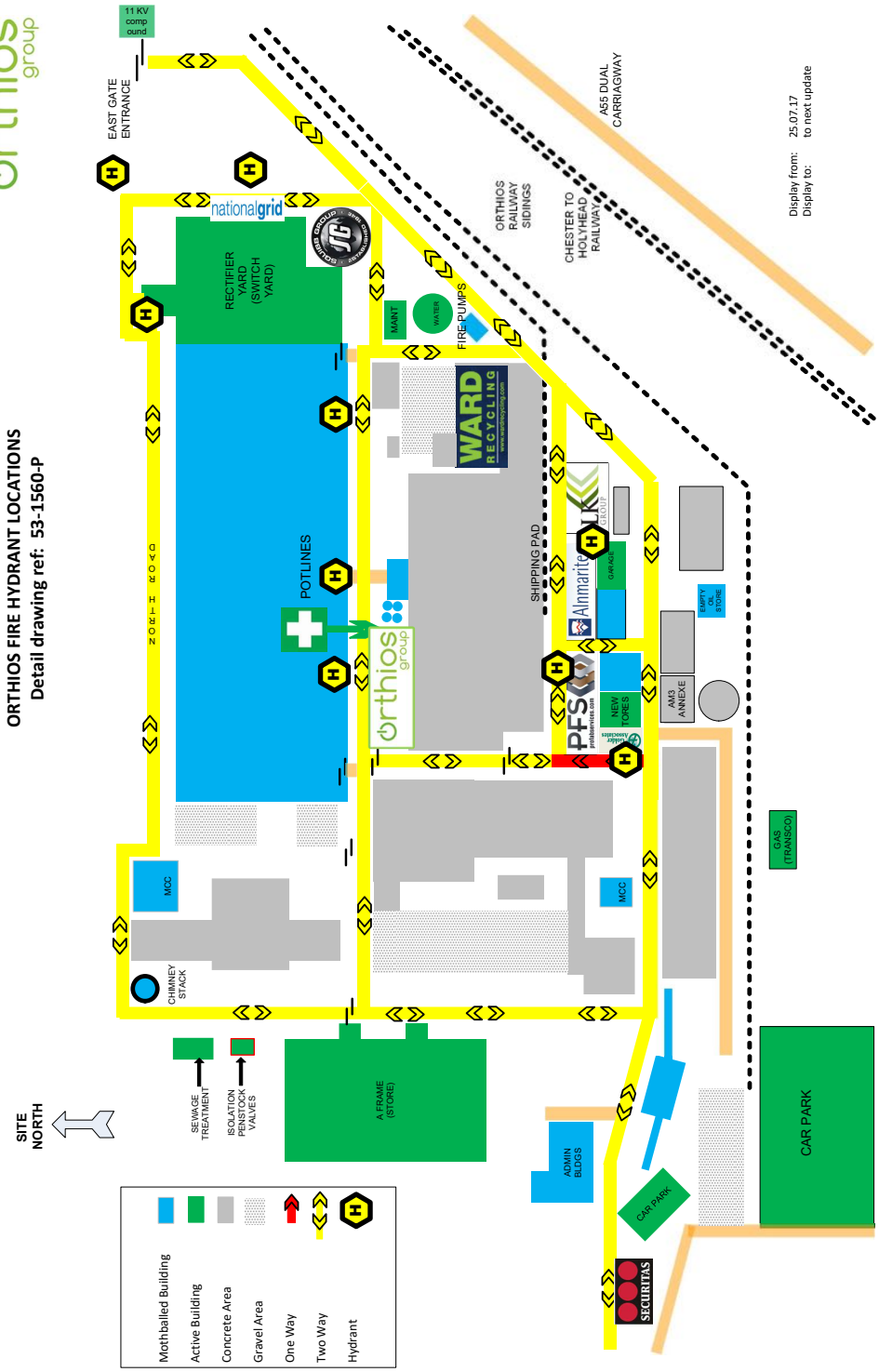
Name

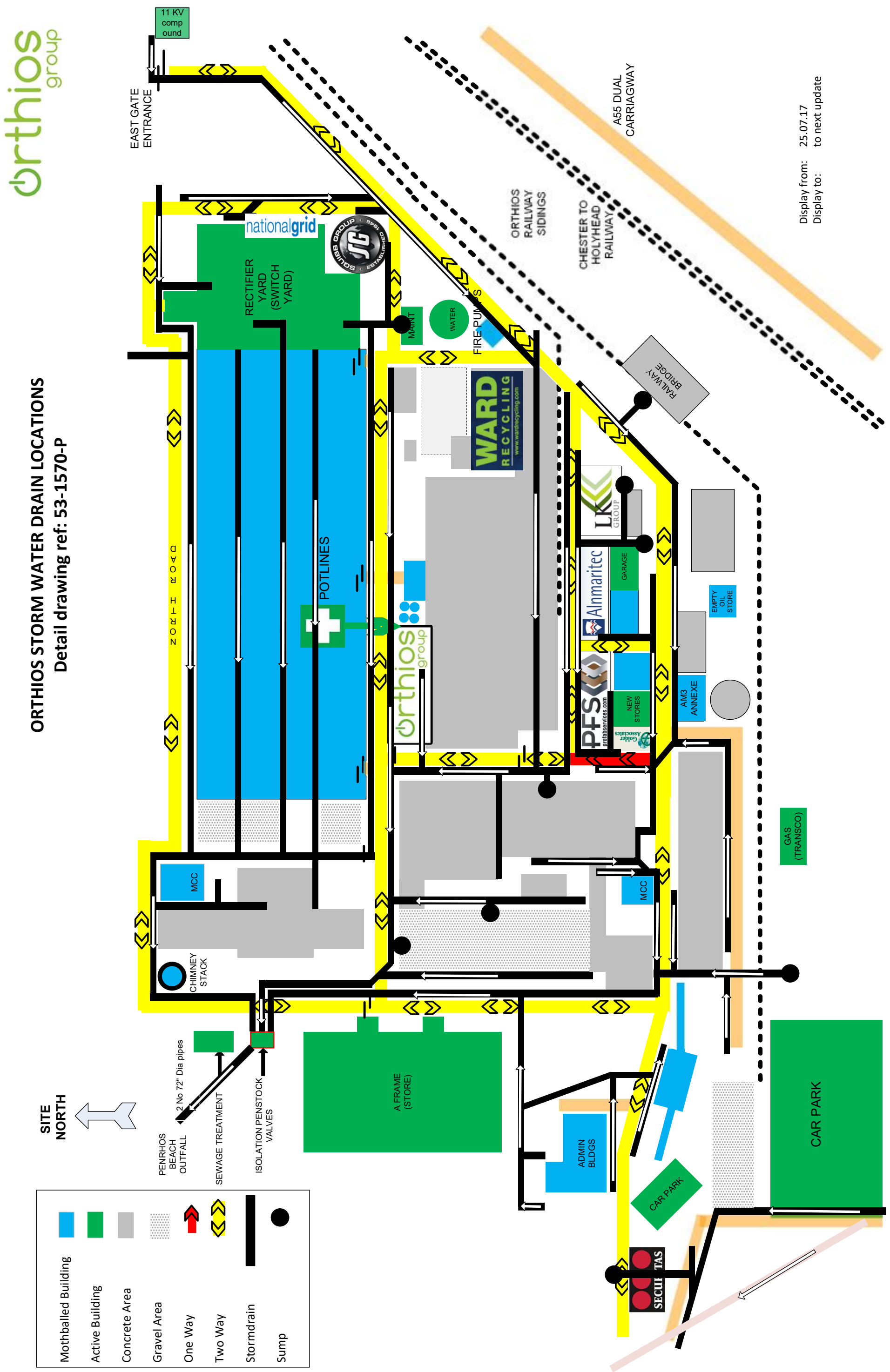
Signature

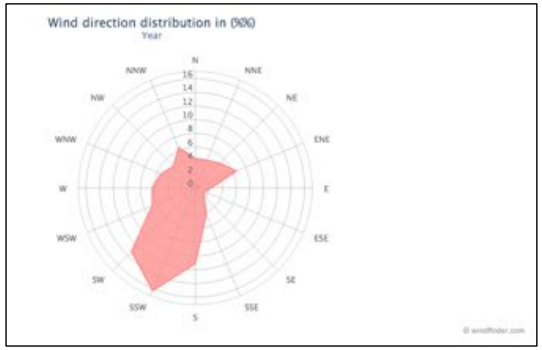
Fire evacuation drills to be completed every month

APPENDIX 3 Plans


Location Plan and Sensitive receptors
Ref : CEC/PA/002
Date : 16/10/2017
Version 2.0
© Crown Copyright. All rights reserved. Licence number 100037869
Wind direction distribution in (%)
Industrial area
Railway line
A55 road
Beddmanarch-Cymyran SSSI
CERI ENVIRONMENTAL CONSULTING LTD
Specialists in Waste & Environmental Management
Nearest residential property
North Anglesey Marine cSAC
Ysbyty Penrhos Stanley Hospital
Anglesey Terns SPA
Main residential area
Commercial retail area
Site access and gate house
Potential office accommodation
Scale 1000m


orthios group
ORTHIOS FIRE HYDRANT LOCATIONS
Detail drawing ref: 53-1560-P
11 KV comp ound
EAST GATE ENTRANCE
nationalgrid
RECTIFIER YARD (SWITCH YARD)
MAINT
WATER
FIRE PUMPS
WARD RECYCLING
POTLINES
SHIPPING PAD
ORTHIOS RAILWAY SIDINGS
CHESTER TO HOLYHEAD RAILWAY
A55 DUAL CARRIAGWAY
Display from: 25.07.17
Display to: to next update
MCC
CHIMNEY STACK
SEWAGE TREATMENT
ISOLATION PENSTOCK VALVES
A FRAME (STORE)
ADMIN BLDGS
CAR PARK
SECURITAS
GAS (TRANSCO)
AM3 ANNEXE
NEW TORES
EMPTY OIL STORE
SITE NORTH
Mothballed Building
Active Building
Concrete Area
Gravel Area
One Way
Two Way
Hydrant


ORTHIOS STORM WATER DRAIN LOCATIONS
Detail drawing ref: 53-1570-P
orthios group
11 KV comp ound
EAST GATE ENTRANCE
ORTHIOS RAILWAY SIDINGS
CHESTER TO HOLYHEAD RAILWAY
A55 DUAL CARRIAGEWAY
Display from: 25.07.17
Display to: to next update
RECTIFIER YARD (SWITCH YARD)
nationalgrid
POTLINES
NORTH ROAD
WATER
FIRE PUMPS
RAILWAY BRIDGE
WARD RECYCLING
GARAGE
EMPTY OIL STORE
NEW STORES
AM3 ANNEXE
MCC
CHIMNEY STACK
GAS (TRANSCO)
A FRAME (STORE)
ADMIN BLDGS
CAR PARK
CAR PARK
SITE NORTH
PENRHOS BEACH OUTFALL
2 No 72" Dia pipes
SEWAGE TREATMENT
ISOLATION PENSTOCK VALVES
Mothballed Building
Active Building
Concrete Area
Gravel Area
One Way
Two Way
Stormdrain
Sump

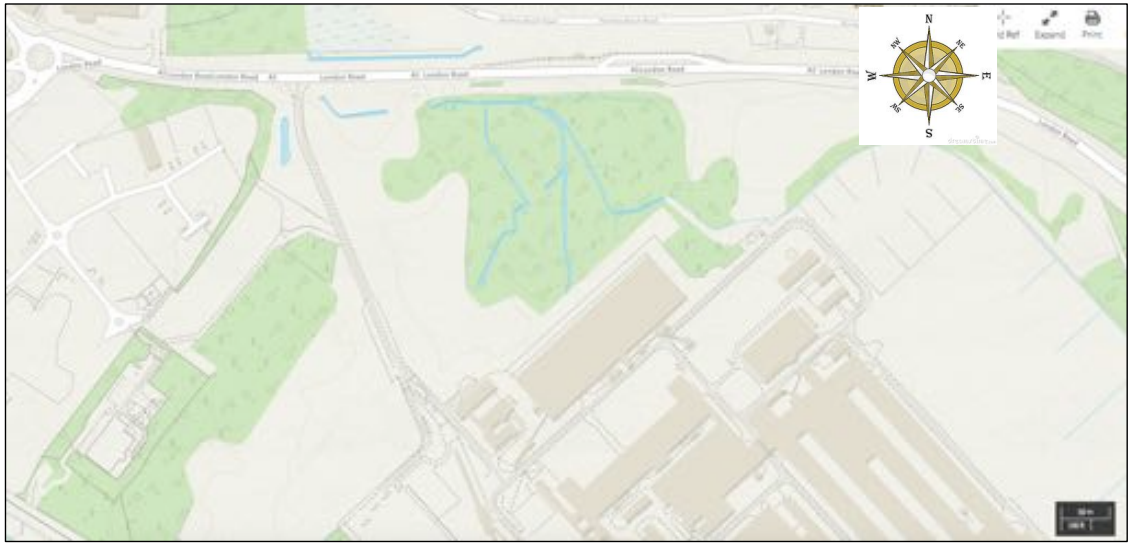


Surface Water, Sensitive Receptor Plan

Ref : CEC/PA/003

Date : 16/5/2017

Version 1.0



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Specialists in Waste & Environmental Management

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Nr. NEWTOWN,
POWYS SY16 4LL
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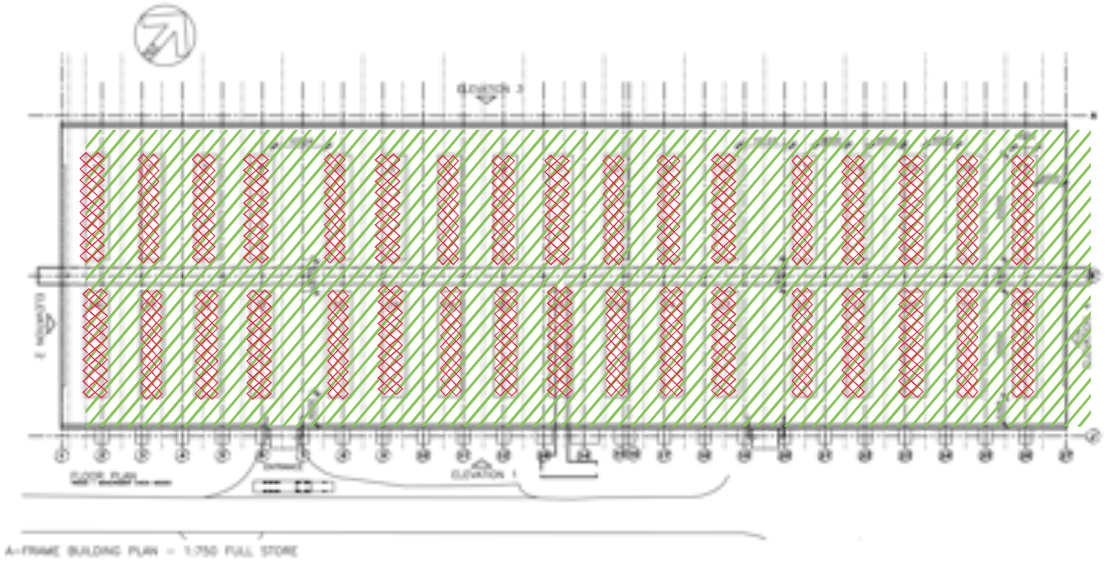
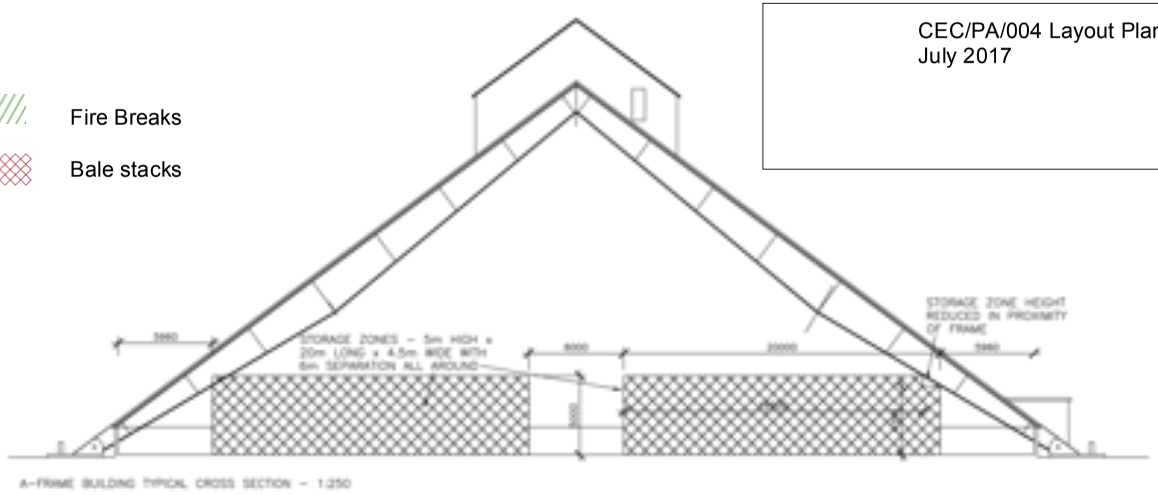
email: enquiries@cerienvironmental.co.uk



CEC/PA/004 Layout Plan
July 2017

Fire Breaks

Bale stacks



PAPERBACK


Paperback Collection & Recycling Ltd
Plan CEC/PA/001
Site Boundary and Location
Date 2 September 2017 Version 1.1
UK MAP CENTRE
Permit boundary
Quarantine areas
50m
Scale 1:1250
North