



Fire Prevention Plan for T.M.Wiberg Ltd T/A M&R Commercials

Introduction and Background

M&R Commercials has been operating from the SWB Cymru site since 2009 where we have processed various metals and ELV's.

M&R are committed to safety of their employees and those visiting the site whom are not employed by M&R as well as minimising the effects to property, plant and machinery which may occur as the result of a fire.

The site operates under an environmental permit as issued by the Environment Agency (EA) and is subject to the permit controls, as seen below:

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.

3.1.2 For the following activities referenced in schedule 1, table S1.1, A1, periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

(b) Implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

By following the above conditions laid out in the permit, in the event of a fire all necessary measures must be taken to prevent uncontrolled emissions to water, air or land which may have an effect on local receptors, water courses, habitats, wildlife etc. whilst still being able

to control and prevent a fire from worsening.

The purpose of the Fire Prevention Plan (FPP) is to eliminate causes of fires, prevent injuries and loss of life, damage to property and machinery and any mitigating effects to local receptors from fugitive emissions.

The FPP will look to cover those areas within the site which pose a fire risk and how these risks are controlled in order to prevent and minimise the occurrence of a fire.

The FPP will be kept on the main RL server and hard copies issued where required.

Classes of Fire

Classes of fire are referred to by the type of material that is the fuel of the fire. The classes are as follows:

- A - Free burning materials – paper, wood, plastics etc.
- B - Flammable liquids – petrol, methylated spirits, solvents etc.
- C - Flammable gases – methane, hydrogen etc.
- D – Metals – potassium, sodium, magnesium etc.
- F – Cooking oils – fats
- Electricity can be involved in any class of fire

Sources of Ignition

There are various ignition sources which can lead to an uncontrolled fire starting and these sources should be eliminated, where possible in order to prevent the occurrence of a fire.

Ignition sources may be some of the following:

- Uncontrolled smoking
- Use of hot works equipment such as welding equipment, oxy-acetylene cutting
- Sparks from abrasive wheels and cut off equipment
- Faulty electrical equipment
- Plant and Equipment malfunctions and breakdowns
- Hot exhaust on plant and equipment
- Heaters
- Arson

Measures are taken, where possible to remove ignition sources from those where flammable materials are handled and stored i.e. non-sparking pneumatic equipment in the de-pollution department.

Fire-Fighting Equipment

Portable fire-fighting equipment is vital in the prevention of fires worsening and spreading and extinguishing once occurred. Portable fire-fighting equipment as identified as the following:

Water – (red)  Foam – (cream)  CO2 – (black)  Dry Powder – (blue) 

Portable fire-fighting equipment must only be used on the type of fire/material which they are classified/suitable for. Portable fire-fighting equipment is classified as the following:

- Water – Class A fires
- Foam – Class A & B fires
- CO2 – Class B & C
- Powder – Class A, B & C fires

As identified above, Powder fire extinguishers are the most universal.

Fire blankets can also be used as a means of extinguishing fires but these are best suited to small contained Class B fires and for something persons whom may be on fire.

A lay out of where portable fire-fighting equipment are located can be found on the attached portable fire-fighting equipment plans.

Fire Inspections and Housekeeping

Fire inspections and good housekeeping have a very important part in the prevention of fires ensuring that every day running of the site and that this is done so in such a way which minimises the occurrence of a fire.

- Fire inspections are carried out in a variety of ways. These checks are as follows:
- Daily – informal inspection of the main control panel
- Weekly – fire alarm call point test
- Weekly – portable fire-fighting equipment
- Quarterly – inspection and test of the fire alarm system by a competent alarm engineer

Housekeeping is carried out on a daily basis throughout all departments and the yard areas. This is carried out in a variety of ways through mains of hand tools, brushes etc. and mechanical aids such as road sweepers. This in turn helps prevent build-up materials on equipment such as dust which in turn could lead to fire.

Housekeeping is monitored through both informal and formal inspections and information recorded on site diaries and site audits.

Fire Zones

The site is separated in to different fire zones. If the fire alarm is raised the fire marshals will check their respective zones to ensure all persons are evacuated. Once they have cleared their zone they will report to the main gatehouse where they will report to the zone controller and inform them that their zone is clear. If, for any reason the emergency services are called out and a zone comes back as not clear and then, as well as being directed towards the fire the emergency services will also be directed to the zone which has come back as not clear.

Staff are made aware of the site specific fire procedures through safe working procedures.

A layout of the fire zones for the site is attached.

Fire Evacuation Drill

In order for staff to be able to evacuate the site safely in the event of a fire, fire evacuation drills are carried out every six months. The drills are carried out without prior knowledge to staff. All records of fire evacuation drills are recorded within the Fire Precautions Log Book.

Contractor Information

As part of the FPP all contractors whom come on to site must be made aware of all procedures relating to the site in regards of fire prevention.

Before any contractors are allowed to commence with any works on site they must complete a supplier assessment form detailing company particulars. Once on site all contractors must also complete a site induction explaining rules of the site etc. as well as a contractor specific assessment form for the proposed works. The contractor specific assessment form will also identify the need for a permit to work i.e. hot works. If a permit to work is required this will be issued by M&R to the competent person associated with the contractor. Once all works have ceased, the permit to work will then be signed off by the contractor and the area which has been worked in/on will be inspected to ensure that this is left in a safe manner.

All information gathered from contractors will then be filed within the compliance offer for future reference.

Fire Prevention

M&R are committed to the prevention of fires at all times throughout the site. Naturally, there are areas of the site which have a higher risk of fires than others. This is due to the types of work activities which are carried out in those areas, such as welding, oxy-acetylene cutting, use of abrasive wheels etc. as well as areas which store and/or process flammable materials, such as vehicle de- pollution, battery stores etc.

As part of fire prevention plan a fire risk assessment has been completed which covers all departments and activities throughout the site. The fire risk assessment is attached.

During work activities such welding and hot works all M&R employees carry this work out with great care and attention to their surrounding areas ensuring that combustible and flammable materials are not in the area where they are working. They must also ensure that during these types of work activities they have an appropriate fire extinguisher to hand and a fire watch is carried out.

Smoking areas are located on site and these must be used by staff that smoke. These areas

are highlighted through inductions to new starters as well as other visitors and contractors.

In highly flammable areas such as vehicle de-pollution, no-smoking/hot works signs are on display to help reinforce that these areas are of higher risk of a fire occurring and that activities such as smoking and hot works are strictly prohibited.

Both preventative and re-active maintenance is carried out throughout the site. All plant and equipment are scheduled in so that regular maintenance can be carried out. This preventative maintenance helps by ensuring that all plant and equipment are operating correctly and that potential faults are found before they become an issue which may result in a malfunction which in turn could result in a fire. Additional to preventative maintenance re-active maintenance is also carried out where required. All plant and equipment operatives complete defect sheets on a daily basis and these are used to highlight an issues which may occur during scheduled maintenance such as clogged cooling systems which then may lead to overheating resulting in a fire.

All mobile plant are also fitted with a Powder extinguisher in case of emergency as well as air filters which prevent particles and dust from being drawn in to the combustion system.

Due to the nature of work which is carried out on site it is not practicable to fit rubber strips to buckets on loading shovels, rough terrain telescopic handlers etc. as these would soon become damaged due to the type of materials that are handle causing damage to rubber strips resulting in materials becoming entrapped between the bucket/strips and floorings which would then have potential to cause sparks. By not fitting rubber strips this ensures that buckets can be placed as close to the floor as practicable whilst not coming in to contact with floorings.

As standard practice throughout the waste and recycling industry, wire brushes are used by re- handler excavators in order to clear/sweep areas where stockpiles have been stored and handled. Using wire brushes does have the potential to create sparks whilst in use but through training this is carried out as safely as possible and historically, an activity which we have never had an issue with.

Once all operations have ceased, plant will be parked up in such a way that this will not have any effect on stockpiles if this was to combust in some way. It is not possible for this to be a specific parking area due to the fact that the stockpiles change shape and size on daily basis and that some of the plant have a large footprint so they have to be parked accordingly to stockpile changes. Plant operatives will then check their machinery to ensure that there are no obvious issues before leaving this unattended.

The site has total enclosure through the means of parameter fencing. The fencing is checked on a regular basis and any issues, such as attempted break-ins will be recorded in the site diary and the issue will related to the maintenance department so measures can be taken to repair damage/fencing helping to prevent un-authorised access to the site.

The site has 24 hour CCTV security which, during normal operating hours is monitored by

the company. Out of hours this is monitored by an external security company. As part of the security system there are numerous motion detectors located throughout the site which when set will notify the external security company of any abnormal activities on site. These measures help to ensure that any breaks in are brought to the attention of our security company and help to ensure that damage to property, such as arson is prevented.

Additional measures are also taken with stockpiles to prevent arson. Stockpiles are stored on site in such a way that they are either at least 6 meters away from the site boundary or enclosed by 6 meter high concrete pusher walls.

M&R also refuses the employment to any person whom has been convicted of an arson offence.

The documentation such as the fire prevention plan, fire precautions log book, evacuation procedure are brought to employees attention through inductions and training. If requested all relevant documentation will also be issued.

Self-Combustion

The length of which materials will be stored on site will be in accordance to table S1.1 list of activities of the site permit which has been issues by the Environment Agency (EA).

Some of the materials that are accepted on to site would, alone not have the properties to self-combust. Expectations to this would be materials which have the ability to rust such as iron, so this could be End of Life Vehicles (ELV's), scrap metals etc. As these types of materials start to corrode they can generate heat through an electrochemical process involving water and oxygen. Due to the type activity which we carry out this is something which is unavoidable, however to prevent issues that may arise from this material throughput is vital. Quick and efficient throughput will ensure that the chance of fires occurring will be minimised but due to the constraints of planning permission the maximum time allowed to process materials has an effect on this.

Once materials have been processed, through the shear for example these are separated in to separate factions and material types some of which have potential to show signs on decomposing. These materials are processed and removed from site as quickly possible in order to prevent the risk of fires. If, for some reason these materials are not removed from site these stockpiles will be monitored through visual monitoring and the use of a thermal image camera and the stockpiles will be turned by the means of Materials Handling equipment (MEH) where required to prevent build-up of heat resulting in self combustion.

The majority of combustible materials will not be stored for long periods of time, if for any reason materials are stored for more than three months these stock piles will be monitored and turned.

All non-compatible materials will be stored separate from one and another and enclosed, where possible by concrete walls and steel containers create a fire break. This is to ensure

that the prevention of fires will not spread to other stored materials.

All End of Life Vehicles will also have batteries removed. Again these will be stored separately in acid leak proof containers. All batteries will then be removed off site by an approved waste carrier and transported to an authorised facility in order to be processed safely.

Items such as tyres will be removed from ELV's. Once waste removed tyres will be stored separately from other materials in a steel shipping container. Tyres will then be bailed and removed from site in order for them to be processed further.

Managing Fire Water and Water Supplies

In the event of a major incident where the emergency services are called to site the potential of excessive amounts of fire water can occur. In order to deal with this the site is made up of impermeable surface, bunded with its internal drainage system with a 20,000 litre capacity, three stage interceptors. The drainage system then discharges to foul sewer at the consent of the regulatory authority. The regulatory authority will also take a discharge sample to ensure that no contaminated water is discharged.

The site has various hydrants located throughout the site which can be used to connect to the emergency services. There is a large lagoon at the rear of the yard which has been used to fight fires previously. However, the emergency services may also be required to connect to other company's fire hydrants, local council water fire hydrants and at a last resource water may be sourced from local water courses.

Where possible, any run-off fire water will be re-used and sprayed back on to a fire as long as this causes no further mitigating issues.

Site Information

The following information relates to the "Fire Prevention Plans" guidance which has been provided by NRW. The information relates to specific points as highlighted within the guidance as well as information from the site permit and other general site information for waste types and inputs which the site accepts and handles.

- The amount and type of waste received daily and how this is managed.

The waste types which the FPP covers will be those listed within schedule 2.2 of the site permit which has been issued by the Environment Agency (EA).

Information regarding daily specific amount is not only commercially sensitive information but a figure/s which is hard to specify as this will change on a daily basis due to various factors i.e. current market values of waste materials. However the information below is an example of average daily amount of materials which have been accepted on to site.

All incoming waste entering the site will be directed to the assessment area where details of the load will be recorded. This will help us to determine whether or not the waste type is permissible. Once the details have been recorded and, if the waste type is permissible this will be directed to the relevant discharge area for that waste type.

The total amount of waste, types and forms (e.g. unprocessed, shredded or baled) on site are listed within the site permit and not exceed the limits laid out in this.

The location of where each waste type is stored on site is identified on the attached site plan of M&R. This is a live document as location of materials may change and the plan will be amended to suit.

Stockpiles are inevitably ever-changing thing and these can be increased and reduced on a daily basis. The details below list the current stock piles and the maximum size which they will be allowed contain at one time.

The minimum separation or fire break between stockpiles will be of at least 6 meters. We have implanted and still are making arrangements for further installations of concrete walls which will a solid fire break 1.2 meters in depth and 3 meters high. This will help to prevent the spread of fires if they occur and contain them in segregated areas.

The materials stockpiles will be visually monitored including managing hotspots (sign of potential self-combustion) on a daily basis by yard operatives, management and the site TCM .If signs of a fire are found then these must be reported to the relevant person/s so the appropriate measures can be taken and recorded.

Stockpiles are kept with a minimum 6 meter gap between them and, where possible stored diagonal to each other. Additional to this we are currently making arrangements for the installation of concrete be 1.2 meters in depth and 3 meters high. This will help to prevent the spread of fires if they occur and contain them in segregated areas.

We have numerous fire marshals on site that are trained to be able to identify the signs of fire andhow to prevent these from occurring in the first place. The fire marshals are also trained in the use of fire-fighting equipment to help extinguish small incidents and stop the spread of fire.

We also have the ability to use material handling equipment such as excavators and loading shovels to remove materials from stockpiles to reduce the size of the stockpile and create further fire breaks.

To stop the spread of fires from site the main storage areas are contained through the use concrete pusher walls which are around 3 meters high.

In the event of a fire on site we have fire marshals on site that are trained, if safe to do so to, tackle fire's through the use of fire-fighting equipment. If the fire is too large for them to tackle then the fire alarm must be raised so that the site can be evacuated and the emergency service will be phone. Information regarding whom to call can be found on the

environmental accident plan which is located in reception areas, canteen areas etc.

Further information can also be found in the fire precautions log book. A short, quick reference hard copy version in the gatehouse in instances where the Fire and Rescue Service may be required on site. As part of our fire precautions log book site plans are included which highlight areas where potentially highly flammable materials are stored. This also contains useful contacts, fire emergency response etc.

To prevent combustion products and emissions to air, land and water all fires will be extinguished as quickly as possible. Emergency response to any fire will be to initially raise the alarm internally and if a fire becomes a situation which is beyond the capabilities of that of the site then the emergency services will be contacted.

If the fire alarm is raised those persons on site must congregate adjacent to the main entrance. At this point a member of staff will be allocated to take charge of incoming traffic i.e. emergency services at the entrance road to the site. A further member of staff will then man the main entrance and direct incoming traffic to the relevant area.

We have two water specialists (Wales Enviro and CRES) that are oncall at any given time to our site if the fire water cannot be recycled and reused to tackle the fire. These specialists are on hand to remove excess water if deemed necessary.

Any burnt waste will be transported to nearby facilities to be treated.

Site Plans

Various plans for the site can be found in the attached documents. These are as follows:

- Overall site plan
- Flammable areas site plan
- Drainage site plan
- Satellite site layout showing compass rose and prevailing wind direction

Conclusion

Throughout the site M&R intends to try are utmost to prevent fires from occurring as well as reducing and minimising the effects from fire if they occur.

We take a pro-active approach to the way in which we monitor the site and preventing fires on site in order to cause as little impact on resources and to those receptors surrounding our site.

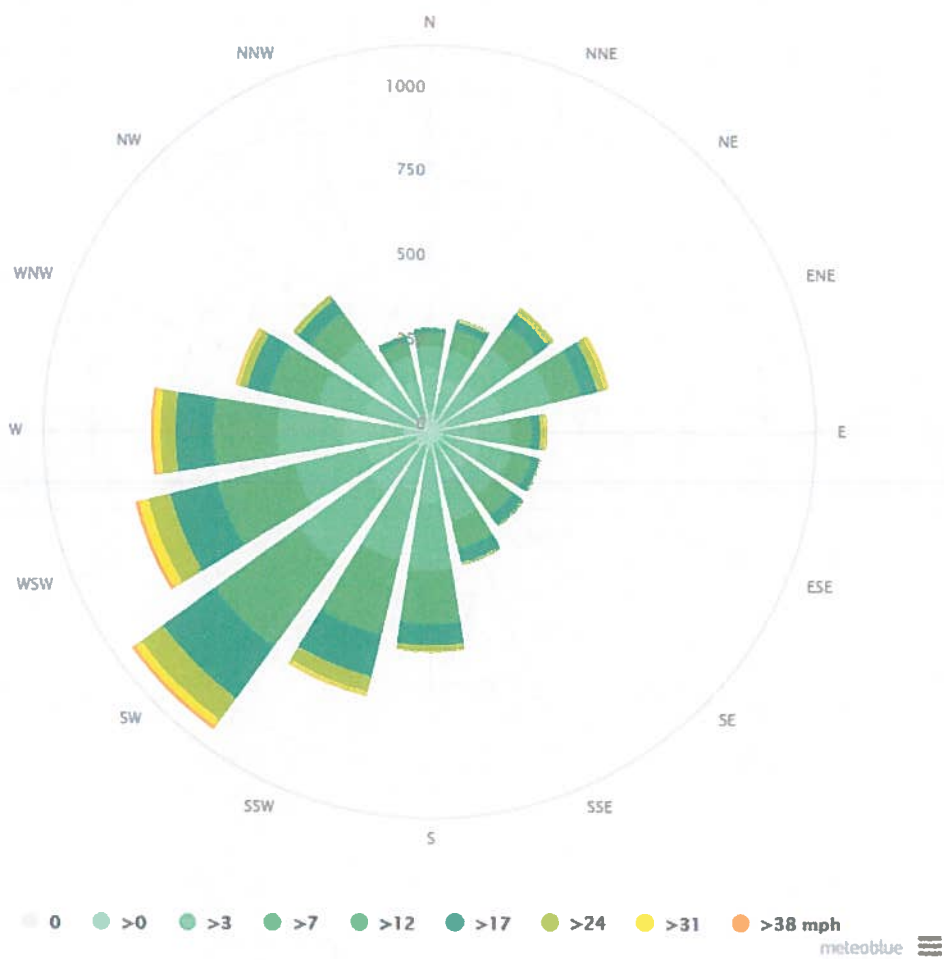
In adhering to the areas laid out in this FPP we feel that this is realistic and will be achievable in relation to the level of risk associated to the site and fires.

Site location



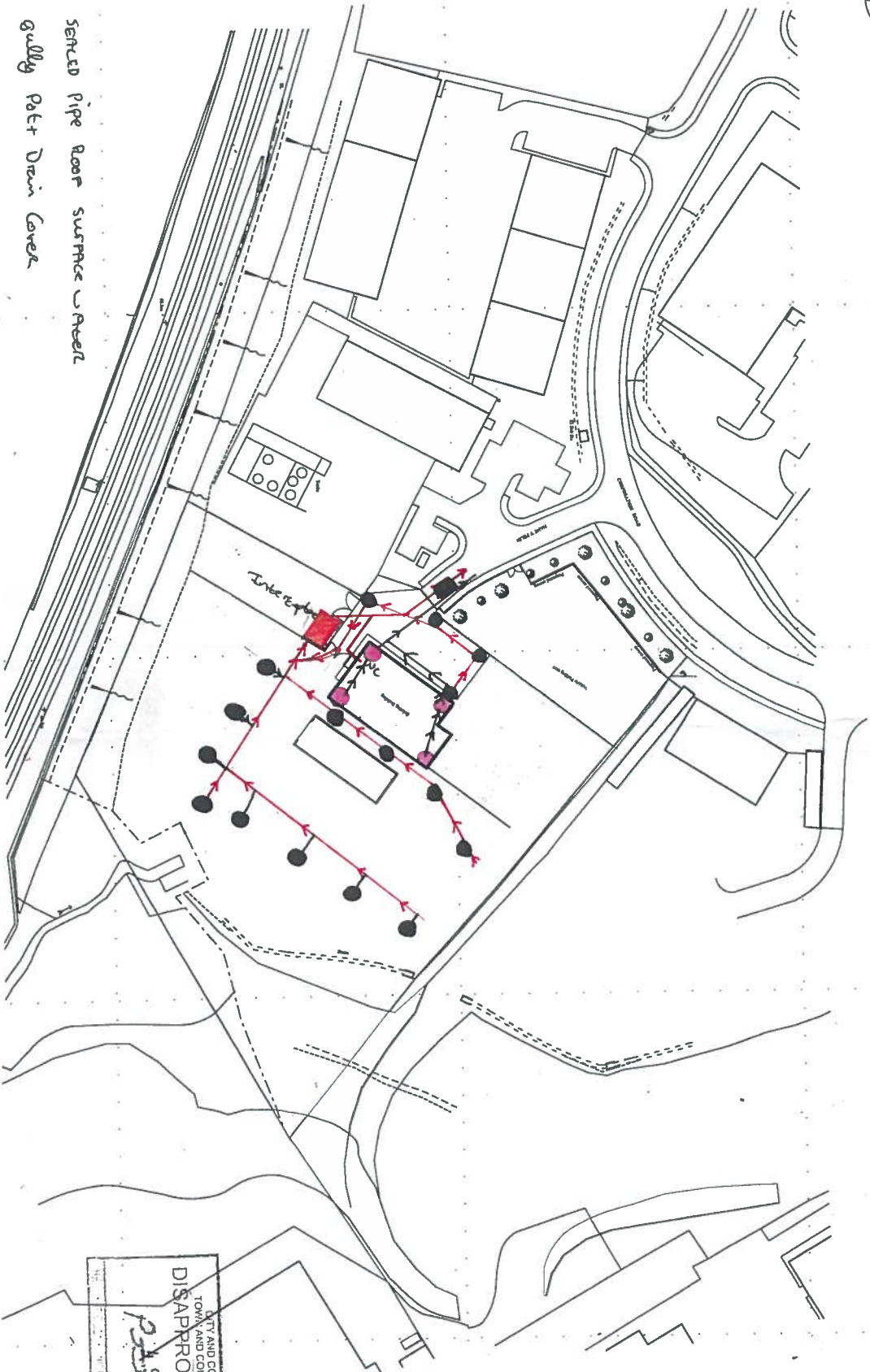
The former SWB Cymru site is situated on a mixed industrial and commercial estate. North East to the site is a scrapyard, with a chemical works to the West. The nearest housing estate is over 500 meters away.

Wind rose





Drainage Plan



- Served Pipe Roof Surface + Aerial
- - Gully Pot + Drain Cover
- Interception Lined Drainage + Foul TO Foul Sewer

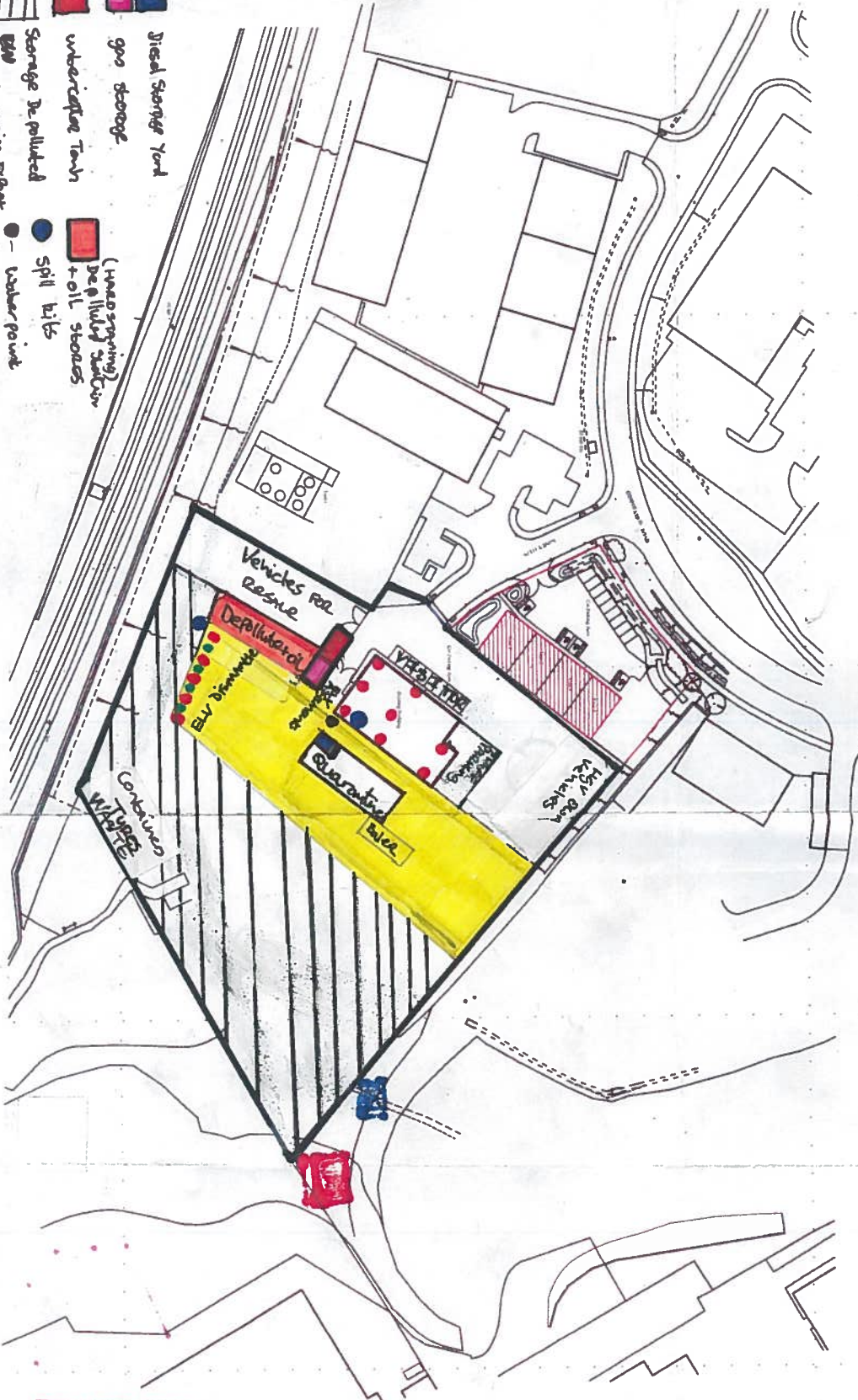
Surface Water off Building Served Pipe

Note:- This drawing is intended for Planning purposes only. No search has been made of SDP (Site Drainage Plan) records. The client is advised to ascertain what services are in the area and should confirm the location of any services with the Building Regulations approval. A Party Wall Notice may need to be issued by the Client to the adjoining neighbours, prior to starting work. All dimensions are approximate and should be checked on site.

	CLIENT :- M&R Commercial Vehicle Depollution and Recycling Facility, Plois P & W, St. Davids Road, Nant y Felin, West Industrial Park, Forestfach, Swansea, SA5 4HL	JOB TITLE :- New Boundary treatment / Screen to Plois P & W, St. Davids Road, Nant y Felin, West Industrial Park, Forestfach, Swansea, SA5 4HL	DWG TITLE :- OS Extract
Simply Designed	SCALE :- 1:1250	DATE :- June 2014	DWG No. :- P10
	Mob. : 07758 649449	E-mail : simplydesigned@hotmail.co.uk	REV. :- B
			A3

CITY AND COUNTY OF SWANSEA
TOWN AND COUNTRY PLANNING ACTS
DISAPPROVED
21 SEP 2014
P. J. JONES

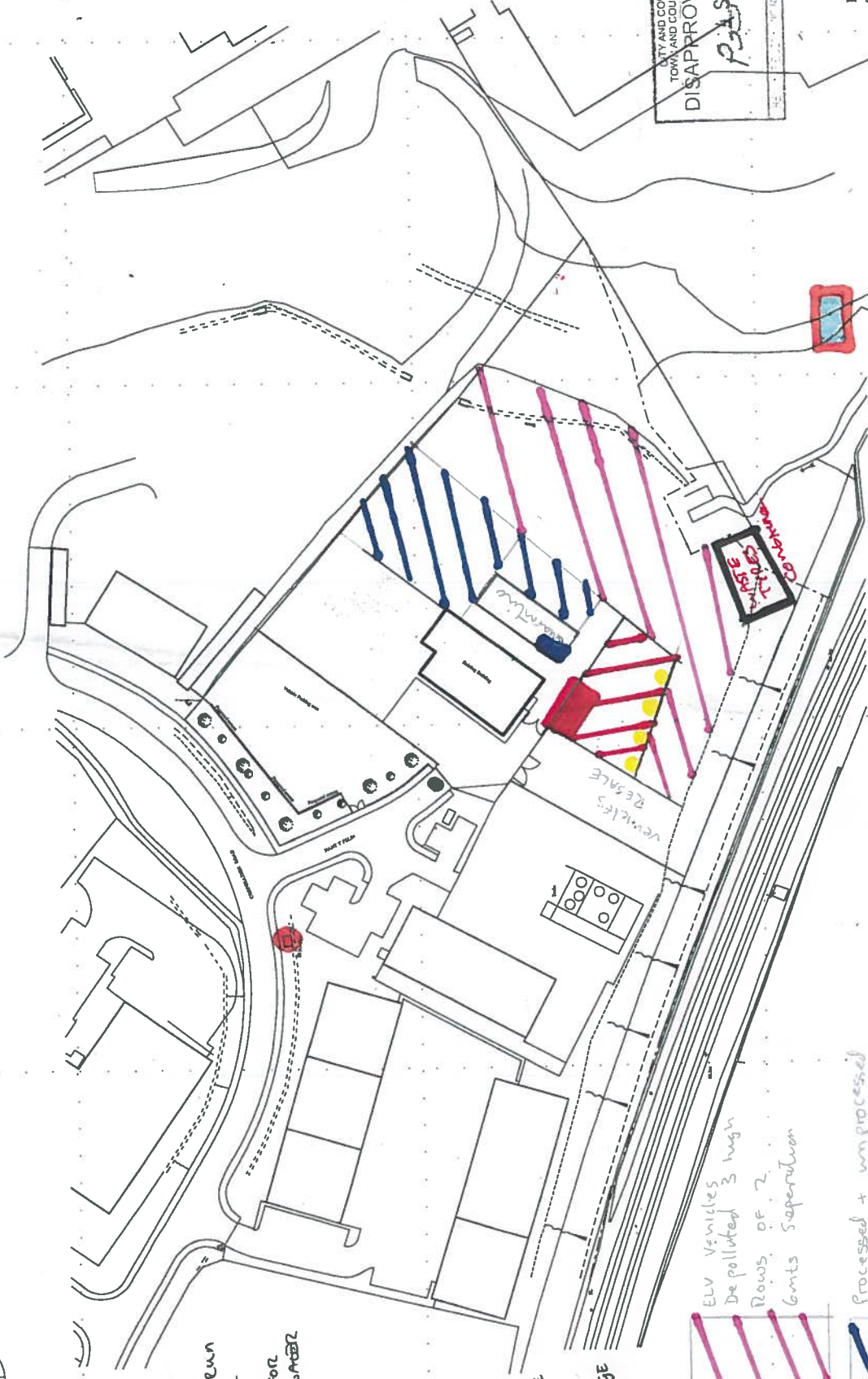
Rev. A - 27-06-2014 - Red line boundary amended.
Rev. B - 15-07-2014 - Red line boundary amended.



27 MAR 2015

Note: - This drawing is intended for Planning purposes only. No search's have been made by "SIP" into existing services. The Client is advised to ascertain what services are in the area and should contact the Local Authority to see if a building Regulations approval is required and should advise the contractor accordingly. A Party Wall Notice may need to be issued by the Client to the adjoining neighbours, prior to carrying work. All dimensions are approximate and should be taken on site.

SITE FING PLAN



- MAIN PIPE TO ISOLATE RUN OFF WATER
- LAGON FOR EXTRA WATER
- FIRE HYDRANT
- WATER SCOURGE
- FUEL TAIL STORAGE
- GAS STORAGE



Processed + unprocessed
Scrap for SHEAR FEED

non depolluted assemblant
+ vehicle Dismantling

Note: This drawing is intended for planning purposes only. No warranty has been made by "SD" into existing services. The client is advised to ascertain what services are in the area and should contact the Local Authority to see if Building Regulations approval is required and should advise the contractor accordingly. A Party Wall Notice may need to be issued by the Client to the adjoining neighbours, prior to starting work. All dimensions are approximate and should be checked on site.

CITY AND COUNTY OF SWANSEA
TOWN AND COUNTRY PLANNING ACTS
DISAPPROVED
23 SEP 2014
P334040005

Rev. A - 27-06-2014 - Red line boundary amended.

Rev. B - 15-07-2014 - Red line boundary amended.

	CLIENT :- M&R Commercial Vehicle Depollution and Recycling Facility. Plots P & W, St. Davids Road, Nant y Felin, West Industrial Park, Forestfach, Swansea. SA5 4HL	JOB TITLE :- New Boundary treatment / Screen to Plots P & W, St. Davids Road, Nant y Felin, West Industrial Park, Forestfach, Swansea. SA5 4HL	DWG TITLE :- OS Extract
Simply Designed	SCALE :- 1:1250	DATE :- June 2014	DWG No. :- P10 REV. :- B A3

Mob : 07758 649449 E-mail : simplydesigned@hotmail.co.uk