



Accident Management Plan EPR/AB3695CH

Nine Mile Point Waste Processing Facility

for:

Hazrem Environmental Limited

CRM 083 002

'Experience and expertise working in union'



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Accident Management Plan CRM 083 002 PE R 011 B

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1.0 INTRODUCTION

1.1. Overview

- 1.1.1. This Accident Management Plan (AMP) has been prepared as part of on-site Operational Documentation for Hazrem Environmental Limited's Waste Processing Facility at Nine Mile Point Industrial Estate, Ynysddu, Cwmfelinfach, Caerphilly, NP11 7HZ.
- 1.1.2. This AMP will be incorporated into the site's EMS following commencement of operations. The plan will be updated and reviewed in accordance with the requirements of the site management systems.
- 1.1.3. This AMP is to be used as a reference working document for operational staff on a day to day basis and shows what actions should be taken to minimise a given event and who is responsible for authorising or undertaking any action.

1.2. Structure of Accident Management Plan

- 1.2.1. This AMP considers all potential accidents and describes how they are managed and minimised.

1.3. Relevant Guidance and Documentation

- 1.3.1. This AMP has been prepared with reference to the following key guidance documentation:-
 - Environmental Permitting (England & Wales) Regulations 2016 (as Amended 2018);
 - Natural Resource Wales guidance: How to comply with your environmental permit, Version 8, October 2014;
 - Environment Agency guidance: Develop a management system: Environmental permits, updated April 2018;
 - Environment Agency guidance: Risk assessments for your environmental permit, updated May 2018; and
 - Sector Guidance Note S5.06: Guidance on the Recovery and Disposal of Hazardous and Non-Hazardous Waste, Environment Agency 2013.

1.4. Regulated Activities

- 1.4.1. The Operator is permitted to operate a bespoke Part A Installation Environmental Permit for a Waste Processing facility for the production of Solid Recovered Fuel (SRF) and Refuse Derived Fuel (RDF) accepting up to 100,000 tonnes per annum of waste.
- 1.4.2. The Facility's operation will consist of a waste reception building where waste, which will be delivered to site in skips or bulk waste carriers, will be sorted into different fractions for recycling, recovery or disposal. Waste will be segregated to separate out the recyclable materials from the waste received. The remaining bulk waste will then be treated by mechanical shredding and/or drying to produce Solid Recovered Fuel (SRF) or Refuse Derived Fuel (RDF) which will then be baled and wrapped. All activities, except the drying, will be carried out inside the waste reception building. The resulting bales will then be stored outside the building on hardstanding up to a maximum of three months prior to dispatch off-site.

1.5. Site Location

1.5.1. The facility is located at;

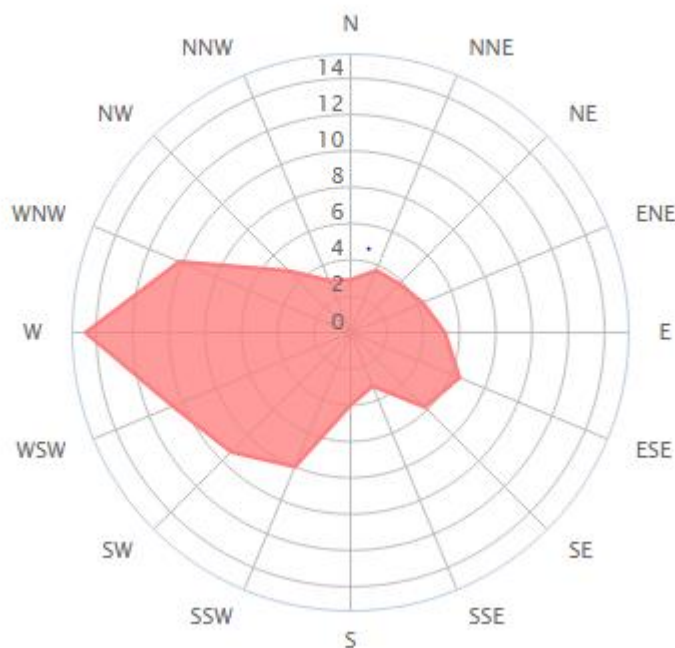
Nine Mile Point Industrial Estate,
Ynysddu,
Cwnfelfinch,
Caerphilly,
NP11 7HZ.

- 1.5.2. The Facility will occupy an area of 1.09 hectares within the approximately 16 hectare Nine Mile Point industrial estate. The site is surrounded by other industrial units, woodland areas and the Sirhowy River.
- 1.5.3. The site boundary is illustrated in green on the Drawing 'Installation Boundary' CRM 083 002 PE D 001. The site is centred at National Grid Reference (NGR) **ST 19235 91305**.
- 1.5.4. The location is shown on Drawing 'Site Location' CRM 082 002 PE D 001 in Appendix I.
- 1.5.5. The site is located close to other Industrial and Commercial units on the industrial estate to the east and west of the site, the closest of which is immediately adjacent to the east of the facility. The Sirhowy River is approximately 35m South of the facility and there is agricultural land approximately 150m South.
- 1.5.6. The nearest residential properties are on New Road, approximately 470m North East of the eastern edge of the site boundary and William Street, approximately 478m West of the western edge of the site boundary.
- 1.5.7. Wind statistics (based on regular observations recorded at the 'Caerphilly' monitoring station www.windfinder.com) show that prevailing winds at this site are from the west, west north west and west south west, as illustrated in Figure 1.5.7 below. Based on the average wind speed, the Beaufort scale describes 7-9 knots as a 'moderate' to 'fresh' breeze therefore any emissions are likely to be readily dispersed.

Figure 1.5.7 Wind Speed and Direction

| Month of year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year |
|---------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 1-12 |
| Dominant Wind dir. | ➤ | ➤ | ➤ | ➤ | ➤ | ➤ | ➤ | ➤ | ➤ | ➤ | ➤ | ➤ | ➤ |
| Wind probability >= 4 Beaufort (%) | 19 | 23 | 18 | 21 | 21 | 11 | 8 | 11 | 5 | 14 | 6 | 24 | 15 |
| Average Wind speed (kts) | 6 | 7 | 7 | 8 | 7 | 6 | 6 | 6 | 5 | 6 | 4 | 7 | 6 |
| Average air temp. (°C) | 8 | 8 | 10 | 13 | 15 | 19 | 23 | 19 | 17 | 15 | 11 | 9 | 13 |

Wind direction distribution in (%)
Year



1.6. Receptors

- 1.6.1. Sensitive receptors are generally considered to be places where people are likely to be for prolonged periods/where members of the public/off-site workers may be exposed to unacceptable releases arising from the facility.
- 1.6.2. NRW regard a place where people are likely to be present for more than 6 hours at one time as being a sensitive receptor. The term does not apply to the operations of the permitted facility, their staff when they are at work or to visitors to the facility, as their health and well being is covered by Health and Safety at Work legislation.
- 1.6.3. The key receptors which may be impacted by accidents at the facility are indicated in table 1.6.3 below.

Table 1.6.3: Key Receptors

| Receptor | Type | Distance (m) | Direction |
|--|--------------|--------------|-----------|
| The site is located close to other Industrial and Commercial units on the Nine Mile Point Industrial Estate. These lie to the east and west of the site. The closest of these is immediately adjacent to the facility. | Commercial | 0 | E |
| Sirhowy River | Ecological | 35 | S |
| Agricultural Land | Agricultural | 150 | S |

| Receptor | Type | Distance (m) | Direction |
|--|-------------|--------------|-----------|
| Residential properties at New Road, Wattsville | Residential | 470 | NE |
| Residential Properties at William Street, Cwmfelinfach | Residential | 478 | W |

2.0 PROCESS DESCRIPTION

2.1. Process Description

- 2.1.1. The Nine Mile Point Waste Processing Facility will receive up to 100,000 tonnes of waste per annum.
- 2.1.2. Waste will be delivered to site during the following operational hours:
- 07:30 to 18:30 hours Monday to Friday;
 - 07:30 to 13:00 hours Saturdays;
 - No deliveries will take place on Sundays or Public/Bank Holidays.
- 2.1.3. Waste loads will be delivered to site in sheeted skips/bulk containers and will be visually inspected prior to acceptance to ensure compliance with environmental permit conditions and the waste carrier's/producer's description. Unacceptable waste loads will be rejected with records maintained. Waste deliveries will be prohibited from entering the site if the reception area is full and there is insufficient space for storage of waste or incoming vehicles on site.
- 2.1.4. All deliveries to the site will be subject to pre-acceptance evaluation and delivery schedule as agreed with customers prior to arrival on site. No ad hoc waste deliveries will be allowed.
- 2.1.5. The waste is loaded into the primary-shredder followed by screening to separate out the fines. Clean waste can bypass the primary shredder and be fed directly into the dryer.
- 2.1.6. The waste then passes through an overband magnet, eddy current separators and a near infrared optical sorter to remove any recyclables.
- 2.1.7. Material is then shredded to the appropriate particle size depending upon the output specification required.
- 2.1.8. The shredded waste is transferred to a fluid bed dryer, fuelled by natural gas, which reduces the moisture content by heating the waste to a temperature of approximately 100-120°C. Exhaust air from the dryer will pass through an Active Carbon Filter (ACF) prior to release via a stack.
- 2.1.9. Once shredded and dried, the waste is then transferred to the baling and wrapping equipment.
- 2.1.10. The operator will also produce RDF. The specification for RDF is less stringent than that for SRF and the shredded waste does not require drying. RDF will follow the same process steps outlined above but it will bypass the drying process and be transferred directly to the baler.
- 2.1.11. An RDF Monitoring Unit is used to evaluate the quality and composition of the RDF/SRF produced. The unit calculates and transmits the RDF net calorific value, chlorine content, moisture content and biogenic content to the SCADA system.
- 2.1.12. The baled waste is then wrapped with five layers of wrapping to protect it and keep the moisture content down. This also helps to prevent litter as all baled waste is to be stored externally to the main reception building under a canopy, prior to dispatch off-site. Bales will be monitored daily to ensure that any splitting of wrapping is identified at an early stage and rectified immediately.
- 2.1.13. Recyclates will be stored inside the waste reception building in bays following segregation and will be removed off site for recycling.

- 2.1.14. Baghouse filters will be used on the primary and secondary shredders to control dust emissions. The dryer will also have a baghouse filter for dust abatement and an ACF to minimise odorous emissions.

3.0 ACCIDENTS

3.1. Overview

- 3.1.1 This section describes accident risks arising from operation of the facility. A risk assessment of all accident hazards is presented in Appendix A of this report.

3.2. Failure of Containment

- 3.2.1 The facility is located within a Groundwater Vulnerability Zone which is a major aquifer with high leaching potential. Without the measures below in place if a containment failure occurred pollution of the aquifer and contamination of surrounding land could occur.
- 3.2.2 The facility will be dealing with non-hazardous solid waste. All accepted incoming waste will be stored and treated inside the waste reception building which will have an impermeable floor and fast acting roller shutter doors. All drainage from this building will discharge to sewer under a discharge consent with Dwr Cymru. Any wastes which may generate polluting leachates will be stored and treated within the waste reception building.
- 3.2.3 The only waste stored externally will be the baled and five times wrapped RDF/SRF. The bales will be inspected daily and any splits in the packaging repaired immediately.
- 3.2.4 The only chemicals and oils stored on site will be maintenance oils which will be stored on hardstanding within a bund in the maintenance department. Incompatible chemicals will not be stored together.
- 3.2.5 Site surface water drainage and clean run-off from the roof will be directed to storage crates via a full retention interceptor then released into the industrial estate's existing surface water drainage system.
- 3.2.6 Silt traps and oil interceptors will be inspected on a regular basis to check their integrity and be maintained to prevent overfilling along with the site drainage system.
- 3.2.7 Hard standing areas will be inspected for damage on a daily basis and any repairs will be carried out promptly and to the original standard and specification.
- 3.2.8 All site personnel will be tasked with monitoring for evidence of spillages and debris during their day to day routine. Any evidence of spillage or debris will be reported to the Site Manager or his nominated deputy for remedial action.
- 3.2.9 Clean-up procedures will be implemented to contain and remove potentially polluting material.
- 3.2.10 Training will be provided to all staff in relation to use of spill kits and spill clean-up procedures. Copies of procedural flow charts can be found in Appendix D.
- 3.2.11 Following an incident, an incident report form (included in Appendix G) will be completed and a root cause analysis will be undertaken to determine why the incident occurred. This analysis will also review and update procedures in place at the facility if they are deemed to be a cause of the incident.
- 3.2.12 If the root cause analysis requires procedures to be updated then Natural Resources Wales will be provided with the updated procedures.

3.2.13 Natural Resources Wales will be notified as per requirements of Schedule 5 of the Environmental Permit.

3.3. Explosions

3.3.1 The risk of explosion is considered to be low due to the nature of the waste to be accepted on site and if the site is effectively managed.

3.3.2 Explosion risk has not been further considered in this accident management plan.

3.4. Overfilling

3.4.1 There will be no above ground storage tanks or sumps in use at the site so the risks of overfilling have not been considered further in this accident management plan.

3.5. Fire

3.5.1 The consequences of fire, should it occur, could be harmful, with site personnel and visitors at most risk. If a fire develops, there could also be a risk of harm to the local environment, local residents and nearby workplaces. In addition, the consequences of a failure to contain firewater could result in harm to groundwater, damage to equipment and contamination of soils.

3.5.2 A Fire Prevention Plan has been compiled to manage foreseeable risks from the facility, in accordance with Natural Resources Wales's Guidance Note 16: *Fire Prevention and Mitigation Plan Guidance- Waste Management*, Published August 2017.

3.5.3 The maximum storage time on site for all RDF/SRF will be three months. Typical storage times for baled wastes will be less than one month and procedures will ensure that waste is moved off site regularly with the oldest bales always being removed first.

3.5.4 The site will have a monitored fire detection and alarm system and firefighting equipment will be maintained on site in accordance with fire regulations.

3.5.5 A 'No Smoking' policy will be strictly enforced on site by Site Rules and signage around the site.

3.5.6 No waste materials will be burned on the site.

3.5.7 Any fire will be regarded as an emergency and will be extinguished at the earliest opportunity utilising local Fire & Rescue Services if required.

3.5.8 Site security systems to prevent unauthorised access will include a perimeter security fence, security gates and CCTV monitoring. The gates will be kept locked and secured outside the site's operational hours.

3.5.9 All plant and equipment and electrical installations will be kept in good working order and will be subject to a routine inspection and maintenance schedule.

3.5.10 Should firewater be produced onsite, storage will be available in the surface water storage crates.

3.5.11 All Site staff will be fully trained in the fire procedure and the use of firefighting equipment. Fire drills will be carried out at least once a year to ensure personnel can be effectively evacuated from site.

- 3.5.12 Records of all fire drills and actual fires will be kept and any incidents of fire will be reported to Natural Resources Wales as per schedule 5 of the Environmental Permit.
- 3.5.13 Appendix B contains an inventory of chemicals held on site which will be supplied to the Fire and Rescue Service should a fire occur.
- 3.5.14 Appendix C contains a list of key contact names and numbers for use in any emergency situation.
- 3.5.15 Following a fire incident the 'Accident and Incident' report form (in Appendix G) will be completed and a root cause analysis will be undertaken to determine why it occurred. This analysis will also review and update procedures in place at the facility if they are deemed to be a cause of the incident.
- 3.5.16 If the root cause analysis requires procedures to be updated then Natural Resources Wales will be provided with the updated procedures.

3.6. Flood

- 3.6.1 The facility is not located within a flood risk zone. The risk of groundwater flooding is also considered to be low.
- 3.6.2 The nearest watercourse is the Sirhowy River, located approximately 35m South of the site which can flood to a limited extent due to its location in the valley floor. The site is located in an elevated position compared to the river.
- 3.6.3 If any flooding incident occurs, a root cause analysis will be undertaken to determine the reasons for the incident. This analysis will also review and update procedures in place at the facility if they are deemed to be a cause of the incident. The 'Accident and Incident' report form (Appendix G) will be completed and maintained as a record.
- 3.6.4 If the root cause analysis requires procedures to be updated then Natural Resources Wales will be provided with the updated procedures.

3.7. Failure of Plant and/or Equipment

- 3.7.1 The consequences of a breakdown or failure of plant or equipment on site include, pollution of local surface and groundwater and harm to human health.
- 3.7.2 In the event that there is a breakdown of equipment or plant out of hours, standby and duty staff will receive email notification via the SCADA system. Email notifications are also sent to the standby and duty staff to inform them of any alarms raised on-site.
- 3.7.3 All treatment operations, except the drying, are carried out within the waste reception building. The roller shutter doors to the building are kept closed at all times except during waste deliveries. A failure of any of the plant or equipment can be contained within the waste reception building.
- 3.7.4 Key spare parts are kept on site so that any failed parts are quickly replaced and unnecessary delays in ordering parts are avoided. Contracts will be in place for suppliers for ordering and the prompt delivery of replacement parts. When a spare part is used, the Site Manager is made aware and another replacement part is ordered to ensure there is adequate cover at all times.
- 3.7.5 Additional plant will be hired in when required to ensure continuity of operation and to make sure waste does not accumulate beyond the storage capacity.

- 3.7.6 If plant or equipment cannot be made functional or hired in within 24 hours, and waste operations cannot be modified to ensure the facility can continue to operate, waste will temporarily stop being accepted at the facility if storage capacity is to be exceeded.
- 3.7.7 All equipment is maintained in accordance with the manufacturers recommendations
- 3.7.8 Any failures of plant or equipment which could cause or is causing significant pollution will be reported to Natural Resources Wales as per Schedule 5 of the Environmental Permit.
- 3.7.9 Following an incident due to plant and equipment failure, the 'Accident and Incident' report form will be completed (included in Appendix H) and a root cause analysis will be undertaken to determine why the incident occurred. This analysis will also review and update procedures in place at the facility if they are deemed to be a cause of the incident.
- 3.7.10 If the root cause analysis requires procedures to be updated then Natural Resources Wales will be provided with the updated procedures.

3.8. Overcapacity

- 3.8.1 Accepting more waste than the facility can process could result in inappropriate waste storage. Such an event could result in wastes, odours, dust and leachate leaving the site boundary and vermin could also be attracted to the site.
- 3.8.2 Storage capacity in the waste reception building is 610 tonnes in the waste reception area and 217.97 tonnes for segregated waste (once separated out from the incoming waste and stockpiled for recycling). Storage is monitored by operatives. Should another accident or incident for example, a mechanical breakdown or plant failure mean that storage capacity is at risk of being exceeded, waste deliveries will be turned away and suppliers will be notified that contingency arrangements will need to be made.
- 3.8.3 Waste will only be accepted back onto site when there is adequate storage capacity within the waste reception building.
- 3.8.4 Following an incident of oversupply, the 'Accident and Incident' report form will be completed (included in Appendix G) and a root cause analysis will be undertaken to determine why the incident occurred. This analysis will also review and update procedures in place at the facility if they are deemed to be a cause of the incident.
- 3.8.5 If the root cause analysis requires procedures to be updated then Natural Resources Wales will be provided with the updated procedures.

3.9. Staff Shortages

- 3.9.1 There is a staff standby rota in place and it is actively managed. In the event of staff illness the next name is drawn from the list.
- 3.9.2 Short term staff shortages (such as a few days illness) will not affect the ability of the site to operate effectively as other employees can be reassigned to critical operations.
- 3.9.3 In the event of prolonged absence of employees, temporary staff will be recruited and appropriately trained to fulfill non-critical roles whilst other more experienced staff members are reassigned.
- 3.9.4 Following an incident where staff numbers or types are below the required level, the 'Accident and Incident' report form will be completed (included in Appendix G) and a root cause analysis

will be undertaken to determine why the incident occurred. This analysis will also review and update procedures in place at the facility if they are deemed to be a cause of the incident.

- 3.9.5 If the root cause analysis requires procedures to be updated then Natural Resources Wales will be provided with the updated procedures.

3.10. Failure of Mains Services

- 3.10.1 Failure of mains services could result in harm to site personnel and visitors and the local environment.
- 3.10.2 The Operator will enter into supply contracts with utility suppliers and will keep informed of any planned utility outages and adjust activities at the facility to ensure that no harm to human health or pollution to the environment can occur.
- 3.10.3 During unplanned utility outages contact will be made with the supplier to determine the expected length of the outage and if this is significant e.g. over 24 hours then waste deliveries to the facility will be suspended. This will ensure that waste capacity is not exceed and that no harm to human health or pollution to the environment can occur.
- 3.10.4 The power outage procedure can be found in Appendix F.

3.11. Vandalism

- 3.11.1 The likelihood of vandalism occurring at the site is low due to the preventative measures in place. Should vandalism occur plant and equipment could be damaged which could result in contamination of land or odour, dust or litter nuisance.
- 3.11.2 The site is surrounded by a secure gate and fence and is locked outside normal working hours. CCTV cameras are in place to monitor the site.
- 3.11.3 Following an incident of vandalism, the 'Accident and Incident' report form will be completed (included in Appendix G) and a root cause analysis will be undertaken to determine why the incident occurred. This analysis will also review and update procedures in place at the facility if they are deemed to be a cause of the incident.
- 3.11.4 If the root cause analysis requires procedures to be updated then Natural Resources Wales will be provided with the updated procedures.

3.12. Vehicle Collisions

- 3.12.1 Should a vehicle collision occur then harm to human health or fire could result.
- 3.12.2 The likelihood of a vehicle collision occurring is small. All deliveries and pick- ups will be scheduled and operational procedures will be in place to control traffic movements around the site and within the waste reception building, especially during waste deliveries, to minimise the risk of collision and accidents.
- 3.12.3 Following a vehicle incident, the 'Accident and Incident' report form will be completed (included in Appendix G) and a root cause analysis will be undertaken to determine why the incident occurred. This analysis will also review and update procedures in place at the facility if they are deemed to be a cause of the incident.
- 3.12.4 If the root cause analysis requires procedures to be updated then Natural Resources Wales will be provided with the updated procedures.

4.0 RECORDS AND REPORTING

4.1. Incident Review

- 4.1.1 Records will be made of all accidents and incidents which occur at the facility. The Accident and Incident record form provided in Appendix G is to be used to make records. All records of events and actions taken will be retained as required by the Environmental Permit.
- 4.1.2 Where an accident or incident occurs an investigation will take place to determine both the root cause of the accident and how to prevent the accident reoccurring. All findings of the investigation will be reported to the management of Hazrem Environmental Ltd and shared with all employees so good practice can be incorporated into future works.
- 4.1.3 A formal review of all on-site processes will be undertaken by the Operator following any major accident or incident. Any changes to processes or procedures required as a result of the formal review will be communicated to the management and employees of Hazrem Environmental Ltd.

4.2. Notifying Natural Resources Wales

- 4.2.1 In the event that an accident or incident occurs, the Operator will notify Natural Resources Wales as soon as practically possible, using the emergency 24hr phone line (0800 80 70 60). The Plant Manager or TCM for the facility will also notify the Regulatory Officer should any complaints be received directly to site as a result, and advise what remedial measures or actions have been taken to address the problem. Copies of any material complaints received will be made available to Natural Resources Wales for review.

4.3. Accident Management Plan Review

- 4.3.1 The AMP will be reviewed by senior management every 4 years or immediately following any major accident/event. An updated copy of the AMP will be forwarded to NRW after every review.
- 4.3.2 Any technical or managerial changes on-site will also initiate a review of the AMP to ensure that the control techniques remain appropriate for the site.

APPENDIX A: ACCIDENT CONTROL MATRIX

| Event | Likelihood | Consequence of Occurrence | Actions taken or proposed to minimise the chances of the event occurring. | Actions planned if the event does occur |
|---|---|--|---|---|
| Containment Failure | | | | |
| Contaminated run-off/rainwater from site surfaces | Low | Medium – contamination of land and pollution of local groundwater. | Waste reception building floor is impermeable and drains to sewer. All hardstanding areas are inspected for damage on a daily basis and repairs carried out promptly to original specification. The drainage system is inspected and maintained on a regular basis. Surface water from the roof and site surface is directed to storage crates located at the entrance to the waste reception building via full retention interceptors. | Follow the spill response procedure in Appendix D, it describes the actions to take. |
| Failure of maintenance oil storage. | Low – bunding in place. | Medium – contamination of land, surface watercourses and groundwater. | Regular inspection to check for spillage. Always ensuring oil container stored in bunded area. | Follow the spill response procedure in Appendix D Spill Procedure |
| Spillages | | | | |
| Spillages of waste from delivery and collection vehicles. | Low – due to waste acceptance procedures in place. | Medium – contamination of land, groundwater and local amenity sites. Release of odour. | All wastes are delivered in enclosed or covered vehicles. | All spillages will be cleaned up as soon as practicable. Follow the response procedure in with Appendix D, Spill Procedure. |
| Liquids from waste storage. | Medium: Leachate could build up if wastes are stored for lengthy periods. Leachate could escape containment and reach local sensitive receptors without appropriate containment in place. | Pollution of groundwater, contamination of land and release of odour. | Waste storage is undertaken inside the waste reception building which has its own internal drainage system. All liquids from the waste reception building are directed to foul sewer. Wastes are generally put into the process within 28-48 hours of receipt. | Any spills are isolated and cleaned. Follow the procedure in Appendix D. |
| Fire | | | | |
| Fire | Low | Medium – smoke and air pollution, escape of firewater causing contamination of land and groundwater. Risk to health and safety of workforce and neighbouring receptors | Fire water containment. Maintain a tidy site and minimise stockpiles of combustible materials. No smoking policy on site and no waste materials are burned on site. Fire training and emergency drills are undertaken. | Follow the fire procedure in Appendix E. First person to detect the fire must sound the alarm. Emergency services will be called and all personal will meet at the fire assembly point. |
| Flood | | | | |
| Flooding on site | Very Low- facility is not located within a floodplain and it is located on higher ground compared to the nearest surface watercourse. | Low- Minor onsite flooding | Oils are stored within buildings and are provided with secondary containment. Process areas are constructed on impermeable surfaces. | Depending on location and severity of flooding, temporarily close site and postpone deliveries. Assess flood water to determine disposal route Hire pump to dewater site. Inform Natural Resources Wales. |

| Event | Likelihood | Consequence of Occurrence | Actions taken or proposed to minimise the chances of the event occurring. | Actions planned if the event does occur |
|---|--|---|---|--|
| Failure of Plant/and or Equipment | | | | |
| Unplanned breakdown of key equipment. | Low - regular inspection and maintenance. | Medium – contamination of land, pollution of groundwater, harm to human health, fire, release of dust or odour to the atmosphere. | The reception building is sized to store up to 610 tonnes of incoming waste materials. All equipment will be maintained and serviced in accordance with the manufacturer's guidelines. Additional plant will be hired in if required, to keep facility fully operational. | If it's reasonably foreseeable that the plant or equipment failure will take longer than 24 hours to rectify then the site will be temporarily closed to new deliveries of waste or less once waste storage is full. |
| Overcapacity | | | | |
| Too much waste received or incorrect combinations of wastes received. | Low – with correct management procedures in place. | Medium – wastes stored outside permitted area which could lead to contamination of land and groundwater. | Deliveries to the facility are scheduled. No ad-hoc deliveries will be received. Machinery and plant used to process the wastes will be serviced and maintained in line with the manufacturers recommendations. | If it's reasonably foreseeable that the plant or equipment failure will take longer than 24 hours to rectify then the site will be temporarily closed to new deliveries of waste or less once waste storage is full. |
| Staff Shortage | | | | |
| Staff illness | Medium | Medium – experienced staff are not available to undertake all roles which could lead to releases of materials with potential to contaminate air, land and groundwater and harm human health | Staff are trained and able to undertake a number of different roles at the facility. | Recruitment of staff to undertake less critical roles and reassignment of more experienced staff into more critical roles. Use of temporary staff if required |
| Failure of Services | | | | |
| Failure of supply: electricity, water, gas, sewage | Low. | Medium – contamination of land and groundwater due to inability to operate the Facility and process waste. | Contracts will be in place with utility suppliers. The operator will ensure they are kept informed of planned outages and vary the sites operations when these occur. If unplanned outages occur then operations will cease until the utility can be restored. | Follow the Power Outage procedure found in Appendix F. Temporarily close site and postpone deliveries. Inform Natural Resources Wales. |
| Vandalism | | | | |
| Vandalism | Low - security measures in place. | Medium – contamination of land and groundwater. | Secure gate and fence. Site locked when unmanned. Plant and machinery secured out of hours. Site is monitored by CCTV cameras | Follow spill procedures in Appendix D. |
| Vehicle Collision | | | | |
| Vehicle Collision | Low | Medium – Possible contamination of surface and/or groundwater by fuel and/or oil. Risk to health and safety of workforce and visitors. | Vehicle movements are limited on site, and traffic management system in place. Deliveries are scheduled and supervised by site staff | Follow the fuel/oil/chemical spill procedure found in Appendix F. Keep a log of near misses or incidents. |

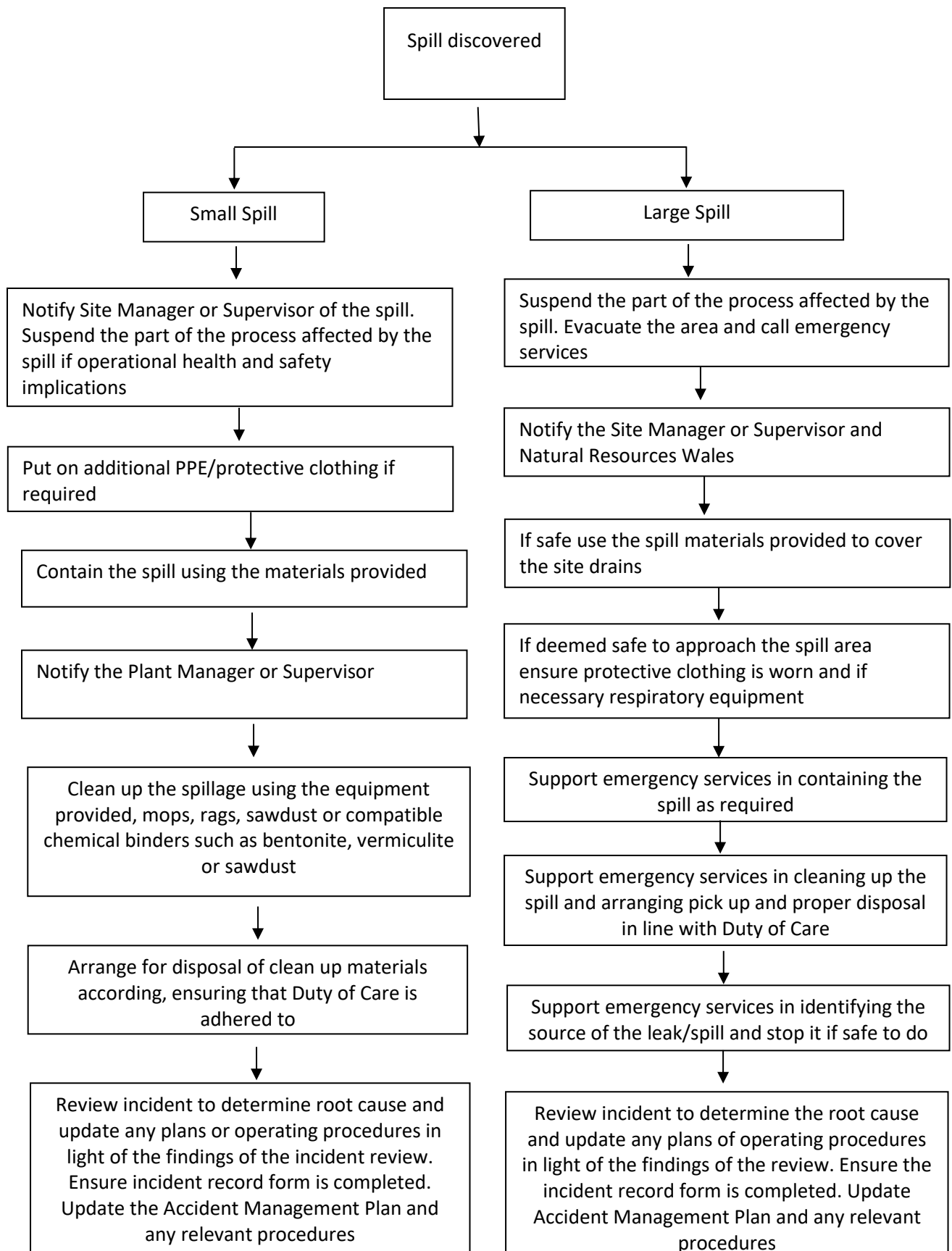
APPENDIX B – CHEMICALS INVENTORY

| Material | Maximum Quantity Stored | Type and Size of Storage | Type and Size of Secondary Containment |
|-----------------|-------------------------|--------------------------|--|
| Maintenance oil | | Supplied in drum | Bund |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

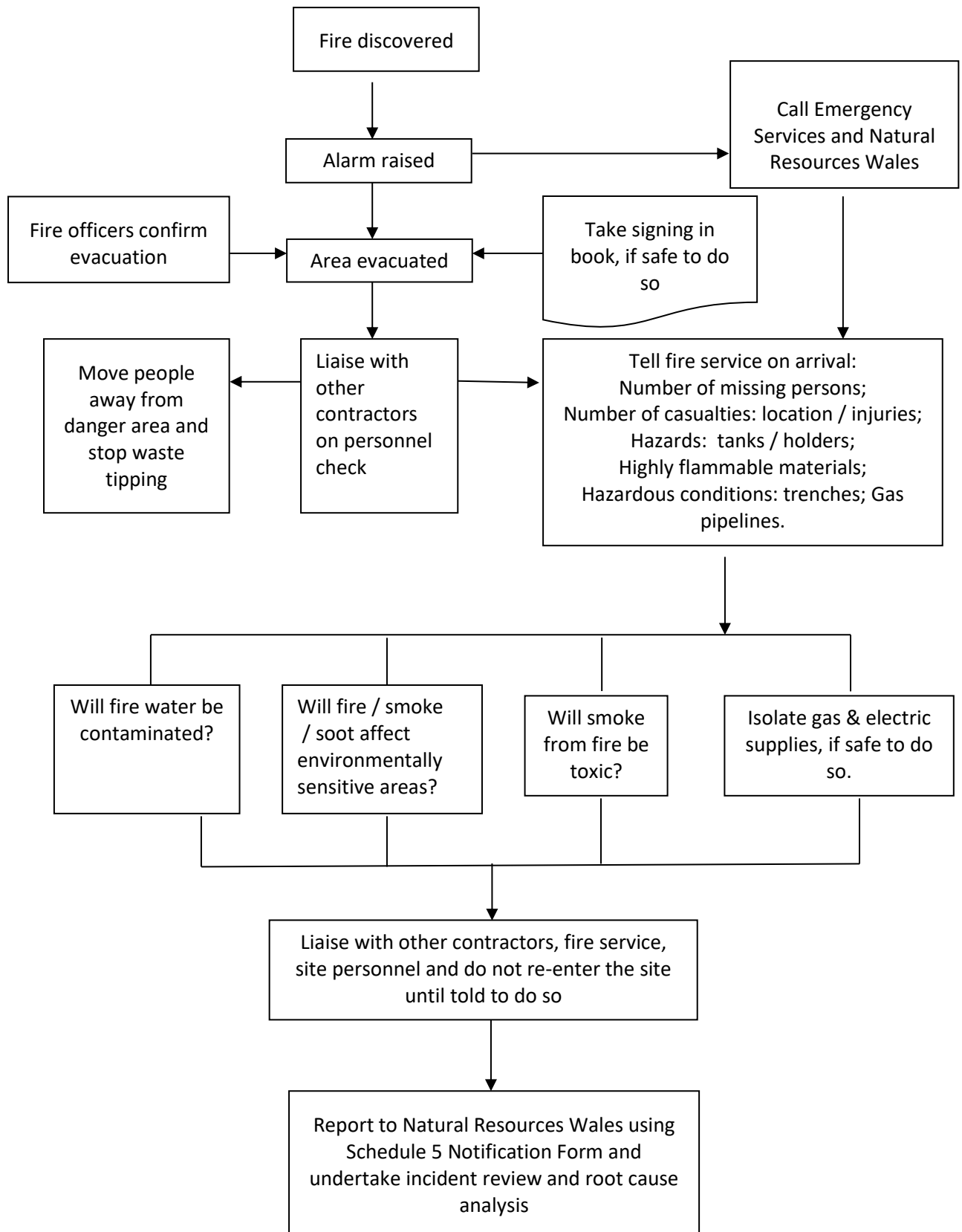
APPENDIX C – KEY CONTACTS

| KEY CONTACTS – Last Updated July 2015 | | | |
|---|-------------|-------------------------------|---------------------|
| Location: Nine Mile Point Nine Mile Point Industrial Estate, Ynysddu, Cwnfelinfach, Caerphilly | | | |
| Postcode: NP11 7HZ | | | |
| Site Access Grid Reference: | | | |
| SITE CONTACTS | Name | Office Hours (specify) | Out of hours |
| Owner: | | | |
| Plant Manager: | | | |
| Site Supervisor: | | | |
| Site Operator: | | | |
| Site Operator | | | |
| Landowner / Agent: | | | |
| EMERGENCY SERVICES | | Office Hours | Out of hours |
| Emergency | | 999 | 999 |
| Medical: | | | |
| Police: | | 0845 4087000 | |
| Fire: | | 999 | |
| REGULATORS | | Office Hours | Out of hours |
| Health and Safety Executive (HSE) | | 01179 886085 | |
| Local Authority: | | | |
| Natural Resources Wales (Local) | | | |
| EA/NRW (24 hour emergency hotline) | | 0800 80 70 60 | |
| UTILITY / KEY SERVICES | Name | Office Hours | Out of hours |
| Water undertaker: | | | |
| Sewerage undertaker: | | | |
| Gas supplier: | | | |
| Electricity supplier: | | | |
| Oil supplier: | | | |
| Fuel supplier: | | | |
| Chemical supplier: | | | |
| Oil spill contractor: | | | |
| Maintenance contractor: | | | |
| Electrician: | | | |
| Plumber: | | | |
| OTHER KEY CONTACTS | Name | Office Hours | Out of hours |
| Head Office: | | | |
| Adjacent landowners: | | | |
| Neighbours: | | | |
| Specialist advisors: | | | |

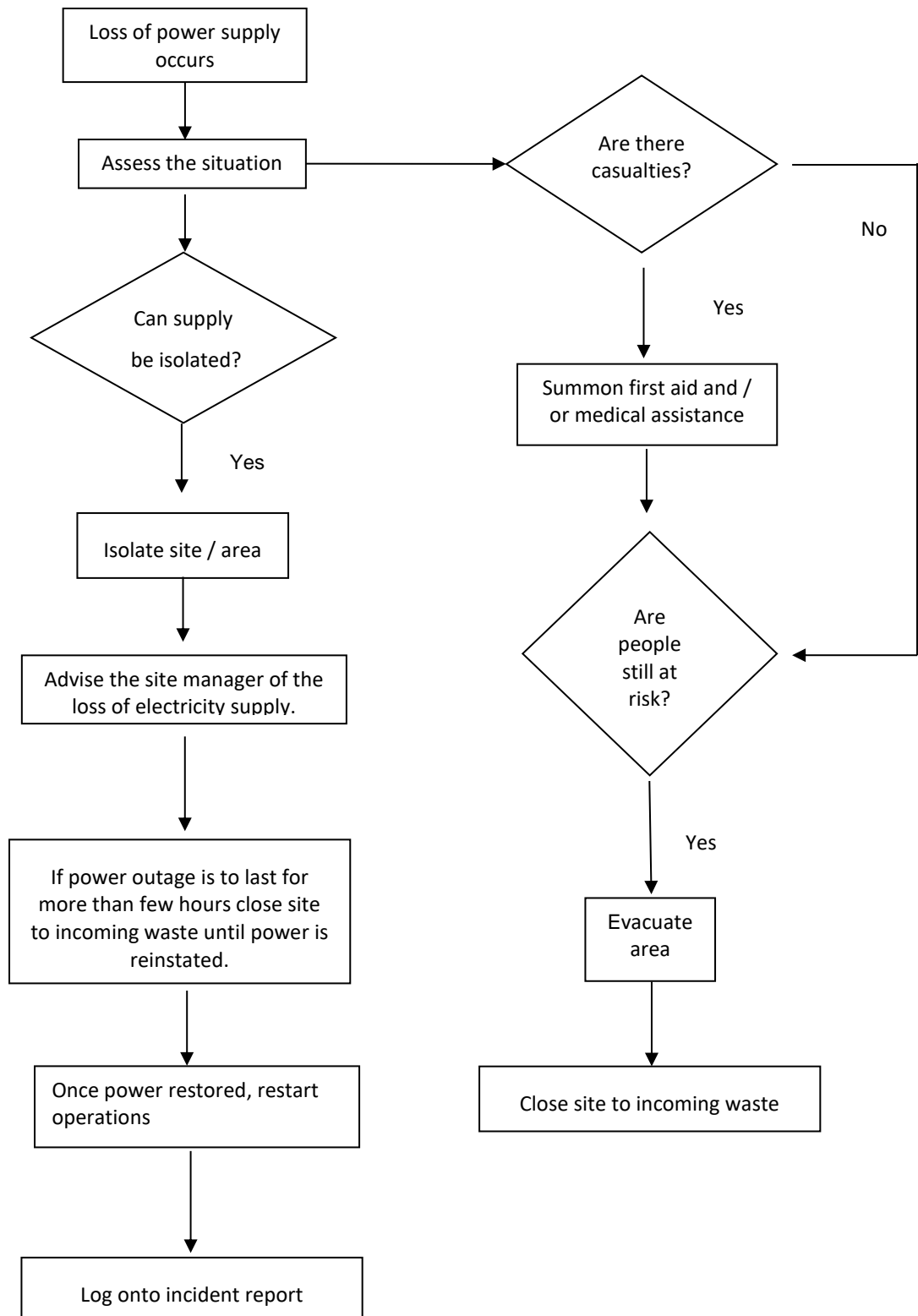
APPENDIX D – SPILL PROCEDURE



APPENDIX E -FIRE PROCEDURE



APPENDIX F – POWER OUTAGE PROCEDURE



APPENDIX G –INCIDENT RECORD FORM

| | | |
|--|------------------------------------|-----------------|
| | Document Type: | Ref: |
| | Title: Incident Report Form | |
| | Issue Date: | Version: |
| | Owner: | Site: |

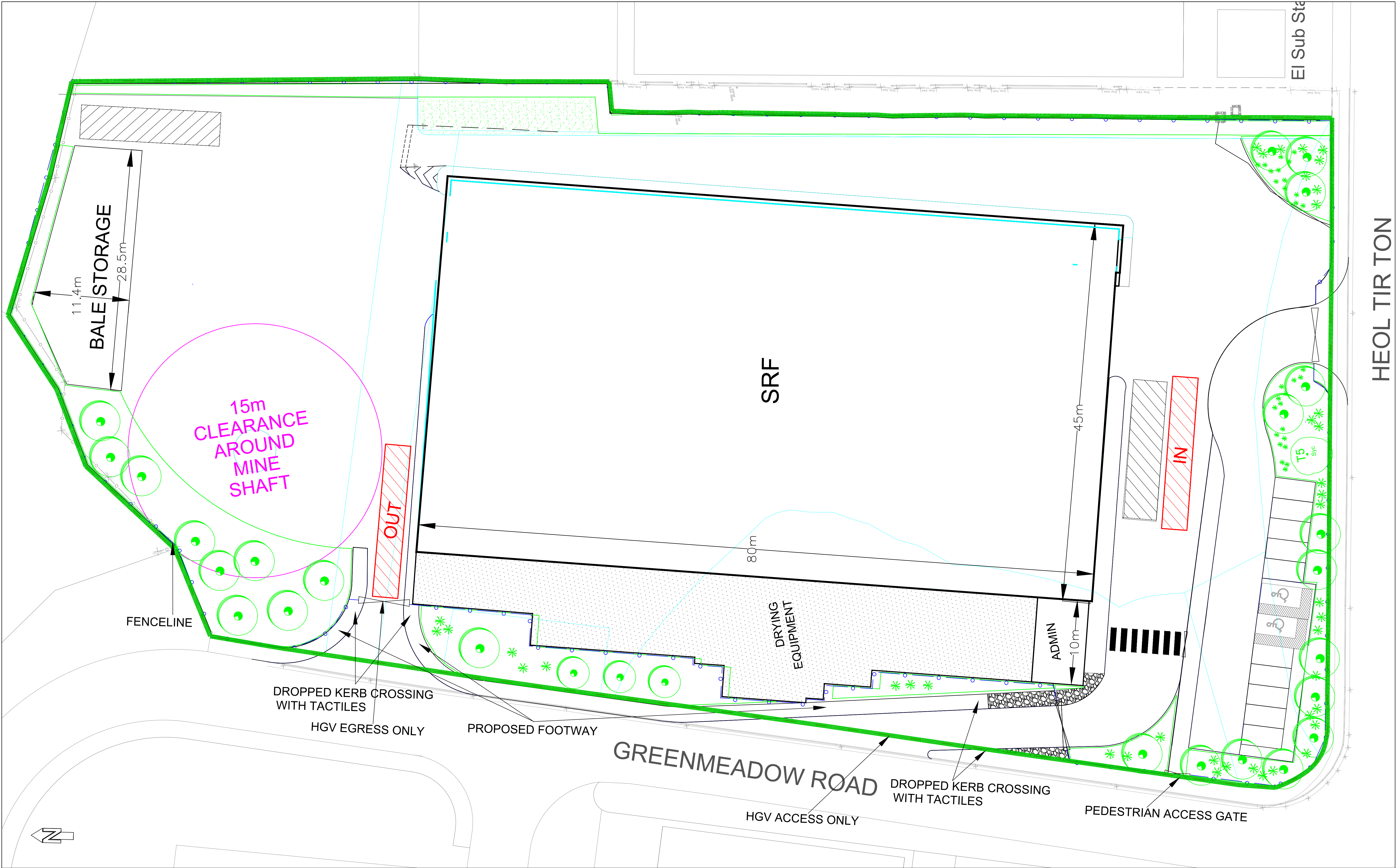
This form is to be used to report a spill incident. Please complete and pass onto the Site Manager for review.

| | | | | |
|--|-----|--------------------------|------------------------------|--------------|
| Name of person(s) responding to incident: | | | | |
| Date of incident: | | Time of incident: | _ _ : _ _ | |
| Location of Spill: | | | | |
| Details of any spilled material | | | | |
| What was it? | | | | |
| How much of it? | | | | |
| Medium into which the release occurred? <i>Please circle</i> | Air | Land | Drain | Water course |
| For Food Waste delivery spillages please give details of the following: | | | | |
| Company? | | | Vehicle registration? | |
| Describe the incident <i>(include details of circumstances causing the incident and any hazardous situation(s) observed. Photographic evidence must be taken)</i> | | | | |
| | | | | |
| Confirm photos have been taken? | Yes | No | Was any leak stopped? | Yes No |

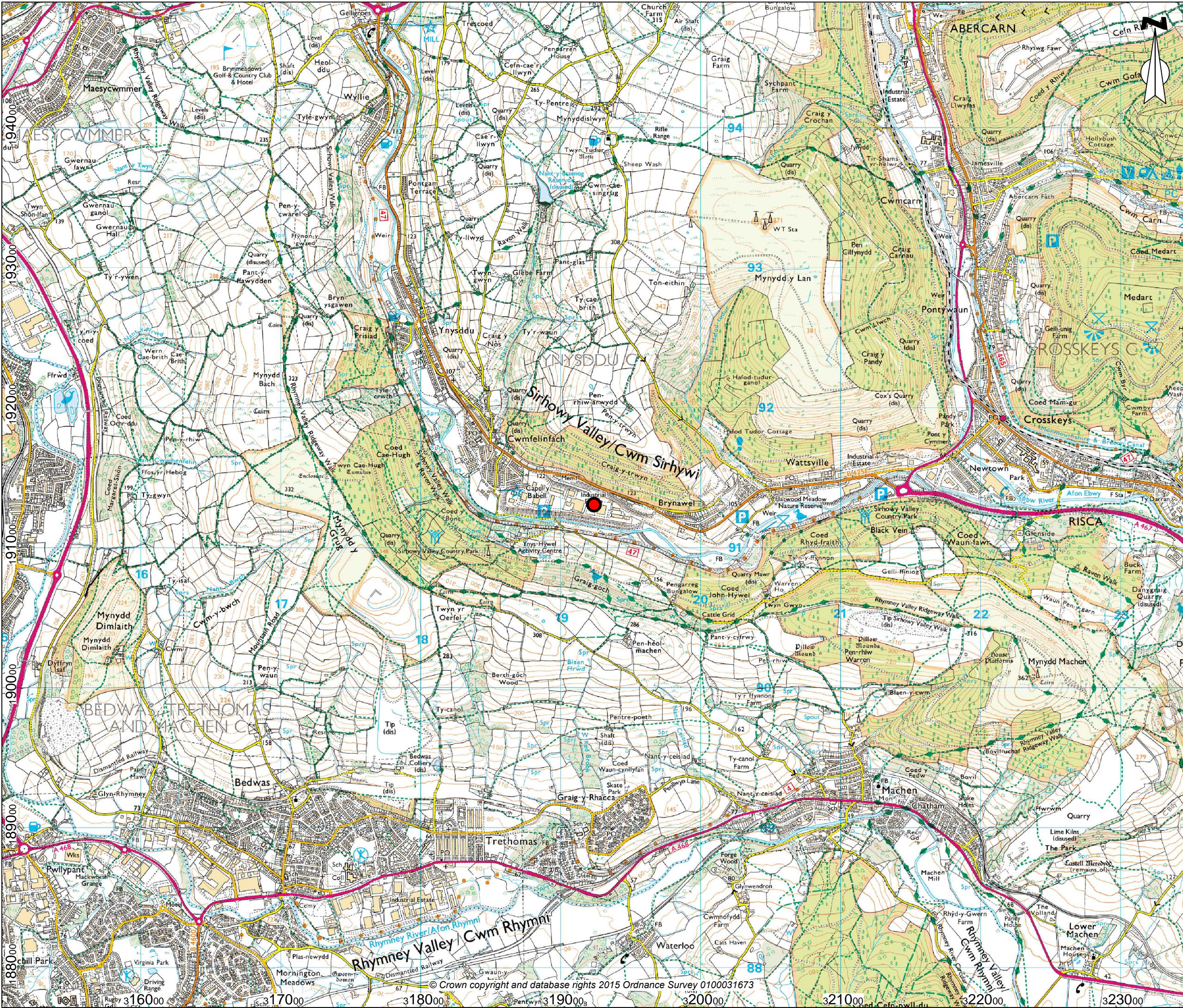
| | | | |
|---|-----------|---|-----------|
| Was the load accepted? | Yes No | If NO has Commercial Planner been informed? | Yes No |
| Were contents of the spill kit used? | Yes No | Were the contaminated items used disposed of properly? | Yes No |
| If Yes please give details of spill kit contents used: | | | |
| Signed: | | | |

| Review and action | | | |
|---|---------------|--|--------------|
| Reference no | - - - - - | | |
| Compliance Adviser's comments: | | | |
| Print name: | | | |
| Note Action(s) taken and further action(s) required by a specific date | Date | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Incident closure sign off | | | |
| Reviewed by (Compliance Adviser) | Signed | | Date: |
| Reviewed by (Operations Leader) | Signed | | Date: |
| Additional comments: | | | |
| | | | |

APPENDIX H - SITE LAYOUT AND BOUNDARY



APPENDIX I – SITE LOCATION PLAN



Key



Site Location
(ST 1924 9131)



enzygo
environmental consultants

STEP Business Centre, Wortley Rd, Sheffield, S36 2UH

CLIENT:
Hazrem Environmental Ltd

SCALE: 1:25,000@A3
PROJECT REF: CRM.083.002

DRAWN: MG
CHECKED: SC
DATE: Oct 2015

PROJECT:
Proposed SRF Facility,
Greenmeadow Road,
Nine Mile Industrial Estate

TITLE:
Site Location Plan

DRAWING NO:
CRM.083.002.PE.D.001



Enzygo specialise in a wide range of technical services:

Property and Sites
Waste and Mineral Planning
Flooding, Drainage and Hydrology
Landscape Architecture
Arboriculture
Permitting and Regulation
Waste Technologies and Renewables
Waste Contract Procurement
Noise and Vibration
Ecology Services
Contaminated Land and Geotechnical
Traffic and Transportation
Planning Services

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Cromhall
Gloucestershire GL12 8AA
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SHEFFIELD OFFICE

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5 Fox Valley Way
Stocksbridge
Sheffield S36 2AA
Tel: 0114 321 5151

MANCHESTER OFFICE

First Floor
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Spinningfields
Manchester M3 3EB
Tel: 0161 413 6444

Please visit our website for more information.

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