

FIRE PREVENTION & MITIGATION PLAN

Hafod Yard Transfer Station, Hafod Road, Hafod, Wrexham LL14 6HF

Enviroclear Site Services Ltd

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Oaktree Environmental Ltd
Waste, Planning & Environmental
Consultants

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Permit Boundary Plan

Sensitive Receptor Plan

Layout & Fire Plan / Drainage & Infrastructure Plan including Stockpile Detail Table

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Preventative Maintenance Checklist

Daily Temperature Monitoring Sheet

ANNEX 3

Fire Risk Assessment (Jennings Safety Services Ltd)

Site Information & Contacts List

Site Address:	Hafod Yard Transfer Station, Hafod Road, Hafod, Wrexham LL14 6HF		
Site Operator:	Enviroclear Site Services Ltd	National Grid Ref:	SJ 31163 46404

<u>CONTACT</u>	<u>Description</u>	<u>Office Hours</u>	<u>Out of Hours</u>
Arthur Imrie	Director, Site Manager & TCM	01978 840228 07768 533546	07768 533546
Callum Imrie	Site manager	01978 840228	
Wrexham Maelor Hospital Croesnewydd Road, Wrexham, LL13 7TD	Local NHS Hospital (Main)	01978 291100	999
	Accident & Emergency (A&E)	999, 112 or 111	999
The Surgery, Gardden Road, Rhosllanerchrugog, Wrexham, LL14 2EN	Local Doctor Surgery (GP)	01978 801890	999
Chirk Police Station	Local Police Non-Emergency	101 0300 330 0101	999
	Police Emergency	999	999
Chirk Fire Station	Fire and Rescue Service (in Emergency Dial 999)	01691 772497 (Non Emergency)	999
Natural Resources Wales	Environmental Regulator	0300 065 3000	0300 065 3000
Wrexham County Borough Council	General Enquiries	01978 292000	01271 388240
	Local Planning Authority Dept. Environmental Protection	01978 298994 01978 298989	01271 388240
Dee Valley Water	Local Water Supplier	01978 846 946	01978 846 946
Oaktree Environmental Ltd	Specialist Advisor (Waste & Environmental Issues)	01606 558833	
Jennings Safety Services Ltd	Specialist Advisor (Health & Safety)	01244 539660	

LIST OF NAMES AND CONTACT DETAILS WITHIN 1KM OF HAFOD YARD SITE

<u>Name</u>	<u>Address</u>		<u>Tel no.</u>
Enviroclear Site Services Drainage Division & Main Office	Hafod Yard	LL14 6HF	01978 840228
Beer Gas (office and external storage yard)	Hafod Yard	LL14 6HF	01978 840 982
Eco-Ready Mix concrete and Wood shredding facility	Hafod Yard	LL14 6HF	01978 846976
Hafod House (Care Home)	Hafod Road	LL14 6HF	01978 845442
Dennis Ruabon Ltd (Sales offices)	Hafod Road	LL14 6HF	01978 842 283
Residential properties (nearest property 180m northwest of the Hafod Yard site : Caretaker House)	Hafod Road	LL14 6HF	N/A *
Public Car Park Bonc-yr-Hafod	Hafod Road	LL14 6HF	N/A

The above receptors will be contacted by a co-ordinated approach.

- Initially neighbouring receptors will be notified by the staff associated with Enviroclear Site Services Ltd (ECSS).
- Once the Emergency Services arrive on site ie Fire Service, Police, Local Authority, Natural Resources Wales, the lead authority (usually the Police) will co-ordinate a systematic approach to ensure all the relevant sensitive receptors are notified. This will involve via telephone call, personal visit (knocking on doors) and or using a loud speaker while driving around the associated catchment.

*NB Contact details of residential properties may be deemed confidential.

Details are therefore not included in the above list.

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

A copy of the Site Location Plan showing the relevant receptors will be placed with all the other relevant documentation inside the 'Emergency Services' Box location at the entrance of THE Hafod Yard as shown on Drawing No. 3854/1277/03.

This Fire Prevention and Response Plan will be submitted to Natural resources Wales who will consult the local fire and rescue service (FRS). Any comments from the FRS can be included below.

[illegible]

Date

1 INTRODUCTION

1.1 Fire prevention objectives

1.1.1 This Fire Prevention & Mitigation Plan (FPMP) has been designed to meet the following 3 objectives:

- To minimise the likelihood of a fire happening;
- To aim for a fire to be extinguished within 4 hours; and,
- To minimise the spread of a fire within the site and to surrounding neighbouring sites thus minimising impact from emissions during or after a fire on the local community, critical infrastructure and the environment.

1.1.2 When producing this FPMP and deciding which options are appropriate the following information has been taken in to consideration:

- a) Scale and nature of the environmental hazards on site and the activities undertaken
- b) Risks posed to people, the environment and property
- c) Types of materials stored on site, the form they are stored in and the length of time that would be needed to extinguish a fire involving them

1.1.3 All site staff and contractors must be aware and understand the contents of the Fire Prevention & Mitigation Plan (FPMP) and what they must do during a fire.

1.1.4 This FPMP document will be kept in the site office, which is shown on the 'Site Layout & Fire Plan' (Drawing No.3854/1277/03) in Appendix I of this document.

1.2 General Site Information

1.2.1 This document (FPMP) considers the risks associated with fire on site at Hafod Yard Transfer Station, Hafod Road, Hafod, Wrexham LL14 6HF. The site is operated by Enviroclear Site Services Ltd. Both paper and electronic copies of this document and

relevant site plans will be kept on site and in the neighbouring head office building. It is proposed that a hard copy of the Fire Plan will be placed inside an “Emergency Services box” which will be located at the site’s entrance.

1.2.2 In accordance with the NRW’s current Fire Prevention & Mitigation Plan (FPMP) guidance: Waste Management Guidance Note 16 (Version 2 Dated August 2017) which applies to the following wastes which may be accepted at the Hafod site: biodegradable general/mixed wastes, paper/cardboard, plastics, rubber, wood and wood composites, rags and textiles, scrap metal, WEEE, green waste, this FPMP details the measures which will be put in place with regards site design, infrastructure and management to ensure the waste operations will be carried out with paramount consideration to the risk of fire. All necessary prevention measures and procedures will be strictly implemented and followed through essential training and inspection regimes as detailed in this document, the Operator’s Internal Fire Risk Assessment, the Company’s training programme and in the site’s EMS. The operator also employs a specialist Health & Safety consultant who carries out regular meetings and site inspections.

1.2.3 In summary, operations which currently take place at the site involve:

- a) The importation of household, commercial & industrial wastes for either bulking up or for sorting to remove all recyclable wastes with residual waste to landfill;

The permit also allows but **not** currently undertaken at the facility:

- b) The importation of End-of-Life Vehicles (ELVs) to depollute, dismantle and remove all potentially hazardous components;
- c) Separation of different elements and parts of ELVs e.g. batteries, tyres, engines etc. for resale and/or onward processing at an alternative facility;
- d) The importation of ferrous metals for storage pending further processing at an alternative facility;

- e) The importation of non-ferrous metals for storage and processing (shearing/bulking) for onward delivery to an alternative facility;
- f) The treatment of WEEE.

The FPMP would be updated accordingly if any changes to activities were proposed on site.

- 1.2.4 In addition to this document, the site will be operated in accordance with a fully comprehensive Environmental Management System (EMS) and Environmental Permit (EP) regulated by Natural Resources Wales (NRW).
- 1.2.5 All key staff should be provided with a copy of this Fire Prevention & Mitigation Plan (FPMP) and/or be aware of where it is located on site.
- 1.2.6 All site staff and contractors must be aware and understand the contents of the Fire Prevention & Mitigation Plan (FPMP) and what they must do during a fire.

1.3 Site description

- 1.3.1 The site has two buildings designated for the storage and processing of mixed waste, which are located as shown on the site layout plan in Appendix I. These buildings are of metal and brick construction with concreted floor surface. The buildings lie back to back, one building is used to store mixed dry recyclables eg card, plastic, mattresses. The other building which is fully contained is used to store liquid wastes, aerosols (some of which may be flammable) and any potentially hazardous waste including batteries and WEEE waste (but excluding asbestos waste which is stored externally in designated sealed containers).
- 1.3.2 The transfer station buildings and surrounding yard areas are manned by up to 4 operators during normal hours, plus any visiting drivers.
- 1.3.3 The site is not open to the general public and there are no public rights of way through the site.

1.4 Staffing and management

- 1.4.1 Table 1 below details the staff structure of the site when operating at full capacity. Positions in bold italic print below are the minimum staff requirements when the site is open for the reception of waste and, therefore, shows the minimum number of staff available to tackle a fire on site during operational hours. Only the site manager, machine/plant operators and general operatives will be permitted to tackle fires on-site.

<u>POSITION</u>	<u>EMPLOYEES</u>	<u>RESPONSIBILITIES</u>
Site manager (TCM)	2(1)	Overseeing all activities which take place at the site
Machine / Plant Operator	3(1)	Waste handling/processing, reception and plant operation
General Operatives	3(1)	Waste sorting, maintenance & tidying

- 1.4.2 Arthur Imrie is the Technically Competent Manager (TCM) for the site and responsible for the general management of the site and ensuring that operations are carried out in compliance with the site's EP. Callum Imrie may also provide technical competence cover.

- 1.4.3 The out-of-hours emergency contacts will be trained in their roles as an out of hours fire marshal when the site is closed for the acceptance of waste.

1.5 Plant and equipment

- 1.5.1 The table below details the plant/equipment on site which may be used if a fire breaks out on site. Only trained operators will be permitted to drive/operate the plant/equipment listed below.

<u>ITEM</u>	<u>NUMBER</u>	<u>FUNCTION</u>
Forklift truck	1	Movement of material for fire breaks
Loading shovel	1	Movement of material for fire breaks

1.6 **Correspondence with Fire and Rescue Service**

- 1.6.1 North Wales Rescue Service (FRS) were contacted in the preparation of this FPMP with a view to obtaining details regarding the nearest hydrants in the proximity of the site and to arrange a site visit. The FPMP document will be sent to the FRS as part of the NRW consultation.
- 1.6.2 Enviroclear Site Services Ltd will seek a two yearly response from NRW and FRS (or sooner should a fire incident occur) with regards to their FPMP and associated operations on site. This regular correspondence will ensure all measures to prevent, mitigate and contain fires on site are up to date and deemed sufficient by the FRS.
- 1.6.3 Regular Fire Risk Assessment are carried out by third party independent Health & Safety consultant in accordance with The Regulatory Reform (Fire Safety) Order 2005 (RRFSO) with any recommendations passed to the site for action and to ensure a procedure to be put in place to review the assessment on a regular basis and fire audits regularly carried out. An Action Plan was produced for the site in 2017 and a copy is kept on file in the Head Office. Follow-up inspections are carried out by the H&S consultant at least annually. ECSS also employ an internal Health & Safety person who carries out regular inspections and conducts monthly meetings.

1.7 **Sensitive receptors**

- 1.7.1 A Sensitive Receptors Plan has been provided in the Annex to this document to highlight receptors within 1 km of the site.
- 1.7.2 To minimise the impact on the local area and associated receptors from a fire on site, this document details mitigation measures which will decrease the likelihood of a fire occurring on site and limit the size and duration of a fire if it does occur (as per Section 1.1 above). These measures will ensure the potential impact on any of the surrounding land is as minimal as practicably possible.

- 1.7.3 The site is located as shown on Drawing No. 3854/1277/01. The primary sensitive receptors for any fire event would be the site itself and any site users.
- 1.7.4 In addition the site is located adjacent to a gas suppliers yard which produces and supplies CO₂ and Nitrogen gases for the food production industry and cellar gas for pubs and hotels etc. To the south of the transfer station lies industrial facility (ready mix concrete and wood shredding facility) with the B5426/Bangor Road and Hafod Quarry beyond. Hafod House (care home) located on Hafod Road is also a nearby receptor and lies to the south-east of the waste site. The nearest residential property is located 180m to the north-west. Distances to sensitive receptors are shown on Drawing 3854/1277/04.
- 1.7.5 Schools, industrial and commercial premises are all clearly visible on the Sensitive Receptors Plan. There are no schools, shops or railway lines within 350m of the site and there are no hospitals within 1,000m of the site.
- 1.7.6 Stryt Las A'R Hafod SSSI and Johnstown Newt site (SAC) are located within close proximity of the transfer station.
- 1.7.7 The A483 is also in close proximity (approximately 250m east) but is unlikely to be impacted by smoke and debris from a fire on site moving across or being deposited onto the highway, due to its distance from the recycling centre being >200 metres away.
- 1.7.8 The operator believes there are no Groundwater Source Protection Zones or boreholes, wells and springs supplying water for human consumption situated within 1,000m of the site.
- 1.7.9 To minimise the impact on the local area and associated receptors from a fire on site, this document details mitigation measures which will decrease the likelihood of a fire occurring on site and limit the size and duration if it does occur. These measures will ensure the potential impact on any of the surrounding land is as minimal as practically possible.

2 Managing common causes of fire

2.1 Details

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

Source	Risk	Specific mitigation
Arson or vandalism	Deliberate ignition of wastes by intruder(s) and/or vandalism of site infrastructure, plant and/or machinery which may give rise to malfunction or compromise the integrity of waste storage/containment measures	Site security measures are detailed in Section 2.7.
Visitors & Contractors	Unaware of the fire prevention message	Ensure all visitors follow the correct safety and fire prevention procedures. Fire prevention message reinforced around the site using suitable signage.
Ignition sources	See below for potential sources of ignition and the associated risks	Sources of ignition to be kept at least 6 metres away from combustible and flammable waste.
Plant or equipment	e.g. spillages of fuel, sparks from machinery or malfunction caused by ineffective maintenance	All items of plant are subject to the preventative maintenance checklist and stored 6m away from combustible materials when the site is closed; see Sections 2.5 & 2.6
Electrical appliances and cabling	Faulty appliances or damaged/ exposed electrical cables may spark as a result of a power surge	All electrical equipment is serviced by a suitably qualified electrician on an annual basis.
Discarded smoking materials	Risk of ignition of stored wastes from smoking materials which have not been fully distinguished	The site has a strict no smoking policy and designated smoking areas are provided as detailed on the Layout & Fire Plan in Appendix I.
Discarded lithium batteries within waste deposits	Can be a source of ignition	Written Management procedures in place to identify incompatible wastes which would include lithium batteries

Source	Risk	Specific mitigation
Tramp metal	Can find its way into moving machinery and cause localised hot spots.	Prevent metal getting into moving machinery by hand sorting or using magnet device
Open burning on site or on adjacent sites	Risk of ignition from radiative heat or flaming from open burning on site or an adjacent sites	There is no open burning on site, all staff are suitably trained and 2/3 times a day checks take place. There are no receptors within 6m of the site.
Overheating of stored waste	sources of heat may include heating pipes, hot exhausts, light bulbs, space heaters or direct	Stored wastes will be visual inspected throughout the day and turned as necessary to prevent the formation of 'hot spots'.
Sparks from loading buckets/shovels	Scraping of loading buckets/shovels causing sparks which may ignite stored wastes	Fire extinguishers are fitted in the cab of all loading plant.
Fireworks/Chinese lanterns	Ignition of stored wastes from either of these two sources	All piles / stacks of combustible wastes are within the limits listed in the FPMP guidance and remotely accessible CCTV and on site fire-fighting equipment can be used to reduce the spread of fire. All containers containing combustible wastes are individually accessible should an incident of this nature occur
Hot works	e.g. welding, soldering, cutting, etc. which involve the use of high temperature equipment which may be a source of both primary and residual heat to stored wastes	All hot works (including welding/cutting, etc.) are to be carried out will solely in the 'Hot works area' as defined on the Site Layout and Fire Plan which is located at a minimum of 6 metres from any stored wastes. The site's hot works procedure is provided in Section 2.3 Below.
Industrial heating	Industrial heaters and/or pipework used to heat internal and external areas on site which may, in turn, supply heat to stored wastes increasing the risk of combustion	There are no industrial heaters (or associated pipework) used at the site.
Hot exhausts	Potential source of both primary and residual heat to stored wastes	Daily fire watch and the preventative maintenance ensure the risk is minimised.

Source	Risk	Specific mitigation
Loose material build up around plant/machinery and exhausts	Light waste and ambient particulates with high combustibility settling and building up in key areas in and around plant/machinery and around exhausts	Plant / equipment is monitored daily as per the checklist and dedicated site staff using cleaning agents to keep the areas around plant and equipment clear of debris. Shift teams at end of each shift clean the area around the equipment they have been working on and ensure the equipment is clear all debris and material.
Hot loads	Imported wastes which may contain materials which are above ambient temperature	All loads are inspected in accordance with our waste acceptance procedures. If such loads arrive at site they are intercepted by site operatives who will refuse the acceptance of the waste. They will then if need be directed to the quarantine area to ensure the material does not pose a concern/fire risk to the site. The material will if required be treated to ensure the risk of fire is completely negated.
Overhead power lines	Any overhead power lines on or around the site may ignite in the event of a fire and worsen the effects	There are no overhead power lines which traverse the site.
Leaks and spills of oils and fuel from plant and machinery	Can be tracked around the site	Any spillage is cleaned up immediately using absorbents and the contaminated material correctly disposed of to reduce the risk of a potential fire situation

2.2 Hot works procedure

2.2.1 Hot works carried out on site (i.e. welding/cutting/etc.) will be carried out within the workshops or if external to the workshop must be carried out under a 'hot works' permit and the following procedures apply:

- a) Check that hot work is required or could you use an alternative (drill and bolt etc).
- b) All hot works must be carried out in the 'Hot works area' as shown on the Site Layout & Fire Plan due to its significant stand-off from other stored materials/wastes on site (i.e. 6 metres).
- c) Ensure the area is cleared of all flammables.

- d) Ensure you have TWO fire extinguishers to hand. The type would depend on your working environment but generally a CO₂ and a Powder extinguisher would be suitable.
- e) Ensure you have used screens to shield bystanders from sparks and welding flash.
- f) Ensure you have an observer to watch over you and check for sparks while you work
- g) When you are ready to set up you will need to get a key to unlock the equipment from the Site Engineer.
- h) When you are set up you must get the site supervisor or manager to check your preparation.
- i) If they are happy, they will sign your permit which should be displayed and you can proceed.
- j) During cutting/welding your observer should remain with you at all times and be constantly checking the area for sparks or signs of fire.
- k) When the work is complete again check for fire and if all looks OK, note the time the hot work finished on the permit.
- l) Check again for fire for at least 30 minutes and, if all is clear, the permit must be signed off. This would usually be by the person who authorised it.
- m) Hot work requires one permit per person for each day.

2.3 Gas Cylinders

- 2.3.1 Gas cylinders are not generally accepted on site but if accepted will be immediately removed and taken to the neighbouring bottle gas company or alternately may be placed and secured for temporary storage inside the gas cage which is located next to the dry waste transfer building as shown on the Site Layout & Fire Plan.

2.4 Burning of waste on site

- 2.4.1 No waste will be burnt on site at any time.
- 2.4.2 Extensive training will be provided to all site staff and contractors on fire prevention, protection and occurrence procedures.
- 2.4.3 Employment contracts and staff handbooks recognise the severity of any instances of unauthorised burning of waste and would lead to immediate dismissal and threat of prosecution through civil/criminal courts depending on the circumstances.

2.5 Smoking policy

- 2.5.1 Smoking is prohibited in all waste management and storage areas.
- 2.5.2 Employees who wish to smoke may do so in their own time during lunch breaks. Employees will not be permitted to smoke whilst carrying out their duties and responsibilities **SMOKING IS ONLY PERMITTED IN THE DESIGNATED SMOKING AREAS** as shown on the Layout & Fire Plan (which are located at safe distances from any potential fire risks or other flammable materials/wastes).
- 2.5.3 Managers will be responsible for the promotion and maintenance of the policy by their staff. Managers will receive training and guidance regarding their responsibilities in relation to the policy and enforcement of it.
- 2.5.4 Employees should inform the appropriate manager immediately if anyone fails to comply with the policy.
- 2.5.5 Employees not complying with the policy will be referred to their manager for support subject to the usual disciplinary procedure.
- 2.5.6 Visitors not adhering to the policy will be asked to comply or leave the site.

- 2.5.7 All job applicants will be made aware of the policy via application packs, where a requirement to abide by it will be part of the person specification. Applicants will be reminded of the policy at interview stage.
- 2.5.8 A copy of the policy will form part of new employees' induction packs. Training and guidance on enforcing the policy will form part of new managers' induction process.
- 2.5.9 The policy will be reviewed every 12 months.

2.6 Plant and equipment

- 2.6.1 External separation distances of 6m will be observed between plant and stored material when the site is not staffed. In the building, all plant will be powered-down and completely shut off prior to cessation of operations on any given day. Plant which is not in use for any extended period and in any event at the end of the working day will be stored at least 6 metres from any other stored combustible wastes.
- 2.6.2 Bucket loaders will contain fire-fighting equipment in the cab rather than rubber strips as it is widely recognised that loading shovels equipped with buckets used on most sites do so on ground that is not completely flat and for loading non-homogeneous waste which has the potential to remove a rubber strip on the day it is fitted.
- 2.6.3 Mufflers will be fitted onto hot exhausts to ensure the source of ignition from plant/equipment is reduced to a minimum.
- 2.6.4 Dust from processing/treatment operations on site can settle at the end of the shift / working day onto hot exhausts and engine parts so a fire-watch will be implemented after cessation of works. Any build of dust/fluff will be removed from the equipment and comments noted in the inspection sheet shown in Appendix II.

- 2.6.5 Site management will undertake or delegate additional preventative maintenance checks on a more frequent basis to ensure, where possible, the machinery is mechanically sound, as described in the section below.

2.7 Preventative Maintenance

- 2.7.1 All items of plant and equipment listed in Section 1.4 (and any additional items of plant which may be hired in to cover busier periods) are subject to preventative maintenance checks to ensure their safe operation and to prevent any potential situations which may give rise to faults or malfunction. A preventative maintenance and fire checklist are shown in Appendix II of this FPMP.

- 2.7.2 Much of the plant and equipment on site and all vehicles in the fleet are subject to annual manufacturer maintenance to ensure proper working order in the form of service contracts. Site management will undertake or delegate additional preventative maintenance checks on a more frequent basis to ensure i.e. daily, before, during and at the end of each working day to ensure (where possible) the machinery is mechanically sound. These checks will be carried out using the preventative maintenance checklist shown in Appendix II of this FPMP and any results which are flagged as needing attention will also be recorded in the site diary.

2.8 Electrical faults or damaged/exposed electrical cables

- 2.8.1 All electrical cabling on site will be inspected weekly and annually serviced by fully qualified and certified electrical contractors to undertake both Planned Preventative Maintenance and Reactive Maintenance (under contract) of the following:
- a) Fire detection & alarm system;
 - b) Emergency lighting;
 - c) Portable appliances; and,
 - d) Machinery checks / services (as per manufacturers' instructions).

- 2.8.2 Daily inspections of cabling, etc. will be undertaken as part of the daily checklist shown in Appendix II. Any potential ignition sources from suspected electrical faults will be isolated and the appointed electrical contractors will be contacted immediately to rectify the situation. Where possible, staff will immediately remove any stored wastes from the vicinity of the fault area or cable traverse if safe to do so.

2.9 Liquid (Non Waste) storage

- 2.9.1 Oils and chemicals are stored within bunded containers within the COSHH store which is sited inside at the rear of the Hazardous Waste Storage building. Procedures for storage of such materials on site are as follows:

- Tanks/containers are surrounded by a bund capable of containing a minimum of 110% of the volume of liquid stored in the tank.
- All pipework and associated infrastructure will be enclosed within the bund.
- A lock will be fitted to any tank valve to prevent unauthorised operation.
- All valves and gauges on the bund will be constructed to prevent damage caused by frost.
- No combustible waste will be stored within 6 metres of the tank.

- 2.9.2 The tank/container will be clearly marked showing the product within and also its capacity.

- 2.9.3 The site also has an external, bunded storage tank located adjacent to the Hazardous Waste storage building as shown on the Site Layout & Fire Plan Drawing Ref No. 3854/1277/03.

2.10 Site security

- 2.10.1 The main entrance gates are of galvanised steel frame construction to a height of 2.4 metres. The gates will be padlocked when the site is unmanned to prevent any unauthorised vehicular and pedestrian access. The site benefits from 1.8m high steel

palisade security fencing. In addition, there is CCTV in operation at the site and a night watchman employed on site.

- 2.10.2 The site security will be inspected on a daily basis and any defects which impair the effectiveness of the security will be repaired to the same or better standard within 7 working days. All repairs will be noted on the site diary within 24 hours of the event.
- 2.10.3 The security measures at the site are under constant review. If unauthorised access becomes apparent as a problem at the site the security measures will be reviewed and improvements implemented.

3 Preventing self-combustion

3.1 Manage storage time

- 3.1.1 The aim for the site operator is to follow a 'first in, first out' principle where incoming waste is sorted processed and arrange for its export off site as soon as practicably possible, to minimise over-stocking which in-turn minimises the risk of overheating and spontaneous combustion (albeit that this only applies to a limited number wastes handled at the site). Therefore, the maximum storage capacities of all wastes as defined in the Waste Storage Table on the Site & Fire Plan are considered excessive and 'worst-case scenario' to account for plant downtime, holding stock and market fluctuations.
- 3.1.2 Strict waste acceptance procedures are in place at the site including electronic waste input and output recording system and will be used to detail how long waste has been on site and how long other separated wastes are stored prior to removal from the site. This will ensure compliance with the maximum storage duration for specific wastes which will be shown on the Stockpile Detail Table.
- 3.1.3 All combustible wastes will be managed to ensure that they are stored for no longer than 2 months (or removed much sooner) and therefore under the NRW guidance is considered at low risk of self-combustion. Mixed combustible waste deposited in the reception area of the transfer building will be processed (ie sorted by hand or using a grab) and the operator's aim is to remove the dry waste recyclables off site within three working days, and therefore is continually topped up and emptied. At least every month the building is emptied and brushed thus no mixed waste is stored for excessive duration.
- 3.1.4 Despite the fact that all wastes storage times for potential combustible wastes on site fall within the 3 month limit specified in the NRW's FPMP guidance, staff will be trained to identify any potential hotspots and manage them accordingly either through:

- a) removal or isolation of any suspect material to the quarantine area;
- b) continuous turning and monitoring until any heat is fully dissipated; or,
- c) smothering any suspect material using inert materials stored in the external yard areas on site.

3.1.5 Firefighting equipment (owned by the applicant) and/or mains water supply points are located near to the areas of waste storage should accidental burning of waste occur (see the Layout & Fire Plan in the Annex for location details). In addition, fire extinguishers are located around the site to aid the quick suppression of a fire if detected.

3.2 Waste types and quantities

3.2.1 The throughput of the site will be to a maximum of 250 tonnes per day and this would include inert waste such as soils, stone. The site will not accept greater than 10 tonnes of hazardous waste per day nor greater than 50 tonnes per day of waste destined for disposal. Notwithstanding the daily limit the maximum storage limits outlined in Table 1 below will apply:

WASTE TYPE	MAXIMUM STORAGE (TONNES)	PROPOSED STORAGE LOCATION
Mixed Degradable wastes (non hazardous)	150	Refer to Site Layout & Fire Plan Drawing No. 3854/1277/03
Plasterboard	50	
Green waste	40	
Wood	100	
Separated recyclable waste	100	As above
Unprocessed demolition waste	500	As above
Metals	100	As above
Asbestos	10	As above
Hazardous waste for storage only (inside the Hazardous Waste building) inc flammable liquids and aerosols	10	As above
WEEE waste	20	As above
Lead acid batteries	2	As above
Gas cylinders	20 units	As above
Waste for Landfill	50	As above
ELVs and associated parts/fluids* (not currently accepted on site)	10	As above

3.3 Waste acceptance

- 3.3.1 Strict waste acceptance procedures are in place at the site when waste is accepted at the site and will be used to detail how long waste has been on site and how long other separated wastes are stored prior to removal from the site. This will ensure compliance with the maximum storage duration for specific wastes (as shown on the Waste Storage Table on the Site Layout & Fire Plan).
- 3.3.2 Guidance will be given by the site management to all employees, sub-contractors, other waste carriers and customers regarding the waste types and operations which are acceptable at the site i.e. a copy of Appendix III of the Environmental Management System. The site will be used for the waste collections by Enviroclear Site Services Ltd's own skip hire operations and for waste from third-party users, whose details will be checked prior to delivery of waste to the site.
- 3.3.3 All incoming vehicles are required to report to the site office. The details of the load will be recorded and the Duty of Care transfer note and company documentation will be further checked by the operator to ensure that the load is acceptable at the site. Any deviation from these procedures or problems with any loads will be reported to the site manager.
- 3.3.4 Once a load has been accepted by the operator, the driver will be asked to unsheet the vehicle (if it is sheeted) and a visual inspection of the contents will be carried out to ensure that the waste types comply with the Environmental Permit. The nature of mixed construction/demolition and general waste makes full inspection difficult until the load is deposited. If rejected waste is discovered before deposit, the load will remain on the delivery vehicle and will be returned to the producer if possible or disposed of at an approved facility. In cases where the presence of unauthorised waste is likely to lead to a breach of permit conditions, the Natural Resources Wales will be contacted immediately to agree a course of action.
- 3.3.5 If the load is acceptable the driver will be instructed to deposit it within the appropriate waste reception area which may be on the external yard area or inside

the waste transfer building or within the hazardous waste storage building. The locations of which are shown on Drawing No. 3854/1277/03. If the load is unacceptable after deposit it will be loaded back onto the delivery vehicle, or stored until it can be taken to an approved facility to be disposed of. Otherwise, the Natural Resources Wales will be contacted and the load will be taken to a suitably permitted or exempt site.

- 3.3.6 Any wastes which are delivered to the site as wholly inert (hardcore/excavation materials) will be discharged directly into the bulky inert waste bay.
- 3.3.7 Any wastes single stream wastes eg plastics, green waste, plasterboard will be discharged directly into the appropriate waste bay.
- 3.3.8 Mixed dry wastes will be deposited in the “waste reception area” in the transfer building, (see Drawing No. 3854/1277/03 for location details).
- 3.3.9 Waste which are consigned as hazardous waste will be directed to the hazardous waste storage building with the exception of consignments of asbestos in which case they will be deposited into the designated ‘asbestos’ container which is stored externally on the yard (see Drawing No. 3854/1277/03 for location details).
- 3.3.10 Rejected wastes discovered at any stage in the process will be deposited in the quarantine area provided for non-conforming wastes. Where necessary, particularly where the rejected waste discovered would be classed as a difficult, hazardous or clinical waste, Natural Resources Wales will then be contacted to agree a course of action. The contents of the rejected waste containers will be recorded in the site diary.
- 3.3.11 For outward consignments of wastes produced on site, the driver of the collection vehicle will be instructed to report to the site office (see Section 2.4.1) or the machine/plant operator. All relevant documentation will be completed and the vehicle will be passed to pick up the load and take it to the designated recycler/disposal site. The product or waste will be loaded using the loading shovel.

3.4 **Record keeping**

3.4.1 The following details will be recorded for every load deposited at the site:

- a) The date and time of delivery.
- b) The name and address of the waste producer.
- c) The detailed and accurate description of the waste including type, quantity (in tonnes and/or cubic metres) and EWC codes.
- d) How the waste is contained e.g. loose, container type.
- e) The carrier's name and address.
- f) Driver's name, signature and vehicle registration No.
- g) Signature or initials of person(s) producing/ accepting/ inspecting/ carrying the waste.
- h) Additional handling details/notes made by the driver after inspection of the load.
- i) SIC code of the premises which produced the waste (where relevant).
- j) Waste hierarchy declaration.
- k) Information on previous treatment of the waste e.g. manual or mechanical.

3.4.2 Any wastes identified during the incoming waste inspections which do not conform to site acceptance criteria will not be accepted and/or removed and quarantined immediately to await safe removal from site and NRW will be contacted (where necessary) if the non-conforming waste discovered is likely to lead to a breach of permit conditions.

3.5 **Wastes stored on site including Potentially Combustible Materials**

3.5.1 The following list outlines the materials which have been identified on site as having combustible or high combustible potential along with the maximum quantity of these materials stored on site at any given time.

- a) **Non hazardous dry mixed waste (degradable)** - Biodegradable waste stored within the dry recyclables waste transfer building which has an impermeable floor and sealed drainage. Inside the building mixed dry waste is subject to physical sorting by hand to separate out the recyclables into recyclables eg paper, cardboard, plasterboard, plastics, metal, timber. These are then bulked up into skips or designated stockpile ready for collection for processing off site. Combustible wastes will usually be sorted into its recyclable components within three days from date of deposit but may be up to two months during an unplanned event/emergency. Stockpiled in accordance with the latest fire risk management guidance provided by NRW and the Fire Service. Proposed locations are shown on Drawing 38541277/03.
- b) **Separated Recyclable Wastes** – Including plastic, metal, plasterboard, paper and cardboard, which have been received in mixed loads. See above. This waste is stored in the dry waste recyclables transfer building. Single stream recyclables loads may be transferred and stored externally within designated bays with contained drainage or stored in container ready for removal off site. Separated recyclables which are potentially combustible will usually be removed from site within one month as this is the time it takes to fill the storage receptacle under normal operating conditions and depending on market forces and any unplanned/emergency may be stored on site for up to two months. Stockpiled in accordance with the latest fire risk management guidance provided by NRW and the Fire Service. Proposed locations are shown on Drawing 3854/1277/03
- c) **Plasterboard** - Stored in a designated external bay which has the benefit of concrete hardstanding which drains to the rear of the bay. Maximum storage time 2 months. Proposed location as shown on Drawing 3854/1277/03.
- d) **Green waste** - Green waste arriving on site will be stored for bulking up within a designated storage bay on concrete hardstanding which drains to the rear off the bay for a maximum of two months. Stockpiled in accordance with the latest fire risk management guidance provided by NRW and the Fire Service. Proposed location as shown on Drawing 3854/1277/03.

- e) **Wood** - Wood loads will be directed to the designated external storage areas which benefit from a concrete hardstanding and drain to the site's surface water drainage system or contained within one of the contained concrete storage bays. Wood is not processed on site. Stockpiled in accordance with the latest fire risk management guidance provided by NRW and the Fire Service. Proposed locations are shown on Drawing 3854/1277/03. Maximum storage time 2 months.
- f) ***Cement-bonded asbestos** – This material will be accepted at the site and will be immediately segregated into a covered lockable skip which will be stored outside on a concreted and drained area of the site. Kept on site no longer than 12 months.
- g) ***Hazardous waste** including potential highly combustible material (Flammable) – eg small amounts of flammable aerosols and liquids, waste paints, solvents, polyurethane foam, contaminated packaging and rags. These are stored within the Hazardous waste transfer building which has an impermeable floor and sealed drainage. These wastes will typically be delivered to the site in intermediate bulk containers (IBCs). Maximum storage time 2 months.
- h) **Waste for landfill** – Waste which is not suitable for recycling is bulked up and stored in the waste for landfill bay inside the transfer building to await removal off site for disposal at an appropriately permitted facility. Kept on site no longer than one month.
- i) **Gas cylinders (max. 20 units)** - Any gas bottles found in the loads will be stored upright in a lockable cage. Location as shown on Drawing No.3854/1277/03. Kept on site no longer than 2 months.
- j) **WEEE waste** stored on site for no longer than 2 months.
- k) **Lead acid batteries** stored within sealed battery boxes no longer than 2 months.
- l) **End-of-life tyres** – If discovered within a mixed load will be stored on site in designated bay or container within the potential combustible waste area. Further details given in Section 4.1.11. Kept on site no longer than 2 months.
- m) **End of Life vehicles** Currently not accepted on site but if accepted would be kept on site no longer than 6 months.

- n) **Rejected waste (<5 tonnes)** - This material will be stored in clearly labelled enclosed skip/container if it cannot be removed from the site immediately. The location of these skips may be varied as operating conditions permit (i.e. to permit the loading of rejected wastes but clear labelling and management control will ensure its use as specified). Rejected items can sometimes contain materials which are particularly susceptible to combustion. If any such items or materials are discovered, they will be subject to individual quarantine and NRW will be contacted to agree a course of action.

***Hazardous waste** – the maximum amount of hazardous waste on site at any one time for disposal or recovery will not exceed 10 tonnes as stated in the permit.

Inert waste – There is always a stockpile of inert waste eg soil/stone held on site within the soils designated storage bay (location shown on Drawing 3854/1277/03) which can be used as cover to damp any fire if deemed safe to do so.

3.6 Monitoring and control of temperature

- 3.6.1 A requirement exists to ensure that temperatures of waste piles, both processed and unprocessed, are monitored and recorded if stored for longer than 3 months.
- 3.6.2 Those wastes which are stored for no longer than 3 months do not require routine monitoring for temperature. However the company will invest in a thermal temperature probe or thermal imaging camera to conduct temperature monitoring if site operations change and for some reason the waste is to be held on site for 3 months or more. If the piles are to be stored for 3 months or longer the piles will be monitored no less frequently than daily (following storage after 3 months) by a trained employee / fire marshal with the time recorded, the upper and lower temperatures recorded. Any relevant comments regarding the stored (e.g. physical condition, steam etc., and/or actions taken) will also be noted on the form which appears in Appendix II of this FPMP. The completed temperature monitoring forms will be available for inspection in the site office. NRW will be informed about any relevant change.

- 3.6.3 **General** - All loads will be visually inspected before and after deposit to identify the potential for hot loads. As any self-combusting waste (ie mixed waste processed and unprocessed) will be stored for only days rather than months, it is considered that utilising thermal imaging and/or temperature probes are not necessary.
- 3.6.4 The turning of the waste may be carried out to prevent internal heating of the waste stockpile however due to the proposed storage times being within the 3 month fire prevention guidance, turning is not deemed necessary unless the staff who are trained to detect and manage any hotspots, suspect there may be a problem. Waste is stored in its largest form prior to processing.
- 3.6.5 Unprocessed and processed mixed wastes are stored within the transfer building which minimises external heating of the waste during hot weather by shading from direct sunlight. It also protects the waste from rain thus controlling moisture levels in the waste by keeping the waste dry.
- 3.6.6 Whilst there are other forms of combustible waste stored at the site, these will have been sorted and stored as described in subsequent sections of this document to await removal and have very little chance of combusting other than arson or staff negligence; both of which have been addressed in this FPMP.

4 Managing waste piles

4.1 Stored combustible waste

- 4.1.1 The Waste Storage Table on the Site Layout & Fire Plan details how all combustible wastes will be stored in line with NRW's FPMP guidance.
- 4.1.2 All escape routes, fire exits, alarm call points and fire extinguishers are kept clear and free from waste at all times.
- 4.1.3 The aim of the site is to process the incoming material and arrange for its export off site as soon as practicably possible, to minimise over-stocking which in-turn minimises the risk of overheating and spontaneous combustion.
- 4.1.4 The maximum height of 4m stated in the Fire Prevention Guidance is based on practical ability to fight fires using manual means such as standard hoses, and stability of stack to reduce the risk of fire spread from falling wastes.
- 4.1.5 The operator stores waste materials in their largest form and minimise pile sizes wherever possible.
- 4.1.6 To ensure compliance, stockpile heights for combustible wastes will be compliant with the limits recommended in NRW's Fire Prevention guidance. These restrictions will help minimise the susceptibility of material to overheating.
- 4.1.7 In the event of the stockpiles overheating, water may be added if safe to do so depending on the type of material and the material will be turned to release heat. If a hot spot is identified in stored or imported waste and turning of the material is not deemed sufficient, the hot spot will be dug out of the stockpile and deposited in a designated emergency quarantine area. As it would be high risk, this area would have increased separation distances and be closely monitored until the risk of combustion had ceased.

- 4.1.8 If the heated material is contained within a skip then the container will be moved to the quarantine area if its current location requires a greater fire break from any neighbouring stockpiles. The hot load will then be smothered or sprayed with firefighting equipment which may include inert material eg soils to ensure the combustion risk is reduced to a minimum.
- 4.1.9 No chipping or shredding of wood is carried out currently at the facility but if this changes, to aid in the mitigation of dust emissions from the site, any processed wood chip stockpiles on site will be regularly dampened, a process which will further decrease the susceptibility of these stockpiles to combustion.
- 4.1.10 Due to the types of some of the wastes stored on site consideration will be given to the location of certain stockpiles to ensure no reactions take place between incompatible materials. Furthermore, any wastes identified during the incoming waste inspections which are likely to be either particularly combustible or reactive will be stored in the hazardous waste transfer building to await safe removal from site. NRW will be contacted (where necessary) if non-conforming waste is discovered and likely to lead to a breach of permit conditions.
- 4.1.11 Any End-of-life tyres which happen to be brought onto site within a mixed load will be subject to further measures, in addition to those above, due to their high calorific value. More stringent storage times will be imposed on any tyre stack and stacks size are limited. A maximum of 10 tonnes of end-of-life tyres will be stored on site at any one time and stockpiles will be located at least 6m from other combustible materials on site. Currently ELVs and tyres are not accepted on site.
- 4.1.12 Any waste which discovered to be a 'hot load' after being tipped will either be removed off site immediately or assigned to the quarantine area. The hot load will then be smothered or sprayed with firefighting equipment to ensure the combustion risk is reduced to a minimum.

4.2 Waste stored inside the Transfer building

- 4.2.1 Mixed dry waste is tipped into the reception area inside the transfer building. Recyclable wastes will be crudely sorted by hand or loading shovel from the mixed waste stockpile to remove any bulky items or non-conforming waste. The building has large double doors to the front to allow easy access for the FRS. It is considered the volumes and storage durations of piles and the fact they are stored in an open fronted building with frequent monitoring enables early detection and accessibility in undertaking the appropriate fire suppression techniques. The general standards applied to warehousing of goods is not considered appropriate to the internal storage of wastes.
- 4.2.2 The open fronted building allows easy access for fire-fighting and providing a means of clearing smoke from the building

4.3 Waste stored in containers

- 4.3.1 There are a number of piles which comprise the storage of waste in skips or in bays. These skips will be used for the storage of separated wastes (such as separated plastics, cardboard stored within the dry waste transfer building) and wood, green waste, plasterboard, inert and non hazardous grit type residue (non combustible material) stored externally within designated bays. The containers will be removed off site once full and will then be replaced by an empty container.
- 4.3.2 A clear area will be maintained and kept clear of obstruction in front of the stored skips in order to remove them in an emergency fire situation to the designated quarantine area if the container were to be the subject of a fire or any materials within a container were ignited.
- 4.3.3 Flammable material including liquid waste and aerosols is stored in sealed containers within the hazardous waste building which has an impermeable floor and sealed drainage. These wastes will typically be delivered to the site in intermediate bulk containers (IBCs). The storage area is divided up into three sections by approx 1.5m

high x approx 0.5m thick concrete bund walls as indicated on Drawing Ref No.3854/1277/03 providing three distinct storage compounds.

- 4.3.4 Due to health and safety risk and potential risk of the fire spreading, the operator would not attempt to move a container full of waste which has fully ignited.
- 4.3.5 **Out of hours** - All waste stored in containers has been subject to rigorous manual and or mechanical sorting and the waste types stored have a very low chance of self-combustion; the only risk of waste in containers igniting would be during operational hours i.e. staff negligence or arson when the site is open. Appropriate measures have been demonstrated throughout this FPMP to ensure this risk of a container fire is minimised and extinguished efficiently.

5 Prevent fire spreading

In the unlikely event that a fire were to break out on site, the site has a number of measures in place, in addition to a number of existing characteristics of the site, which would limit the size, duration and impact of a fire on site. These are listed below:

5.1 Fire Breaks (External Yard)

5.1.1 Combustible waste will be stored within bays, containers or stockpiles.

5.1.2 To create significant permanent fire breaks between combustible materials and limit the spread of fire the proposed site layout ensures that combustible waste bay will be situated next to non combustible waste eg soil, hardcore (this material may also be used to suppress the fire in an adjoining bay). This layout will restrict the spread of fire by containment (the flames will not be blown over the walls of one bay and onto potentially combustible material located in an adjoining bay). Furthermore, the containment bays will provide a wind break surrounding stockpiles of material, which will impede the acceleration of a fire through the increased oxygen supply provided by wind gusts. Stockpiles will be limited to 3m (as is proposed in NRW's Fire Prevention and Mitigation guidance for potential combustible wastes) or will not exceed the height of the bay walls or container within which they are stored. A free board is not deemed necessary as there is non combustible waste stored adjacent to any combustible waste stockpiles.

5.1.3 Potentially combustible waste not stored within the bay storage area ie Grade A wood will be stored at least **10m** away from any other potential combustible material on site. To the rear of the wood storage area (beyond the perimeter fence is a 10m standoff area also owned by ECSS Ltd. It is proposed to construct a 3m high fire wall to the north and west sides of the wood storage area as indicted on the latest Site Layout & Fire Plan to minimise the risk of fire spreading off site.

- 5.1.4 The site layout plan Drawing No. 3854/1277/03 shows the designated storage areas detailed above.

5.2 Fire Breaks (inside waste transfer buildings)

- 5.2.1 Dry mixed combustible wastes stored inside the transfer building will be stored within the dry waste transfer building which has a concrete floor and sealed drainage. The waste will be limited to a height of 4m.
- 5.2.2 Hazardous waste (Flammable) – for example small amounts of flammable aerosols and liquids, waste paints, solvents, contaminated packaging and rags are permitted to be stored on site. These wastes will typically be delivered to the site in intermediate bulk containers (IBCs). These will be stored within in IBCs in the Hazardous waste transfer building which has an impermeable floor and sealed drainage.
- 5.2.3 As specified on the Layout & Fire Plan, all fire walls are constructed of concrete and 150mm wide, 3m high meaning they are of sufficient height, thickness to stop fire spreading and minimise radiant heat.
- 5.2.4 In addition, upon the discovery of a fire, site operatives will be trained to create fire breaks on site under the guidance of the emergency services.
- 5.2.5 Site surfaces which are not used for plant or stockpiles, and are therefore providing a fire break, will be cleared as required, to ensure that any potentially combustible material between stockpiles, which would undermine the effectiveness of fire breaks, is removed.
- 5.2.6 Fire break distances and bay, stack and pile locations are clearly shown on the 'Layout & Fire Plan' and the surface areas and dimensions of each storage area is provided in the Stockpile Detail Table, both of these documents can be found in the Annex to this document. All pile sizes, heights, widths, lengths, volumes and separation distances are in accordance with the Fire Prevention & Mitigation Plans guidance.

- 5.2.7 If a fire on site were to be discovered, site operatives are provided with appropriate training to create additional fire breaks on site under the guidance of the emergency services which may involve the clearance of any adjacent bays/stacks.
- 5.2.8 Site surfaces which are not used for plant or stockpiles, and are therefore providing a fire break, will be kept clear of waste throughout the working day and enforced upon cessation of operations at the end of each day through the site shut-down procedure.
- 5.2.9 Appropriate separation distances will be observed for all stored wastes in accordance with NRW's FPP guidance document.

5.3 Fire walls inside the waste transfer station and external storage bay walls specification

- 5.3.1 The concrete walls are designed and constructed to the BS8110 Pt2 'Structural use of concrete Part 2 Code of practice for special circumstances' and BSEN1992-1-2 'Design of concrete structures. General rules - Structural fire design'.
- 5.3.2 In accordance with BSEN1992, the fire resistance of concrete structures over 100mm will have a fire resistance of 1200°C for 4 hours.
- 5.3.3 The walls are 200mm thick concrete push-walls to a minimum height of 3m and offer a fire resistance period of at least 120 minutes to allow waste to be isolated to stop fire spreading and minimise radiant heat.

5.4 Controlled burn

- 5.4.1 In some instances, a plan for a controlled burn might be beneficial on waste sites in the event of a significant fire, to reduce the amount of flammable material surrounding the fire, thereby impeding the spread of fire across the site. Due to remote location of the site this may be a viable option.
- 5.4.2 However, it has been decided that the initiation of controlled fires on site by site operatives would not be the safest method of tackling a fire, as this technique has

inherent risk associated with it and, if not conducted properly, could actually accelerate a fire on site. If it is deemed necessary that a controlled fire is to be initiated on site, it will be conducted under the control and direction of the fire and rescue service (FRS), who have significantly more training with regard to fire management and equipment available to them than site operatives.

- 5.4.3 In the majority of situations, separation distances and containment bays will provide sufficient isolation of a fire prior to the FRS arriving and assessing the situation. If it is deemed that further isolation is required, operatives will be instructed to move flammable materials away from the fire and instructed to place inflammable material in the path of the fire, to impede the spread of fire across the site.

5.5 Storage on flat ground

- 5.5.1 Site surfaces are flat, therefore reducing the risk of falling materials accelerating the spread of fire.

6 Quarantine area

- 6.1 In accordance with the FPMP guidance an area is designated as a quarantine area as shown on the Layout & Fire Plan which is accessible at all times. This area also allows for a 10 metre buffer from the site perimeter and a minimum of 6m from other stored waste or materials on site. The location of the quarantine area is shown on the Site Layout & Fire Plan Drawing No. 3854/1277/03.
- 6.2 The allocated quarantine area measures 100m² and will be able to hold up to 133m³ of material which is greater than the volume of the largest waste stockpile of 50m³ as referred to in Section 3.5.1a above.
- 6.3 In the event of a fire this area may either be used to remove any wastes stored in bays/piles/containers which is located near any material which is smouldering or on fire (but not itself directly affected by the fire,) to prevent the fire spreading, or this area may be used to isolate wastes which are smouldering to allow safe dissipation of heat without placing other areas on site at risk of ignition.
- 6.4 Waste would be moved to the quarantine area using the site's loading shovel.
- 6.5 Surrounding wastes would be moved using the site's loading shovel and will only be moved to the quarantine area if safe to do so.
- 6.6 The site could use the forklift truck to transfer any burning material or contact a third party to hire in a suitable piece of plant to assist in doing so.

7 Fire Detection, infrastructure and techniques

7.1 Access for emergency services

- 7.1.1 The site has direct access onto Hafod Road, which subsequently joins the B5426 and A483 to the south of the site. These surrounding roads provide adequate access for the emergency services.
- 7.1.2 The width of the surrounding roads and the gateway to the site are sufficient to provide access onto the site for the FRS.
- 7.1.3 Access routes for emergency services around the site are clearly shown on the 'Layout & Fire Plan' Drawing No 3854/1277/03.
- 7.1.4 There will be an 'Emergency Services Box' located at the site entrance for attending appliances with adequate signage and its contents will include:

A. Scaled plan of the site (Drawing No 3854/1277/03) showing:

- Layout of the buildings – including utility isolation points
- Location of passive and active fire safety measures e.g. Fire doors, Fire alarms, Portable extinguishers, Dry or wet risers, sprinklers, fire shutters, foam or deluge systems, inert systems as well as their isolation points.
- Location of stored hazardous materials including their properties and quantities. MSDS sheets may also be useful.
- Access routes for fire appliances and any alternative routes to ensure access to fire appliances is always maintained.
- Assembly point location for staff and visitors
- Location of water hydrants (on Drawing No. 3854/1277/04) and water supplies (on Drawing No 3854/1277/02).
- Any watercourse running near the site
- Location of plant, protective clothing and pollution control and materials e.g. bunding or neutralising equipment as applicable
- Information on drainage systems – foul and surface water & their direction of flow and outfall points

- Location of sensitive receptors within 1km of the site : **Human** e.g. hospitals, nursing homes, residential areas, places of work etc. and **Environmental** e.g. surface waters, potable abstractions, groundwater, protected habitats etc. (Receptor Plan Drawing No. 3854/1277/04)
- Location of quarantine area
- Location of site service isolation points
- Location of any dangerous machinery and process areas
- Location of falls from height or underground openings or structures e.g. Work platforms, storage racking or inspection pits

B. Copies of the Fire Prevention & Mitigation Plan – Waste Management

C. Out of hours staff emergency contacts

D. Contacts for any specialist advice

7.1.5 The following measures are in place to ensure that fires are detected and tackled quickly on site:

- a) **PPE & First Aid Kits** – These will be located in the site office
- b) **Manual fire alarm system** – There is a manual fire alarm point located on the wall by the entrance to the mixed dry waste transfer building and there are hand bells positioned at various locations within the site will be activated on discovery of a fire (located outside the transfer building, by the Grade A wood storage area and inside the site office).
Also the staff can use mobile phone contact.
- c) **Infra Red Flame Detection System** – the operator proposes to install a permanent IR Flame Detection system and is currently looking into the best system for their facility.
- d) **Fire Extinguishers** – Powder (ABC), foam (AFFF) and carbon dioxide firefighting equipment are provided and stored at a number of designated areas on site as

shown on the Layout & Fire Plan and appropriate and regular training will be given for their use in tackling small fires. All vehicles on site used for the processing and moving of material will be fitted with fire extinguishers, as required by the Fire Prevention Plans document.

- e) **Mains water supply** – There is a constant mains water supply for the site in the unlikely event that a fire were to occur and that fire was extinguishable using water. If a fire does occur and the site operatives are unsure of the nature of the fire, guidance will be taken from the local fire service. As previously mentioned, there is sufficient equipment on site to effectively utilise the water for fighting fires or impeding its spread (e.g. mains water and hosepipes). A hose reel is located at each mains water connection point which provides full coverage of the whole site where each pile/stack of combustible waste can be accessed safely.
- f) A 2000 gallon tank (9,092 litres) will be installed on site adjacent to the waste wood storage area and will be kept full of water. The tank will have a coupling devise to enable the FRS to connect their hoses to it as an additional water supply to help suppress any fire.
- g) **Fire Hydrant** – There are two fire hydrant situated on Hafod Road, which are shown Drawing 3854/1277/04 in the Annex to this document, and have been checked by the FRS. If an additional fire hydrant is recommended by the FRS in the future then the operator will liaise with the relevant bodies to have one located within the site boundary.
- h) **Inert wastes (soils/hardcore)** – The site handles and stores inert wastes and soils which are, by virtue of their description, inert and non-combustible. These inert wastes are effective in smothering a fire and arresting the oxygen flow which reduces the flames thus mitigating the spread of a fire. This method for tackling a fire is less environmentally sensitive as there is less water required to extinguish the fire which reduces the amount of potentially contaminative runoff required to be contained and disposed of.
- i) **Visible worded signs** – Signage is placed strategically around the site, giving full and clear instructions for fire alarm and means of escape (Meeting point, 999 instructions). The main information board is located on the wall of the

weighbridge office as shown on Drawing No 3225/1277/03. Travel distances and number of fire exits are adequate and safe to use.

- j) **Fire Log Book** – to be kept on site with all relevant records.

7.2 Notifying nearby properties

- 7.2.1 The nearest receptors within 100m of the site will be informed of the fire by employees of the operator and the F&RS, Local Council and NRW will be contacted to ensure further properties are informed should the fire become problematic.
- 7.2.2 The nearest receptors within 100m of the site i.e. houses, business will be informed of the fire by employees of the operator and the F&RS either by phone or visiting the premises. The Police, Local Council and NRW will be contacted using the site contacts list in the FPMP to ensure further properties are informed should the fire become problematic. Under data protection some properties however may not be willing to disclose their information so would rely on neighbouring premises to ensure they are aware of any fire incident which may have an impact on them.
- 7.2.3 As soon the operator is aware of a fire on it's site which has the potential to become problematic to human health, the environment or to infrastructure, the operator would contact the IMMEDIATE neighbouring premises either by phone or in person, depending on when the fire event is occurring as these sites are unlikely to be manned out of hours. The relevant contact details have now been included in the FPMP.
- 7.2.4 The Emergency Services (usually the police) in consultation with the other relevant Emergency Services would co-ordinate notifying the OTHER sensitive receptors within 1000m of the site either by phone or visiting the premises.
- 7.2.5 Contact details of sensitive receptors with 1 km of the site will be held on file by the operator so they can be contacted if likely to be affected by the fire. Copy of the list will be included in the Site 'Emergency Services' box for FRS, Police and NRW access.

- 7.2.6 The FRS contact DCWW to notify them there is a fire and they will be using the fire hydrants. The flows may then be increased if requested by the FRS.

7.3 Site inspection programme

- 7.3.1 Daily inspections of all site areas will be undertaken and recorded on the fire checklist shown in Appendix II. These inspections will be conducted by person(s) who is/are familiar with the requirements of the EMS, EP and this document. This will keep the levels of dust, fibre, paper and other loose combustible materials, which could aid in the acceleration of a fire, on site surfaces to a minimum and ensure all containment of wastes on site are functioning effectively in accordance with the storage limitations as detailed in the Waste Storage Table included on the Site Layout & Fire Plan.
- 7.3.2 The results of site inspections will be recorded either on the appropriate record form in Annex II of this FPMP or in the site diary. The appropriate form will be available to NRW, Fire Service and Local Authority upon request.

7.4 Maintenance & testing

- 7.4.1 The equipment will be properly installed, tested and maintained and staff will be trained about the system.
- 7.4.2 All staff will be trained and assessed every 6 months or if the site layout changes to ensure the below section is rigorously monitored.
- 7.4.3 The following checks are made daily using the fire check inspection form in as a minimum for all waste which is stored in buildings:
- All escape routes are clear and the concrete floor is in good condition.
 - Fire exit signs are in the right place.

- Firefighting equipment i.e. extinguishers, blankets are sound (these will be tested twice a year by an approved fire-safety consultant to ensure they are fit for purpose).
- Storage of combustible waste complies with latest NRW guidance
- Mobile 24 CCTV is functioning correctly.

7.4.4 The aforementioned points ensure that the risk of fire is minimal; avoids the need to test whether the plan works and if a fire were to occur, all firefighting equipment is sound and available.

7.4.5 If a fire is detected on site outside of normal operating hours, the site manager or out-of-hours emergency contact will be notified of the fire by the Fire Service, NRW or a member of the public.

7.4.6 The site manager/out-of-hours contact will then conduct the following procedure:

- a) Irrespective of whether a company presence is required at the site by the FRS, the out of hours appointed contact (or delegated responsible person) will attend the site to assist in any way possible and to ensure that surface water protection and control measures are deployed, if safe to do so, under the instruction of the FRS.
- b) The site appointed out-of-hours contact will subsequently contact as many additional members of staff as required ensuring that surface water protection, smothering and/or separation measures may be effectively deployed. Ideally this will be a minimum of three other staff members (enabling safe working in pairs) with at least one machine operator.

7.5 **Staff training**

7.5.1 A Fire Risk Assessment has been recently carried out by the operator's Health & Safety Consultant in accordance with the Regulatory Reform (Fire Safety) Order 2005 (RRFSO) to ascertain the level of fire precautions in the premises and to assess the possibility of fire starting and the risk to people in the event of fire. A copy of the

Report has been included as an appendix to this FPMP (see Annex 3). The Report recommends that a fire audit be carried out to monitor and record progress on implementing the Fire Risk Assessment recommendations detailed in the Action Plan, with any actions undertaken being fully documented. The Action Plan includes several actions which are required to be carried out under the FPMP eg Fire training (inc use of fire extinguishers), carrying out fire drills, provision of 'Emergency Service Box' at site entrance and ensuring all electrical equipment is tested.

- 7.5.2 Staff will be suitably trained in how to raise a fire alarm and how to use the extinguishing equipment, including hose reel should the fire be small enough to tackle. Staff will also seek formal fire extinguisher training for anyone specifically designated to use such equipment.
- 7.5.3 A full understanding the procedures outlined in this FPMP document will be required to be demonstrated as part of the site induction for all new staff and any existing staff that are not familiar with the documents. In particular all staff will be trained to ensure that they know what to do if a fire breaks out and more importantly how to undertake their work in a way that minimises the risk of a fire occurring.
- 7.5.4 Ongoing training, including tool box talks, will also be provided to ensure site staff are informed of any changes to any of the site management documentation that is subject to regular review.
- 7.5.5 A full test (drill) of the procedures in this document i.e. to test that the plan works, will be carried out every 6 months. The first test will take place within one month of the agreement of this document with NRW. The outcome and any follow up training for staff will be documented in the site diary and relevant forms in the EMS. The Site Inspection Form in Appendix II will also be used during the drill.
- 7.5.6 Ongoing training will also be provided to ensure site staff are informed of any changes to any of the site management documentation subject to regular review. All staff will be rigorously tested about the requirements of this FPMP on a 6 monthly basis to know the procedures in the event of a fire.

7.6 Fire detection procedure (operational hours)

- 7.6.1 Hand bells: Will be activated on discovery of a fire (located at various locations as shown on Drawing No.3854/1277/03 outside the transfer building, inside the site office, by the wood storage area and by the green waste container). Also the staff can use mobile phone contact.
- 7.6.2 It is proposed that an IR Flame Detection system is to be installed in both the mixed dry waste storage building and in the hazardous waste storage building.
- 7.6.3 Further to the above measures, the following procedure would apply:
- a) Call the Fire Response Service (FRS) immediately using 999.
 - b) Call the NRW's Emergency Contact Number.
 - c) Competent person to ensure suitably trained employees initiates the closing of the cut off valve of the site's surface water drainage systems at the location shown on the Site Layout & Fire Plan.
 - d) Competent persons to ensure suitably trained employees initiates the deployment of polybooms if required to ensure fire water containment.
 - e) Prior to the FRS arriving, inform all neighbouring premises likely to be affected.
 - f) If not previously informed, senior management of the company will be informed at this point of the details, nature and extent of the fire and whether assistance from staff from other depots is required.
 - g) Ensure access routes are clear.
 - h) If safe to do so, the Site Manager, TCM or a senior member of staff will inspect the location of the fire, to identify immediate risks to surrounding premises and the FRS.
 - i) Ensure operators of appropriate machinery are standing by in a safe location to help create fire breaks, under the direction of the FRS when they arrive.
 - j) Ensure relevant site staff are standing by in a safe location to deploy additional surface water protection equipment under the direction of the FRS when they arrive (eg booms, etc.).

- k) The site manager / TCM will identify themselves to the fire service as soon as they arrive on site and will provide them with a copy of this document and update them with relevant information that will assist them in dealing with a fire more effectively.
- l) Implement pollution control measures only when safe to do so.

7.6.4 In the event of the site manager or TCM being absent from the site, the operator will ensure a suitable person is employed and familiar with the site. The operator's H&S consultants should be contacted and have the appropriate staff who are specialised trained and familiar with the site and operations (Contact details in the Site Information & Key Contacts List on page v of this FPMP).

7.7 Fire detection procedure (out-of-hours)

7.7.1 The site has 24 hour CCTV which is remotely accessible.

7.7.2 The site also employs a full time night watchman who will inspect the site and check for signs of fire every six hours and they would then immediately contact the out-of-hours emergency operator contact and the emergency services if they have any concerns.

7.7.3 As detailed in 7.6.2 above the installation of an IR Flame Detection System is being considered.

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

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

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

7.8 Evacuation of staff (and drill procedure)

7.8.1 An evacuation plan has been formulated for the site and all persons have been made aware of it (through site induction and refresher training). The fast and effective evacuation of staff to the Fire Assembly Point (Muster point) shown on the Site Layout & Fire Plan will increase safety on site and limit the impact of a fire on any persons on site.

7.8.2 Regular fire drills are carried on site as per article 15 of the Regulatory Reform (Fire Safety) Order 2005 to ensure evacuation times are acceptable and that site staff remain informed of evacuation procedures. The operator may also appoint and train fire marshals on site, to aid in the above. The fire drills are carried out using the following methods:

- a) Inform all employees of that a fire drill is going to happen, providing them with specific details and also firmly letting them know their participation is required.
- b) Nominate observers (if necessary) to assess the fire drill, paying attention to the appropriateness of actions, the behaviour of employees and any problems which may arise during the drill.
- c) Additionally, if there are likely to be any visitors present at the time of the fire drill you should also pre-warn them.

7.8.3 Throughout the drill, the 'responsible person' and any nominated observers or fire safety wardens should:

- a) Keep an eye out for any inappropriate behaviour, such as stopping to collect coats, bags and other personal belongings.

- b) Closely observe any difficulties experienced by people with disabilities, such as an inability to get out of an exit or get down stairs easily.
- c) Make sure employees are using the nearest fire escape route, rather than just the exit they are most familiar with.
- d) Pay attention to any difficulties experienced as a result of the chosen escape routes, such as doors being difficult to open or exits being blocked.
- e) Listen closely to the roll call taken once the evacuation has been completed, making sure everyone is present and accounted for and checking for any issues which may arise.

7.8.4 After the drill, it is vital the person in charge:

- a) Thoroughly and comprehensively logs all details of the fire drill, including how the evacuation procedure went and any inappropriate actions or problems which were noted as a result.
- b) Any significant findings of the drill should be recorded within this FPMP and reviewed regularly as part of your workplace fire safety.
- c) Remedial action deemed necessary, such as the installation of additional fire safety signs or fire alarms, should be undertaken by a professional, reputable fire safety company.

7.8.5 The full drill involving a dry run of the procedures involved in this document will be carried out every 6 months. The drill will be a simulation of an emergency with the location of a mock fire notified to staff in order to test the response speed in deploying pollution control equipment i.e. including drain mats/plugs and ensure all firefighting equipment is sound. The fire check form will be completed and a detailed report of the outcome of the exercise will be prepared to assist with staff training as stated in 7.2.

7.9 **Staff/visitor response procedure**

7.9.1 The following actions will be undertaken by site operatives when a fire is detected or suspected on site:

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

8 Suppressing fires

8.1 General

- 8.1.1 Section 20 of NRW's FPMP guidance mentions the site should have enough water available for firefighting to take place and to manage a worst case scenario. A worst case scenario would be the largest waste pile catching fire.
- 8.1.2 Based on the above scenario, the largest waste pile of combustible waste on site (ie dry mixed waste stored inside the transfer building) may measure 50m³ in a worst case scenario as detailed in Section 3.5.1a above. This would require 6,000 litres (60m³) of water to extinguish the fire within 3 hours. It is not scientifically possible to calculate the flame height as each waste pile is different and could contain a number of different wastes leading to a lesser or greater flame height

8.2 Fire hydrants

- 8.2.1 In consultation with the FRS, it has been identified that there are x2 hydrants within 500 metres of the site. The FRS have also confirmed there is a 160mm diameter water main. Therefore there should be sufficient water available for the FRS to utilise in the event of a fire to reach the requisite 2,000 litres per minute flow as required by the FPMP Guidance.
- 8.2.2 The two hydrants are situated on Hafod Road as shown on the Receptor Plan. The fire hydrants have been checked by the FRS. (WN43/H22785 Located opposite "Hafod House Farm" LL14 6HF Grid ref 331187, 346109, tested/satisfactory, sign fitted 75mm x 5m, cover painted. WN43/H22824 Located near "Caretaker House" LL14 6HF Grid ref 331313, 346539, tested/satisfactory, sign fitted 100mm x 2m, cover painted). However the FRS may prefer to use the water available on their fire appliances as each fire engine can hold 1800 litres of water depending on the severity of the fire.
- 8.2.3 The flow rate has not been tested as the figures are too variable and can be increased on the day by Dee Valley Water at the request of the FRS. Based on the above, it is

considered there is sufficient firewater available to extinguish a worst case scenario fire at the site.

- 8.2.4 As well as contacting the local FRS, DCWW Fire Service Liaison Manager has also been contacted to confirm water access and that they are DCWW assets. DCWW do not check flow rates of the fire hydrants but mains pressure tests can be carried out if deemed necessary by NRW as part of the FPMP.

8.3 Additional suppression measures

- 8.3.1 There are a number of fire extinguishers located around the site which can be deployed in the event of a smaller fire incident for fire suppression.
- 8.3.2 The site has x3 water mains water points as shown on the Site Layout & Fire Plan. There are also x2 hose pipes which can extend the full length of the site.
- 8.3.3 The site will have a water supply held within a 2000 gallon (9,902 litres) storage tank which will have a coupling allowing the FRS to connect and draw down, the tank can then be refilled from the mains.
- 8.3.4 In addition to the fire hydrant and the water storage tank, the fire water used in tackling a fire would accumulate in the sealed concrete/hardstanding areas of the site which can be re-circulated thus reducing the effective volume of containment required.
- 8.3.5 For smaller fires which can be tackled by the operator, the site benefits from mains water supply.
- 8.3.6 As well as using on site firefighting equipment i.e. hose reel, extinguishers, there will be a stockpile (up to 400 tonnes) of non-combustible inert soil / hardcore material which could be using to smother a fire using the site's loading shovel within 5/10 minutes of a fire breaking out at the site. Utilising 'dry' firefighting techniques will reduce the need for water use in tackling a fire on site which would therefore reduce

the volume of potentially polluting firefighting residues requiring disposal following an incident.

8.4 No suppression system in building/s

- 8.4.1 The operator will not be installing a suppression system inside the buildings however a detailed assessment has been provided in the contents of this FPMP to ensure the objectives of FPMP guidance are met: to prevent, detect, suppress, mitigate and to contain the fire.

MEASURES TO MEET THE THREE OBJECTIVES

PREVENT OR MINIMISE

- Daily checks as shown in the fire checklist
- Storage limits kept to a minimum and within FPMP guidance
- Plant / equipment preventative maintenance checklist
- Processing and reception areas of mixed potentially combustible waste aim to clear at the end of each working day
- Constant daily monitoring all piles; any piles which show hot spots will be immediately moved to the quarantine area
- All operational staff are trained in reporting a fire enabling the FRS to implement professional techniques to ensure the fire can be extinguished within 4 hours.
- Constant daily monitoring all piles; any piles which show hot spots will be immediately moved to the quarantine area

DETECTION

- Remotely accessible 24 CCTV with on and off site supervision
- Infra Red Flame Detection System proposed to be installed in each of the waste storage buildings
- Addition of manual fire alarms i.e. rotary bells

SUPPRESS (EXTINGUISHED WITHIN 4 HOURS)

- 6m separation distances or fire walls are in place so only one pile is required to be extinguished at any one time.
- Adequate supply of water on and off site if required by staff and the FRS

MITIGATE AND REDUCE SPREAD

- All buildings which store waste are constructed of fire retardant components i.e. asbestos, concrete and cladding meaning a fire cannot spread from one building to another
- No receptors sited less than 6m of the operational area boundary or the building walls
- Adequate supply of water
- Constant daily monitoring all piles; any piles which show hot spots will be immediately moved to the quarantine area
- On site fire-fighting equipment for smaller fires
- Storage of waste has appropriate separation distances
- Dedicated quarantine area
- Staff training in the event of a fire
- Containment of hot fire water / combustible wastes on site

9 Managing fire water

9.1 Sealed drainage system (containment of firewater)

- 9.1.1 All mixed waste with the potential to leach will be stored within a building on site on a surface of impermeable concrete within a bunded and sealed drainage system to ensure that any fluids or spillages associated with the reception and processing of mixed wastes will be contained within the buildings on site. Any liquid arising in either of the waste storage buildings will be prevented from entering the surface water system. The floor of the buildings fall to the rear and any liquids arising within the building will be sucked up by vacuum tanker or soaked up with sand or sawdust and then shovelled up with the staff wearing the relevant protective clothing (depending on the volume of contaminated run-off) and collected for disposal off site to a suitably authorised facility. The buildings are designed to contain drainage within them.
- 9.1.2 Uncontaminated surface waters arising from the roofs of the buildings on site are kept separate from the potentially contaminated yard waters and drain off site into the surface water sewer.
- 9.1.3 The yard surface falls to the rear of the site and therefore all yard water will flow into the surface water gully system which runs along the north-west boundary of the site. The surface water from the concreted external areas drain into the site's drainage channels via two silt trap gullies and pass through the site's interceptor prior to discharge into the site's surface water drainage system before discharging to soakaway. Details are as shown on Drawing No. 3854/1277/03. The interceptor is a Class 1 designed to achieve a discharge concentration of <5mg/l oil and is sized to provide a 10,000 litre (100m³) capacity.
- 9.1.4 The operator is however looking at the possibility of connecting to the local public sewer. If this is feasible NRW will be notified accordingly.

- 9.1.5 The operator has just completed the construction of x5 new containment bays along the north boundary of the site. These are constructed of concrete panels to a height of 3 metres and each has a concrete floor which falls to the rear to provide sealed drainage. Once the concrete apron has been completed the operator is proposing to construct a drainage channel to the front of the storage bays which will drain into the site's existing surface water drainage system. Details of the bays and the proposed associated drainage channel can be seen on Drawing No 3854/1277/03. The bays will be used to store single stream recyclables eg grade B & C wood, soil, plasterboard, rubble. The final bay will be used as a dig out bay for inert and non hazardous grit type residue (non combustible material).
- 9.1.6 The site's surface water system has a penstock shut-off valve at both the inlet and outlet of the interceptor which will be closed as soon as a fire is detected to ensure fire water does not escape from the site. Location of the penstock shut-off valves can be seen on Drawing No. 3854/1277/03.
- 9.1.7 Should a fire occur, the immediate response would be to manually operate the penstock shut off valves on the interceptor and to place sand bags and/or polybooms to ensure the surface water system is sealed which would mean all drain outlets are blocked and the site perimeter is sealed. This would prevent any potentially contaminated firewater from passing through the interceptor. The firewater would pool in the yard where there is ample containment as shown below.
- 9.1.8 In the event of a worst case scenario fire, it is estimated that containment is required for 60,000 litres or 60m³ of water. The buildings have a containment potential of 350m³ for the dry waste transfer building and 200m³ for the hazardous waste storage building. The yard has containment capacity for potentially over 2000m³ and approximately 450m³ of containment provided by the new storage bays which combined with the building storage potential can provide more than enough containment on site.

- 9.1.9 In addition, fire water would pool in the containment areas which would allow for fire water to be re-circulated, thus reducing the effective volume of containment required.
- 9.1.10 Drain blocking and surface water control equipment are available for use on site. There is a range of equipment available on site, from sand bags, loose sand (in bags), poly booms, drain bungs and mats and concrete lintels that are to be used to fabricate temporary bunds.
- 9.1.11 Enviroclear Site Services Ltd offer a total waste management service which includes the provision of specialist vehicles to carry both liquids and solid, hazardous and non hazardous wastes. Services include waste recycling, tank cleaning, skip hire, effluent recycling, drain cleaning services and CCTV survey equipment. They also offer spillage and pollution control which may require operating outside the normal working hours*. Enviroclear are a UK Spill Accredited Contractor. The spill kits are stored at various locations around the site and including on the fence outside the site office. Details where the equipment is stored is shown on the Site Layout & Fire Plan. A copy of which will be kept inside the 'Emergency Services Box'.
- 9.1.12 Surface water protection measures will be checked by a designated person regularly throughout the duration of the fire incident whilst water is being applied by the Fire Service. Periodic inspections should continue after the Fire Service have left until all run off has pooled. Breaches in control should immediately be notified to the site management and NRW to allow additional measures of control to be considered and deployed.

9.2 Removal of fire water

- 9.2.1 Upon successfully extinguishing a fire all standing fire water would be pumped using a hired-in vacuum tanker and deposited to a suitably permitted site for treatment.
- 9.2.2 Surface water protection measures will then be checked by a designated person regularly throughout the duration of the fire whilst water is being applied by the Fire

Service. Periodic inspections will continue after the Fire Service have left until all run off has pooled. Breaches in control would be immediately notified to site management and to NRW to allow additional measures of control to be considered and deployed.

9.2.3 These measures should ensure that there is sufficient storage on site for any contaminated water and under no circumstances will firewater be released into surrounding waterways, drains or any other system which might lead to contamination of water or land.

9.2.4 Surface water protection measures should remain in place and regular checks on them should be maintained until the clean-up and removal of all fire water has occurred, the emptying of all holding tanks, gullies and interceptor have been carried out and the final brushing up of the affected area has been undertaken. It is the site management who are responsible for deciding when an appropriate level of clean-up has been achieved to remove the surface water protection measures.

9.2.5 Surface water on site will be cleared using the following methods.

- a) Using a tanker, all standing fire water should be sucked up and discharged to foul sewer (if available) or stored prior to removal off site.
- b) The first 2 – 3 loads of water contained within the interceptor should be removed and discharge to foul sewer (if available) or stored prior to removal off site.
- c) Using all available resources, manually clean out all surface water gullies removing the debris to the pile of fire damaged waste for removal to landfill.
- d) Flush the drainage system to the interceptor with clean water. Repeat no more than twice.
- e) Remove another 2 loads of water from the interceptor and discharge to foul sewer (if available) or store prior to removal off site.
- f) Repeat the previous 2 steps until the water used to flush the drains runs clear into the interceptor.

- g) Using a road sweeper, sweep the yard (damp as required) until all ash and clinker has been removed.
- h) Repeat steps d and e until the discharge to the interceptor runs clear.
- i) Empty the interceptor (5 loads from full approx.) and discharge the water to foul sewer or store prior to removal off site.
- j) Repeat steps d, e and i until the water in the interceptor remains clear.
- k) All debris has now been isolated and all tanks have been cleaned and emptied.
- l) Wash the yard down in entirety using clean water, or allow a reasonably heavy rain shower to wash the yard down. All runoff should remain discharged to the interceptor.
- m) It is at this stage that site management should decide whether it is appropriate to remove the surface water protection measures, or repeat areas of the clean-up.

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

- a) Remove any temporary bunds.
- b) Remove all sand bags.
- c) Open the cut of valve- Surface water discharge from the site is now possible the next time it rains. Ensure that surface water checks are made during the next rainfall event to validate that clean-up has been undertaken satisfactorily. Record all findings and actions in the site diary.
- d) Account for all consumables that have been used in the fire and re-order / replace immediately.
- e) Restack, and re-locate all items used for the surface water protection during the fire to their storage locations ready for future deployment.
- f) Check monthly that items are still present and correct and still serviceable for use in an emergency.

9.2.7 Surface water protection measures will be checked by a designated person regularly throughout the duration of the fire incident whilst water is being applied by the Fire

Service. Periodic inspections should continue after the Fire Service have left. Breaches in control should immediately be notified to the site management and to NRW to allow additional measures of control to be considered and deployed.

9.2.8 Control measures should remain in place until after the clean-up operation has been completed and all contaminated fire water removed from site.

9.2.9 These measures ensure that there is sufficient storage on site for any contaminated water and under no circumstances will firewater be released into the surface water drainage system which might lead to contamination of water or land.

9.3 Contingency Planning

9.3.1 Enviroclear Site Services Ltd would direct customers to contact the sites below in the event of site closure due to a fire incident:

- a) Thornclyff Skip Hire Ltd, Ewloe Barn Industrial Estate, Mold Road, Alltami CH7 6LG (Opening hours 7am -1730hrs) for non hazardous waste and asbestos Tel 01244 545 907
- b) Hafod Landfill, Cory Environmental Ltd, Bangor Road, Johnstown, Wrexham LL14 6ET Tel 01978 843025
- c) Bradley Park Waste Management Ltd (Landfill site), Huddersfield for Hazardous waste loads (Asbestos) Tel 01484 534976
- d) BIP Environmental Ltd, Middlewich Tel 01606 838207 (Hazardous wastes)
- e) Hazport, Whitchurch Business Park, Shropshire Tel 01948 841 268 (Transport & Disposal Specialists for Hazardous wastes)

9.3.2 No waste will be accepted on site until the post-fire site recovery procedures outlined in Section 6 below have been fully implemented and the site is authorised to re-open for trade and waste acceptance.

9.4 **Fire debris**

- 9.4.1 Fire debris should continue to be turned using the on-site plant and dowsed as necessary with the loading shovel and hosepipe or bowser if necessary until site management confirm that the embers are cooled and there is no chance of a flare up.

- 9.4.2 Debris can then be cleared and isolated to a series of storage piles for onward temperature monitoring until they have cooled to an acceptable level for landfill disposal (<40 degrees C). Once cooled to an acceptable temperature, as described above, bulk haulage will be arranged for the removal of the ash from the site.

10 POST-FIRE SITE RECOVERY

10.1 General recovery procedure

10.1.1 When the fire has been successfully dealt with the following actions will take place:

- a) Any fires will be reported to NRW on the working day that they occur and will be confirmed in writing within 3 working days, including all steps taken by site staff, management and/or emergency services to deal with the fire.
- b) Ask engineers to carry out repairs on any plant, vehicles and/or infrastructure.
- c) Assist the FRS with the fire investigation and where necessary engage the advice from a professional fire consultant.
- d) Removal of burnt material using appropriate and lawful disposal.
- e) Investigation into the cause of the fire, to ensure it does not reoccur.
- f) A review of the FPMP, associated amendments will be implemented.
- g) Review of any additional training requirements for site personnel as a result of the incident.
- h) Ensure all fire equipment, where used, is replenished with particular reference to poly booms. All fire extinguishers used to tackle the fire will be serviced and replaced after use.

10.1.2 In addition to the abovementioned procedures, the sections below outline specific procedures following a fire.

10.2 Investigation procedures and remediation

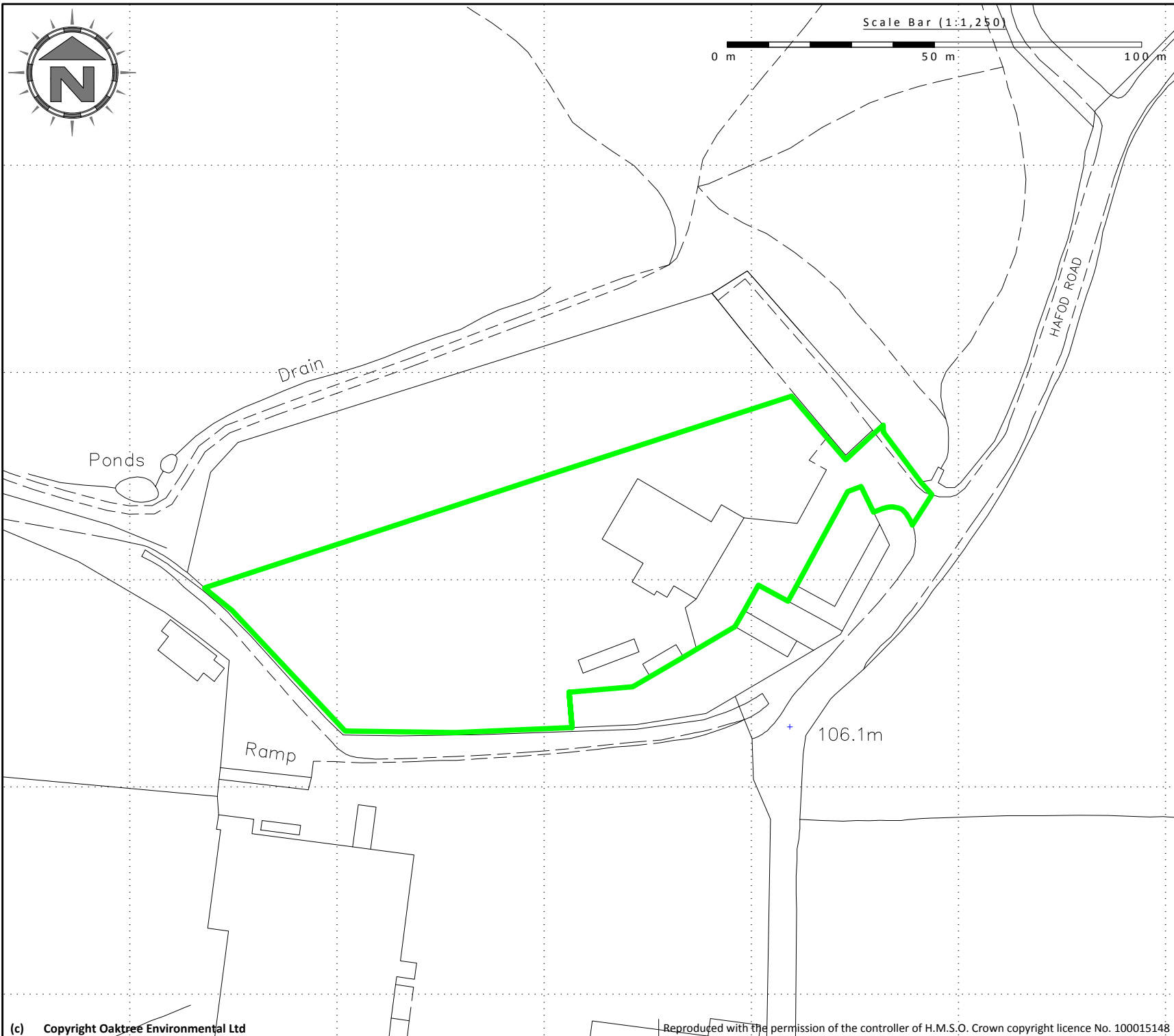
10.2.1 Following a fire event, the affected area will be subject to the following:

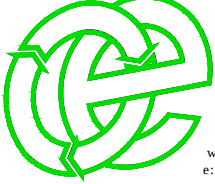
- a) Ground sampling of any permeable areas and around the vicinity of the affected area – the frequency, location and depth of the samples required would be agreed between the operator, ground investigation contractor and Natural Resources Wales.

- b) The samples would be sent for analysis at an MCERTS accredited laboratory to ascertain the nature and extent of contamination (if any).
- c) Following receipt of the analysis results a remediation strategy would be submitted to Natural Resources Wales for consideration (if required).
- d) Following agreement of the remediation strategy, it will be implemented as agreed and any contaminated material removed from the site will be sent to a facility suitably permitted to accept the material.
- e) Following remediation, a completion report will be submitted to Natural Resources Wales.

10.2.2 If any significant contamination is found to be present, the operator will work with NRW to implement further measures which may be necessary should a subsequent event occur.

ANNEX I (Site Plans)





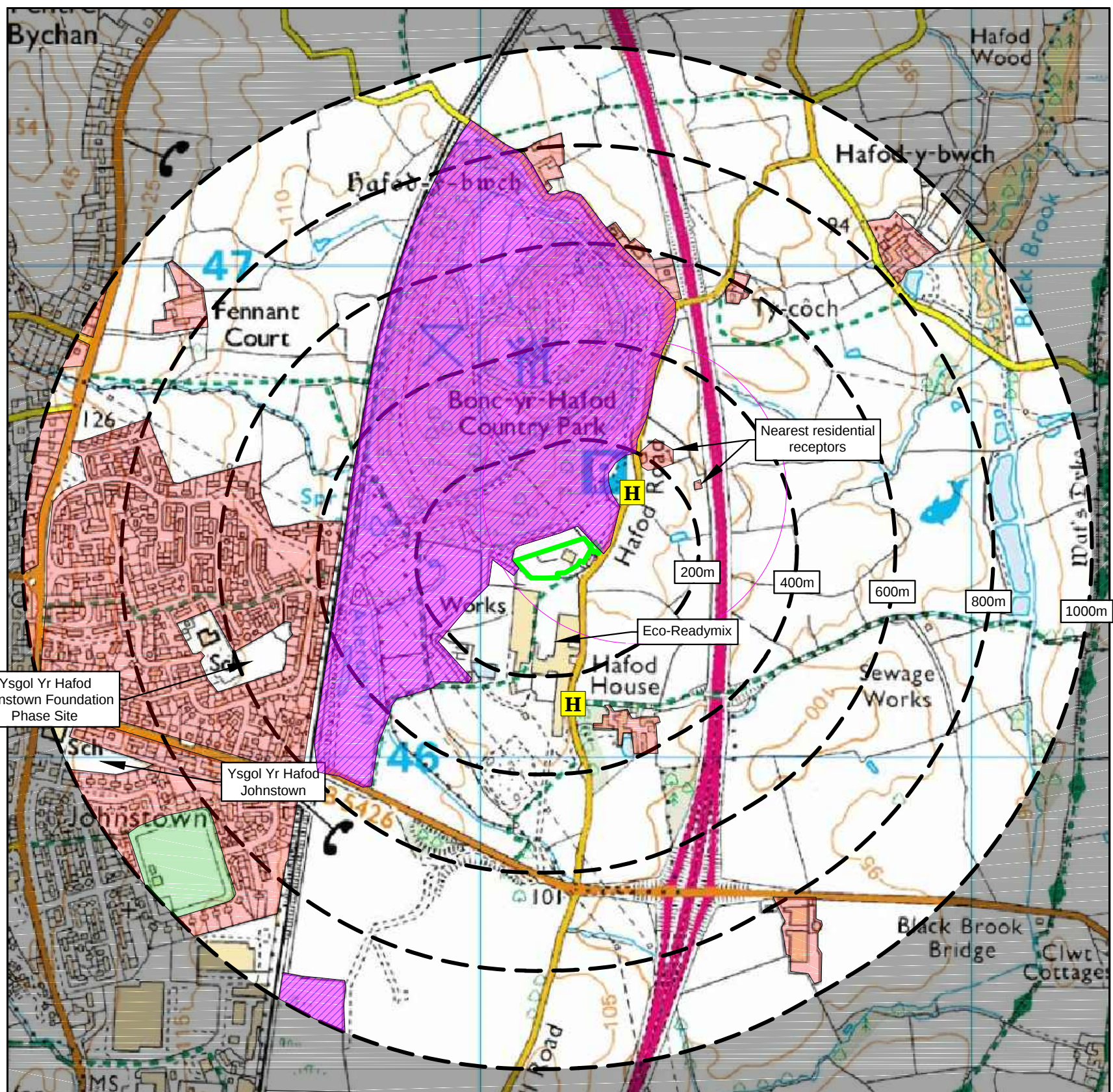
Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

Lime House, Road Two
Winsford Ind. Est.
Winsford, Cheshire
CW7 3QZ

t: 01606 558833

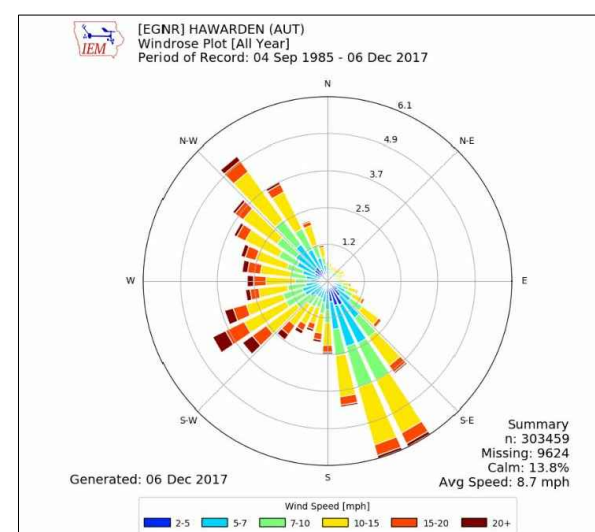
w: www.oaktree-environmental.co.uk
e: sales@oaktree-environmental.co.uk

Drawing No:		3854/1277/02		Rev:		-	
Title:							
PERMIT BOUNDARY PLAN							
Site:							
Hafod Yard, Hafod Road, Ruabon, Wrexham							
Client:							
Enviroclear Site Services Ltd							
Date:				Job:			
25 June 2018				3854			
Drawn:		Checked:		Client:			
CP		JE		1277			
Scale:				Printed @:			
1:25,000				A4			
KEY:							
Permit boundary							
Notes:							
(1) Drawing for indication only.							
REVISION HISTORY							
Rev:	Date:	Init:	Description:				
-	25/06/18	CP	Initial drawing				



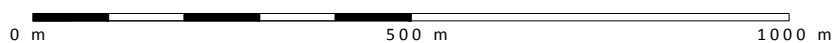
- Permit boundary
- Surface water body (river / stream / pond / pool / lake)
- Residential blocks / workplaces
- Woodland habitats
- Fire hydrant
- Main river
- Johnstown Newt Sites (SAC)

-  Mixture of retail, commercial, and industrial premises
-  Recreational / green areas
-  Mixture of A, B, C roads
-  Mixture of A, B, C roads
-  Railway line
-  Public footpaths
-  200m boundary lines



Compass Wind Rose for Station at Hawarden
(EGNR) Period 1985-2017

Scale Bar (1:10,000)



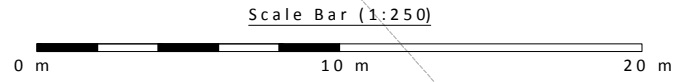
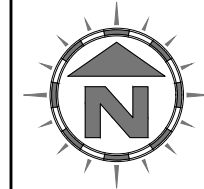
Client: Enviroclear Site Services Ltd		
Site: Hafod Yard Transfer Station, Hafod Road, Hafod, Wrexham LL14 6HF		
NGR: SJ 31163 46404		
Date: 25 June 2018	Printed At: A3	
Scale: 1:10,000	Revision: -	Drawn By: CP
Client No: 1277	Job No: 3854	Checked: JE

- (1) Boundaries of designated sites (habitats and protected sites) are shown indicatively.
- (2) Wind rose data shows the prevailing wind direction to be SW.

Rev:	Description:	Date:
-	Initial drawing	25/06/18

Title: RECEPTORS PLAN

Drawing No: 3854/1277/04



Title: 3854/1277/03	
Drawing No: SITE LAYOUT & FIRE PLAN	Revision: -
Client: Enviroclear Site Services Ltd	
Site: Hafod Yard, Hafod Road, Ruabon, Wrexham LL14 6HF	
Date: 25 June 2018	Printed At: A1
Scale: 1:250	
Job No: 3854	Client No: 1277
Drawn By: CP	Checked: ..

Key:

- Permit boundary
- Combustible waste storage areas
- Haz waste storage (part combustible)
- General storage areas (plant/equipment)
- Concreted areas
- Waste storage buildings
- Other buildings (offices, etc.)
- Mixture of sealed block paving and concrete
- Mains water
- Spill kit
- Fire fighting equipment (extinguishers, etc.)
- Fire water containment equipment i.e. booms, drain mats, drain plugs etc..
- Access route for emergency services
- Fire alarm
- Manhole (foul / surface)
- Gully (foul / surface)
- Surface water fall direction
- Foul water drainage
- Surface water drainage
- Fire assembly point
- Designated smoking area

(c) Copyright Oaktree Environmental Ltd

NOTES:
1. Drawing is for indication only.
2. All measurements must be verified on site.

Extinguishers must be fire extinguishers of what they store	Water	Foam spray	A/B/C powder	Carbon dioxide	Wet chemical
Flammable liquids	✓	✓	✓	✗	✓
Flammable gases	✗	✓	✓	✓	✗
Flammable solids	✗	✗	✓	✗	✗
Highly flammable	✗	✗	✓	✗	✗
Corrosive	✗	✗	✓	✓	✗
Reactive	✗	✗	✗	✗	✓

Storage Area Details							
Plan Ref	Description	Storage form/container	Max Length/ Width (m)	Max height (m)	Max Area (m²)	Max Volume (m³)	Max Duration of storage
AREA 1	Reception, tipping and sorting area for mixed HIC & CDE wastes	Free standing pile	12	3	100	50	<2 weeks
AREA 2	Hazardous waste storage and reception area - comprising of both combustible and non-combustible storage; all waste is contained and pre-seprated/segregated upon delivery	Sealed containers	N/A	2	Variable	N/A	<12 weeks
AREA 3	Combustible waste storage bays for wood, plastics, green, paper/cardboard etc... the type of waste in each bay may vary throughout the lifetime of the permit	Concrete bay partitioned with fire walls as specified on the plan	2	2.5	35 (per bay)	60	Contents of bay removed when full or <12 weeks
AREA 4	Reception, tipping and sorting area for waste wood	Free pile bounded by concrete fire wall as per the plan	20	2.5	200	250	Contents of bay removed when full or <12 weeks
AREA 5	Quarantine area	Free pile / zone in marked area on site	10	4	200	135	N/A

APPENDIX D

EMERGENCY PLAN AND FIRE ROUTINE

An emergency plan must be prepared and its purpose is to ensure that all persons in the premises know what to do in case of an emergency, including a fire, so that the premises can be safely evacuated.

If you employ 5 or more people, licensed or there is an alteration notice requiring it, the details of the emergency plan must be recorded i.e. written down. **It is good practice to have a written emergency plan in any case.**

The emergency plan should be based on the outcome of the fire risk assessment and be available for your employees, their representatives, residents and the enforcing authority. In residential care premises, the emergency plan will need to be more detailed. **In small premises the emergency plan may be exactly the same as the fire action notice.**

The emergency plan should be appropriate for the premises and may include the following:-

1. The means of warning if there is a fire.
2. What action staff/employees should take if they discover a fire.
3. Details of how the evacuation of the premises should be carried out.
4. Any individual/specific needs or risks associated with any individual residents/employees.
5. Identification and use of protected areas, refuges etc. used for horizontal and partial evacuation.
6. The location of the assembly point, the procedures to take a roll call and for checking that the premises have been evacuated.
7. Identification of key escape routes, how people can gain access to them and escape from them safely.
8. Arrangements in place for fire fighting.
9. The duties and identities of staff/employees who have specific responsibilities e.g. fire wardens, fire marshals etc.
10. Arrangements for the safe evacuation of people who are identified as being especially at risk e.g. residents, those with disabilities, contractors, visitors etc.
11. What machines/processes/appliances/power supplies etc. that need to be stopped or made safe if there is a fire and the role of any persons who have been designated to do this.
12. Any specific arrangements that have been made especially for high fire risk areas.
13. Contingency plans for when any of the safety systems are out of order.
14. Details of how fire and rescue services will be called and the responsible person(s) for doing this.
15. Procedures that are in place for meeting the emergency services upon their arrival and passing over information to them.
16. What training employees/staff need and arrangements to ensure that training is given on a regular basis.
17. Plan for the accommodation of any residents both during the fire, immediately after and long term and also the storage of any valuables etc.

If the premises is large or complex it is sometimes worthwhile to include a simple line drawing showing the plan of the building and featuring the escape and fire safety facilities marked on the plan.

It is also useful to keep a 'fire box' containing all relevant information with a member of staff/employee being responsible for taking the box out of the premises once the fire alarm actuates. An alternative to this is to keep a recovery plan off-site but readily available as well as a copy of the fire risk assessment.

ANNEX II (Recording Forms)

(NB Alternative forms may be provided by the operator)

**ENVIROCLEAR SITE SERVICES Ltd -
FIRE CHECK INSPECTION FORM (DAILY INSPECTIONS) HAFOD YARD**

WEEK STARTING								
TYPE OF INSPECTION		DAY						
		M	T	W	T	F	S	S
EMERGENCY ACCESS								
SECURITY - GATES								
SECURITY - FENCING								
SITE ROADS / SURFACES (CLEAR FROM HAZARDS)								
WASTE CONTAINERS & BAYS- PROVISION OF FIRE BREAKS								
WASTE TYPES- COMPATIBILITY								
COMBUSTIBLE WASTE STORAGE (WITHIN PROPOSED LIMIT)								
COMBUSTIBLE WASTE STORAGE (AWAY FROM POTENTIAL IGNITION SOURCES)								
FIRE FIGHTING EQUIPMENT EG FIRE EXTINGUISHERS, FIRE ALARMS /SMOKE DETECTORS								
PLANT & EQUIPMENT- FIT FOR PURPOSE AND UNDERGONE MAINTENANCE CHECKS								
STAFF ON SITE HAVE RECEIVED FIRE SAFETY TRAINING								
DRAINAGE CHANNELS/GULLIES								
HOUSEKEEPING	DUST							
HOUSEKEEPING	LITTER							
HOT WORKS FIRE WATCH UNDERTAKEN								
HOT EXHAUSTS FIRE WATCH								
WELFARE FACILITIES (CHECKED FOR ANY POTENTIAL FIRE RISK)								
NO SMOKING SIGNS IN PLACE								
QUARANTINE AREA CLEAR								
FIRES (ANY INCIDENTS REPORTED)								
OTHER -								
INSPECTION CARRIED OUT BY								
NOTES/ACTION (CONTINUE ON A SEPARATE SHEET IF NECESSARY):								
CHECKED BY				SIGNATURE				
POSITION				DATE				

NB: The above checklist may be used on more than one occasion throughout the day depending on operations

**ENVIROCLEAR SITE SERVICES Ltd -
SITE INSPECTION FORM (OUT-OF-HOURS INSPECTIONS) – HAFOD YARD**

DATE / STARTING TIME							
TYPE OF INSPECTION	CHECK TIMES AT LEAST 2 HOURLY INTERVALS						
SITE ENTRANCE/NOTICE BOARD							
SECURITY - GATES							
SECURITY - FENCING							
SITE ROADS (CLEAR FROM HAZARDS)							
COMBUSTIBLE WASTES							
POTENTIAL IGNITION SOURCES							
OFFICE/WELFARE FIRE RISKS CHECKED							
WASTE CONTAINERS & BAY WALLS							
QUARANTINE AREA CLEAR OF WASTE							
FUEL TANK/BUND							
ELECTRICAL APPLIANCES AND CABLING CHECK							
LITTER							
FIRE FIGHTING EQUIPMENT							
FIRE BREAKS IMPLEMENTED							
FIRES (ANY INCIDENTS REPORTED)							
VISIBLE FIRE							
VISIBLE SMOKE							
COMPLAINTS RECEIVED							
OTHER (SEE NOTES BELOW)							
INSPECTION CARRIED OUT BY							
PERSONS CONTACTED							
NOTES/ACTION (CONTINUE ON A SEPARATE SHEET IF NECESSARY):							
CHECKED BY		SIGNATURE					
POSITION		DATE					
Sheet		of					

ENVIROCLEAR SITE SERVICES LTD

PREVENTATIVE MAINTENANCE CHECKLIST - HAFOD YARD

CHECKED BY	POSITION
DATE	DATE OF LAST CHECKLIST

ITEM	EQUIPMENT ITEM					
OFFICIAL MAINTENANCE CHECK REQUIRED (Y/N)						
IF NO, DATE OF LAST CHECK						
IF YES, DATE OF NEXT CHECK						
IS ITEM IN CORRECT WORKING ORDER						
LEAKAGES OF OIL/DIESEL ON MOBILE PLANT / VEHICLES						
IF NO, WHAT REPAIRS ARE REQUIRED (USE SEPARATE SHEET IF REQUIRED)						
WERE REPAIRS DETAILED ON THE LAST CHECKLIST						
IF YES, HAVE THEY BEEN CARRIED OUT						
ADDITIONAL REPAIRS OR ACTIONS REQUIRED						

ENVIROCLEAR SITE SERVICES LTD
EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW

EMPLOYEE NAME					DATE					
POSITION					REVIEW DUE					
TRAINING CARRIED OUT BY										
POSITION										
TRAINING REQUIRED	GENERAL OPERATIVES		HGV DRIVER		PLANT OPERATOR		YARD MANAGER		TECHNICALLY COMPETENT MANAGER	
CARRIED OUT?	Y/N	SIGNED BY EMPLOYEE	Y/N	SIGNED BY EMPLOYEE	Y/N	SIGNED BY EMPLOYEE	Y/N	SIGNED BY EMPLOYEE	Y/N	SIGNED BY EMPLOYEE
SITE RULES AND INFRASTRUCTURE										
EMERGENCY PROCEDURES										
FIRE SAFETY/ FIRE FIGHTING										
RECOGNITION OF WASTE TYPES										
RECOGNITION OF MAXIMUM PILE SIZE										
RECOGNITION OF MAXIMUM STORAGE DURATION										
FIRE DETECTION - EARLY SIGNS I.E. VISUAL/SMOKE										
STORAGE AREAS/LIMITS										
FIRE FIGHTING EQUIPMENT & ALARMS										
FIRE WATER CONTAINMENT MEASURES I.E. BOOMS, DRAIN MATS										
PLANT / VEHICLE CHECKS (Preventative Maintenance)										
PLANT OPERATION - LOADING PLANT										
FIRE PREVENTION PLAN, MANAGEMENT SYSTEM & PERMIT										
SPILLAGE/CLEARANCE MEASURES										
OTHER 1 (PLEASE SPECIFY)										

Daily Temperature Monitoring Sheet

A requirement exists undertake temperature monitoring of all stockpiles (of maximum pile size) containing combustible wastes which are stored for a period exceeding 3 months.

Two temperatures should be taken from each waste pile using a hand-held thermal imaging device (IR). Both temperatures should be recorded in the table below, identifying the time.

STOCKPILE REF. FROM LAYOUT AND FIRE PLAN	DAY		TIME	TEMP (°C)	TEMP (°C)	STOCKPILE REF. FROM LAYOUT AND FIRE PLAN	DAY		TIME	TEMP (°C)	TEMP (°C)
MIXED DRY COMBUSTIBLE WASTES	Mon					GREEN WASTE	Mon				
	Tue						Tue				
	Wed						Wed				
	Thur						Thur				
	Fri						Fri				
	Sat						Sat				
	Sun						Sun				
HAZARDOUS WASTE	Mon					PAPER/ CARD	Mon				
	Tue						Tue				
	Wed						Wed				
	Thur						Thur				
	Fri						Fri				
	Sat						Sat				
	Sun						Sun				
WOOD STOCKPILE	Mon					PLASTER BOARD	Mon				
	Tue						Tue				
	Wed						Wed				
	Thur						Thur				
	Fri						Fri				
	Sat						Sat				
	Sun						Sun				
METAL WASTE	Mon					WASTE FOR LANDFILL	Mon				
	Tue						Tue				
	Wed						Wed				
	Thur						Thur				
	Fri						Fri				
	Sat						Sat				
	Sun						Sun				
WEEE WASTE	Mon					OTHER STOCKPILE	Mon				
	Tue						Tue				
	Wed						Wed				
	Thur						Thur				
	Fri						Fri				
	Sat						Sat				
	Sun						Sun				

Comments:

**ANY RECORDED TEMPERATURE ABOVE 50°C SHOULD BE REPORTED IMMEDIATELY TO A SENIOR MEMBER OF THE
MANAGEMENT TEAM TO AGREE A COURSE OF ACTION**

Week Commencing: _____

Name _____

Signed _____

ANNEX 3

Fire Risk Assessment (Jennings Safety Services Ltd)

FIRE RISK ASSESSMENT

**ENVIROCLEAR SITE SERVICES LTD – TRANSFER STATION
HAFOD YARD
HAFOD INDUSTRIAL ESTATE
HAFOD ROAD
RUABON
WREXHAM
LL14 6HF**

WASTE TRANSFER STATION LICENSE: EPR/NB3339RH



Adlink House, 86 The Highway, Hawarden, Flintshire CH5 3DJ
Tel: 01244 539660 Fax: 01244 539660
E-mail: info@jennings-safety-services.co.uk

CONTENTS

1	DETAILS OF PREMISES
2	IDENTIFICATION OF FIRE HAZARDS
3	EVALUATION OF THE RISK BY AREAS OF THE WORKPLACE
4	ADEQUACY OF EXISTING FIRE PRECAUTION MEASURES
5	GENERAL DETAILS
6	OTHER ADDITIONAL COMMENTS AND REMARKS
7	ACTION PLAN
8	APPENDIX A – PHOTOGRAPHIC DETAILS
9	APPENDIX B – PRINCIPLES OF PREVENTION AND DEFINITIONS
10	APPENDIX C – SITE MAP (OWN TO BE USED)
11	APPENDIX D – EMERGENCY PLAN/FIRE ROUTINE
12	APPENDIX E – MATTERS TO BE TAKEN INTO ACCOUNT IN RISK ASSESSMENTS IN RESPECT OF YOUNG PERSONS (Article 9 (5) Schedule 1 Part 2)
13	APPENDIX F – MATTERS TO BE CONSIDERED IN RESPECT OF DANGEROUS SUBSTANCES (Article 9(2) and 12, Schedule 1 Part 1 and 4)
14	APPENDIX G – ARSON PREVENTION

FIRE RISK ASSESSMENT

DETAILS OF PREMISES

Name of Premises: Enviroclear Site Services Ltd	Name of the Responsible Person: Arthur Imrie Name of the Contact if Different: Dave Worthington
Address (Including Postcode): Hafod Yard, Hafod Industrial Estate, Ruabon Wrexham LL14 6HF	Telephone: 01978 840228 E-Mail: info@enviroclear.co.uk
Date of Assessment: 24 May 2018	Date of Last Assessment: - 26 January 2017
Relevant Legislation: Regulatory Reform (Fire Safety) Order 2005 (RRFSO)	Any Other Legislative Controls: Building Regulations (compliant)
Relevant Registration Number:	Any Other Legislative Details: Not applicable
Date of Last Visit by Enforcing Authority: Fire Service attended site 18.7.18 – small fire in skip.	Name(s) of Enforcing Authority: Fire and Rescue Service Headquarters, Ffordd Salesbury, St Asaph Business Park, St Asaph, Denbighshire, LL17 0JJ Tel: +44 (0)1745 535 250

Type of building/Premises:	Waste Transfer Station – site office (portacabin) and two buildings for storage and processing of waste, metal and brick construction with concreted floor surface.
Is the Premises a workplace?	Yes.
Use of Premises:	Licensed Waste Transfer Station, Office, Storage Sheds.
Number of Floors:	1 –all ground level.
Number of Persons Employed: A written fire risk assessment is needed where:- 1. 5 or more persons are employed, or 2. a licence is in force, or 3. CSCI registered, or 4. an alterations notice is in force	Total no of Transfer Station employees 4 - 5.
Estimate of Maximum Number of Persons in the Building at Any One Time:	Typically 3-10 employees/drivers.
Are Any Young Persons Employed or Proposed to be Employed? (under 18 years of age) Article 9 (5): If yes, then has the current fire risk assessment been reviewed or made out to take account of young persons and in particular matters as laid out in Appendix E to this assessment.	Young persons are employed on occasion. If young persons are employed at this site a specific young persons' assessment is carried out.

Regulatory Reform (Fire Safety) Order 2005 (Article 9): (a) Have appropriate risk assessments been carried out within the requirements of the legislation? (b) Have the assessments been properly recorded? (c) Have risk reduction/risk control measures been introduced? (d) Have risk reduction/control measures been monitored to ensure suitability and effectiveness? (e) Have staff been trained/retrained to provide for these measures? (f) Are there procedures in place to ensure that the risk assessment is reviewed periodically or sooner if alterations are made to the premises etc?	Yes – this risk assessment is written in conjunction with the Fire Prevention Plan for site. Yes Yes Yes Yes Yes
--	--

IDENTIFICATION OF FIRE HAZARDS AND DANGEROUS SUBSTANCES (Articles 9 &10)

Identify Any Combustibles: These can be divided into two main groups; combustible materials such as paper, wood, cardboard, etc; and highly combustible substances such as thinners, solvents, polyurethane foam etc. Identify any oxygen usage:	Comments/Remarks: Biodegradable general/mixed wastes. Wood, paper, cardboard, metals, plastics, batteries, soil, asbestos, general waste etc Combustible waste will have a maximum storage time of 2 months or sooner. Mixed combustible waste deposited in the sorting shed will be processed and removed from site within 3 days. Combustible waste will be stored within the bays with fire breaks 6 metres wide and height limited to 4 metres. Wood store must be sited a minimum of 10 metres from any potential combustible material. No.
Identify Any Sources of Heat: All workplaces contain heat/ignition sources, some will be obvious such as cooking equipment or open flames (heating or process). Others may be less obvious such as heat from chemical processes or electrical equipment.	Comments/Remarks: Portable heaters and radiators, Extension leads and multiple plug socket adapters, Fluorescent light fittings and tubes, General office equipment including computers, and welfare facilities including kettles, toaster and microwave. Grinding or welding operations.
Identify Any Unsafe Acts: People undertaking unsafe acts such as smoking next to combustible material etc.	Comments/Remarks: No smoking allowed inside the premises and in company vehicles.
Identify Any Unsafe Conditions: These are hazards that may assist a fire to spread in your workplace. Also, the means of escape in case of fire may be unsafe such as open stairs that can cause a fire to spread quickly, inadequate fire stopping, blocked gangways and other routes to exits, blocked exits themselves and fire doors held open inappropriately. Any or all of these types of unsafe conditions can assist the spread of smoke heat and fire.	Comments/Remarks: None noted.

Identify Location and Persons Who Are at Significant Risk e.g. (Articles 8 & 9): a) Sleeping accommodation is provided. b) People with disabilities. c) People are unable to react quickly to an emergency. d) People are in an isolated location. e) Relevant people (those who are not employees).	Comments/Remarks: N/A. N/A. No. No. None, visitors are accompanied where necessary.
Identify Any Dangerous Substances (Articles 9 (2) &12): Consider matters set out in Appendix F to this assessment.	Small amounts of flammable aerosols and liquids. Occasional gas cylinders which are removed from site. See Site Fire prevention Plan Section 3.5 for fire prevention measures for waste storage. Separation distances, management of storage times.

EVALUATION OF THE RISK BY AREAS OF THE WORKPLACE (Article 9)

Low Risk Areas: Areas where there is minimal risk to person's lives, where the risk of fire occurring is low, or the potential for fire, heat and smoke spreading is negligible and people would have plenty of time to react to an alert of fire.	Area(s) and Remarks None
Normal Risk Areas: Areas that will account for most parts of a workplace and where an outbreak of fire is likely to remain confined or spread slowly, with an effective fire warning allowing persons to escape to a place of safety.	Area(s) and Remarks The main yard is considered normal risk if a fire broke out it could remain confined if dealt with effectively.
High Risk Areas: Areas where the available time needed to evacuate the area are reduced by the speed of development of a fire e.g. highly flammable or explosive materials stored or used (other than small quantities under controlled conditions). Also where the reaction time to the fire alarm is slower because of the type of person present or the activity in the workplace, e.g. the infirm and elderly or persons sleeping on the premises.	Area(s) and Remarks The office is located adjacent to a propane/butane supplier's yard and if a fire were to break out evacuation time would be reduced. The sorting shed is considered high risk. If a fire occurred it would spread quickly and affect adjacent buildings and vehicles.

ADEQUACY OF EXISTING GENERAL FIRE PRECAUTION MEASURES
(Articles 9, 10, 11,12,13,14,15,16,17 & 21)

Means of Detecting and Giving Warning In Case of Fire: Is there a system? If there is, state what type. Is it clear and audible (Distinguishable)? What maintenance regime is in place?	Description and Comments A manual fire alarm is fitted – a means of raising the alarm should be identified. See action plan. A thermal imaging camera system is being considered for the site. n/a
Means of Escape: Are they adequate in size, number, location, well-lit, unobstructed, safe to use, adequate travel distances etc?	Travel distances and number of fire exits are adequate and safe to use.
Escape Doors and Fire Doors:	Escape doors and fire doors are adequate in number and size. They have no fire resisting properties.
Emergency Escape and Fire Exit Signage:	Fire exit signage is displayed.
Lighting on Escape Routes:	No emergency lighting in place. See action plan.
Evacuation Procedures and Fire Routines:	Fire action notice's are displayed. Records are not maintained for drills. Staff are trained in the use of extinguishers and fire awareness. See Action Plan.

Overall Maintenance and Repairs Procedures: Procedures and arrangements should be in place to ensure that all escape routes, staircases, fire doors and exits are regularly examined and maintained in a good state of repair so that they are safe to use at all times. All equipment and systems provided as part of the general fire precautions required by the Fire Safety Order should be regularly tested and maintained in an efficient and effective working order. A record of all tests should be kept of all tests carried out and all faults found. A procedure should be in place to ensure that all faults are repaired immediately, and where necessary, alternative arrangements are put into operation until the fault(s) has been rectified.	Portable appliance testing is carried out annually. Fire extinguishers are tested by 3rd Party supplier. Done in 07/17. A fire log book should be kept on site with copies of all relevant records.
Signs and Notices: Signage is vitally important as an aid to successful evacuation especially for visitors who may not be familiar with the premises. Does the provision of signage comply with the Health and Safety (Safety Signs and Signals) Regulations 1996?	Fire Action Notices are displayed in site office.

Smoke Extract Systems and Sprinkler Installations: Are systems installed? If so give brief description of the system(s) installed including state of system and maintenance schedules and testing.	Not applicable.
Equipment for Fire fighting: Is there adequate provided? Are extinguishers wall mounted and placed by exits? Are they suitable types for the hazards present & sufficient in number? Is their location visible? Etc.	Yes, all wall mounted, suitable types and sufficient in number.
Staff Awareness and Training etc: Are staff aware of fire precautions, means of escape, any special roles individuals may have, what to do in case of fire, knowledge of fire precautions equipment etc? Legislation requires that training, (including induction and continuation training), be carried out and that records of all training be kept. These records should include, but not necessarily be limited to: 1. Staff fire safety training 2. Fire evacuation drills Those staff with special or nominated responsibilities with regard to fire should receive further training in their role.	Live fire training is carried out periodically. Fire drills have not been carried out and no records are in place. Fire Training is booked for 14th June 2018. See Action Plan.

GENERAL DETAILS (Articles 17, 18, 19,20,22,38 & 41)

Electrical and Gas Installations and Equipment: Details of any maintenance and testing of systems by a competent person. Electrical and gas installations should be subject to statutory test regimes as appropriate. Electrical installation testing should be carried out in accordance with British Standard 7671:2008. Requirements for Electrical Installations IET Wiring Regulations 17th Edition.	Fixed electrical wiring test completed 22.5.18.
Portable Appliance Testing (PAT).	PAT testing is carried out annually. Booked for 11th June 2018
Soft Furnishings: Is there compliance with Furniture and Furnishings (Fire) Regulations 1988 (As amended)? Is there a purchasing policy?	Yes. Yes.
Security: Do the security measures installed have any detrimental effect upon the means of escape? Is there an arson prevention strategy in effect?	No, CCTV only is installed. Yes
Emergency Plan: Is there an emergency plan?	Yes
Recovery Plan: Is there a recovery plan? To include details of useful contacts in case of emergency. e.g. Electrical contractors, plumbers, Service utilities etc.	Yes as per Fire Prevention Plan – Emergency services box.

Safety Assistance: Are there any people appointed by the 'responsible person' to be 'competent persons' to assist in undertaking preventative and protective measures?	Jennings Safety Services Ltd are appointed by the responsible H & S person. Oaktree Environmental Ltd are appointed Specialist Advisor for Waste and Environmental Issues.
Contractors on Site and Hot Work Permits: Is there a permit system of work for control of contractors working on site and/or carrying out 'hot work'? See Appendix C of this assessment for example policy.	Hot working is only permitted in the allocated area under permit. Hot works procedure Fire Prevention Plan Section 2.3.
Disability Discrimination Act: Access Audit: Has an access audit been carried out within the workplace/premises? Is there a policy in place?	No Formal Assessment carried out.
Maintenance of Measures For Protecting Fire-Fighters: Is equipment/devices provided in the premises for the use by and protection of fire-fighters? Are they subject to a suitable system of maintenance and maintained in an efficient state, in efficient working order and in good repair? (N.B. this aspect could be by virtue of a Local Act or the Building Regulations). What is the capability of the local Fire and Rescue service to attend, control and extinguish a fire at the premises?	FRS have confirmed there are x2 fire hydrants within 500 metres and a 160mm diameter water main. The site has x3 water mains pipes as shown on the site plan. There are also x2 hose pipes which can extend the length of the site. Wrexham Fire Station is 5 miles from the site. There is a 12-15 Minute average response times to this workplace. This of course is traffic dependant.

Duty to Consult Employees: Have employees been consulted about nominating persons for specific roles and about any proposals to improve fire precautions? Have employees been provided with good relevant information on the fire risks identified by the risk assessment, the measures to protect them if a fire breaks out and how to prevent fires? Have non-employees/contract workers/agencies providing persons from outside organisations been informed about all relevant risks and provided with information about who are the nominated competent persons and about fire safety procedures for the premises?	Basic induction and fire training. Formal refresher training should include a fire drill and practice of procedures. Not applicable.
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OTHER ADDITIONAL COMMENTS AND REMARKS

This report has been prepared following an assessment of the premises on 24 May 2018 and is based upon verbal information received during discussions with management and staff and on observations made during the assessment. The report does not reflect any areas, activities or processes that the assessor was not made aware of.

The fire risk assessment was carried out to ascertain the level of fire precautions in the premises and in so doing assess the possibility of fire starting and also the risk to people in the event of fire. The assessment has been carried out in accordance with The Regulatory Reform (Fire Safety) Order 2005 (RRFSO) and consideration has therefore been taken of the contents of the relevant guidance document for your type of premises. This is available from good bookshops or by downloading them from the internet at www.firesafetyguides.communities.gov.uk. The Assessment was carried out for the whole building.

In addition to recording the findings this document makes recommendations for actions to be taken. It is the duty of the Responsible Person and of management to ensure that the recommended actions are implemented and to introduce procedures to review this assessment on a regular basis.

As part of your fire safety management arrangements I recommend that a fire audit be carried out once the action points are completed, to monitor and record progress on implementing the Fire Risk Assessment recommendations. In order to demonstrate good fire safety management practice to any enquiring party I recommend that you document the actions taken in respect of this report within the action plan provided with this assessment. It is recommended that this assessment, together with the completed action plan, be kept in a 'Fire Safety Record Book' together with all other fire safety records.

Remember that the responsible person must make and give effect to such arrangements as are appropriate, having regards to the size of his undertaking and the nature of its activities, for the effective planning, organisation, control, monitoring and review of the preventive and protective measures.

Note that the premises is adjacent to others which have an impact on fire safety – the Regulatory Reform order requires each occupier to advise of significant risks in adjacent premises.

DATE OF ASSESSMENT_____ **24 May 2018**_____

NAME OF ASSESSOR (Print Name)___ **Nicola Jennings Grad IOSH**_____

SIGNATURE OF ASSESSOR *Nicola Jennings*

Qualifications:

NEBOSH Level 6 Diploma in Occupational Health & Safety
NEBOSH Level 3 Certificate in Fire Safety and Risk Management

ACTION PLAN

Priority A: High priority; immediate action required for legislative compliance

Priority B: Medium priority; action required for legislative compliance or responsible fire safety management

Priority C: Low priority; action required, considered good fire safety practice

ITEM No.	ACTION PLAN FOR THE PREMISES	PRIORITY RATING
1	<i>Action</i> <i>Fire training (inc use of extinguishers) for site operatives to include Manager's from Main office</i> <i>Responsible Person</i> <i>Arthur Imrie</i> <i>Review Date – Booked for 14.6.18</i> <i>Completion Date</i>	A
2	<i>Action</i> <i>Provide emergency services box at site entrance to include all contacts, site information, site map etc</i> <i>Responsible Person</i> <i>Arthur Imrie</i> <i>Review Date</i> <i>July 2018</i> <i>Completion Date</i>	A
3	<i>Action</i> <i>Ensure fire drills are carried out on a regular basis at least every 6 months and/or to cover any new employees and record the results in the fire log book.</i> <i>Responsible Person</i> <i>Arthur Imrie</i> <i>Review Date</i> <i>June 2018</i> <i>Completion Date</i>	A
4	<i>Action</i> <i>Ensure all electrical equipment is tested.</i> <i>Responsible Person</i> <i>Arthur Imrie</i> <i>Review Date – PAT testing booked for 11.6.18</i> <i>Completion Date</i>	B

5	Action <i>A fire log book should be kept on site, it should include copies of all relevant documentation i.e. fire risk assessment, drill records, inspection records for the site, equipment, electrical test records etc</i> Responsible Person Arthur Imrie Review Date June 2018 Completion Date	B
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The above action plan shows details of recommended actions in order of priority that should be taken by the responsible person as indicated together with a review date and completion date. This action plan will help in ensuring that the fire safety risk assessment methodology is transferred into positive action.

APPENDIX A PHOTOGRAPHIC DETAILS



Photograph 1



Photograph 2

- 1. Shows the new waste storage bays with fire breaks.**
- 2. Shows the manual fire alarm point at the site entrance.**

APPENDIX B

PRINCIPLES OF PREVENTION AND DEFINITIONS

PRINCIPLES OF PREVENTION.

The principles are—

- (a) avoiding risks;
- (b) evaluating the risks which cannot be avoided;
- (c) combating the risks at source;
- (d) adapting to technical progress;
- (e) replacing the dangerous by the non-dangerous or less dangerous;
- (f) developing a coherent overall prevention policy which covers technology, organisation of work and the influence of factors relating to the working environment;
- (g) giving collective protective measures priority over individual protective measures; and
- (h) giving appropriate instructions to employees.

DEFINITION OF A DANGEROUS SUBSTANCE

- a) a substance or preparation which meets the criteria in the approved classification and labelling guide for classification as a substance or preparation which is explosive, oxidising, extremely flammable, highly flammable or flammable, whether or not that substance or preparation is classified under the European CLP Regulations.
- b) a substance or preparation which because of its physio-chemical or chemical properties and the way it is used or is present in or on the premises creates a risk; and
- c) any dust, whether in the form of solid particles or fibrous materials or otherwise, which can form an explosive mixture with air or an explosive atmosphere.

DEFINITION OF AN EXPLOSIVE ATMOSPHERE

a mixture, under atmospheric conditions, of air and one of a more dangerous substance in the form of gases, vapours, mists or dusts in which, after ignition has occurred, combustion spreads to the entire unburned mixture.

NOTE

Prior to commencing to use and/or store flammable liquids in the workplace, a risk assessment must be carried out by a competent person. Flammable liquids pose a fire and/or explosion risk and **must not be stored** on the premises unless a **suitable fire risk assessment has been undertaken**.

APPENDIX C

Site Map as Fire Prevention Plan

Annex I

APPENDIX E

MATTERS TO BE TAKEN INTO ACCOUNT IN RISK ASSESSMENTS IN RESPECT OF YOUNG PERSONS

The matters which need to be considered and taken into account when a young person (under 18 years of age) is employed or proposed to employed are:-

1. The inexperience, lack of awareness and immaturity of young persons.
2. The fitting out and layout of the premises.
3. The nature, degree and duration of exposure to physical and chemical agents.
4. The form, range and use of work equipment and the way in which it is handled.
5. The organisation of processes and activities.
6. The extent of the safe training provided or to be provided to young persons.
7. The risks from agents, processes and work listed in the Annex to Council Directive 94/33/EC (a) on the protection of young persons at work.

APPENDIX F

MATTERS TO BE CONSIDERED IN RESPECT OF DANGEROUS SUBSTANCES

The matters to be considered and taken into account with respect to dangerous substances stored and/or used are as follows:-

- 1) The hazardous properties of the substance.
- 2) The information on safety provided by the supplier including information in any relevant safety data sheets.
- 3) The circumstances of the work including:-
 - a) The special, technical and organisational measures and the substances used and their possible interactions.
 - b) The amount of the substances involved.
 - c) Where the work involves more than one dangerous substance, the risk presented by each substance in combination.
- 4) Activities, such as maintenance, where there is a potential for a high level of risk.
- 5) The likelihood that an explosive atmosphere will occur and its persistence.
- 6) The likelihood that ignition sources, including electrostatic discharges, will be present and become active and effective.
- 7) The effect of measures which have been or will be taken pursuant to the Regulations.
- 8) The scale of anticipated effects.
- 9) Any places which are, or can be connected via openings to, places in which explosive atmospheres may occur, and
- 10) Such additional safety information as the responsible person may need in order to complete the assessment.

MEASURES TO BE TAKEN IN RESPECT OF DANGEROUS SUBSTANCES

In applying measures to control risks the responsible person must, in order of priority:-

- 1) Reduce the quantity of dangerous substances to a minimum.
- 2) Avoid or minimise the release of dangerous substance.
- 3) Control the release of dangerous substance at source.
- 4) Prevent the formation of an explosive atmosphere, including the application of appropriate ventilation.
- 5) Ensure that any release of a dangerous substance which may give rise to risk is suitably collected, safely contained, removed to a safe place, or otherwise rendered safe, as appropriate.
- 6) Avoid:
 - a) Ignition sources including electrostatic discharges; and
 - b) Such other adverse conditions as could result in harmful physical effects from a dangerous substance; and
- 7) Segregate incompatible dangerous substances.

The responsible person must ensure that mitigation measures are applied and include:-

1. Reducing to a minimum the number of persons exposed.
2. Measures to avoid the propagation of fire and explosions.

3. Providing explosion pressure relief arrangements.
4. Providing plant which is constructed to withstand the pressure of an explosion.
5. Providing pressure relief arrangements.
6. Providing suitable personal protection equipment.

The responsible person must:-

- 1) Ensure the premises are designed constructed and maintained so as to reduce risk.
- 2) Ensure that suitable special, technical and organisational measures are designed, constructed, assembled, installed, provided and used so as to reduce risk.
- 3) Ensure that special, technical and organisational measures are maintained in an efficient state, in efficient working order and in good repair.
- 4) Ensure that equipment and protective systems meet the following requirements:-
 - a) Where power failures can give rise to the spread of additional risk, equipment and protective systems must be able to be maintained in a safe state of operation independently of the rest of the plant in the vent of a power failure.
 - b) Means for manual override must be possible, operated by employees competent to do so, for shutting down equipment and protective systems incorporated within automatic processes which deviate from the intended operating conditions, provided that the provision or use of such means does not compromise safety.
 - c) On operation of emergency shutdown, accumulated energy must be dissipated as quickly and as safely as possible so that it no longer constitutes a danger, and
 - d) Necessary measures must be taken to prevent confusion between connecting devices.
- 5) Where the work in hazardous places or involves hazardous activities, ensure that appropriate systems of work are applied including:-
 - a) The issue or written instructions for the carrying out of the work, and
 - b) A system of permits to work with such permits being issued by a person with responsibility for this function prior to the commencement of the work concerned

APPENDIX G

ARSON PREVENTION

Recent studies show that the majority of property fires in the UK are often found to have been started deliberately. All premises can be targeted either deliberately or just because they offer easy access.

Many businesses never recover from an Arson attack.

There are a number of strategies that can be adopted to try and minimise the risk to arson of your premises.

You should be aware of any other deliberately set fires in your area which may act as an indicator of increased risk to your premises and you should also be aware of any small 'accidental' fires on your own premises and investigate them fully. They should be reported to your local authority Fire and Rescue Service for investigation and if necessary you might consider bringing in a specialist fire investigator. Fires started deliberately can be particularly dangerous because they generally develop much faster and may be intentionally started in escape routes. Of all the risk reduction measures, the most benefit may come from efforts to reduce the threat from arson.

Measures to reduce Arson

1. Ensure that the outside of the premises is well lit and, if practical, secure the perimeter of the premises.
2. Thoroughly secure all entry points to the premises, including windows and the roof, ensuring that the 'means of escape' is not compromised, in particular making sure that any people working alone still have adequate means of escape.
3. Make sure that combustible rubbish is cleared regularly.
4. Do not place rubbish skips adjacent to the building. Large waste bins should be in a secure compound separated from the building.
5. Encourage staff to challenge people acting suspiciously.
6. Remove automatic entry rights from staff who have been dismissed.
7. Ensure that any security/fire alarm is monitored and acted upon.
8. Secure flammable materials and substances so that intruders cannot use them.
9. Fit secure metal letterboxes on the inside of the mail flaps to contain any burning materials that may be pushed through.
10. Deter any unauthorised entry on site and also control entry of all other persons coming on site.
11. Take positive steps to reduce opportunities for arson attempts.
12. Reduce the scope for potential fire damage.
13. Reduce the subsequent losses and disruption resulting from fire by preparing a recovery/disaster plan.
14. Maintain security of the main access door in the event of a fire.
15. Recognise and resolve security/means of escape issues and conflicts.
16. Small rubbish bins used within the building should be made of metal, NOT plastic or wicker.