

**This document is a live document and will be reviewed and updated on at least an annual basis, or immediately after an incident or a change to operations**

These FFP documents form part of working plan / management system and are implemented on site.

This document will form part of the site's Environmental Management Plan (EMP) held on site (the EMP is itself part of the wider EMS and the EMP is equivalent to the document formerly known as the site's 'Working Plan').

**Site. The Old Forge**

**Permit reference. MB3333DG**

**Operator/permit holder .Jonathon Mark Rees (Rees Metals)**

**Rules set. SR2011 No2 and SR2011 No3**

## **FIRE PREVENTION PLAN. (Rees Metals)**

### **1 Introduction**

#### **1.1 Fire Prevention Plan**

1.1.1. Sites that store combustible wastes are at risk from fires on sites. These events can pose an environmental risk to receptors off site, both from the smoke plume from the fire and from the firewater runoff created by any firefighting activities. Sites storing combustible materials such as scrap metal or end of life vehicle components are required to have in place a fire prevention plan that follows the standards prescribed in the " Fire Prevention & Mitigation Plan Guidance- waste management, Guidance Note 16. August 2017.(Document version 2,Review date August 2019) "

The guidance document compiled by Natural Resources Wales (NRW) in collaboration with the Fire & Rescue Services in Wales (South Wales Fire & Rescue Service, Mid & West Wales Fire & Rescue Service and North Wales Fire & Rescue Service).

It represents the minimum appropriate measures required to be put in place by waste operators within Wales to ensure that fires are prevented within their businesses.

**1.1.2 This document is a live document and will be reviewed and updated on at least an annual basis, or immediately after an incident or a change to operations. Any review will include consultation with Natural Resources Wales (NRW).**

**1.1.3 A Fire Risk Assessment was conducted on 13 October 2017, The purpose of this FRA is to provide an assessment of the risk to life from fire in the premises and where appropriate, to make recommendations to ensure compliance with above Guidance Note16.August 2017**

**1.1.4 Rees metals operate a scrap metal storage facility , under a Environmental Permit allowing the treatment and transfer of scrap metals.**

**1.1.5 We are a small local run business based at Neath Abbey industrial estate. Neath (The Old Forge, Neath Abbey, SA10 7DW)**

The business is well respected in their industry with a vast knowledge and experiance of specialising in the collection ,treatment and sorting of scrap metals

The storage /workshop building on site is of single storey brick construction building with concrete and sheeted steel framed roof. The whole of the inside is fully concreted with sealed drainage catch pit. The building is sited within a large secure fenced yard area.

**1.1.6 external storage.** Scrap metals awaiting transportation to re-processors (sims metals ), are stored within the secure yard area.

The yard area is used for , loading and storage of scrap metal

**1.1.7 Lead acid batteries, fuels,oils and liquids removed from scrap vehicles are stored in fit for purpose containers. Within the storage workshop building.**

## **1.2 Materials stored on site and considered with the guidance document**

**1.2.1 The materials that may be stored at site include:**

- vehicles awaiting depollution, depolluted vehicle shells, wheels and tyres, and scrap metal ferrous and non ferrous .

## **1.3 Materials stored on site and are not covered by the guidance document**

**1.3.1 The guidance document does not apply to materials or waste that are; flammable; combustibile liquids or gasses; hazardous; or dangerous substances stored under the Control of Major Accident Hazards Regulations. The guidance states that these materials should still be considered within the fire prevention plan because of the potential they have to increase the impact of fire on site. Therefore, the storage of the following materials is considered within this plan - the storage locations are shown on the site layout plan:**

The scrap handler used on site is diesel powered and can access yard area of the facility. The scrap handler is fitted with a fire extinguisher and is regulary serviced and maintained by a mechanical service engineer.

- There are no other hazardous liquids and gases stored on site.

## 1.4 Causes of fire and fire prevention measures

### 1.4.1 This fire plan considers the following causes of fires:

- **Arson or vandalism** – site and yard are well secured to prevent vandalism, including barbed wire on top of walls and fencing including 24 hour CCTV.
- **Self-combustion (due to chemical oxidation)** - unlikely due to the nature of the materials handled and the relatively short amount of time retained on site.
- **Plant or equipment failure** – very little plant and equipment employed other than JCB type scrap metal handler

This machine is checked daily before use and regularly maintained as part of inhouse Health & Safety Procedures. Maintenance is recorded in site diary record sheets. Any faults or problems noted during these checks are reported either direct to the manager or in his absence the site supervisor so that the problem or fault can be rectified. Again, actions will be recorded using the site diary check/defect sheet.

- **Electrical faults** – all buildings have been wired by a qualified/certified electrician and daily checks carried out on portable hand tools, electrics, etc. *The electrician is scheduled to carry out annual checks on all electrical equipment as part of the PAT testing regime. This will also be recorded on the Maintenance Logs.*

. **Batteries in vehicles.**- Batteries left connected in un-depolluted vehicles can short circuit and cause fires. Batteries are disconnected or removed from all vehicles as soon as possible after reception.

- **Hot Loads** – it is not envisaged that any of the incoming wastes would be classed as 'hot loads' as they would not be picked for transport in the first instance. In the unlikely event that a vehicle or scrap metal load was in fact discovered on arrival to be hot it could be placed in the quarantine area whilst it was dealt with.

. **Cylinders stored at the site** – are to be stored in the correct manner when either in/or not in use. Cylinder storage locations are identified on the site plan.

- **Discarded smoking materials**- ban on smoking in the permitted area (strict no smoking policy in force)

- **Hot works** – no cutting of vehicle components is carried out using burning equipment. No hot works at time of fire risk assessment. ( should the need arise to use hot cutting /burning lamp this will be done at designated area well away from combustible materials) at least 6m away also a “fire watch “ period of at least 15 minutes once hot works cease and “fire watch” shall also take place at end of working day.
- **Hot exhausts** – vehicles spend a minimum amount of time with engines running.-- only the scrap handler used on site and this is subject to daily checks before use and is covered by a regular maintenance . This machine will be stored when not in use, away from any combustible materials and will be equipped with a fire extinguisher.
- **Industrial Heaters** – no industrial heaters are employed other than a small domestic electric heater in the site office which is well away from any combustible materials.
- **Open burning** (onsite or adjacent sites) – not allowed under any circumstances
- **Damaged or exposed electrical cables** – procedures in place for reporting damage to cables to enable isolation until repaired by a qualified electrician.
- **Reactions between incompatible materials** – should not occur due to the nature of the wastes being handled but stored materials will be checked daily as a precaution. There is an inspection sheet available in the written management system to record actions.
- **Neighboring sites activities** – unlikely to be a probable cause as immediate neighbours are warehousing/manufacturing operations, there are 2 residential properties based within 500m of the site.
- **Incompatible wastes** – again not likely to be a problem due to the types of waste being handled.

**Leaks and spillages of oils and fuels** - Spill control procedures are in place to prevent fuels and combustible liquids leaking or trailing from site vehicles and ELVs. Including leaks and spillages from vehicles: being tracked around the site ,materials used to absorb combustible liquids are correctly disposed of to reduce the risk of a potential fire situation.

- **Buildup of paper and combustible wastes** – very little paper used or produced and potentially combustible wastes are confined to vehicle shells and whole tyres. *All these materials need to be turned around quickly because of the limited storage space available on site.* All equipment used on site will be checked daily to make sure there is no buildup of debris or litter which could cause a fire through overheating of that equipment. This action will be recorded as part of the daily checks.

• **Finally**, if there are problems with any kind of incident including fire on site the company will stop operations, remove vehicles off site until the incident is dealt with and the site deemed to be safe again. Various contractors can be called in to remove materials e.g. scrap metals ,vehicle shells, batteries etc,and can be delivered to Sims metals, at Neath abbey wharf , SA10 8BL

**1.4.2** A routine inspection will be undertaken by the Authorised Person (Technical Competent manager). The inspection will consider all points within Section 1.4. Issues will be reported on the Site Inspection checklist Form and actions will be taken. The Fire Plan will be amended if required.

**1.4.3** Site security consists of brick / block walls around all sides of the perimeter of the building. The yard is contained within secure walled structure and metal gates,  
- all walls topped with electric shock fence and barbed wire.

The site is alarmed and CCTV installed with images sent or viewable by key staff when the site is closed. These actions have been implemented to reduce the risk of arson that could lead to a fire or any other unauthorised entry to the site.

**1.4.4** All visitors will follow the correct safety and fire protection procedures. New staff and contractors will be inducted onto site.

**1.4.5** A 'fire watch or check' will be undertaken at the end of each working day by the Authorised Person as well as frequent checks made during the hours of operation. All potential areas of fire will be checked including battery storage bins,oils and fluids storage areas (storage workshop building) this being the 'high risk area').

**1.4.6** A quarantine area of 1.5 m<sup>3</sup> (mini skip) is available in the yard for any burning waste i.e. allowing easy access to extinguish or to move materials from adjacent to an area that is on fire where they will be assessed and dealt with in an appropriate manner depending upon material type and volume. The quarantine area has at least 6m from any combustible materials around its boundary in an attempt to comply with the guidance. Any burning material would be contained in this area whilst initial firefighting took place. The quarantine area can also be used for storing hot loads or unacceptable wastes for a short period (less than 24 hours).

### **1.5 Sensitive Receptors**

**1.5.1** The sensitive receptors have been assessed within 1000m of the site – downwind of the prevailing South Westerly winds is mainly mix of commercial and industrial premises. To the North, East, West and South of facility area consists mainly of manufacturing,commercial and warehousing establishments.these are mainly industrial and commercial units.

Approximately 5m away to the north is the Neath Canal, and approximately 10m away to the east is the lower clydach river. There are no water courses boreholes or wells located within the site.

There one school/collage located within 1km of the facility, being located 0.75km upwind of the facility as indicated on the 1km Screen plan facility. The nearest residential properties are located 100m to the west, of the site.

The A465 (heads of valley dual carriage way) is located some 1000m south of site. A shunting Railway line also runs at its closest 500m to the north of site.

There are no areas of unmade or natural ground with close proximity to the site with the immediate area being a mix of industrial and commercial zones.

Procedures are being put in place to notify the Fire service, Natural Resources Wales and local Water authority, should an incident occur. Local residents up wind of any smoke will also be alerted. See 1km Screen.

1.5.2 There is no apparent Risk of flooding from Surface Waters

1.5.3 All actions taken by The business will consider the impact of the smoke on the local community, and the impact of firewater on the environment.

## **1.6 Resources**

1.6.1 **The Fire Plan** contains a site plan to aid the Emergency Services. The site plan outlines the layout of the building, areas where hazardous materials are stored, main routes for fire engines, water supplies (position of roadside hydrants), location of pollution control equipment and plant, drainage systems, location of key receptors and compass rose showing prevailing wind.

1.6.2 The company will make all plant available during a fire. The scrap handler can be used to remove unburnt material away from the fire. These actions would only be undertaken at the request of the emergency services or NRW.

## **1.7 Post-incident clean-up and remediation costs**

1.7.1 The company will have a commercial property insurance policy set up to cover costs.

## **1.8 Fire Prevention Plan/Fire Risk assessments**

1.8.1 This fire prevention plan ensures that the company do all that is reasonable to prevent fires on site, but all risk cannot be eliminated. The Fire Prevention Plan will form part of the written management system and includes an assessment of the sites fire risk and the measures in place to prevent, detect, suppress, mitigate and contain fires. The Fire Plan will be intrinsically linked to the wider site written management system/accident plan and should provide the most robust fire protection from all reasonably foreseeable fire risks.

## **1.9 Staff training**

1.9.1 This plan will be read and understood by all staff working on the site and training will be given in understanding fire risk, prevention and mitigation. This plan will be periodically tested to ensure it is fit for purpose and is adapted to meet any changes in the operation of the site. The operator will carry out checks on monthly basis to ensure that the site is remaining in compliance with the FPP. If the nature of the operation changes, any changes will be discussed with the local NRW, Officer to determine whether a new FPP should be submitted.

## **2 Fire Prevention Plan**

### **2.1 Preventing fires**

2.1 The most effective way to reduce the impact from fire on site is to prevent them from occurring in the first place. This is achieved by ensuring that the fabric and layout of the site, the process managed systems, working practices and the staff training is conducive to fire prevention.

### **2.2 Incoming materials.**

2.2.1 The company specialism is as a scrap metal merchants in the sourcing and procurement of scrap metals

2.2.2 All incoming loads are subjected to pre-acceptance procedures and are inspected during the unloading process. loads are initially stored in the acceptance designated area before being transferred to the on site sorting area for grading. Any wastes found to be unsuitable will be moved if safe to do so to the quarantine area until it can be arranged for disposal at an appropriate permitted facility. This removal needs to be arranged within 24hrs to ensure that the quarantine area remains free for its intended use.

2.2.3 Approximately 100 tonnes ( 10 vehicle loads) will be delivered to the site per week.

2.2.4 After treatment the outgoing vehicle shells and scrap metals, will be stored as per the site layout plan .

2.2.5 All wastes will be stored to give the minimum 6m distance between combustible waste types.

### **2.3 Materials storage**

2.3.1 The site does not allow members of the public access to the building.

2.3.2 Batteries received from vehicles are stored in spill/leak proof containers and when full (approximately 750kg) removed to Sims metals .

2.3.3 Spillage kits are located within the building. All used spillage material will be disposed of at an authorised site with appropriate documentation.

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**2.3.4** A fire within the facility will be deemed an emergency and the emergency services will be called within the first instance, and the site evacuated. The company can easily divert any incoming materials to an alternative permitted Facility until it is declared safe to reopen the facility. The company can also call on several contractors to remove any fire damaged materials as required.

#### **2.4 Site layout – sources of ignition.**

**2.4.1** It is important to keep sources of ignition (naked flames, welding and cutting equipment etc.) away from material that is combustible.

There is no proposed activity likely to give rise to naked lights or sources of ignition and smoking has been banned from anywhere in the permitted area.

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#### **2.5 Managing waste piles**

**2.5.1** All stacks, piles and stores of sorted wastes, will be stored in a manner that allows emergency vehicular access to the whole site at all times (access ways available to allow emergency vehicles access to the front entrance of the site).

#### **2.6 Fire risk monitoring**

**2.6.1** It is important that combustible materials stored on site are subject to regular checks to ensure they are stable and are not developing dangerous hot spots that could become fires.

**2.6.2** The regular checks will consist of 4 checks made by the Authorised Person, spread throughout the day, one when the site is opened, one mid-morning, one midafternoon and one when the site is closing. These can be recorded in the site diary or the sites internal inspection form.

#### **2.6.3**

All though there are a number of mixed type fire extinguishers around the site The Fire Risk Assessment identified a need for a CO2 extinguisher within the office portacabin area and storage work store areas. There is a mains water tap connection within the storage workshop building – see layout plan) where it is proposed to install a fire hose reel - with length of hose long enough to reach all the combustible waste storage areas within building and and to yard area. This tap/hose site has been checked to ensure an adequate supply of mains water – the delivery rate has been checked as able to supply approximately 100lt per minute.

There is also a 110mm Fire Hydrant situated approximately 20m from main yard entrance gate hydrant sited on the road directly to the left yard entrance gate). This hydrant is according to Water company and should be capable of supplying a minimum of 1,200 litres per minute of water.

## **fire Response Planning**

### **3.1 Detection, suppression, containment and mitigation of fires**

3.1.1 Upon the detection of a fire, if it is safe to do so, site staff should attempt to extinguish the fire with the portable extinguishers provided. If this is not possible or unsuccessful the fire service should be called immediately. This should be followed up with a call to the NRW agency's incident reporting service on 0300 65 3000.

3.1.2 **Fire Suppression** – during the recent fire risk assessment, the use and need for a suppression system – it was deemed as not required and extinguishers would be suitable for the task. the majority of wastes are heat resistant steel scrap stored in metal roll on roll off containers.

3.1.3 Within the storage workshop building all drainage is sealed and contained. In case of emergency, to retain any firefighting waters, the external doors could be sealed beneath with sand bags. This would give an area of sealed drainage of approximately 100 m<sup>2</sup>. It is not envisaged that with the relatively small quantity of combustible wastes stored that large quantities of firefighting water would be generated. If at all

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If combustible wastes were on fire (cable and plastics – total 5 m<sup>3</sup>) then the maximum quantity of water needed (from the guidance) over a 3 hour period would be approximately 5 divided by 300 multiplied by 360,000 = 6,000 litres . . (300 m<sup>3</sup> pile of combustible material will normally require a water supply of at least 2,000 litres a minute for a minimum of 3 hours = 360,000 litres). If the area suggested (300 m<sup>2</sup>) was sealed with sand bags at the external doors to a depth of 2 cm (0.02 m) it could retain approximately 6,000 litres of water and a specialist contractor could be called in to tanker the waters away - if on testing the waters could not be discharged to foul sewer.

3.1.4 There are no drains in the yard areas – block wall and electric fence forms the entire boundary. In the event of a fire, sand bags would be used to seal beneath the main entrance gate and retain fire waters within yard and building.

Adequate stocks of absorbent booms, pads and granules are to be retained on site. These are kept in the operational area and 'spares' kept in the site office. A supply of sandbags is also to be purchased to allow the potential fire waters containment area to be secured when needed.

3.1.5 It is not possible to predict all the products of combustion from a fire as the prevailing conditions and the nature of the material on fire will produce wide variability in what is present in the smoke plume and runoff. However, the types of waste at this site may produce large quantities of particulates, carbon dioxide and carbon monoxide. It will also produce trace quantities of acid gasses (HCl, HNO<sub>3</sub>) NO<sub>x</sub> and H<sub>2</sub>SO<sub>4</sub>

3.1.6 Fire water runoff will contain a moderate biological and chemical oxygen demand as well as trace compounds dissolved from the gaseous emissions. In a major incident, the firewater will be retained within the building, as discussed and disposed of at an authorised facility. The re-use of firewater on site would be an exception rather than a rule as the composition of firewater cannot be assumed. The company will alert local water company on 0800 085 3968 to alert them of an emergency situation with the potential that contaminated waters may need to go at some stage to foul sewer. Local water company are unwilling in principle to allow in advance any discharge to sewer because of the possible unknown contaminants but would advise at the time of any incident.

• The following courses of action will be taken. The Emergency Services will be in charge during the fire event, and are likely to be in charge in the following hours after the fire has been extinguished. Site staff and contracted services will only enter the area once the Emergency Services have given the all clear.

**3.2 Fire Fighting Strategy**

3.2.1 When dealing with a fire on a waste facility it is often difficult for the emergency responders to determine which risk is greater, the smoke plume or the risk of water pollution. Different strategies must be used to protect air quality or water quality. Water quality protection is normally achieved through a controlled burn whereas protecting air quality requires the fire to be extinguished as quickly as possible.

3.2.2 The building has sealed drainage catch pit with everything contained Any firefighting waters can be held within the building and then sent for treatment if not deemed fit for discharge to foul sewer.

The risk to surface water quality is minimal as the fire water runoff can be collected and sent for treatment, the strategy should be on extinguishing the fire as soon as possible in order to reduce the impact on air quality. Any fire within the building which results in the production of firefighting waters can be retained, as above.

3.2.3 The site is well serviced by mains water that is available for firefighting activities. There is a 110mm Fire Hydrant situated approximately 10m away from the entrance gates in road, directly to the left of the yard entrance gate.

3.2.4 Any wastes noted to be alight will be moved to the quarantine area if safe to do so or wastes left where they are and adjacent combustible materials moved to the quarantine area. Once the fire has been extinguished and the fire service have agreed it is safe to enter the building contractors will be called in to tanker away any firefighting waters (if deemed unsuitable after testing to be discharged to foul sewer). Once these operations have been carried out the wastes on site will be checked to see if they are safe to remain and the site infrastructure will be checked and repaired as necessary. As appropriate, all surfaces will be steam cleaned.

3.2.5 Fire service vehicles can access the site via the main entrance off Neath Abbey rd

3.2.6 The local fire station - Neath Fire Station – is 0.75 miles away.

Emergency Actions

- A fire is confirmed on site
- An uncontrolled event occurs which could reasonably be expected to lead to a fire on site
- A major accident is an occurrence (including in particular a major emission, or explosion) resulting from uncontrolled developments in the course of the operations, and leading to serious danger to human health or the environment, immediate or delayed, inside or outside the establishment.

**Duty manager or his deputy will make a 999 telephone call to each of the relevant emergency services. Note that the order in which each service is called will be dependent on the nature of the incident.**

**Contact Natural Resources Wales on 0300 065 3000 after the emergency services.**

- 1. A small fire will be tackled if safe to do so using extinguishers by site staff.**
- 2. Any drains on site will be sealed of using dammit mats and gullies blocked off in a similar manner.**
- 3. Any drivable vehicles will be removed off site to prevent escalation of the incident.**
- 4. Site will immediately be closed to any further movements of materials until declared by the emergency authorities to be safe to reopen.**

Site Operator Mobile, Duty manager : –TELEPHONE .....

Site Landline: - TELEPHONE .....

**Police, fire and Ambulance emergency Service “ telephone 999 ”**

**Police Service, 101 Non-Emergency**

**When making each ‘999’ call staff should provide the following information:**

- Rees metals Site, Neath Abbey industrial estate , Neath Abbey , SA10 7DW
- Details of the Incident
- If any staff are known to be reported missing
- Where the arriving first responders will be met (in a safe location, away from any smoke plume with all relevant information on the details of the incident and a copy of this plan)

## 15. Useful Contact Details

### Natural Resources Wales

Cambria House  
29 Newport Road,  
Cardiff CF24 0TP  
Tel: 0300 065 3000  
Email: [enquiries@cyfoethnaturiolcymru.gov.uk](mailto:enquiries@cyfoethnaturiolcymru.gov.uk)  
[www.cyfoethnaturiolcymru.gov.uk](http://www.cyfoethnaturiolcymru.gov.uk)

### Mid & West Wales Fire & Rescue Service

Fire Service Headquarters  
Lime Grove Avenue,  
Carmarthen  
SA31 1SP  
Tel: 0370 6060699  
Email: [mail@mawwfire.gov.uk](mailto:mail@mawwfire.gov.uk)  
[www.mawwfire.gov.uk](http://www.mawwfire.gov.uk)

### Dŵr Cymru Welsh Water

[www.dwrcymru](http://www.dwrcymru)

### Health & Safety Executive (Wales)

Tel: 0300 003 1747  
[www.hse.gov.uk/welsh](http://www.hse.gov.uk/welsh)

### Public Health Wales

Tel: 029 2022 7744  
[www.publichealthwales.wales.nhs.uk](http://www.publichealthwales.wales.nhs.uk)

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