FIRE PREVENTION PLAN

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Mekatek Ltd
Maerdy Industrial Estate

Prepared By:
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1 Introduction

1.1 Introduction

This document has been prepared by Sol Environment Ltd on the behalf of Mekatek Ltd for the operation of a waste management facility at Maerdy Industrial Estate, Rhymney.

The document provides a structured framework approach in effectively preventing potential fires associated with the processing and storage operations at the site.

This Fire Prevention Plan document (referred hereafter as the 'FPP') has been produced in accordance with Natural Resources Wales Guidance Note 16 Fire Prevention & Mitigation Plan Guidance – Waste Management (draft).

This Fire Prevention Plan meets the fundamental objective of the FPP Guidance as it demonstrates that the site can:

- Minimise the likelihood of a fire happening;
- Aim for fire to be extinguished within 4 hours; and
- Minimise the spread of fire within the site and to neighbouring sites.

1.2 Structure of the Fire Prevention Plan

This FPP has been structured in accordance with the NRW Fire Prevention Plan Guidance and considers the following relevant aspects of the facility:

- Managing Common Causes of Fire;
- Preventing Self Combustion;
- Managing Waste Piles;
- Preventing Fire Spreading;
- Quarantine Area;
- Detecting Fires;
- Supressing Fires;
- Firefighting Techniques;
- Water Supplies;
- Managing Fire Water; and
- During and after an Incident.

1.3 Status of the Fire Prevention Plan

The FPP is a "live" document and will form part of the key environmental management document for the facility. All monitoring procedures, responsibilities and compliance actions will be updated as and when required.

2 SITE BACKGROUND

2.1 Site Setting

Mekatek Ltd intend to operate a Waste Management Facility at Maerdy Industrial Estate, Rhymney. The facility will be regulated in accordance with the requirements of the Environmental Permitting Regulations, under the conditions of the Environmental Permit once determined.

The site will accept up to 30,999 tonnes per annum of segregated waste plastics, packaging and waste electronic and electrical (WEEE) material. The site operations will consist of receiving, sorting, separating, segregating, bulking and mechanical processing mixed recyclable materials including commodities for onward treatment and / or use off site.

The daily amount of waste accepted on site varies day to day as it is dependent on what is available from suppliers however, the anticipated maximum weekly amount will be 450 tonnes.

The total storage capacity on site is approximately 7,500m^3.

The location of the subject Site is shown on Figure A1, Annex A, centred at approximate National Grid Reference SO 11588 06808. The proposed site layout is shown in Figure A2.

The application site is located within the south of the Maerdy Industrial Estate with industrial and commercial units to the north and west and residential dwellings of the town of Rhymney to the south and east. The site is roughly rectangular in shape and extends in area to 3ha. The site is bounded to the west by the Valley Railway Line.

The site comprises a steel frame building with tarmac, concrete and gravelled external areas. A vegetated railway siding is present to the east of the building and an old railway track and disused land in the west. The northern half of the main building is owned by Williams Medical Supplies.

The nearest residential development is located on Forge Crescent to the east and at a distance of 50m. The River Rhymey is culverted beneath the west of the site flowing north – south.

Areas of natural and unmade ground are shown on the site layout provided in Annex A.

Table 2.1 below provides information regarding the surrounding site.

Table 2.1 Site Setting	
Direction	Description
North	Immediate Vicinity: Williams Medical Supplies Within 500m: Maerdy Industrial Estate industrial units, River Rhymney Beyond 500m: Residential Area of Rhymney, School

North East	Immediate Vicinity: B4257 Within 500m: Residential Dwellings, School Beyond 500m: Agricultural land and rough terrain
East	Immediate Vicinity: Small industrial / commercial units Within 500m: B4257, Residential Dwellings, allotments, B4256 Beyond 500m: Agricultural land and rough terrain
South East	Immediate Vicinity: Houses on Wellington Way Within 500m: B4257, residential dwellings, stream with waterfall Beyond 500m: Copse, rough terrain, Tredegar & Rhymney Golf Club
South	Immediate Vicinity: Industrial units, Bungalows Within 500m: River Rhymney, B4257, Railway Line & Station, Residential Housing Beyond 500m: Residential Housing, A469, Disused Tip
South West	Immediate Vicinity: Railway, A469 Within 500m: Residential dwellings, football ground Beyond 500m: Rough terrain, Village of Pontlottyn & Fochriw
West	Immediate Vicinity: Railway Within 500m: Capital Valley Industrial Park units, A469, Rough terrain, small lake Beyond 500m: Gelligaer Common, dismantled railway, disused quarries and tips
North West	Immediate Vicinity: Railway Within 500m: Industrial Units of Maerdy Industrial Estate Beyond 500m: A469, Rough terrain, disused quarries and tips

The only environmental receptors near the site are the are the River Rhymney which runs underneath the site, a lake to the west of the site and springs to the west of the site. These are shown on the sensitive receptor plan shown in Annex A.

The Natural Resources Wales flood risk map indicates that the site lies within an area where there is a medium risk of flooding from rivers and the sea. This is land assessed as having a chance of flooding between 1 in 100 (1%) and 1 in 30 (3.3%) each year.

Although the site is not considered to be highly sensitive in terms of proximity, the facility has been designed to prevent and mitigate the offsite impacts associated with fire as far as practically possible.

The wind direction is predominantly from the south west.

3 FIRE PREVENTION PLAN

This Fire Prevention Plan has been developed to include an assessment of fire risk on site and the measures in place to prevent, detect, suppress, mitigate and contain fires.

This plan forms part of Mekatek's management system and sets out the fire prevention measures and procedures that will be put in place and used on site.

All staff and contractors working on site will understand the contents of the Fire Prevention Plan and what they must do during a fire.

The Fire Prevention Plan will be kept in the Site Office and all staff will be aware of where it is kept.

Regular exercises will be carried out to test how well the plan works and that staff understand what to do. These exercises will take place every quarter.

Please note, due to the nature of the wastes stored on site, self-combustion is considered extremely unlikely.

In accordance with the Guidance, Mekatek store the following ***potentially*** combustible waste materials:

- Plastics;
- Rubber; and
- Waste electrical and electronics equipment (WEEE).

However due to the nature of the materials processed there are a number of non-combustible WEEE items (i.e. large LED screens, items with combustible components removed, large metal sub-assemblies, non-combustible packaging etc), which are considered to represent a very low risk of combustion at the site.

Accordingly, the site storage areas have been segregated in accordance to combustible wastes and non-combustible wastes. Combustible waste will consist of plastics, rubber and WEEE wastes containing combustible material. Where possible non-combustible materials will be used to 'infill' and provide an effective fire break between the combustible storage bays.

All wastes will be stored within:

- Bales;
- Stillages; or
- FIBC Bags.

Stillages and bales will be stored no more than 4 high and the FIBC bags will be stored no more than 1 bag high or 2 bags if less than $1m^3$ in volume.

Please refer to the waste acceptance procedures provided within *Annex C – Procedures* to see the exact EWC codes accepted on site.

3.1 Control of Potential Causes of Fire

The following table identifies common causes of fire and the measures that Mekatek take to reduce the risk.

Table 3.1 Control of Potential Causes of Fire

Source of Fire	Applicability to Site and Proposed Management Controls	Residual Risk
Arson	The site is currently manned between 7am – 5pm. Once operational, these hours will change, with the intention of 24/7 operation should the workload require. The site has secure fencing along the site boundary. Site access is via secured gates which will be locked during 'out of hours' operating times. Daily inspection of the site fencing and gates will be undertaken and recorded. The site is also equipped with CTTV monitoring. Any fire would be quickly identified by the sites visual inspection programme and fire detection equipment.	VERY LOW
Plant and Equipment	The site has a regular inspection and maintenance programme which will identify any electrical or mechanical machinery faults which could result in a machinery fire. All site plant and equipment is subject to regular inspection, service and maintenance agreements in conjunction with the equipment supplier's recommendations. Machinery will always be parked in the dedicated plant storage area. All machinery is visually inspected as per FPP-E01 – Site Walkover Inspection. Machinery is regularly cleaned to remove any dust etc to ensure that it does not accumulate on moving parts. All machinery on site has fire suppression. Site vehicles are fitted with fire extinguishers with the potential for sparks regularly being monitored by site staff.	VERY LOW
Electrical Faults Including Damaged or Exposed Electrical Cables	The risk of damaged or exposed electrical cables is controlled via a regular inspection and maintenance programme. Any electrics on site are fully certified by a qualified electrician.	VERY LOW

Discarded Smoking Materials	Staff and visitors are only permitted to smoke within the designated smoking area, which is located within the car park. There is no smoking permitted within the operational area where waste is stored or handled.	VERY LOW
Hot Works	No hot works are permitted in the maintenance workshop at present without a permit to work being issued and site management being made aware of the work. The hot works will be located at a safe distance from combustible materials. The activity will be very closely managed and with the presence of a fire watchmen.	VERY LOW
Industrial Heaters	No industrial heaters will be used on site.	N/A
Hot Exhausts	The site has a regular inspection and maintenance programme which identifies any signs of a fire caused by dust settling on any hot exhausts and engine parts. This is carried via visual checks throughout the day as well as at the end of the working day. All inspections are carried out as per FPP-E01 – Site Walkover Inspection. Machinery is regularly cleaned to remove any dust, wood waste etc to ensure that this does not accumulate on moving part	VERY LOW
Ignition Sources	Any ignition sources on site will be kept at least 6 metres away from the stored waste on site.	N/A
Leaks and Spillages of Oil and Fuels	The prevention of fuels and oil leaking out from site vehicles will be achieved by the regular inspection and maintenance programme. If there are any leaks, the regular inspections allow this to be dealt with straight away. Spill kits will be provided throughout the site. All staff will be trained on how to use the spill kit as well as the procedures to carry out in the event of a spillage.	VERY LOW
Build-up of Loose Combustible Waste and Dust	The site has a regular inspection and maintenance programme which will identify any build up of wastes and dust. Machinery is regularly cleaned to remove any dust etc to ensure that it does not accumulate on moving parts. The site is inspected at least twice a day in accordance with the sites inspection procedure (FPP-E01). Any build up of waste and dust would be identified during the inspection. If any dust etc was identified then the area would be immediately cleaned (swept, blown down etc). Additionally, at the end of every shift the site is cleaned. All inspections are logged on the Site Walkover Inspection Form (Form 1 – Site Walkover Inspection). All forms are stored in the site office.	VERY LOW
Reactions Between Wastes	All waste is accepted on site in accordance with the sites Waste Acceptance Procedures. This ensures that no incompatible or unstable wastes will be accepted on site.	VERY LOW

	In the unlikely event of incompatible wastes being accepted on site, wastes will be transferred to the quarantine area before removed off site.	
Hot Loads	Mekatek do not receive hot loads.	N/A
Batteries and capacitors	Any batteries and (large) capacitors within incoming waste loads will be transferred to the isolated (external) Battery Sorting Building. No batteries will be stored within the main building.	LOW

3.2 Preventing Self-Combustion

3.2.1 Managing Storage Time

Mekatek do not accept or process any wastes which have the potential for self heating or thermal runaway, as such self-combustion is considered extremely unlikely. The site storage areas have been segregated and designated as either 'combustible' waste or 'non-combustible' waste.

Combustible waste will general consist of plastics, rubber and WEEE wastes containing combustible material. Non-combustible waste will consist of WEEE wastes containing non-combustible material (i.e metal sub-assemblies, non-combustible packaging etc).

Mixed waste will be received on site and placed within the receipt and dispatch area, where it will be manually sorted into categories prior to being placed within the appropriate storage area.

There will be no loose piles of waste stored on site.

Although there are no risks of self combustion of the wastes, for process inventory control and plant scheduling purposes waste will be processed as soon as there are sufficient quantities to warrant a production batch (i.e. through the rotor shredder).

Therefore;

- All waste stored within the internal general storage areas (Area 1, Area 2(a), Area 2(b), Area 3, Area 4 and Area 5) will be stored for a maximum of 3 months.
- All WEEE wastes stored within the WEEE reception bay will be stored for a maximum of 2 weeks.
- The external wood pallet storage area will store wooden pallets for a maximum of 3 months.
- All batteries will be delivered straight to the external battery sorting building and stored within the building for a maximum of 3 months.

All storage durations on site are well within the stipulated maximum storage times within Table 1 of the NRW Guidance.

Mekatek will track all material flow through the site to ensure that the storage times specified in this plan are adhered to. All material is tracked daily and will be processed through the site on a 'first in – first out' principle.

All storage bays will be managed to ensure full stock rotation is achieved. As stated above, the wastes will be stored until there is sufficient material to warrant processing. All material will then be transferred for processing. No older material will be left within the storage area.

For all incoming waste, the location in the building and the first date when the material is added is recorded on the site waste tracking system and uploaded to the company IT system.

A twice daily review of the Fuel Storage Building and process inventory will be made by the Site Manager in accordance with procedure *FPP-E01 – Site Walkover Inspection.*

Waste will be received and accepted in accordance with the established site waste acceptance and rejection procedures which are provided within *Annex C – Procedures*. The procedures dictate that all wastes are required to be stable, non-reactive and solid in nature.

3.3 Manage Waste Piles

3.3.1 Maximum Pile Sizes

The storage arrangements on site have been designed in accordance with Natural Resources Wales Guidance Note 16 Fire Prevention & Mitigation Plan Guidance – Waste Management (draft). Please refer to Table 3.2 below which details the storage areas on site.

Table 3.2: Waste Storage Information				
Area ID	Description	Products stored in the area	Separation distance required from other internal storage areas as per guidance / Graph 2.	Comments
WEEE Reception	Open Storage in Sunken Bay 15m x 4.4m Maximum volume: 264m^3	WEEE wastes Incoming WEEE wastes predominantly stored loose and in stillages.	No separation required from Area 1 as the burn faces are separated by a concrete fire wall	• The fire wall located on the western side of Area 1 mitigates the risk of fire from the WEEE reception bay to Area 1.
Area 1	Open storage 35m x 10m Maximum volume: 1,400m^3	Combustible and non-combustible wastes. Incoming material stored in stillages and bales. No loose material is stored in this area.	35m (available 42m)	• The burn face on the northern side of area 1 is 42m from the burn face of the nearest combustible storage area (Area 2). • The separation of the burn face on the eastern side of Area 1 is mitigated as the nearest storage area (Area 4) is protected by a concrete fire bunker wall. • The burn face on the western side of Area 1 is protected from the sunken WEEE reception bay by a concrete fire wall. 1m freeboard to be used.
Area 2	Open storage 65m x 10m (total) 2(a) 40m x 10m 2(b) 25m x 10m Maximum volume: 2,600m^3	2(a) Combustible and non-combustible waste 2 (b) Non-combustible waste ONLY Material that has been manually liberated / sorted which is awaiting further processing or despatch.	35m (available 42m)	• The burn face of the combustible storage Area 2(a) is 42m from the burn face of the nearest combustible storage (Area 1) and 58m from the burn face of combustible storage Area 4.

		Material will be stored in bales, stillages, FIBC Bags or on pallets.		
Area 3	Fire Bunker 25m x 5m Maximum volume: 500m^3	Combustible and non-combustible waste Predominantly baled material and any other material awaiting further processing. If not baled the material will be stored in stillages, FIBC bags or on pallets.	No separation required from other internal storage areas	• 1m freeboard to be used.
Area 4	Fire Bunker 45m x 10m Maximum volume: 1,800m^3	Combustible and non-combustible waste. Predominantly shredded and granulated material (finished product) stored in bags.	No separation required from other internal storage areas as burn faces not directly opposite combustible storage areas	• A fire bunker wall to be constructed on the western end of storage Area 4. The southern side of the storage area is protected by an existing solid brick wall. The fire bunker walls mitigate the risk of fire to Area 1 and Area 5. This negates the requirement for a 31m separation distance. • Area 2(b) has been located to ensure that the burn face of Area 4 is not directly opposite a burn face of other combustible materials.
Area 5	Open Storage 20m x 10m Maximum volume: 800m^3	Combustible and non-combustible waste. Mixed storage. Material will be stored in bales, stillages FIBC bags or on pallets.	No separation required from other internal storage areas as burn faces not directly opposite combustible storage areas.	• Area 5 has been located to ensure that the burn face is not directly opposite the burn face of other combustible waste stored in Area 1.
Total Storage: 7,364m^3				

3.4 Prevent Fire Spreading

3.4.1 Separation Distances

The WEEE reception bay is opposite Area 1, therefore the separation distance requirements are applicable to these areas. However, due to the construction of a concrete fire wall along the western side of Area 1, a separation distance is not required.

Area 1 is opposite Area 2(a), therefore the separation distance requirements are applicable to these storage areas. Using Graph 2 of the Guidance, due to Area 1 being 35m long, the minimum separation distance should be 35m. The separation distance between the areas is 42m, therefore meeting the requirements of the Guidance.

Likewise, Area 2(a) is opposite Area 1. Due to Area 2(a) being 40m long, according to Graph 2 of the Guidance, the separation distance should be 36m. The separation distance between the areas is 42m, therefore meeting the requirements of the Guidance.

Area 4 is opposite storage area 2(a) and 2(b). Due to Area 4 being 45m long, according to Graph 2 of the Guidance, the separation distance should be 37m. The separation distance between the areas is 58m, therefore meeting the requirements of the Guidance.

Likewise, Area 2(a) is opposite Area 4. Due to Area 2(a) being 40m long, according to Graph 2 of the Guidance, the separation distance should be 36m. The separation distance between the areas is 42m, therefore meeting the requirements of the Guidance. Area 2(b) only stores non-combustible waste therefore, separation distances do not apply, however they are separated by a 58m distance.

The external quarantine area with sealed drainage has a 6m separation distance.

The concrete block manufacturing area located externally to Area 4 and 5.

3.4.2 Baled Waste Storage

Although some wastes are stored within bales, due to the types of waste (non self-heating) stored on site, monitoring is not considered necessary.

Examples of waste stored in bales are:

- Cardboard;
- Plastic;
- Electrical Waste e.g circuit boards and cable.

Baled waste will be stored or a maximum of 3 months on site, which is well within the stipulated maximum storage times stipulated within Table 1 of the Guidance.

Bales will not be stored more than 4m high. As far as practically possible, bales will be stacked in a manner that avoids the potential of energetic air-flows between the bales.

3.4.3 Fire Walls and Bays

As detailed within Table 3.2, Area 3 which will store combustible and non-combustible wastes is a concrete fire bunker. The fire bunker is constructed of grout sealed 'Legio' block fire walls, ensuring a 1m freeboard at all times. The walls will offer a fire resistance period of at least 120 minutes.

The western end of Area 4 has fire bunker due to the short separation distance to Area 1. The bunker is also constructed of sealed 'Legio' block fire walls, offering a fire residence period of at least 120 minutes. A 1m freeboard space above the waste pile will also be ensured at all times.

The western end of Area 1, opposite the WEEE reception sunken bay, has a concrete fire wall due to the short separation distance to the WEEE reception bay. The fire wall is also constructed of grout sealed 'Legio' block fire walls, ensuring a 1m freeboard at all times. The wall will offer a fire resistance period of at least 120 minutes.

The other fire walls relate to the temporary storage bunkers. These walls are also constructed of sealed 'Legio' blocks. Waste will only be stored in these for a maximum of 1 day.

Mekatek will keep records of the material stored within the storage areas to ensure that not storage times are exceeded. All material is tracked daily and will be processed through the site on a 'first in – first out' principle.

Due to the storage arrangements and the nature of the wastes stored on site, temperature monitoring is not considered necessary. Additionally, no wastes will be stored for longer than 3 months.

In the event of a hotspot / fire being detected, as long as it is safe to do so, the bale / stillage / bag would be removed to the external bunded quarantine area where it would be cooled.

A trained site operative will carry out a visual inspection twice daily in accordance with *Procedure FPP-E01 – Site Walkover Inspection* to ensure that all areas are being managed correctly and in line with the Fire Prevention Plan.

3.4.4 Seasonality and Waste Stack Management

The materials stored on site are not subject to seasonal variation.

Mekatek will track all material flow through the site to ensure that the storage times specified in this plan are adhered to. All material is tracked daily and will be processed through the site on a 'first in – first out' principle.

3.4.5 Monitor and Control Temperature

Due to the nature of the wastes being stored and the fact that no wastes are stored for longer than 3 months, temperature monitoring is not considered necessary.

There will be no loose piles of waste stored on site.

If waste is processed through the waste processing equipment, all waste will be cool before transferring to a storage area.

A trained site operative will carry out a visual inspection on site twice daily in accordance with *Procedure FPP-E01 – Site Walkover Inspection* to ensure that the Processing Building is being managed correctly.

Due to the storage arrangements, turning of waste is not considered necessary.

3.5 Detecting Fires

The building is equipped with a UKAS accredited fire detection system (smoke and heat detection) supplied by Chubb Fire & Security Ltd. The system consists of 118 detectors and 13 manual call points. The system is monitored by Chubb who in the event of a fire being detected, will call the Site Manager. If the Site Manager is no available then Chubb will immediately call the fire service.

The system will be tested and inspected in accordance with BS5839-1:2013, BS EN 54-2:1997+A1:2006, BS EN 54-3:2001, BS EN 54:1998, BS EN 54-5:2001, BS EN 54-7:2001, BS EN 54-11:2001, BS EN 54-13:2005, BS EN54-23:2010.

Any fires on site would be immediately identified. In the event of a fire, a member of staff will immediately raise the alarm and then contact the emergency services.

A trained site operative will carry out a visual inspection on site twice daily in accordance with *Procedure FPP-E01 – Site Walkover Inspection* to ensure that the Processing Building is being managed correctly and that all detection systems are working correctly.

The automatic fire detection system provides 24/7 detection of the building. This allows a fire to be detected quickly.

Please refer to *Annex D – Fire Alarm Systems* for further information on detecting fires.

3.6 Fire Extinguishers

Although waste is stored within a building, the nature of the operations on site and the general low risk combustibility of the waste types stored, a suppression system is not considered necessary.

There is a sufficient number of fire extinguishers located throughout the premises which are all mounted on wall brackets. A fire extinguisher schedule is kept on file to ensure that all extinguishers are regularly inspected.

3.7 Fire Fighting Techniques

The site has been designed in order to allow active firefighting.

An off-site emergency information pack is provided in a box on the main gate into the site and contains emergency contact numbers, a site plan and copy of this FPP.

The fire access route shown on the site plan will be inspected as part of the site walkover inspections to ensure that safe access to the site for fire and rescue services and other emergency responders is always achieved. In the event that anything is blocking the route, it will be immediately flagged to the Site Manager and removed.

Additionally, the area around the site perimeter will be kept clear at all times to ensure the site is always accessible by the fire service, as demonstrated on the site plan. The site perimeter will also be checked as part of the site walkover inspections.

The site has an alternative access point, the entrance of which is accessed via the adjacent Williams Medical Services site. This access point will remain clear at all time and also be checked as part of the site walkover inspections.

Upon identifying or being made aware of a fire, the site manager will raise the alarm, alert all present on site to the fire and its location and alert emergency services.

The site will be evacuated in accordance with the site evacuation plan with exception of those staff involved in active fire fighting.

All staff, contractors and visitors would follow the Fire Evacuation procedure as included in Section 3.10 below.

Staff will only tackle the fire using the fire extinguishers if it is safe to do so. If not safe to do so, staff are to await the Fire and Rescue Service (FRS), who would then take the appropriate actions.

All personnel working on site will be provided training in the Fire Prevention Plan and all associated procedures and controls.

The FPP training will be provided to all new starters and temporary employees working at the site.

FPP refresher training will be carried out to all personnel at least annually.

3.8 Fire Evacuation

The assembly point is located opposite the weighbridge and is clearly signposted. The assembly point is clearly shown on the site plan provided within Annex A.

Sites rules are reinforced via use of fire drills and planned response scenarios.

All personnel to follow the instructions of the Fire Wardens and the Site Manager.

A list of trained Fire Wardens is maintained and displayed on the site, together with a list of on call staff to attend the site in the event of a fire outside of normal operation hours.

The Fire Evacuation Procedure is provided to staff, contractors and visitors which states:

- On discovery of a fire, immediately operate the fire alarm by pressing the nearest break glass call point and / or contact the Site Manager via a radio to ensure the alarm is raised;
- Fire Wardens and staff must only tackle the fire if they are trained to do so, the equipment is appropriate and if their safety or that of others is not compromised.
- Leave the building / work area by the nearest available exit / safe route and report directly to the assembly point located opposite the weighbridge.
- Leave quickly but in a calm, controlled and orderly manner. Do not detour to collect personal items;
- Do not re-enter the building / work area for any reason until authorisation has been given by the Site Manager / Fire Brigade.
- The Site Manager will assess the situation and call the Fire and rescue Service if required.

This document is reviewed and updated annually, or sooner if required. The document details all hazards and the control measures that are in place and / or required to prevent fires.

3.9 Water Supplies

There are four on-site mains fed Fire Hydrants as shown on the site plan provided within *Annex A – Site Plan.*

These fire hydrants are connected to a mains water supply and would provide a continuous supply of water in the event of a fire.

All hydrants are easily accessible for the fire service.

3.10 Managing Fire Water

In the event of a fire, the WEEE reception delivery bay will be utilised as a holding bund for firewater. All firewater will drain to the bay which will be isolated from the surface water drainage system via a penstock valve. Company tankers would be mobilised from the Mekatek site in Carmarthen (1-hour mobilisation time) to remove the firewater held in the bay either in the event that more firewater storage was required, or after a fire to dispose of the firewater.

The delivery bay has a capacity of 245m^3 if empty and 150m^3 if at full utilisation as a storage bay.

Fire water runoff is directed to the WEEE reception area due to the fall of the building.

The penstock valve prevents run-off from leaving the building and soaking to ground, as it ensures that all firewater is contained within the drainage system.

As mentioned above, the fire water will be removed via tanker from the on-site surface water drainage system which will transport the water offsite to an appropriate treatment facility.

3.11 Quarantine Area

The site is equipped with an external quarantine area with a dedicated sealed drainage system.

The quarantine area has been designed to hold 900m^3 (15m x 15m x 4m) which is 50% of the largest storage area on site.

The location of the quarantine area is identified on the site plan provided within *Annex A – Site Plan.*

3.12 During and After an Incident

During an Incident

During any fire fighting or subsequent clear up operations, any incoming wastes will be diverted to an alternative waste processing site.

In the event of a fire that may impact the sensitive receptors, the following action plan has been developed:

- The site will have a mobile tannoy on site. This will be used to alert nearby residents / businesses that there is a fire on site and that there is the potential need for evacuation;
- As well as this, trained site operatives will knock on residents' doors surrounding the site to ensure that they are aware of the fire. The site operatives will start at the nearest residential receptors on Wellington Way.

The use of the tannoy and knocking on peoples' doors ensures that all nearby residents will be made aware of the fire on site.

After an Incident

The site will be thoroughly cleaned after an incident. Any charred / partially combusted / combustion products will be disposed of an appropriate facility. It is anticipated that the clearing of combusted material will not take long, as the company are confident that any fires will be appropriately controlled and therefore will not result in significant volumes of burnt waste.

All fire water will be captured by the drainage system and transferred off site via tanker and appropriately disposed of.

All equipment will be checked for any fire damage. In the event that any equipment has been damaged, it will be removed from site and fixed / replaced as soon as possible.

This ensures that the impact to the community, infrastructure and the environment is minimal.

ANNEX A: SITE PLANS

ANNEX B: DRAINAGE PLAN

ANNEX C: PROCEDURES

ANNEX D: DETECTION AND SUPPRESSION INFORMATION