

Environmental Management System For ELV Recycling
Facility
GMH Vehicle Recycling, Rumney, Cardiff

Contents

Contents.....	2
Introduction	3
1 Specified Site and Waste Management Operations	4
2 Engineered Site Containment and Drainage Systems	10
3 Site Infrastructure	14
4 Site operations	15
5 Pollution Control, Monitoring and Reporting Systems (Re: SSSI).....	22
6 Amenity Management and Monitoring.....	23
7 Record Keeping.....	25
8 Appendix 1 – Site Plans	
9 Appendix 2 - Waste Flow Chart	

Introduction

The working Plan will be subject to continuous review and revision, in all circumstances revisions shall be subject to approval by the Environment Agency. 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) Waste Permitting Regulations 2007
- d) Environment Agency Guidance Notes
- e) Standard rules permit SR2008 No 20
- f) Standard rules permit SR2011 No 3

1. Specified Site and Waste Management Operations

1.1 Site location and description

1.1.1 The site is well screened to the south, east and west by dense, mature planting on land elevated above the ground level. There is further screen planting along the site's southern edge where it adjoins the reën.

1.1.2

Mardy Road is a single carriageway road running roughly north to south. The adjoining road Lamby Way is well used by Heavy Goods Vehicles (HGVs) and other traffic accessing Cardiff's Eastern industrial areas.

1.1.5

The site has been in use as an ELV Recycling Facility for some forty plus years and contains a number of structures and buildings including offices, and oil waste storage area.

1.1.6

Part of the site is currently surfaced with concrete hard-standing, this area is used for de-polluting vehicles. The remainder is surfaced with an impermeable surface made from compacted aggregate material.

1.2 Specified Waste Management Operations

1.2.1

The site is designed to store and separate ELV wastes, so that waste types might be segregated and usefully used or recycled. The principle objective of the site is the de-pollution and recovery of recyclables from ELVs and this will be achieved using a combination of manual and mechanical treatment operations. . The following waste management activities will be undertaken at the site:

Activity	Waste Type	Limits of activities	Waste Framework Directive Code
Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced	All	Treatment consisting only of de-pollution of waste motor vehicles and sorting, separation, baling, compacting, or cutting using hand-held equipment only, and waste into different components for recovery	R13
Recycling/reclamation of metal and metal compounds	All solid wastes including metals	Wastes shall be stored for no longer than 1 year prior to disposal	R4
Recycling/reclamation of other inorganic materials	Liquid wastes from ELV de-pollution	The maximum quantity of hazardous waste stored at the site or disposal shall not exceed 10 tonnes per day. The maximum quantity of hazardous waste stored at the site for disposal shall not exceed 10 tonnes	R5
Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on site where it is produced	All	No more than 25 tonnes of intact waste vehicle tyres (waste code 16 01 03) shall be stored at the site	D15

1.2.2

All wastes will be received, inspected, accepted or rejected, and recorded in accordance with section 4.6 of this Environmental Management plan.

1.2.3

These segregated materials will be stored in clearly identified bays and skips within the licence site in readiness for export for re-use.

1.2.5

Fundamentally, the site consists of the following six areas:

- Reception – This area will include a load inspection position, administrative offices with staff welfare facilities and staff and visitor car parking.
- Depollution Bays.- This is a hard-standing area with de-pollution equipment conveniently sited for ease of operations.

c) Recyclables Storage skip areas – These skips will be structurally designed to store recyclable materials brought to the site. These materials will be transported from the site, to be remanufactured elsewhere.

d) ELV parts storage areas – This building will house the facilities for storing cleaned and tagged recycled vehicle parts, there is a designated area for the storage of all recovered vehicle parts pending export/sale from the site.

e) External Storage Area – This area will be used for the storage of de-polluted vehicles and clean dry recovered materials, stored in skips, awaiting export. This area is an impermeable pavement made from compacted construction materials.

f) Waste oil storage area- This is a fully bunded area where waste liquids are stored in tanks and drums.

1.2.6

The site has been designed to protect the underlying groundwater and adjacent reens from any potential polluting discharges, by the containment of materials within the site interceptor. Clean water is discharged into the reen and residues from the interceptor are collected by vacuum tanker for treatment at an off-site facility.

1.3 Permitted Wastes

1.3.1

Maximum Quantities and Waste Types

The total quantity of waste accepted on site shall be less than 5,000 tonnes per year

Waste Types

EWC Code Waste Description

Code	Description
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16	Wastes not otherwise specified in the list
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16 01	End of life vehicles from different means of transport (including off-road machinery) and wastes from dismantling the end of life vehicles and vehicle maintenance (except 13,14, 16 06 and 16 08)
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16 01 03	End of life tyres
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16 01 04	End of life vehicles
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16 01 06	End of life vehicles (containing neither liquids nor other hazardous components).
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16 01 07	Oil filters
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16 01 11	Brake pads containing asbestos
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16 01 12	Brake pads other than those mentioned in 16 01 11
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16 06 01 Lead acid batteries

16 06 05 Other batteries and accumulators

16 01 17 Ferrous metals

16 01 18 Non- Ferrous metals

20.01.40 Metals

Exclusions

Wastes having any of the following characteristics shall not be accepted:- consisting solely or mainly of dusts, powders or loose fibres

1.4 Waste Volumes

1.4.1

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:

Scrap metal	Not exceeding 500 tonnes at any time
Hazardous waste (fluids and batteries)	Not exceeding 10 tonnes at any time
Vehicle tyres	Not exceeding 25 tonnes at any time
Total	4,999 tonnes 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 1800 (except for public holidays)
- b) Saturday 0800 to 1400
- 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, Deputy Manager and a full complement of site staff including Administrators, plant operators and de-pollution operatives.

1.6.2

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.

1.6.4 Technically Competent Management

Technically competent management will be provided to oversee the operation of the plant. The manager/s will either hold a WAMITAB certificate of competence or will be deemed technically competent under arrangements set out in The Waste Permitting Regulations 2007.

1.6.5 Health and Safety and the Environment

Risk assessments and Environmental risk assessments are available for all activities on site and details of site specific Personal Protective Equipment are found at reception. Hi-visibility clothing is mandatory in operational areas of the site.

2. Engineered Site Containment and Drainage Systems

2.1 Design, construction and maintenance of site containment and drainage systems

2.1.1

A three chamber interceptor is in place in the de-pollution area. Clean water runs to the re-en and residues are removed from site

2.2 Surface Water Management

2.2.1

Site drainage allows clean rainwater to run to ground from areas outside the de-pollution area. Storm drains on site have been blocked to avoid discharge of potential pollutants. There is a single drain to the re-en at the Southern exit of the yard.

2.2.2

A one brick high partial bund wall prevents run off from the de-pollution area. All run off from the de-pollution area is to the interceptor

2.3 Storage building

2.3.1

The building is of clad frame construction, mounted on a reinforced concrete base.

2.3.2

Each tanker of liquid removed from the interceptor and waste pumped from the hazardous waste storage area will be recorded and its volume audited by weight to volume conversion.

2.4 External Pavements

2.4.1

All external storage areas outside the de-pollution area will be constructed using imported material in accordance with the exemption US1

2.4.2

The de-pollution area will be partially kerbed to ensure no runoff can leave the pavement other than by the interceptor drainage.

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. In the event of failure of the fixed lighting, temporary lighting, kept on site, will be brought into use immediately.

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, licence 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 Licence holder for defects in plant, equipment or structure or in any working practice that may affect satisfactory compliance with the Licence. 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 the Environment Agency; any defects shall be noted and rectified promptly.

3. Site Infrastructure

3.1 Site Security Fencing

3.1.1

Access to the site will be the existing access from Mardy Road. There will be lockable security gates at the site entrance and a 1.2m high stock-proof fencing around the perimeter of the entire the licensed/permitted area.

4. Site operations

4.1 ELV arrival and de-pollution procedure.

4.1.1 On arrival

- Checks to be made on arrival to ensure all fluids remain secure in vehicles. Cars with potential leaks to be moved to impermeable surface for temporary storage with absorbent materials placed to absorb any leakages.
- Cars are unloaded using a forklift.
- Initial storage is in an uneven non- bunded compound.

- Cars are stored in rows
- Staff check for LPG tanks and mark cars as LPG.

4.1.2 De-pollution

a) Top de-pollute

- Coolant and screen-wash is removed.
- Refrigerant is removed using refrigerant removal equipment operated by trained staff.
- LPG tanks are removed and tanks stored away from buildings.
- LPG tanks are stored in the open.
- Batteries are removed and moved manually to a purpose made battery bin.

b) Bottom de-pollute

- Cars are loaded onto ramp with a forklift.
- Removal of:- Oil, transmission oil, power steering fluid, fuel, sometimes coolant are all removed using sealed cylinders.
- Airbags are removed.

c) Top Strip and Tyre Removal

- Cars are reloaded onto stand.
- Wheels are removed and manually taken to cage or onto rack.
- A higher stand is used to remove wheel hubs.

d) Bottom Strip/ Car turning

- Cars are turned with a forklift.
- Engines are removed using air gun.
- Gas is used to burn through sub-frames/ drive shafts etc Engine is removed by the forklift truck lifting the car from the engine- any additional cables are cut to free the engine.
- Engines are lifted to bench using assisted lifting.
- Alternator/ starters are removed.
- Oil filters are removed on bench placed into a bucket and moved to oil storage area.
- Engines and other heavy iron not being saved for resale are put into the container using assisted lifting or stored in 'engine bay' area.
- Vehicle bodies are moved by forklift.
- The vehicle shells that are not kept for additional parts removal are crushed using the JCB bucket.
- Vehicles with additional saleable parts are moved to the de-pollution storage area and marked D/P.
- Crushed vehicle shells are loaded onto flatbed trucks. They are loaded at a rate of seven per vehicle for removal off-site.

4.1.3 Additional functions/storage

Batteries

- Batteries are marked A1 or U/S. U/S batteries are moved to battery boxes manually.
- Parts for storage/resale are tagged, labelled and moved to the appropriate storage area.
- Larger parts i.e engines and transmissions are loaded in racking using a fork lift.
- Tyres are removed from rims using the tyre press in the warehouse. Tyres/wheels are handled manually.

Environmental risk assessment Fluid Recovery

- Mobile containers are used to drain fluids from vehicles.
- Green cylinder for petrol.
- Black cylinder for diesel.
- No additional markings are noted on containers.
- Containers are moved to oil area to be emptied.

Sump/Interceptor

- Entry to the sump is via a drain grid and sediment trap.
- It is a three compartment sump and clean water runs into the reën.

Oil Storage Area

- Fluids are pumped using air into steel tanks in a concrete bunded area with a capacity of some 150% volume of the largest tank.
- Oil filters are drained into the oil tanks on grilles.
- Drained oil filters are placed into the filter bins.
- The fluids from points 1 and 2 above are removed by a contractor using a vacuum tanker, the tanker parks as close to the tank area as possible, having reversed into the specified area.
- Coolants are stored in 1000 litre IBCs and are also emptied by vacuum tanker.
- Oil filters are manually removed from one drum within the bund to another drum outside the bund prior to collection by a contractor.
- The fluid recovery mobile units are stored in the compressor shed.

Site Drainage

- Storm drains on site have been blocked to avoid discharge of potential pollutants.
- There is a single drain to the reën at the Southern exit of the yard.

Security

- Site security is by fencing throughout the site.
- Security cameras and alarms are in use on the site

Screening

- Conifers have been used to screen the site adjacent to the reën.

5. Pollution Control, Monitoring and Reporting Systems (Re: SSSI)

As the site falls within a SSSI area the following precautions will be undertaken.

5.1.1

Visual inspections of the site will be carried out on a daily basis

5.1.2

Water from the interceptor running into the reën will be analysed once yearly or as and when required

6. Amenity Management and Monitoring

6.1 Control of Dust

6.1.1

Dust is not an issue on site.

6.2 Control of Noise

6.2.1

All recycling facility plant will be maintained to control rogue noise generation from faulty or worn apparatus.

6.3 Control of Odours

6.3.1

The risk of generation of odour is minimal- but will be monitored.

6.4 Control of Pest Infestations

6.4.1

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

6.5 Control of Litter

6.5.1

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.

7. Record Keeping

7.1 Record Keeping

7.1.1

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 records, detailing input waste, empty weight, weight of waste delivered, time and date of delivery, hauliers, waste category and unique reference number
- d) Waste transfer notes
- e) Consignment notes (in and out)
- f) Visitors book.

7.1.2

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

Appendix 1 – Environmental risk assessment

Appendix 2 – Site Plan