FIRE PREVENTION MANAGEMENT PLAN

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Version	Date	Amendments
Original	August 2020	
Revision 1	January 2021	Numerous amendments made throughout the document further to comments made after review by NRW of Permit Application PAN-011388
Revision 2	February 2021	Updated annual permissible tonnage from <35,500 tonnes per annum to <32,500 per annum. Numerous changes, particularly with regard to fire detection and fire fighting strategy in Sections 3.5 and 3.6. Updated Site Plan to reflect changes within FPMP text.
Revision 3	March 2021	Included further information about when each 40,000 L tank will be used in the event of a fire, and management techniques to be implemented

DUNCAN MCKENNA – CWMGWILI

FIRE PREVENTION MANAGEMENT PLAN

Contents **Page**

1.0 FIRE PREVENTION PLAN

This Fire Prevention Plan has been prepared as part of on-site Operational Documentation in support of a proposed waste transfer station at Land Adjacent to Ty-Newydd, Cwmgwili, Llanelli, Carmarthenshire, SA14 6PT.

The Operator of the Facility will be Mr Duncan McKenna, hereby referred to as 'the Operator'.

Natural Resources Wales Guidance Note 16 'Fire Prevention & Mitigation Plan Guidance – Waste Management' August 2017 describes the waste activities for which fire risk is a key issue and for which a Fire Prevention Plan is required.

Some of the proposed materials to be accepted at the Cwmgwili Waste Transfer Station are flammable, and as a result, a Fire Prevention Plan is required to minimise the risks associated with the storage and handling of combustible materials associated with waste activities.

The plan will be updated and reviewed in accordance with the requirements of the site management systems. As the Facility is not yet operational, it is also proposed to update this document following site commissioning to provide further detailed information where necessary on the proposed mitigation measures to be installed.

This document forms part of the Permit application for the proposed Facility and the commitments made in this report will be implemented upon full commissioning. This Fire Prevention Plan is intended to be used as a stand-alone working document for operational staff on a day to day basis. It outlines the main potential fire sources at the proposed site, the mitigation measures to be used to reduce the risk of fire and the monitoring and reporting methods to be used when the site becomes operational.

It will be reviewed regularly and revised as required. This document provides information to support an Environmental Permit Application to provide details of the operational techniques that will be used to minimise and control emissions from the proposed waste transfer station.

1.1 Aim and Objectives of the Fire Prevention Plan

This Fire Prevention Plan has been compiled based on the requirements of Natural Resources Wales Guidance Note 16 'Fire Prevention & Mitigation Plan Guidance – Waste Management' August 2017. This guidance document outlines the standards which must be followed when storing combustible materials at permitted sites.

The aim of this Fire Prevention Plan is to identify sources of combustible materials, possible causes of fires and to minimise the risks of fire at the Facility.

1.2 Site Location

The full site address is listed below: -

Land Adjacent to Ty-Newydd
Cwmgwili
Llanelli
Carmarthenshire
SA14 6PT

1.3 Nearby Sensitive Receptors (Within 1km)

Details of nearby sensitive receptors are available for review in Table 1 overleaf. Details include distance and direction from site, addresses and telephone contact details where available: -

Table 1 – Sensitive Receptors Identified Within 1km of the Site: -

Receptor Name	Receptor Address	Distance and Direction from Site	Company Details (if Applicable) and Telephone Contact Details
Unnamed Tributary of Afon Gwili	n/a	60m (S) 135m (E) 145m (NW) 505m (SW) 575m (NW)	n/a
Tŷ Llwyd Fâch	Tŷ Llwyd Fâch, Thornhill Rd, Llanelli SA14 6PT	140m (W)	n/a
Adept GRP	Unit 4/Heathfield Ind Est/Thornhill Rd, Llanelli SA14 6PT	250m (SE)	01269843355
Caeau Mynydd Mawr SAC	n/a	255m (N)	n/a
Caeau Ffos Fach SSSI	n/a	255m (N)	n/a
Broad Oak and Thornhill Meadows SSSI	n/a	270m (NE)	n/a
Pendragon Waste & Skip Hire Ltd	Tyllwyd Isaf, Thornhill Rd, Penygroes, Llanelli SA14 6PT	305m (SW)	01269844270
Caeau Lotwen SSSI	n/a	360m (SW)	n/a
Plas Y Bryn Nursing Home	Thornhill Rd, Cwmgwili, Penygroes, Llanelli SA14 6PT	420m (S)	01269844454
Afon Gwili	n/a	470m (SW)	n/a
Cwmgwili Village	Cwmgwili Penygroes Llanelli	655m (S)	n/a
Cae Gwynfryn SSSI	n/a	675m (SW)	n/a
Parc Menter Industrial Estate	Parc Menter Cross Hands Llanelli SA14 6RA	805m (NW)	NR Evans Logistics - 01269842330 Wincanton Logistics 01269833754 Combidrive – 01269834848 SA15 Car Sales - 07812335015 Absolute Motocross - 01269844009
Felin Fach Meadows (Cwmgwili) SSSI	n/a	920m (S)	n/a
Ron Skinner & Sons	11b Heol Parc Mawr, Cross Hands, Llanelli SA14 6RE	925m (N)	01495713400
Castell Howell Foods Ltd	Cross Hands Food Park Cross Hands Llanelli Carmarthenshire SA14 6SX	945m (NW)	01269846060
Shufflebottom Ltd	Business Park, Heol Parc Mawr, Cross Hands, Llanelli SA14 6RE	980m (N)	01269831831
Welsh Holiday Lettings	Preswylfa, Pontardulais Rd, Cross Hands, Llanelli SA14 6PD	980m (W)	n/a
Capel Hendre Park	55 Banc Y Ddraenen, Capel Hendre, Ammanford SA18 3SR	990m (E)	n/a

1.4 Facility Operations

The site's proposed operational use is as a household, commercial and industrial waste transfer station, with no building processing both non-hazardous non-biological and non-hazardous biological waste totalling circa <32,500 tonnes per annum.

The proposed operations to be undertaken at the site are: -

- <32,500 tonnes per annum of residential, commercial and industrial waste will be separated and then bulked for onward transfer to recycling, recovery or landfill outlets; and
- Up to 20 skips to be accepted on any one working day. No more than 40 tonnes of waste is expected to be accepted on site per working day.

An approximate expected breakdown of accepted materials is ~60% wood and similar, ~30% general skips, ~5% metal and ~5% construction materials.

A full list of waste types to be accepted at the installation is shown below: -

- **17 01 01** Concrete;
- **17 01 02** Bricks;
- **17 01 03** tiles and ceramics;
- **17 01 07** mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06;
- **17 02 01** Wood;
- **17 02 02** Glass;
- **17 02 03** Plastic;
- **17 04 01** copper, bronze, brass;
- **17 04 02** Aluminium;
- **17 04 03** Lead;
- **17 04 04** Zinc;
- **17 04 05** iron and steel;
- **17 04 06** Tin;
- **17 04 07** mixed metals;
- **17 04 11** cables other than those mentioned in 17 04 10;
- **17 05 04** soil and stones other than those mentioned in 17 05 03;
- **17 05 08** track ballast other than those mentioned in 17 05 07;
- **17 08 02** gypsum-based construction materials other than those mentioned in 17 08 01;
- **17 09 04** mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03;
- **20 01 01** paper and cardboard;
- **20 01 02** Glass;
- **20 01 10** Clothes;
- **20 01 11** Textiles;
- **20 01 38** wood other than that mentioned in 20 01 37;
- **20 01 39** Plastics;
- **20 01 40** Metals;
- **20 02 02** soil and stones;
- **20 02 03** other non-biodegradable wastes.

A Site Plan is included in Appendix A showing the general layout which will be amended once the site is constructed to show aspects which may affect fire risk e.g. water sources, receptors, drainage, access to site and the location of wastes and hazardous materials on-site.

Waste is brought to site in covered vehicles where is it then unloaded for segregation into its individual components. Soils, hardcore and wood are stored in their own dedicated skip, whilst cardboard, paper and metal are stored in separate dedicated covered skips. This is the same for all other waste materials, which each have dedicated covered skips for storage.

The following principles are proposed for the waste transfer station: -

- There will be no stockpiling of material on the site at any time;
- All materials will be stored within suitably sheeted/covered skips or containers kept on the site impermeable hardstanding;
- A maximum of 300 cubic meters of material is proposed to be kept at the site at any one time, which would equate to ten, full, 40 cubic yard roll on-roll off containers;
- Each skip/container kept at the site will be clearly labelled to ensure the correct material is placed within it;
- The business however benefits from the timely import and export of sorted material from the site to generate site turnover, which is the approach the operator will be taking. Wastes are therefore not intended to be stored on the site for the long term;
- Skips of mixed waste brought to the site will be tipped onto the hardstanding pad and immediately sorted into constituent components, with these placed in their respective skips/containers at the site;
- No fuel will be kept or brought onto site. No refuelling will be undertaken on site;
- No maintenance work will be undertaken on site;
- All waste delivered to the site will be by appointment only, to prevent unauthorised material from being brought to site;
- Prior to delivery, the type of waste (determined by EWC) and volume of material/skip will be identified and confirmed to the site manager;
- The Site Manager will then co-ordinate and agree delivery times;
- Following delivery of the material to site, a visual inspection will be undertaken to identify any unauthorised materials. The waste transfer note for the material will also be reviewed, with the codes checked against those confirmed prior to delivery and visually against the material present in the skip;
- Only if your permit allows the waste identified and it meets the description given in the waste transfer note will the site manager allow the skip to be left at the site;
- Visual checks will be carried out at the weighbridge on site;
- Where unauthorised material is detected prior to the skip being tipped, it shall be rejected from site;
- Where unauthorised material is detected after the skip is tipped, the material shall be quarantined in a dedicated skip/container kept at the site for this purpose. The quarantined material shall then be disposed of off-site to a suitably licensed facility and an investigation undertaken into the presence of the unauthorised material, as per section 3.2 of this document.

Potentially combustible wastes include wood, general waste and cardboard which are present in the quantities detailed in Table 2 below: -

Table 2 – Combustible Waste Types and Storage Capacities

Combustible Material Type	Containment	Maximum Site Storage Capacity (m^3)
Wood	Up to 10x Covered Roll On Roll Off Skip	**300m^3 in total** Combination of 10 x 30m^3 skips of varying waste types, **not to exceed** total of 300m^3
General waste (comprising household & industrial non-hazardous wastes e.g. plastics, wood, metal, paper, textiles)	Up to 10x Covered Roll On Roll Off Skip	
Cardboard	Up to 10x Covered Roll On Roll Off Skip	
Organic Material	Up to 10x Covered Roll On Roll Off Skip	

1.5 Management of Risk from Fire

In the event of a fire, site personnel and users of the nearby adjacent Thornhill Road are most at risk from fire and smoke respectively. It is unlikely that a fire will impact local residents due to their proximity to the site however combustion products may have a local and temporary impact depending on weather conditions at the time of any incident. A Location Plan is included in Appendix A which includes nearest residential housing areas and watercourses.

1.6 Incident Management

A 'Fire Action Plan' will be developed at the facility which will detail specific actions which must be carried out in the event of a fire. A proposed template for this is provided in Appendix B.

1.7 General Measures to Minimise Fire Risk

The following measures should be employed in order to minimise fire risk on site: -

- Ignition sources will be >6m from combustible materials;
- Signage will be maintained in areas where combustible materials are stored;
- The facility will have a designated smoking area, or staff will smoke outside of the boundary of the facility;
- No hot work will be carried out on-site routinely;
- Should maintenance require hot works to be carried out, procedures will be in place to minimise fire risk and the site supervisor will approve the procedures prior to works being undertaken;
- Visitors will be informed of the correct safety and fire prevention procedures; information will be provided as part of the site specific induction and by appropriate signage on-site;
- Firefighting equipment will be maintained on site in accordance with fire regulations;
- Site staff will be instructed to read and understand the Fire Action Plan;
- Any incidents of fire will be reported to the Natural Resources Wales and recorded in the site diary;
- Fire extinguishers located at the Facility will be clearly marked and tested to ensure that they are safe and in good working order;
- Site personnel will be made aware of their location and trained in their correct use with training records maintained;
- Inspection of waste processing areas following the end of daily operations, prior to being vacated and after any hot works have been completed is to be undertaken to look out for signs of fire risk;
- No plant or machinery will operate when site is not staffed;
- A dedicated emergency or quarantine area will be incorporated into the design of the site and will be indicated on the site plan following construction;
- Waste acceptance and pre-acceptance procedures will be maintained to ensure that only the permitted waste codes, which do not include any hazardous wastes, including those with oxidising or flammable risk, are accepted;
- No wastes will be burned on-site.

1.8 Storage of Waste to Minimise Fire Risk

No stockpiles of material are proposed on site.

All waste streams are stored in dedicated skips following segregation. Material turnover will be high and in any instance, combustible materials will be stored for less than 3 months.

Access for emergency vehicles is provided via Thornhill Road approximately 120m north-east of the proposed working areas road as shown on the site plan in Appendix A to access all site areas.

Storage areas will be planned to allow access for emergency vehicles as indicated on the Site Plan.

1.9 Actions in The Event of Fire

In the event of a fire, the emergency measures detailed below are in place on-site to minimise the risk of fire spreading. A Fire Action Plan will be developed following construction – see Appendix B for an example.

- Firefighting equipment will be maintained on site in accordance with fire regulations, including portable fire extinguishers;
- Site staff will be fully trained in the Fire Action Plan;
- Any incidents of fire will be reported to Natural Resources Wales and recorded including any root-cause investigations;
- Unburned/ burning material will be separated using on-site machinery where the level of risk permits this activity;
- Water will be applied to fire and unburned material for cooling if the level of risk permits these actions.

1.10 Abnormal Operating Conditions

Operators must also consider what incidents or emergencies might increase the risk of fire in order that they can plan and take appropriate steps to reduce the likelihood of the incident occurring; minimise any impacts if the incident were to occur; and re-establish normal operations as quickly as possible.

Periods of very warm weather can increase the risk of fire. During these periods, additional site inspections will take place with an increased frequency of monitoring of heat within storage skips.

Maintenance operations, routine or otherwise, may increase the risk of fire by introducing potential ignition and heat sources. Separation distances between any ignition sources and combustible wastes will be adhered to. During maintenance operations, additional inspections shall take place with an increased frequency.

1.11 Records and Reporting

Records will be maintained of the following activities on-site: -

- Incidents including post-incident investigation;
- Training / Site Inductions;
- Stock management;
- Training of operatives;
- Site inspections;
- Maintenance;
- Testing of firefighting equipment;
- Complaints.

All records of events and actions taken will be retained as required by the Environmental Permit.

1.12 Notifying the Environment Agency

In the event of a fire, the Operator will notify the Fire Service in the event of an emergency and Natural Resources Wales as soon as practically possible, using the incident 24hr phone line (0300 065 3000). Following the incident, the Site Manager will advise what remedial measures or actions have been taken to prevent further incidents.

1.13 Fire Prevention Plan Review

The Fire Prevention Plan will be reviewed and updated by senior management following construction and annually thereafter or immediately following any major fire incident / event. Any technical and managerial changes on site will also initiate a review of the Fire Prevention Plan to ensure that the control techniques remain appropriate for the site.

2.0 COMMON CAUSES OF FIRES AND PREVENTATIVE MEASURES

The following lists many common causes of fire and preventative measures which will be taken in order to reduce the risk of fire developing at the site: -

- **Arson or vandalism** – Covered skips will be locked outside of operational working hours in order to reduce the risk of intruders vandalising or causing arson at the site. Adequate security measures in the form of locked secure fencing and a recorded CCTV system will be installed to prevent or deter outsider access to the site outside of operational hours. A visitor sign in system will be in place for traceability. In the event of a breach of security at the site, the cause will be investigated, and appropriate mitigation measures implemented. This will be recorded in the Daily Site Log. Records maintained will include inspections and maintenance of doors and locks, breaches of security, and investigations and actions taken;
- **Visitors & Contractors** – All visitors and contractors are to follow the correct safety and fire prevention procedures. All contractors are to undertake a site induction prior to undertaking work. Fire prevention messages will be erected around working areas to further notify visitors of the risk of fire. The muster point in the event of a fire is visible on the site plan in Appendix A - Drawings;
- **Ignition sources** - Naked flames and other sources of ignition must be located >6 metres away from combustible and flammable waste;
- **Self-combustion** – No stockpiles of material are to be stored on site. Waste will be emptied from a skip on arrival onto an impermeable concrete pad, and segregated by hand and excavator into constituent types. Wastes are to be stored in individual labelled skips, and turnover is expected to be high. Visual inspection and temperature testing of material in skips will be undertaken twice daily by the site manager at the beginning and end of the daily shift and the maximum storage time on site for combustible materials is to be 3 months. Only permitted wastes (see Table 3) are to be accepted at the site. Effective stock management limits the likelihood of the self-combustion of materials stored on site;
- **Plant or equipment failure** - A maintenance and inspection programme will be in place for mobile plant and equipment to fit vehicles with fire extinguishers, dust filters and spark arrestors, and where practicable, all excavators are to be fitted with rubber strips to prevent sparks when the bucket comes into contact with hardstanding. Plant and equipment are maintained in accordance with the manufacturer's recommendations. Mobile plant that is not being used will be kept >6m away from combustible waste. Induction training and refresher training is provided to staff in the safe operation of plant and equipment relevant to their role and inspection of plant and equipment to be undertaken on a daily basis to check for faults and ensure appropriate safeguards are in place. In the event of a failure or suspected fault with an item of plant or piece of equipment, the operator will ensure that the equipment is shut off in a safe manner and not used until the equipment can be repaired or replaced.;
- **Discarded smoking materials** - A designated smoking area will be present on site. All staff are instructed to smoke outside of the operational working area to prevent accidental ignition of combustible wastes;
- **Hot works** - All staff and contractors are to follow safe working practices when carrying out hot works such as welding and cutting. A fire watch for where checks immediately after hot work has been undertaken will be implemented once hot works have ceased and in particular at the end of a working day, where additional inspections are to be undertaken. All hot works are to be conducted in a cleared area of the site at least 6m from any combustible wastes;
- **Industrial Heaters** – No industrial heaters are present on site therefore no preventative measures recommended;
- **Plant & Hot exhausts** – A visual check is to be carried out at regular intervals during the working day and at the end of the day to detect signs of a fire caused by dust settling on hot exhausts and engine parts. This is to be undertaken at a minimum of 4 hour intervals. Vehicles are turned off when not in use. Consideration is given to the high-risk time for hot exhausts (one hour after switch off) and wherever possible vehicles are given time to cool down prior to site staff leaving site at the end of a shift. Plant is parked a minimum of 6m from waste storage, minimising potential for exhausts to lead to the ignition of wastes when left unattended following the end of the shift.;
- **Damaged or exposed electrical cables** - Electrics on site are to be fully certified by a qualified electrician and regular maintenance will be undertaken and logged to reduce the risk of fire from exposed or damaged cables;
- **Reactions between wastes –** Waste is only to be accepted on site if there is space for it to be segregated and sorted efficiently and quickly. Accepted waste is to be immediately emptied onto the impermeable slab and sorted into constituent types for storage in their respective skips. Mixed waste types and all other wastes stored on site are to be subject to daily morning and afternoon temperature and visual checks for

the early signs of reaction of fire. Only vehicles that are accompanied by the correct documentation are accepted onto site. Waste undergoes a visual inspection at the point of deposit onto the slab for sorting. A designated quarantine area is made available at all times and the location of the quarantine area is visible on Drawing no.: 275-01-06.D04 in Appendix A;

- **Hot loads deposited at the site** – No hot (producing steam or heat) loads are to be knowingly accepted on site. Each load is visually inspected at the site entrance to ensure compatibility with accompanying delivery notes, minimising acceptance of prohibited wastes and the acceptance of hot loads. Instructions are given to clients to ensure no hot loads are accepted on site. Should a hot load be deposited on site, it will immediately be removed to the dedicated quarantine area and removed from site the same day to a suitably licenced facility for disposal;
- **Build-up of loose combustible waste, dust and fluff** – The site is to be inspected at the end of each working day for the build-up of loose combustible waste, dust and fluff around the site. Where any build-up is noted, this is to be cleaned away;
- **Tramp metal** – All accepted waste is to be pre-sorted and segregated on an impermeable slab prior to being transported into dedicated skips for each constituent waste type. Sorting is undertaken by hand and excavator, and no moving machinery is being utilised on site as part of the process apart from excavators. The fire risk as a result of tramp metal entering moving machinery and causing hotspots has been deemed to be negligible / not applicable for this site;
- **Batteries within waste deposits** - Batteries are not to be deliberately accepted on site as a waste type. Every effort will be made to remove any form of battery units from within accepted wastes – staff to be made aware that batteries are to be removed if identified during waste inspections, with a particular focus being on mixed waste types which are more likely to contain fugitive batteries;
- **Batteries in ELVs** – No vehicles are being accepted on site therefore no preventative measures recommended;
- **Cylinders stored at the site** – although cylinders are not accepted as part of the activities at the site, a designated area has been allocated for cylinder storage should incidental cylinders be identified during activities. The location of the cylinder storage area is visible on Drawing 275-01-06.D04 in Appendix A;
- **Leaks and spillages of oils and fuels** - Fuels and combustible liquids must be prevented from leaking or trailing from site vehicles. Spill kits are to be maintained on site to absorb combustible liquids, and these are to be correctly disposed of to reduce the risk of a potential fire situation.

3.0 WASTE STORAGE TIMES, LOCATIONS, SELF-COMBUSTION RISK AND QUARANTINE

Many materials can self-combust under certain conditions, and the risk generally increases when materials are stored for prolonged periods, whether internally or externally, and in general the smaller the particle size the higher the risk.

No stockpiling of material is undertaken as part of the process. However, the maximum limits for combustible materials to be stored on site are listed in Table 3 below: -

Table 3 – Maximum Storage Time Limit of Combustible Materials on Site

<table>
<tr><th>Combustible Waste Type</th><th>Maximum Storage Time on Site (months)</th><th>Applicable Waste Codes</th></tr>
<tr><td>Non-shredded or similarly treated wastes (that is wastes whose particle size has not been reduced)</td><td rowspan="2">3</td><td>Construction and Demolition Wastes: -

Concrete, bricks, tiles and ceramics

17 01 01 Concrete;
17 01 02 Bricks;
17 01 03 tiles and ceramics;
17 01 07 mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06;

Wood, glass and plastic

17 02 01 Wood;
17 02 02 Glass;
17 02 03 Plastic;

Metals (including their alloys)

17 04 01 copper, bronze, brass;
17 04 02 Aluminium;
17 04 03 Lead;
17 04 04 Zinc;
17 04 05 iron and steel;
17 04 06 Tin;
17 04 07 mixed metals;
17 04 11 cables other than those mentioned in 17 04 10;

Soil (including excavated soil from contaminated sites), stones and dredging spoil

17 05 04 soil and stones other than those mentioned in 17 05 03;
17 05 08 track ballast other than those mentioned in 17 05 07;

Gypsum-based construction material

17 08 02 gypsum-based construction materials other than those mentioned in 17 08 01;

Other Construction and demolition wastes

17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03;

Municipal Wastes (Household Waste and Similar Commercial, Industrial and Institutional Wastes): -

Separately collected fractions (except 15 01)

20 01 01 paper and cardboard;
20 01 02 Glass;
20 01 10 Clothes;
20 01 11 Textiles;
20 01 38 wood other than that mentioned in 20 01 37;
20 01 39 Plastics;
20 01 40 Metals;

Garden and park wastes (including cemetery waste)

20 02 02 soil and stones;
20 02 03 other non-biodegradable wastes.</td></tr>
<tr><td>Shredded and similarly treated wastes (that is wastes whose particle size has reduced)</td></tr>
</table>

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

- Green material, compost, wood and wood products;
- Paper and paper products;
- General/mixed waste including residual waste, RDF and 'fines';
- Tyres (whole or processed);
- Smaller size or graded materials either stored or mixed;
- Material that has not had potential hazards removed before stacking e.g. exposed rust (which can generate heat);
- Treated materials which are not cold before storage (treatment processes can generate heat).

3.1 Management Procedure to Ensure Compliance with Maximum Storage Time Limits

In order to ensure that waste is not stored for longer than the times outlined in Table 3 a management procedure will be in place whereby once an empty skip begins filling in the processing area, the time and date of this is logged within a logbook present in the site office. Each skip will be labelled for their respective waste type.

Given that the expected turnover of waste on site is high, it is unlikely that the waste within the skips will encroach on the maximum storage time limits outlined within Table 3.

A maximum limit of 3 months has for both non-shredded and shredded waste types has been set-out given the anticipated turnover of skips on site. No baled/compacted wastes or combustible fines/dusts & very small particle size waste is proposed on site, therefore no storage recommendations have been outlined within this document or Table 3.

The status of skips within the yard will be reviewed and logged weekly in the logbook, with a note of the time each skip has been present on site being made.

However, in the unlikely event that the waste being stored on site looks set to exceed the designated limit on site, arrangements will be made for the skip to be transported to a different suitably licenced site for disposal, for example, at Pendragon Waste & Skip Hire, based locally in Cwmgwili.

Seasonal variations are likely given the type of industry, whereby construction work is typically higher over the summer months. As such, turnover of waste over the winter months is likely to be lower.

Waste accepted on site is to be on an appointment only basis. Waste arrivals are managed such that on arrival, received wastes within skips are immediately emptied onto the concrete slab within the processing area for sorting into constituent types within their respective skips.

The appointment schedule will mean that skips accepted at the site are manageable and within the means of the processing capabilities of the plant present on site. Skips are only to be scheduled for arrival within the means of the facilities present at the site.

The site will employ a first in first out system, whereby skips and stock which have spent the longest time on site (within the 3-month maximum period as outlined in Table 3) will be rotated such that they are prioritised for filling over skips which have recently started to be filled and so that oldest material is removed first. This is particularly important for winter months, where reduced turnover is anticipated.

The logbook present in the site office will flag any skips which are at potential risk of exceeding the designated time (3-months) on site, and these will be prioritised over those which have just started filling.

In order to mitigate for this reduced turnover of waste, it is not proposed that an empty skip of the same waste type start to be filled until the previous one has been filled and left the site, so as to try and ensure quick turnaround of skips on site and reduce the time waste spends on site.

Skips which are approaching or have reached the maximum 3-month storage limit are to be sent off site for disposal at a suitably licenced facility even if they are not at maximum capacity. No skips are to be kept on site for longer than the maximum permitted 3-month duration.

Once the skip leaves the yard, either due to being filled or due to having to be sent to an alternative yard due to approaching the maximum permitted time limit on site, this will be logged and the record within the logbook closed off accordingly.

3.2 Waste Acceptance and Rejection

The site will follow strict waste acceptance and rejection procedures to ensure that no nonconforming waste is accepted on site. The procedure includes the following key points: -

- Each incoming load will be visually inspected as it is deposited. Particular attention will be given to the identification of batteries and non-conforming waste;
- The waste transfer note for the material will also be reviewed, with the codes checked against those confirmed prior to delivery and visually against the material present in the skip.
- Where unauthorised material is detected prior to the skip being tipped, it shall be rejected from site;
- Where unauthorised material is detected after the skip is tipped and if it is safe to do so, non-conforming waste will be moved to the quarantine area. Where required, a specialist contractor will be contacted to remove the waste from site within 24 hours;
- Any non-conforming waste deemed to be unsafe to move to the quarantine area will be cordoned off and site operations/traffic movements in that area will be suspended;
- All details will be recorded in the site diary and an incident report form is completed.

3.3 Waste Stacking Protocol

No waste is to be stacked. Waste is to be segregated on arrival and placed into designated skips.

3.4 Waste Stored in Skips

Waste stored in containers must be individually accessible so any fire inside it can be extinguished. In the event of a fire, skips must be able to be moved as soon as is reasonably practicable in a safe manner to prevent the fire spreading.

The following has been considered when determining the location of combustible material containing skips on site:-

- Proximity to potential ignition sources on the site;
- Location of high-asset value equipment and plant in relation to the skips;
- Escape and evacuation routes must not be compromised by skip layout in the event of fire;
- Location of flammable and/or hazardous substances kept on site, such as diesel tanks, quarantine areas which may contain non-conforming wastes etc.;
- Locations of water supplies and fire-fighting equipment – these must not be blocked by skip layout;
- Proximity and locations of any infrastructure which may be affected by a fire, such as overhead power lines, roads, etc.;
- Proximity and location/s of any off-site, third party buildings which may be affected by a fire;
- Permitted amounts of wastes, and types of waste, allowed on site;
- Proximity of ‘quarantine’ area, as appropriate to site specifics;
- Operational practicalities including movements of vehicles & designated routes;
- Stock rotation requirements, seasonality of supply/off-take etc.

The proposed locations of the storage skips, including the material types stored within each area have been selected so as to ensure they remain a suitable distance away from the proposed quarantine area on site and so as to ensure transfer to the quarantine area would be non-obstructed and efficient in the event of a fire.

Furthermore, flammable materials, such as wood, paper and cardboard skips have been located as far away as reasonably practicable from the quarantine area (although still within the processing area and still within close enough distance for easy transportable to the quarantine area) so as to further reduce the potential for fire to spread from the quarantine area to these skips in the event of a site incident.

In order to ensure the areas in which material types are stored remain consistent and are easily visible and maintained by staff, painted onto the concrete slab around each respective area to ensure that the process skips remain within these locations.

Individual dedicated material skips are not to be blocked under any circumstances, and the front should remain unobstructed at all times. This is to ensure that in the event of an emergency, the skip can be easily transported with no obstruction to the quarantine area, and so as to ensure that access to the skip remains open to allow fire fighting techniques to be employed and the fire to be extinguished.

Good housekeeping it to be employed at all times, and two 40-yard storage containers will be present on site for the storage of equipment when not used.

The location of the skip storage in relation to other site infrastructure, including the dedicated quarantine zone, is visible on the site plan visible on Drawing No.: 275-01-06.D04 in Appendix A – Drawings.

3.5 Fire Detection and Inspections

It is important to ensure that any signs of a potential fire are detected and addressed quickly. Given the size of the site and proposed activities, automated systems for fire detection are not considered necessary in order to manage the site safely and detect potential fires quickly.

Skips are to be inspected twice daily by the site manager for signs of fire. A temperature probe will be used to inspect each skip twice daily, both in the morning and before shift end in the afternoon. The probe will monitor two locations within each skip, approximately 1m from either end, into a 1m depth within the waste. A logbook will be maintained of the temperatures monitored of the waste in each skip and times each inspection is undertaken.

Temperature should be used as an indicator for the potential development of a hot spot and for identifying its most likely location. A summary of Environment Agency recommended trigger values for temperature is given in Table 4 below: -

Table 4 – Recommended temperature trigger values

Trigger Temperature	Remarks
>10ºC above normal operating temperature	Where the site has a good record of background temperature monitoring, further investigation should be carried out.
>60ºC	Temperatures above 60ºC are higher than typical anaerobic waste temperatures and so further investigations should be undertaken.
>80ºC	A hot spot may be present or may develop at the site.

When temperatures are found to exceed the trigger values in Table 4 above, actions are to be taken to mitigate against the potential outbreak of a fire.

If any signs of overheating waste (increased temperature / smoke etc.) are detected within a skip, the affected waste will be separated and isolated, temporarily, within the quarantine zone until it has cooled, after which it is to be re-processed.

Any signs of small fire, smouldering and so on will be extinguished by fire extinguisher in the first instance. In the event that the fire is unable to be controlled by extinguisher, the fire fighting strategy outlined in Section 3.6 will be employed.

Fire extinguishers will be present on site in both the office and externally.

3.6 Firefighting Strategy

A number of different remediation techniques are available for fighting fires. These are summarised in Table 5 overleaf: -

Table 5 - Summary of Remediation Techniques

	Shallow hot spot (<5m depth)	Deep hot spot (>5m depth)	Element of fire triangle controlled
Seal off sources of air ingress	Common control measure but unlikely to extinguish fire. Can include smothering or placement of improved cap.	Commonly undertaken. Usually involves sealing specific points of air ingress. Smothering has less effect with depth.	Reduction of oxygen.
Excavation	Commonly undertaken	Less likely to be undertaken with increased depth.	Removal of heat.
Dousing	Commonly undertaken, often in conjunction with excavation.	Commonly undertaken, usually by injection into the waste mass. Requires a targeted approach to increase chances of success.	Removal of heat and reduction of oxygen.
Ponding (allowing leachate level to recover and flood hot spot)	Unlikely due to close proximity of hot spot to surface.	Effective if hot spot within permitted leachate recovery zone.	Removal of heat and reduction of oxygen.
Inject inert gas	Potential but unlikely to be cost effective.	Potential but only if exact location of core is known and injection can be targeted to hot spot core.	Removal of oxygen, some reduction of heat depending on the gas used.
Inject liquid carbon dioxide	Not reportedly undertaken for shallow hot spots.	Undertaken in Hawaii at a depth of 5–7m.	Removal of oxygen and heat.
Grouting	Unlikely due to cost.	Possibility, little published data but some reported success.	Removal of oxygen; seal off hot spot from fuel.
Perimeter cut-off trench	Potential in shallower waste, has been used to identify the hot spot location and restrict migration.	Less likely, as depth of hot spot makes solution impracticable.	Seal off hot spot from fuel and reduction in oxygen supply.

Excavating hotspots

This technique involves removing the affected material, extinguishing all burning or smouldering waste and cooling the waste and hot spot area. Typically, this is done by excavating the waste mass, spreading or placing the waste in thin layers and then dousing it thoroughly.

The waste is then inspected to ensure that all smouldering is extinguished and that its temperature has fallen to acceptable levels prior to re-processing. Excavation can also be used as part of the investigation into the location of the hot spot.

Other strategies include dousing the waste with water as the work approaches the hot area, cooling the hot spot before it is exposed. The hot waste must be spread and doused quickly once it has been lifted. The direction of the wind must be considered in advance in order to minimise exposure of the working team as the waste is exposed.

It is important that site access is maintained to allow for active firefighting in the event of a fire - this will help allow a fire to be extinguished within the shortest time possible. This means skips must be easy to access, with areas left clear for access by firefighting services if required. Active firefighting means having the resources available on site at all times to fight a fire.

The following lists resources present on site and the strategy to be employed in the event of a fire at the site: -

- Fire extinguishers are to be stored externally, near to the quarantine area. These are to be used in the first instance if signs of a fire are identified in order to extinguish any smouldering material;
- In the event of a fire, heavy mobile plant will be used to move waste from the affected area to the quarantine zone. This plant will also be used to separate unburned material from that which is ablaze. The plant to be utilised on site includes;
    - a Volvo ECR84C 5 tonne tracked mini-excavator;
    - Kubota 8 tonne tracked excavator; and
    - Telehandler with 7m reach.
- All plant possess enclosed cabs and heat protected hydraulic systems which are all utilised within the normal waste separation and transport process on site;
- All three pieces of heavy plant are to be utilised in the event of a fire, dependant on the situation, scale and nature of the fire. The 8 tonne excavator will be used to initially extract ablaze material from the skips, whilst the 5 tonne excavator and telehandler are more suited from transportation of the material to the quarantine area for fire fighting;
- If a fire is recorded on site, the alarm must be raised on site, and staff and visitors not involved in fighting the fire must gather in the muster point as visible in the site plan in Appendix A;
- Three water points are present on site (see Drawing No.: 275-01-06.D04 in Appendix A for locations). Hoses present within the site office will be connected to these water points and utilised to fight the fire of the transported material which will have been moved to the quarantine zone as above;
- Run-off from fire fighting within the quarantine zone will enter the foul drainage system to a tank for removal from site. Once extinguished, the skip will be moved to a temporary location on the process area ready for disposal by a licenced waste acceptor;
- Heavy plant listed above is used for site activities and is present on site for immediate use in the event of a fire where required. The plant is stored on the process area at night, away from any filled skips, and the site operator lives ~100m from the main site thus mobilisation of plant outside of operational hours in the event of emergency can be done quickly and efficiently with no anticipated delay. If a fire is identified outside of operational hours, emergency services will be contacted in the first instance to inform them of the incident and outline the plans to fight the fire prior to their arrival. The initial fire fighting strategy will remain the same as outlined above, with extinguishers being used in the event of smouldering, and movement to the quarantine zone and use of water hoses on site to tackle a larger fire;
- Staff members who attempt to suppress or fight the fire are to have fire safety training, included within the site induction which is to be refreshed on an annual basis and the necessary qualifications required to utilise heavy plant for movement of material to the quarantine area. Staff are to receive training on the use and selection of fire extinguishers, site evacuation procedures and fire safety and emergency protocol;
- In the event that the fire is uncontrollable, attempts to extinguish the fire should be ceased and the emergency services contacted for assistance with dealing with the fire. The protection of the health and safety of staff and visitors on site must be the first priority at all times.

3.7 Water Supply and Management of Firewater Run-off

A 300m³ stack of combustible material will normally require an average water supply of at least 2,000 litres a minute for a minimum of 3 hours.

Using the above guide, and based upon a maximum waste volume of 30m³, a fire of the largest waste ‘stack’ present on site would require a water volume of 200 litres per minute for a minimum of 3 hours, equating a total amount of 36,000 litres.

Two tanks will be utilised for fire fighting purposes. A dedicated 40,000 litre clean water tank will be present in close proximity to the quarantine area. This will always be full, and in the event of a worst case fire (30m³) breaking out on site, will have the capacity to put out this fire. In addition, a below ground 40,000 litre tank will also be present on site for dirty surface water (constituting of rainwater from the process area) which can also be utilised for fire fighting purposes.

The 40,000 litre dedicated fire fighting water tank will be present and filled at all times. This ensures that, when the below ground 40,000 litre dirty water tank is empty (for example, during dry periods, or if it has been recently emptied for disposal off site), the site will always have the capacity to fight a worst-case fire on site.

Furthermore, if the below ground dirty water tank contains sufficient water (for example, after heavy rainfall periods or when close to full prior to being tankered away or indeed as a result of fire fighting activities) water from this tank can be used instead of that from the dedicated fire fighting water tank. The below ground dirty

water tank is to be dipped for level / capacity on a daily basis and logged within the site register. In the event that a fire occurs on site, the logbook will be consulted, and the dirty water tank used for fire fighting when the capacity is over half (>20,000 litres).

The tank accepts surface water from the processing area and from the quarantine area so as the water is being used for fire fighting, it will drain back into the tank for reuse.

A Honda WB30 3" Petrol Powered Water Pump will be located on site at all times. The maximum pumping rate of the water pump is 1100L / min, which will be adjusted accordingly and will provide an ample pumping rate (minimum 200L / min) for a fire of the largest stack on site where necessary.

In addition, 3x 1" water supplies with associated hoses will also be present on site. These will be connected from a 2-3" water main running from the main road to residential properties west of the site.

By using a combination of hoses from the water points present on site and the recycled water within the 'dirty' surface water tank on site, this will provide enough water to cover tackle a blaze of the largest stack present on site if this occurs.

In the event of a fire, there it the potential for run-off in excess of normal quantities of rainwater to overwhelm drainage capabilities of the site. Spill kit bunds will be utilised to prevent run-off leaving the dirty area of the site and encroaching onto the freshwater drainage system.

Using a combination of the surface dimensions of the slab processing area in which the spill kit bunds would be placed, along with those of the spill kit bund itself, it is possible to determine the capacity of the slab to store fire fighting water in a worst case scenario event; for example, if the dirty water tank is full (40,000 litres) and is unable to be used for fire fighting purposes, necessitating the use of the dedicated 'clean' firefighting water tank.

The calculation is as follows: -

- 33 m (W) x 21m (L) x 0.1 m (Spill Kit Height) = 69.3 m^3

From the above, it can be concluded that in a worst case scenario event, the processing area slab has sufficient capacity to store the full contents of either tank (40,000 litres) should this ever be required.

Furthermore, a non-return shut off valve present on the interceptor discharge point is to be closed in the event of a fire as an additional precaution.

Once the fire has been successfully extinguished and the site made safe, any excess water remaining on the site within the bunded areas is to be pumped into dirty-water below ground tank for discharge away from site.

In a situation such as the worst case scenario listed above, the dirty water tank is to be emptied and disposed of appropriately, and the holding water on site to be pumped into the dirty water tank until cleared. The site processing/quarantine areas are then to be cleaned down, whilst the bunds are still in place to ensure contaminated run-off enters the dirty water system for disposal away from site.

3.8 Designated Quarantine Area

A quarantine area is a designated area present on site in which fire affected waste is placed to separate it from the rest of the site safely and to allow the fire to be extinguished in a controlled and safe manner. The quarantine area is essential to help reduce the risk of the fire spreading on site. In addition, unburned wastes can be moved into the quarantine area for isolation and to help prevent it catching fire.

The quarantine area will always maintain a separation distance of at least 6m on all sides (where not adjacent to a wall). The quarantine area will be used to store unburned waste that has been separated from any burning waste to prevent any further fire spread.

The quarantine area must be located within the permitted boundary area of the site and should be large enough to both: -

- Hold at least 50% of the volume of the largest waste stream ($15m^3$);

- Have a separation distance of >6 metres around the quarantined waste.

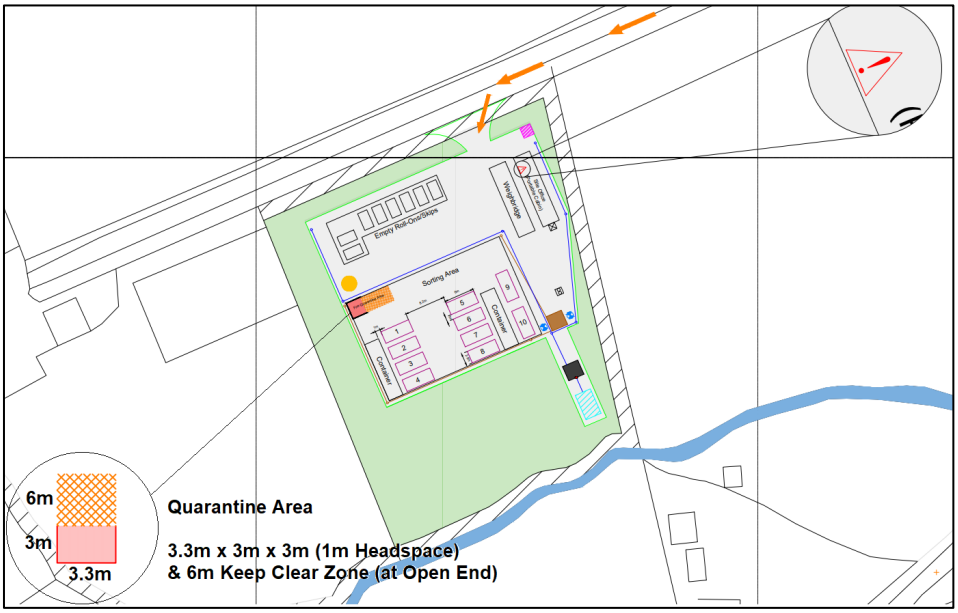
In order to achieve a minimum capacity of 50% of the waste stream (15m^3), the quarantine area has been designed to consist of a 3-walled concrete enclosure of 3.3m length, 3m width and 2m height capacity, with an additional 1m headspace width, totalling a storage volume of 19.8m^3. A 6m 'keep clear' separation distance will be maintained at the open front end of the bay in which no activity or storage can be undertaken under normal circumstances. This area is to be marked on the slab by line paint to ensure this is complied with.

The quarantine area walls are to be constructed from Legioblock walls, precast concrete fire wall panels or similar, and must be rated to withstand a fire resistance period of at least 120 minutes A headspace of 1m is maintained at the top of the sides and back the bay. Lines drawn on the inside walls will indicate the maximum height and width of each stockpile ensuring the maximum volumes are adhered to.

The specification of the concrete used to construct the quarantine area is to be included to the FPMP once sourced and constructed.

The location of the quarantine area is flexible, however at least one specified quarantine area clear at all times - unless it is being used in the event of a fire. The site quarantine area is visible in Figure 1 overleaf: -

Figure 1 – Location of Quarantine area



If the quarantine area is used to store material temporarily (for example, non-permitted wastes) this waste should be removed as soon as is reasonably practicable. In the event of a fire, these wastes must be moved immediately and placed within an empty skip for temporary storage.

Site Management will instruct all site operatives when and how the unburned waste, or any undetected hot loads delivered accidently to site will be moved to the quarantine area. The following procedure will be implemented on site: -

- When it is safe to do so, the waste will be moved by on site plant to the quarantine area;
- The movement of the waste will be overseen at all times by the Site Manager to minimise any spillages and ensure the area is not overfilled;

To limit any spillages, plant will not be overfilled when moving the waste. All site operatives will be trained to follow this FPMP and all procedures listed in the above sections.

3.9 During and After an Incident

In the event of a fire during the working day all site processing operations will cease, no waste will be accepted to the site and all machines not involved in fire fighting must be switched off and moved to a safe location on the site.

In the event of a fire outside normal operating times the site will not reopen until it is safe to do so without risk to the environment. Contingency arrangements for the diversion of waste will be activated to redirect any incoming wastes to nearby sites, with the nearest suitable site being operated by Pendragon Waste & Skip Hire, based locally in Cwmgwili.

Local residents are to be notified of an incident potentially developing at the site, with a member of staff being allocated to inform residents nearby and in the community of Cwmgwili, and in the event of a serious fire, the emergency services will be contacted for assistance.

3.10 Small Fire

A small fire or area of smouldering waste will be dealt with as follows: -

- A fire or area of smouldering waste will not be dealt with in-situ, mobile plant will be utilised to pull the affected waste into the open and away from any further waste that could become alight on contact;
- Depending on the size / nature of the fire the waste will either be: -
    - Extinguished immediately utilising the fire extinguishers or hose reels (Should a single item of the waste stream be alight, and the fire is well contained, then the waste will be doused via use of an extinguisher/hose as it is pulled from the waste pile. The burned and/or fire damaged portion will then be removed to the quarantine area and the remaining waste returned to the pile if it is safe to do so);
    - Moved to the quarantine area and extinguished.

Depending on the size, location and nature of the fire the burning waste will be pulled into the dedicated fire prevention quarantine area. Once a small fire is dealt with the remaining area will be visually inspected immediately by site operatives for any signs that a fire / smouldering waste still remains. The same procedure, detailed above, will be undertaken again should this be the case.

3.11 Uncontainable Small Fire or Large Fire

The following procedure is in place on site that will be followed in the event of a small fire becoming uncontainable or in the event of a major fire onsite: -

- The Site Manager and emergency services will be contacted immediately. NRW to be notified as soon as is reasonably practicable;
- Following arrival of the emergency services, all site staff will await further instruction from them. The following actions may be undertaken if instructed or approved by the emergency services to provide further assistance if it is safe to do so: -
    - Continue to dampen down waste that is unburned to prevent the fire from spreading further;
    - If possible, separate unburned waste from the fire using heavy plant;
    - Site and office buildings to be evacuated.

3.12 Management after a Fire Event

After a fire event, the following procedure will be implemented depending on the severity of the fire: -

Small and containable fire safely dealt with in-house using suitably trained staff and fire fighting equipment located on site: -

- The fire will be recorded in the site diary, including the causes of the fire and methods used to manage the fire. An assessment will be carried out to determine whether further mitigation measures could have prevented the fire. Any outcomes to be implemented onsite will be incorporated within this FPMP and the site's EMS as required.

A larger fire that requires the presence of the emergency services: -

- If the site operator has been told to evacuate or instructed to cease operations by the NRW and/or the emergency services, the site will remain closed until told safe to re-enter and resume operations.

- All incoming waste will be diverted to nearby authorised facilities such as the locally based Pendragon Waste & Skip Hire site, and no waste collections will take place during the fire event. Any closure of the site will be followed by informing customers and the regulatory authorities.

- The fire will be recorded in the Daily Site Log and in an incident report and will detail the causes of the fire and methods used to manage the fire. An assessment will be undertaken to determine whether further mitigation measures could have prevented the fire. Any outcomes to be implemented onsite will be incorporated within this FPMP and the site's EMS as required.

Should damage be sufficient to prevent the site from being able to store waste, the site will cease accepting waste and will divert to other suitably licenced facilities within the area.

The Site Manager will liaise with NRW to determine a plan-of-action to introduce normal operations at the site, and the timescales involved to achieve this.

3.13 Fire Damaged Waste

A visual assessment will be carried out by the Site Manager to determine whether the waste can continue to be sorted into constituent types on site. Wherever possible, unburned wastes will be separated from fire damaged piles.

If waste piles have become mixed, then it is likely that the waste will be removed from site to a suitably permitted facility. Site Management will determine what decontamination and cleaning measures will be required to be carried out proportionately to the impact caused by the fire. Measures to be implemented include:-

- Hose down affected areas;
- Sweep/brush up any loose burnt waste or contaminated firewater ready for removal from site;
- Assess any damage to site infrastructure;
- Spill kit bunds to be utilised to prevent run-off leaving the dirty area of the site and encroaching onto the freshwater drainage system;

Furthermore, a non-return valve present on the interceptor discharge point is to be closed in the event of a fire as an additional precaution.

Once the fire has been successfully extinguished and the site made safe, any excess water remaining on the site within the bunded areas is to be pumped into dirty-water below ground tank for discharge away from site. The site processing/quarantine areas to be cleaned down, whilst the bunds are still in place to ensure contaminated run-off enters the dirty water system for disposal away from site.

After a significant incident, an assessment will be undertaken by a suitably qualified individual.

Technically competent managers, engineers and insurance companies will assess the degree of damage caused by a fire and the residual risk from fire damaged waste, emissions or equipment.

Burnt waste material will be kept on site for a short period of time if required for a subsequent internal investigation. Following this, the material will be transferred off site to a suitably licensed disposal facility.

The period of time taken to restore the site or affected part of the site to operational status will be determined by the nature and extent of the fire. If the affected area does not impact the rest of the site's operation, operations will restart as and when appropriate and upon instruction by NRW.

3.14 Reviewing and Monitoring your Fire Prevention & Mitigation Plan

It is essential that this FPMP is kept up to date to ensure that compliance is maintained. The FPMP is a live working document and must be reviewed regularly to reflect any changes that the business undergoes. Circumstances that would warrant a review of your FPMP can include.

A minimum **annual** review of the FPMP will be undertaken as standard to ensure there have been no changes of circumstances at the site and to ensure that compliance is maintained with regard to fire safety on site.

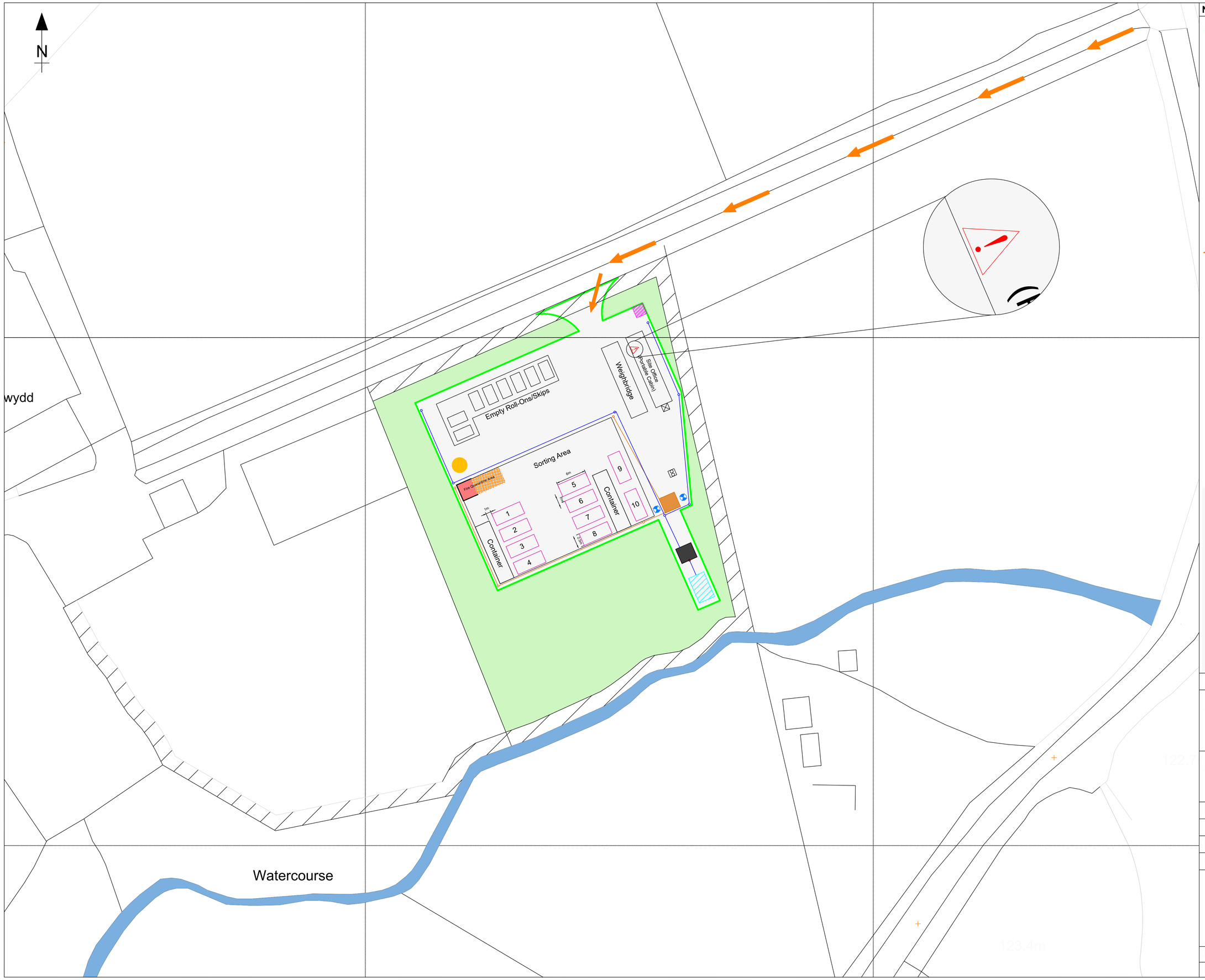
In addition, the FPMP will be reviewed if: -

- A fire of any size occurs at the site – following any fire it is essential that the FPMP (and overall fire management measures) is subject to immediate review and improvement as required to address any issues/concerns;
- There is a change or review of legislation relating to fire risk and FPMP's;
- The site operator wishes to vary their operating permit to include additional treatment, utilise new plant, accept new additional combustible waste types, increase throughput volume etc.;
- NRW instruct the site operator to review or amend the FPMP.

It is the responsibility of the Site Manager or nominated person to maintain this FPMP and to ensure it is adhered to in the event of a fire on site.

APPENDIX A

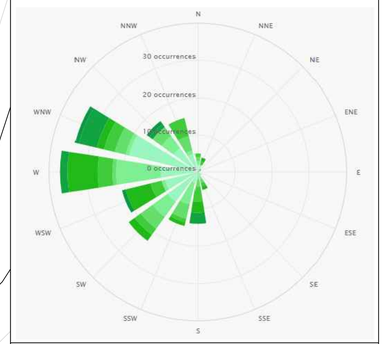
Drawings



Notes: A1

- Site Boundary
- Quarantine Area - 3.3m x 3m x 3m (1m Headspace) & Keep Clear Zone (6m)
- Clean - Storm Water Drainage
- Sorting Area Drainage
- Storage Tank for Sorting Area Runoff
- Oil Interceptor
- Soakaway
- Water Points
- Fire Access Route
- Assembly Point
- Site Emergency Information & Site Plan
- Made Ground
- Natural Ground
- Skips
- Fire Extinguisher
- Cyclinders
- 40,000 Liter Water Tank
- Emergency Non Return Valve

Wind Rose



Job:
JD Mckenna

Title:
FPMP Site Plan

Date: March 2021

Scale: NTS

Drawn by: AJD

Checked by: SO

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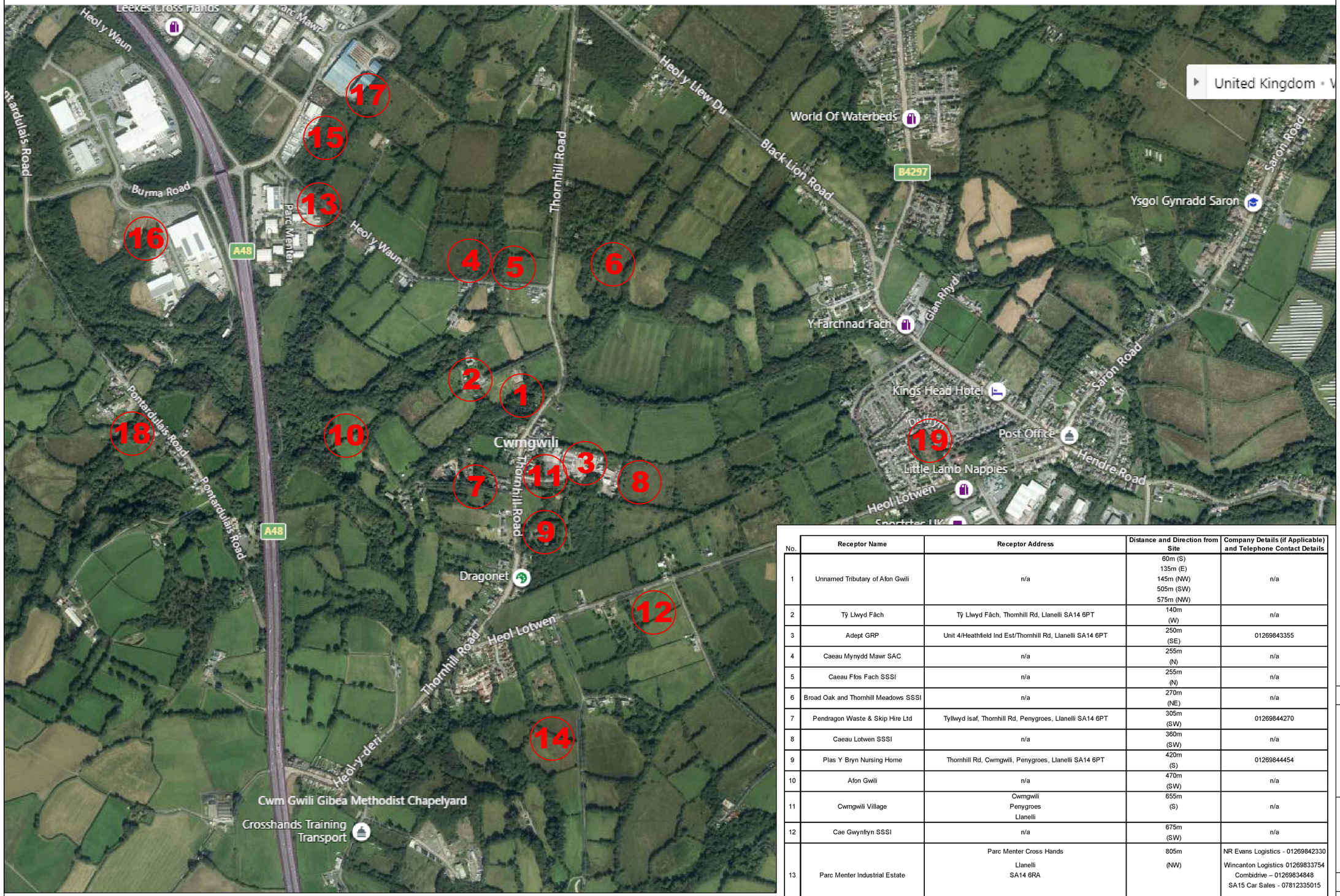
Drawing No: 275-01-06.D04

Revision No: B **Date:** 11/03/2021



No.	Receptor Name	Receptor Address	Distance and Direction from Site	Company Details (if Applicable) and Telephone Contact Details
1	Unnamed Tributary of Afon Gwili	n/a	60m (S) 135m (E) 145m (NW) 505m (SW) 575m (NW)	n/a
2	Tŷ Llwyd Fâch	Tŷ Llwyd Fâch, Thornhill Rd, Llanelli SA14 6PT	140m (W)	n/a
3	Adept GRP	Unit 4/Heathfield Ind Est/Thornhill Rd, Llanelli SA14 6PT	250m (SE)	01269843355
4	Caeau Mynydd Mawr SAC	n/a	255m (N)	n/a
5	Caeau Ffos Fach SSSI	n/a	255m (N)	n/a
6	Broad Oak and Thornhill Meadows SSSI	n/a	270m (NE)	n/a
7	Pendragon Waste & Skip Hire Ltd	Tyllwyd Isaf, Thornhill Rd, Penygroes, Llanelli SA14 6PT	305m (SW)	01269844270
8	Caeau Lotwen SSSI	n/a	360m (SW)	n/a
9	Plas Y Bryn Nursing Home	Thornhill Rd, Cwmgwili, Penygroes, Llanelli SA14 6PT	420m (S)	01269844454
10	Afon Gwili	n/a	470m (SW)	n/a
11	Cwmgwili Village	Cwmgwili Penygroes Llanelli	655m (S)	n/a
12	Cae Gwynfryn SSSI	n/a	675m (SW)	n/a
13	Parc Menter Industrial Estate	Parc Menter Cross Hands Llanelli SA14 6RA	805m (NW)	NR Evans Logistics - 01269842330 Wincanton Logistics 01269833754 Combidrive – 01269834848 SA15 Car Sales - 07812335015 Absolute Motocross - 01269844009
14	Felin Fach Meadows (Cwmgwili) SSSI	n/a	920m (S)	n/a
15	Ron Skinner & Sons	11b Heol Parc Mawr, Cross Hands, Llanelli SA14 6RE	925m (N)	01495713400
16	Castell Howell Foods Ltd	Cross Hands Food Park Cross Hands Llanelli Carmarthenshire SA14 6SX	945m (NW)	01269846060
17	Shufflebottom Ltd	Business Park, Heol Parc Mawr, Cross Hands, Llanelli SA14 6RE	980m (N)	01269831831
18	Welsh Holiday Lettings	Preswylfa, Pontardulais Rd, Cross Hands, Llanelli SA14 6PD	980m (W)	n/a
19	Capel Hendre Park	55 Banc Y Ddraenen, Capel Hendre, Ammanford SA18 3SR	990m (E)	n/a

Notes: A1

N

Job:
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Title:
Sensitive Receptor (-1km)

Date: January 2021

Scale: NTS

Drawn by: AJD

Checked by: SO

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Drawing No: 275-01-06.D05

Revision No: **Date: 29/01/2021**

N

Sorting Area

Fire Quarantine Area

8.2m

6m

1m

2.5m

1

2

3

4

5

6

7

8

9

10

Container

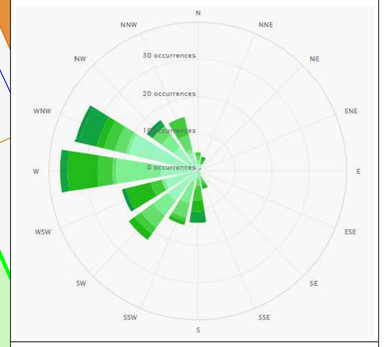
Container

Notes: A1

- Site Boundary
- Quarantine Area - 3.3m x 3m x 3m (1m Headspace) & Keep Clear Zone (6m)
- Clean - Storm Water Drainage
- Sorting Area Drainage
- Water Points
- Made Ground
- Natural Ground
- 40,000 Liter Water Tank

Skip	Description
1	Garden/Park Wastes
2	Construction/Demolition Wastes
3	Concrete/Bricks/Tiles/Ceramics
4	Other Separately Collected Fractions
5	Plastic
6	Glass
7	Wood
8	Wood
9 & 10	Metal

Wind Rose



Job:
JD Mckenna

Title:
Indicative Skip Layout

Date: March 2021

Scale: NTS

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APPENDIX B

Example Fire Action Plan

FIRE ACTION AND EMERGENCY RESPONSE CHECKLIST

To be completed during and after incident by the incident controller / senior manager present on site

Date of Incident:
Start Time of Incident:
End Time of Incident:
Duty Manager:
Type of Incident:

In an emergency situation dial **999**. State clearly your name, company, nature of the incident and site address: -

Land Adjacent to Ty Newydd
Thornhill Road
Cwmgwili
Llanelli
SA14 6PT

The centre of the site is located at Grid Reference SN 57736 11573.

If there are any known, or suspicion of, injured personnel you must say so at this time.

Time Completed:

If site personnel are responding and tackling the fire, but it is clear that this cannot be continued safely or be successful at extinguishing the fire, call **999** as above.

If the fire can be safely managed and extinguished by site personnel and equipment, call the South Wales **Fire** and Rescue Service on 01443 232000 and Natural Resources Wales on 0300 065 3000 to report the incident.

Time Completed:

Evacuate all non-essential personnel to safe area / muster point and record all names. Identify which personnel are responding to the fire (if safe to do so) and ensure that no persons are unaccounted for. If not safe to continue tackling fire those personnel must be evacuated to muster point and names then recorded as such.

Time Completed:

Record arrival time, departure time, and lead name of each agency attending to the incident.

Responding Agency	Lead Responder Name	Arrival Time	Departure Time

Who is / has been involved in responding to the incident and what equipment is / has been used?

Post Incident

Record any feedback from the responding emergency services: -

Record names of injured persons if applicable and details of injury: -

Record details of extent of damage to site, plant and equipment: -
