

Working plan/EMS For Materials Recycling Facility
Stiens Haulage Ltd. Swansea

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Introduction

The working Plan will be subject to continuous review and revision, in all circumstances revisions shall be subject to approval by Natural Resources Wales. This plan has been prepared in accordance with best practice current at the time of drafting and in accordance with the regulations and guidance contained in:

- a) Environmental Protection Act 1990
- b) Environment Act 1995
- c) Health and Safety at Work Act 1974
- d) NRW Guidance Notes
- e) Duty of Care Regulations
- f) PUWER
- g) LOLER

1. Specified Site and Waste Management Operations

1.1 Site location and description

1.1.1

The site is situated within an industrial area, off Fabian Way, Near Swansea

1.1.2

The site is currently in not in use as a Material Recycling Facility (MRF) relevant planning permission has been applied for.

1.1.3

Part of the site is currently surfaced with concrete hard-standing.

1.2 Specified Waste Management Operations

1.2.1

The site is designed to store and separate wastes, so that waste types might be segregated and usefully used or recycled. The principle objective of the site is recovery of recyclables from mixed waste streams and this will be achieved using a combination of manual and mechanical sorting. Having passed through the process, the separate waste streams may be subject to further operations to assist in the storage, transportation and recycling of the wastes. Such operations include wood shredding or chipping. Each of the operations constitutes a treatment where there are no resulting changes in the chemical composition of the wastes. The following waste management activities will be undertaken at the site:

Activity	Waste Type	Quantities	Waste Framework Directive Code
Storage of wastes pending disposal or recovery.	All	1000 tonnes	R13/D15
Physical treatment, recycling or reclamation of wastes	All solid wastes including metals	Treatment of physical sorting or separation of waste into different components. Physical bulking of solid wastes of the same or different types, where there are no resulting changes in the chemical composition of the wastes or its different components. To a maximum limit of 75,000 tonnes per annum in combination with other recycling and treatment operations.	R2/R3/R4/D9

1.2.2

All wastes will be received, inspected, accepted or rejected, and recorded in accordance with section 4.6 of the working plan

1.2.3

The procedures for the acceptance, baling, storage and export of pre-sorted recyclable materials is currently the subject of an exemption from licensing and will continue as an exempt activity. These segregated materials will be stored in clearly identified bays within the licence site in readiness for export for re-use.

1.2.4

Loads containing mixed materials will be processed in the Materials Reclamation Facility using mechanical and manual methods to recover potentially recyclable materials and remove unsuitable material for off-site disposal.

1.2.5

Fundamentally, the site consists of the following five areas:

- a) Reception – This area will include a load inspection position, administrative offices with staff welfare facilities and staff and visitor car parking.
- b) Recyclables Storage Bays – These bays will be structurally designed to store pre-segregated recyclable materials brought to the site. These materials will be transported from the site, to be remanufactured elsewhere.
- c) Materials Reclamation Facility (MRF) – This building will house the facilities for the unloading and sorting of all mixed loads entering the site. It will be equipped for the manual and mechanical recovery of potentially recyclable materials and the screening of residual materials for use as aggregate. This building will also house the facilities for the unloading and sorting of all mixed loads entering the site. It will be equipped for the manual and mechanical recovery of potentially recyclable materials. There will be a designated area for the storage of all recovered and waste materials pending export from the site.
- d) External Storage Area – This area will be used for the storage of containers awaiting disposal at third party sites, defective vehicles and for unacceptable materials, stored in skips, awaiting export.

1.2.6

The proposed site activities do not include the processing of any contaminated materials. However, in order to recognise the potential unregistered/accidental presence of contaminated materials within the waste processed at the facility, the site has been designed to protect the underlying groundwater from any potential polluting discharges, by the full containment of materials within the recycling building. Any water coming into contact with waste materials within the buildings will be controlled, managed, collected, stored and removed from the site for disposal at an appropriate facility.

1.3 Permitted Wastes

1.3.1

The site shall accept only the wastes identified in the table specified in Standard Rules Permit SR2008 No 1. Stiens Haulage shall ensure that only these permitted wastes are stored and subjected to physical treatment at this facility.

EWC Code Waste Description for the wastes expected to arrive on site are listed below.

01 01 01 Wastes from mineral excavation
01 01 02 Wastes from mineral non-metalliferous excavation
01 04 08 Waste gravel and crushed rocks other than those mentioned in 01 04 07
02 01 04 Waste plastics (except packaging)
02 01 10 Waste metal
03 03 08 Wastes from sorting of paper and cardboard destined for recycling
07 02 13 Waste plastic
10 11 12 Waste from glass other than those mentioned in 10 11 11
10 12 08 Waste ceramics, bricks, tiles and construction products (after thermal processing)
15 01 01 Paper and cardboard packaging
15 01 02 Plastic packaging
15 01 03 Wooden packaging
15 01 04 Metallic packaging
15 01 05 Composite packaging
15 01 06 Mixed packaging
15 01 07 Glass packaging
15 01 09 Textile packaging
17 01 01 Concrete
17 01 02 Bricks
17 01 03 Tiles and ceramics
17 01 07 Mixtures of concrete, bricks & ceramics other than those mentioned in 170106
17 02 01 Wood
17 02 02 Glass
17 02 03 Plastic
17 04 01 Copper bronze and brass
17 04 02 Aluminium
17 04 03 Lead
17 04 04 Zinc
17 04 05 Iron and Steel
17 04 06 Tin
17 04 07 Mixed metals
17 04 11 Cables other than those mentioned in 17 04 10
17 05 04 Soil and stones other than those mentioned in 17 05 03
17 05 08 Track ballast other than those mentioned in 17 05 07
17 09 04 Mixed construction and demolition wastes other than those mentioned in 17 09 01, 02 and 03
20 01 01 Paper and cardboard
20 01 02 Glass
20 01 38 Wood other than that mentioned in 20 01 37
20 01 39 Plastics
20 01 40 Metals
20 02 02 Soil and stones
20 03 01 Mixed municipal waste

1.4 Waste Volumes

1.4.1

The maximum quantity of waste that can be processed at the site over the course of 12 months will not exceed 75,000 tonnes. It is most likely that the maximum quantity will be considerably less than this. The site is not designed to be a long-term storage

area and will be operated on the principle of minimum practicable waste retention times. The maximum waste quantity is calculated on the following basis:

Pre- Sorting Area	
Scrap Metal Bin	
Wood Bin	
Wood Salvage	
Paper and Card Bin	
Plastic Bin	
Plastic Salvage	
Paper and Card Salvage	
Glass Bin	
General unsorted Waste Bin	
Processed Fines	
Landfill Waste Bins	
Quarantine Bin	
Total	75,000 tonnes throughput p.a.

1.5 Hours of Operation

1.5.1

The facility will operate within these time limits subject to the appropriate planning consent, namely:

- a) Monday 0800 to to Friday 1700 (except for public holidays)
- b) Saturday 0800 to 1300
- c) Sunday & Bank Holidays Emergency & Maintenance activities only.

1.6 Site Management

1.6.1

When fully staffed, the on-site personnel will consist of:
Site Manager, and a full complement of site staff including
Administrators, plant operators and sorting operatives.

1.6.2

In normal operation, the Site Manager will be on site whenever the site is open to accept waste. When the Site Manager is on leave for longer than three working days, the Site Supervisor, who will be on site on a full time basis over this period, will cover the Site Manager's duties. In order to cover problem periods of sickness combined with annual leave, all members of staff are encouraged to be able to cover each other's duties. All operators will receive training in their allocated tasks, either by Clearout UK Ltd. or an approved contractor.

All site operatives and new employees will be trained and made aware of the acceptance criteria and waste regulation procedures. Operatives will be trained in:

- a) The waste acceptance criteria for the site
- b) The information required on documentation
- c) Identification of non-conforming wastes
- d) The procedures for dealing with non-conforming wastes

1.6.3 Staff Training

The Site Manager will regularly review staff training and instigate appropriate additional training as deemed necessary. All staff will be appropriately trained for their specific roles and general site safety. An induction training programme will be carried out. Continual staff training in the form of tool box talks based on site risk assessments and method statements will be carried out. Staff will be trained to the appropriate standard to use plant and vehicles. All training will be logged in the staff training matrix.

1.6.4 Technically Competent Management

Technically competent management will be provided to oversee the operation of the plant. The managers will either hold an appropriate WAMITAB or similar certificate or will be deemed technically competent under arrangements by Natural Resources Wales.

1.6.5 Health and Safety (Risk Assessments etc.)

Risk assessments are available for all activities on site. Site risk assessments are to be reviewed annually.

All activities will be completed in accordance with company method statements and training.

The HSE poster will be displayed in the site office.

Details of site specific Personal Protective Equipment are found at reception.

Hi-visibility clothing is mandatory in operational areas of the site.

All visitors must report to reception.

COSHH assessments and data sheets are required for all hazardous materials used on site.

2. Drainage Systems

2.1 There is no sealed drainage system. All liquids from wastes will be contained within the building and all sorted wastes requiring external storage will be placed on the concrete pavement outside the MRF.

2.3 Recycling building

2.3.1

The building will be of clad frame construction, mounted on a reinforced concrete base. It will house the mobile plant used in the recycling operation and provide a refuelling area and overnight parking space for the mobile plant.

2.4 External Pavements

2.4.1

All areas external to the main building where sorted waste is stored will be of a concrete pavement construction

2.4.2

All areas external to the waste sorting area do not have any sealed drainage. There is a natural run off to the rear of the building. In order to prevent water pollution no waste activities other than the storage of sorted wastes within containers will take place.

2.5 Lighting

2.5.1

Permanently installed lighting, fully compliant with HSE requirements will provide safe working conditions during the hours of darkness to all external areas of the site and within the recycling building and offices.

2.6 Administrative Office

2.6.1

The office buildings will provide working space for management and administrative staff and welfare facilities for all site staff. All documents and records related to the management and operation of the site will be stored in the building.

2.7 Car Parking

2.7.1

A defined parking area for the vehicles of site staff and visitors will be provided near the administrative buildings and outside the entrance.

2.8 Site Signs

2.8.1

A sign will be positioned at the site entrance to display the site name, address, telephone number, Permit holder's name, hours of operation, waste management licence number and emergency contact number. Further signs within the site will display Health and Safety information, identify vehicle routing requirements and identify locations of fire extinguishers, first aid equipment and fire exits from the buildings.

2.9 Infrastructure Management

The site will be inspected daily by the Site Manager/ Supervisor or other nominated representatives of the Permit holder for defects in plant, equipment or structure or in any working practice that may affect satisfactory compliance with the Permit. Inspections will be undertaken by staff suitably qualified and/or experienced in the day to day operation of the site. Particular attention will be given to the condition of areas of concrete hard-standing within the recycling building, workshop and stockpile areas, to ensure that there are no cracks present that could allow surface water infiltration.

2.9.1 Records

Records will be kept in accordance with legislation. Records of Transfer notes, Consignment notes and daily inspections can be made available for inspection as reasonably required by authorised officers of Natural Resources Wales; any defects shall be noted and rectified promptly.

3. Site Infrastructure

3.1 Site Security

3.1.1

Access to the site will be the existing access from Elba Crescent, Crymlyn Burrows. All activities will take place within the waste transfer building. The waste reception building is fully lockable. The building will be locked when the site is unmanned.

4. Site operations

4.1 Control of Mud and Debris

4.1.1

Road vehicles will use the access roads and the transfer station itself and, therefore, it is anticipated that the generation of mud and debris will be minimal. If mud/dust from vehicle movements becomes an issue wheel washing facilities are available on site

4.2 Spillage and Leaks

4.2.1

Every effort will be made, through efficient maintenance of site plant, to avoid spillages and leaks. However, it is recognised that liquid waste spillages or leaks from vehicles or plant may occur. Every such incident will be treated as an emergency and dealt with immediately. Initially, the drainage system will be isolated by use of a cut off valve located as detailed on site plan. Absorbent material will be used to contain the spillage. The contaminated absorbent materials will be placed in a sealed container for transport to an appropriately permitted disposal site.

4.2.2

All technical precautions as detailed in this Working Plan will be taken to prevent the discharge of List I substances into ground waters and to prevent the pollution of ground waters by any substances in List II. In the event of any polluting discharge from the site entering or threatening to enter the groundwater, the Permit holder will inform Natural Resources Wales if required and take action, as soon as is practicable, to terminate such a discharge. The Permit holder will take such other remedial action as may be necessary and required by Natural Resources Wales to minimise the impact of the pollution on the environment. Written details of the incident will be forwarded to Natural Resources Wales if it is deemed to be a potentially polluting event.

4.3 Fires

4.3.1

All site staff will be alert and react to activities that might cause a fire. No smoking signs will be prominently displayed in all areas where waste materials are received, processed or stored. Staff will be trained in the use of fire extinguishers and evacuation procedures. The emergence fire plan is as follows in the event of a fire: Raise the alarm to evacuate personnel from site. If a fire extinguisher can be used to extinguish the fire this should be used by trained personnel only. If this is not possible call the emergency services and ensure all personnel have retreated to the muster point.

4.3.2

When the fire has been extinguished, the waste will be removed to a designated safe area and allowed to cool. When it is safe to do so, the waste will be transferred for disposal at an appropriate licensed facility.

4.3.3

In the event of more serious fires, the fire service will be called upon to attend and the staff will undertake whatever fire fighting actions that can be carried out safely using on-site fire fighting equipment, pending their arrival.

4.4 Breakdown

4.4.1

Any vehicle breaking down on the site will be parked in the emergency area to await repair. If the vehicle cannot be repaired on site, it will, if possible, be unloaded before being towed away. In the event of an item of plant breaking down, processing operations will cease until it has been repaired. The intake of waste will not be allowed to exceed the stockpile capacity of the recycling building until the defective plant has been repaired. Processing operations will resume once the plant has been repaired.

4.5 Emergency Area

In the event of a defective vehicle or one presenting a risk to the environment arriving at site, it will be directed to the emergency area which lies within a secure area.

4.6 Waste Acceptance and Control Systems

All wastes shall be received, inspected, accepted, handled, treated or rejected, and recorded in accordance with sections 4.6 and 4.7 (inclusive) of the working plan

4.6.1 Waste Acceptance Procedures at Source

Customers will be proved with a duty of care document specifying the waste acceptable at the facility. The document will clearly state that if a load contains any unacceptable waste types, the whole load will be rejected.

4.6.2

Before a waste producer is permitted to import waste to the site, the waste shall be characterised by the producer. The waste shall then be assessed by Clearout UK Ltd. to ensure its suitability and compliance with the terms of the licence. Basic characterisation shall involve the provision by the waste producer of the following information:

- a) A description of the waste
- b) Information on the process that produced the waste

4.6.3

Each waste producer shall provide the above information for assessment before being permitted to tip waste at the site. All vehicles used to deliver waste shall hold a valid registration certificate under the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations (1991). The waste transfer notes presented with consignments arising at a characterised source will be inspected to confirm the source and nature of the wastes. They will be crosschecked against Clearout UK Ltd. records to ensure that the wastes are acceptable.

4.6.4 Waste Acceptance Procedures at the Reception Area

When a vehicle loaded with waste arrives at the reception area, a transfer note and the waste carrier documentation will be cross checked against the load to ensure that the waste is acceptable. The load will then be examined to establish that it is as described on the transfer note.

4.6.5 Acceptance

Upon confirmation that the load is acceptable, the waste transfer note will be completed. This information will form the basis of quarterly waste returns made by Clearout UK Ltd. to Natural Resources Wales.

4.6.6 Rejection

In the event that either the transfer note information or the physical inspection does not satisfy the inspector that the wastes are in compliance with the licence, the load will be rejected. Under such circumstances, the inspector will direct the driver to the nearest appropriate facility or will telephone Natural Resources Wales for advice. A record of the load rejection will be made in the daily site diary and this record will include the vehicle registration, weight and the name of the waste carrier company.

4.6.7 Waste Acceptance Procedure within the Facility – Primary Sorting

Every vehicle arriving at the facility will drive/reverse into the appropriate building and discharge its load onto the reinforced concrete sorting floor. The waste will be inspected to confirm that the wastes are of a type and composition permitted by the licence. This will comprise of a physical inspection.

4.6.8 Inspection

Wastes will be inspected as they are discharged onto the sorting floor.

4.6.9 Quarantine

Where the wastes are of a type permitted by the licence they will be subjected to the recycling operation. However, where wastes are considered to be outside the permitted types or where there is doubt, one of two actions will be followed.

a) Rejection: The inspection will take place upon deposit, so that out of compliance wastes can be spotted before the carrier's vehicle has left the facility. Where the wastes are out of compliance they will be reloaded into the carriers vehicle using the face shovel and grab at the primary sorting area. The vehicle will be directed to the gatehouse where the vehicle will be weighed to ensure that its load has been fully removed. A record of the load rejection will be made in the site diary.

b) Quarantine: In the event that a suspect waste type is discovered during the primary sorting operation, the carriers' vehicle will no longer be available for reloading. Under such circumstances the waste will be loaded into a designated quarantine skip. The waste can then be subject to testing if required to await removal by the carrier to an appropriate disposal point.

4.6.10 Quarantine: Reject Waste Procedure

If incidental asbestos or other non-compliant waste is discovered prior to discharge, the whole load will be immediately rejected. Similarly, if any asbestos is identified during discharge, the whole load will be reloaded and rejected. If, however, asbestos is identified during the primary sorting process, it will be removed and stored in a dedicated sealed container and the remainder of the load will be placed in a container in the quarantine area. Natural Resources Wales will immediately be informed of the occurrence and its advice will be sought on the appropriate method of disposal of the contaminated load. The sealed asbestos container will be sent for disposal by an

appropriately licensed disposal operator when it becomes half full. A detailed description of all actions taken will be recorded in the site diary. Orphaned gas containers will be securely stored within the building and collection arranged by the relevant owner. Incidental waste lead acid batteries will be separated and sent to a permitted recycling facility when it is convenient to do so.

4.7 Waste handling and treatment

4.7.1 Inspection and Pre-sorting

On arrival at the MRF waste materials will be offloaded onto the concrete floor of the reception area and subjected to the Primary Sorting acceptance procedure set out in 4.6.7. At the conclusion of this process, any non-compliant items, timber, green waste or very large items will be manually or mechanically removed. These items will be taken to the appropriate recyclables storage area or placed in the waste container for disposal at a Permitted landfill site.

4.7.2 Manual Sorting

Recyclable waste streams will be manually sorted and put into the relevant storage container for removal off site. Larger items will be removed by the loading shovel.

4.7.3 Storage

All processed materials stored at the site will be contained within bins or skips, with the exception of salvage items that will be stored as directed in 4.7.1. Potentially polluting wastes (general waste bins and quarantine bins) will be of solid construction to prevent the escape of potentially polluting liquid. The waste quarantine containers will be stored within the recycling building at all times. Only clean, recovered materials will be stored outside the facility.

4.7.4 Wood Storage and Chipping

Waste wood will be stored at the site until sufficient volume is available to comprise a full load of shredded/chipped wood. The wood will then be chipped/shredded en-mass, filling a bin positioned below the output chute of the chipper/shredder. The load will be removed when complete.

5. Amenity Management and Monitoring

5.1 Control of Dust, Fibres and Particulates

5.1.1

A rudimentary dust suppression system using sprinkler hose and water will be used to minimise the release of airborne dust within the facility whenever the plant is operational. Wheels of vehicles leaving site will be cleared of mud if necessary prior to leaving.

5.2 Control of Noise

5.2.1

All recycling facility plant will be maintained to control noise generation from site plant.

5.2.2

If unacceptable noise levels are identified, Clearout UK Ltd. will follow the procedure set out below to ensure that any increase in noise from the facility is regulated:

- a) Clearout UK Ltd. will periodically monitor to ensure that there are no discernible increases in noise being emitted from the facility.
- b) Clearout UK Ltd. will monitor the complaints book to ensure that all noise related complaints are fully investigated.
- c) If particular noise complaints persist, a scheme for the monitoring of noise at the earliest sensitive property will be drawn up and carried out.

5.3 Control of Odours

5.3.1

The risk of generation of odour will be minimised by the removal of the biodegradable waste skip which will be retained on site up to a maximum of 7 days. The daily site inspection will also be used to identify any acute or chronic odour problems that may occur. The results of the monitoring will be recorded on the daily inspection sheet.

Any malodorous wastes will be placed in the main building and removed from the site by the end of the working day.

5.4 Control of Pest Infestations

5.4.1 Pests, comprising of insects and rodents could be attracted to the biodegradable wastes stored at the site. Infestation by rodents is unlikely, as all of the waste materials will be in receptacles. Any spillages will be cleaned up immediately. This effectively removes the food attraction for rodents. It is likely that during the summer months, flies will be attracted to the site. Good housekeeping and frequent disposal of wastes will significantly reduce fly infestation. The length of time that biodegradable waste is stored on site should be considerably reduced during periods of extremely warm weather. If necessary, half load should be taken away in order to reduce the time of decomposition and therefore, the attraction to the pests described.

5.4.2

Should any vermin or insect infestation occur, the local pest control officer would be contracted as soon as possible. The officer will be invited to visit the site occasionally to look for signs of infestation. It may be necessary, on the advice of the officer, to take additional appropriate measures to those described in order to eliminate the presence of such pests.

5.4.3

The monitoring of the presence of rodent or insect infestation will be undertaken by simple site inspection on a daily basis. In addition a pest control contractor would also be asked to visit the site periodically. Any pests noted on the site will be recorded on the daily inspection sheet.

5.5 Control of Litter

5.5.1

When each open skip is full, it will be netted to prevent wind blown litter escaping during transportation, although, once on the open highway, the control of litter is the responsibility of the driver. Any litter dropped during the disposal or collection operations will be picked up and placed in the correct container.

Monitoring of litter on site will be undertaken during the daily inspection. If litter is identified, it will be collected by hand and deposited into the appropriate waste container. Any litter noted on site will be recorded on the daily inspection sheet.

6. Record Keeping

6.1 Record Keeping

6.1.1

The following documents shall be used to record events at the site:

- a) The site diary, to record significant events and activities taking place on site on a daily basis
- b) Incident report forms, to record emergencies, problems with waste received and details of rejected loads
- c) Waste transfer notes
- d) Visitors book.

6.1.2

The records will be kept securely at the site office where they will be available for inspection by Natural Resources Wales during operating hours.

Appendix 1 – Site Plans

