South Wales Exports Limited
31, Wimborne Road, Barry Dock, Barry, South Glamorgan CF63 3DH Tel. 01446 732220

Environmental Management System Plan (EMS)

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INTRODUCTION

South Wales Exports Limited has prepared this Environmental Management System (EMS) for the operation of Scrap Metal Recycling, End of Life Vehicles (ELV's) and storage of WEEE at 31, Wimborne Road, Barry Dock, Barry, South Glamorgan CF63 3DH Tel. 01446 732 220.

Site description and characterisation of risk source

1.1 Specified site and waste management operations

Site address:- South Wales Exports Limited,
Scrap Metal Recycling and End of Life Vehicles
31, Wimborne Road, Barry Dock, Barry, South Glamorgan CF633DH

The site location and licensed boundary are shown on APPENDIX A

1.1.1 Classification of specified waste management operations

The following waste management operations are carried out at South Wales Exports Limited (the operator) recycling Facility, 31, Wimborne Road, Barry Dock, Barry, South Glamorgan
(the site).

D15: Storage of waste pending any of the operations classified D1 to D14 as listed in Part III of Schedule 4 of the Waste Management Regulations 1994.

R13: Storage of waste consisting of materials intended for submission to any operation classified R1 to R12 as listed in Part III of Schedule 4 of the Waste Management Licensing Regulations 1994.

1.2 Brief description of Facility

This section should be read in conjunction with (site layout drawing) which can be found in APPENDIX A.

Scrap Metal, End of Life Vehicle and WEEE items will be delivered to the Facility by means of road transport. Carriers will be required to hold a current Carriers of Waste certification.

On arrival at the Facility items will be stored in the Initial Storage and Classification Area.

In general, items will be inspected on arrival. All hazardous components will be removed and sent for recycling/treatment disposal at a suitably licensed facility. The metals will be removed and stored prior to recycling. The remaining plastics will be shredded and reprocessed.

All material delivered to the facility will be stored in compliance with the relevant Natural Resources Wales guidance. The processing equipment will be outside.

1.3 Excluded and Exempt Activities

There are a number of activities within the permitted area of this facility; these activities are controlled under the relevant Permit and exemption activities.

1.4 Specified Site Operations

The site is located within the Barry Dock site complex and is accessed from the plan on APPENDIX A

1.4.1 Initial Storage and Classification Area

All Scrap Metal, End of Life materials will be separated, WEEE from Local authorities will be stored separately. WEEE from door to door collections will remain mixed in the scrap metal.

Items will remain in the delivery area prior to either being processed on site or removed off site by an appropriate transport company for further treatment, reprocessing or disposal.

1.4.2 Manual separation

On arrival at the facility all Scrap Metal, End of Life and Local authority WEEE items will be unloaded and stocked in the respective storage areas, the items will be visibly inspected and any material or waste that is not permitted at the facility will be removed and placed in the waste bin provided.

The site will use IDIS or other manufacturers guidance to obtain depollution on the ELV, if required, the ELV would be inspected for an airbag and set heater control to maximum, materials that would be removed are batteries, fuel, oil, filler caps, wheels, tyres, balance weight from wheels.

Liquids such as petrol will be separated at a distance to protect the stored petrol from potential ignition sources.

All items from the End of Life Vehicles will be separated into the relevant category; i.e. are batteries, fuel, oil, filler caps, wheels, tyres, balance weight from wheels, containers will be clearly labelled so that people are aware of their contents and hazards, all the components and the car carcass will be removed from site for further recovery of metals.

1.4.3 Storage of processed materials

All materials will be stored in the designated storage areas, lead acid batteries will be stored in containers with an impermeable, acid resistant base and kept inside to prevent ingress of water, all liquid types fuel, oils, brake fluids and water based fluids will be stored separately, this will be recorded and the information of the specialist recovery company for disposal will provided to Natural Resources Wales if so required.

1.4.4 General waste

A skip or bin will be provided so that any un-authorised or odorous waste can be stored. They will be emptied on a regular basis into A skip marked general waste in the permitted area and a record of waste leaving the site, detailing

the waste company's information and where the waste is transported to with the relevant EWC codes.

1.4.5 Quarantine area

A designated area will be established so that any non-conforming waste can be stored prior to its removal from site, this area will a secure area so that it prevents the waste stored in it from contaminating the environment and other waste and materials on site.

1.5 Permitted wastes, quantities and storage durations

Table 1 below lists the general types and quantities of waste that may be held at the facility. A full list is given in Appendix C

If a waste type is delivered to the site that is not on the list the operator will contact Natural Resources Wales to determine if it is permitted at the facility. If the waste is not allowed a suitable disposal option will be agreed with Natural Resources Wales, the person who produced the waste and the site operator.

1.6 Annual tonnage of waste accepted at the Facility with condition of the besboke permit.

The total quantity of waste that will be accepted at the site shall be less than 75,000 tonnes a year

The tonnage is for sorting, separation, grading, shearing, shredding, baling, compacting, crushing, granulating and cutting of ferrous metals, alloys and non ferrous metals, recovery (including storage) of all waste vehicles which do not contain any poisonous noxious or polluting substance or any bio-degradable wastes.

Tanks or drums used for the storage of liquids shall be contained within the bunded compounds. The containment capacity of the bund shall be at least 110% of the tank capacity in the case of a single tank. Where multiple tanks and drums are contained within a bund, then the bund capacity shall either be 110% of the capacity of the largest tank or drum, or 25% of the total volume of the liquid which could be stored in the bund, - whichever the greater. The side walls and base of the bunded areas shall be lined with impervious material.

Every part of the storage tank shall be within the bund.

All taps or permanent valves through which liquid can be discharged shall be

1. Within the bund;
2. Discharged vertically downwards;
3. Shut and locked when not in use.

Where liquid from a tank is delivered through a flexible pipe permanently attached to the tank then –

a) A tap valve shall be provided at the delivery end which automatically closes when not in use;
b) An isolating valve shall be provided at the tank end of the flexible pipe which shall be kept locked when not in use;
c) The flexible delivery pipe shall be kept within the bund when not in use.

Batteries

All lead acid batteries shall be stored in a designated area.

i. The area is constructed with an impervious base and bunding with blind sump to prevent the escape of any of the contents of the batteries or any contaminated liquor. The area shall be covered to prevent ingress of water into it. The area shall be covered to prevent ingress of water into it. The bunding and sump shall be emptied regularly into a suitably constructed and labelled container.

ii. Scrap batteries shall be stored wet (i.e. containing acid) whilst awaiting removal to a facility capable of processing the acid metal contents.

iii. Batteries for resale shall be drained and flushed with water in an impervious bunded area. Electrolyte and flushing shall be stored in suitable containers in a bunded compound for collection and disposal of as a Special Waste and the Waste Regulation Authority notified accordingly.

iv. A suitable alkali material be used to neutralise spillages and a drip tray provided under acid containers.

The maximum tonnage of WEEE material accepted at the facility per year will not exceed 75,000 tonnes.

There will be no burning of any wastes, either in the open, inside buildings or in any form of incinerator.

1.7 Hours of Operation

The hours of operations will be in compliance with the local planning agreement. 7.30 – 4.30 Monday – Friday and sometimes weekends due to loading of vessels

1.8 Operations of mobile plant and associated equipment

Typical mobile plant and equipment that will be used at the facility will be forklift trucks, long reach grab, front-loading shovels. Operators of these vehicles will be trained in their use. All vehicles will be serviced in accordance with the manufacturer's directions.

Section 2 Site engineering for pollution prevention and control

2.1 Engineered site containment and drainage systems

The designated working area will be within 31, Wimborne Road, Barry Dock, Barry and can be securely locked when they are unmanned.

The Building has fully engineered concrete floors that are suitable for the purposes of the operations.

The building and floors will be inspected every week to insure there are no defects. Should any defects be found, temporary repairs will be carried out to insure the integrity and security of the facility; permanent repairs will be carried as soon as practicable. Records of damage and repair will be kept in the site diary.

There is a suitable rest room/mess facility available with a WC for the workforce.

2.2 Drainage systems

There are no open drains within the building used for the storage of non ferrous metals, Batteries, liquids etc., the items will be stored internally in containers, bins, pallets on the concrete floor. There will be no leakage from the material into the drainage system, which can be found in APPENDIX D.

Drainage from the mess rooms, weighbridge, office for WC's are connected to the foul sewer system within the Barry Docks own system which discharges into a Cesspit and will be collected via a specialist company.
The sealed drainage system uses impermeable service, this drainage system with its impermeable components which ensures that no liquids will run off a surface other than the system, except where they may lawfully be discharged, to foul sewer, all liquids entering the system are collected from the sealed sump which can be found in APPENDIX D and collected via a specialist recovery company for disposal, records of the fluids collected and information can be provided to Natural Resources Wales.

Section 3 Site Infrastructure

3.1 Provision of Site identification board

A site identification board will be erected at a prominent position, so it is visible to everyone who visits the site, it will include the following information:

- Name of facility
- Name of permit holder/site operator
- Contact address for permit holder/operator
- Operational hours
- Permit numbers
- Emergency site telephone contact number
- Natural Resources Wales office and emergency telephone 0300 065 3114 – 0300 065 3000

3.2 Site Cleanliness

All materials handled at the facility are broken down and all the recycling processes are carried out within the controlled areas, if there is likelihood of material being tracked off the site or blown off, in this the event if the material is spilt on the site access roads or public highway the material will be cleared as soon as site staff have been notified.

3.3 Site Security

All access points at the facility can be closed and locked when it is un-manned, there is coded pad lock system in place on the main gates. There are camera's around the perimeter of the premises and inside the weighbridge.

During the times when the facility is manned, visitors will be required to sign the visitor's book, which is kept in the main site office. During usual operating conditions all doors that are not required for access will be closed.

The facility is within secure area with weighbridge and offices, the site is bounded by fencing and wall. The fence boundaries and locks are checked regularly by the staff and any repairs are carried out promptly. We are separated by a neighbouring company J M Enviro Fuels Permit number EPR/AB3690CP with a boundary of which will be 4 meters high and approximately 70 meters long.

Section 4 Site operations

4.1 Control of mud and debris

All materials that may be spilled will be collected and placed in the appropriate storage container or area. There should be no escape of debris from the facility. Daily checks will be made to ensure all mud or debris is cleaned from roads and surfaces in the appropriate manner.

4.2 Potentially polluting leaks and spills

All equipment is sited on concrete hardstanding, there is no requirement for any drainage for the operations.

All ELV's and recovered material will be stored in secure containers or in the designated storage areas. In the event of any spillage of liquids at the facility, it will be treated as an emergency and as such the Emergency Plan (see Appendix B) will be brought into effect. Where possible the leak or spilt oil will be soaked up by using a spill kit.

4.3 Equipment and materials for cleaning up leaks and spillages

In the event of an oil spill, the site operators will take immediate action to stop oil from entering drains and watercourses. Absorbent granules, spill kits will be stored onsite to deal with any spillage of liquids. These materials will be stored in a manner to prevent them becoming hydrated.

The site will notify Natural Resources Wales if there has been a spillage to watercourses or ground soil and if necessary, soil samples may have to be taken.

All oil and fluids will be stored in suitable containers labelled prior to removal off site to an appropriately approved disposal facility. A record of the material removed will be kept in the site office.

4.4 Fires on site

In the event of a fire on site the Emergency Procedure will be initiated.

The local fire brigade will be contacted in the case of a large fire that could not be dealt with by the personnel and equipment on site.

During any incident of fire, the facility will be closed and evacuated leaving only those personnel who are dealing with the fire. When the local fire brigade is on site the Site Manager, Fire Marshall or Assistant will provide the necessary assistance.

All fire will be recorded in the site diary and Natural Resources Wales will be informed within 48 hours of any incident.

Fire prevention and control

4.4.1 Fire fighting/suppression equipment and materials

The site will have a sufficient number of suitable types and sizes of fire extinguishers. These will be operated by Nathan Curtis Fire Marshall. These extinguishers will be located at various points around the site so that they are easily accessible in the event of a fire. The extinguishers will be of a type capable of dealing with electrical, oil and combustible material fires. The minimum size of the extinguishers will be 7.5kg and will be checked annually by a qualified person.

4.4.2 Procedures for the prevention of fires

A number of procedures are undertaken on site to reduce the possibility of fires starting. The whole site is designated as a No Smoking area.

No 'Hot Working' by contractors will be permitted on site without a 'Permit to Work' being issued.

Combustible materials such as waste cardboard and paper will be stored in appropriate waste containers and not left uncontained around the facility.

4.4.3 Procedures to be followed when a fire is detected

If a fire is detected the 'Emergency Plan' and 'Fire Procedure' shall be followed.

4.4.4 Records of waste inputs and outputs

All End of Life Vehicles, Scrap Metal and WEEE brought onto the site will be recorded on the Company's record sheets. The person/company who delivers the materials to the site must be a registered carrier of waste and have the correct waste transfer information with them, these records are to comply with Section 34 of the EPA 1990.

Copies of these records will be available to Natural Resources Wales on request.

Material that are removed from site will also be recorded and the destination recorded. The quantity of each load will be checked on the weighbridge within the site or weighing scales within the facility. Records will be kept in the site office and quarterly summaries will be sent to Natural Resources Wales.

Only wastes described in this plan will be accepted at the facility. Any other waste will be rejected, and the carrier instructed to remove the load from the facility. All waste will be checked for compliance purposes and if approved will be placed in the appropriate storage bay.

4.4.5 Waste quantity measurement

The method of measurement of material delivered to the facility and material removed will be based on the type material, they will conform to the standards used by Natural Resources Wales.

Section 5 Pollution Control, Monitoring and Reporting

5.1 Environmental Monitoring

The Risk Assessment prepared for the facility conclude that the risks posed by operations to the environment are minimal and the control measures that will be in place, including the engineered containment are sufficient. Even though this is in place there will still be a routine environmental monitoring.

The operator will carry out any occasional environmental monitoring Natural Resources Wales may require or will allow officers of Natural Resource Wales access to the facility to carry out their own environmental monitoring.

Section 6 Amenity Management and Monitoring

6.1 Control, monitoring and reporting of dust, fibres and particulates

No waste will be accepted that consists or contains significant proportions of dust, fibres or particulates.

The site supervisor will undertake visual monitoring for excessive dust, fibres and particulates throughout the working day.

Details of all monitoring and remedial actions taken will be recorded in the site diary.

6.2 Controls of odours

Due to the nature of the materials handled on site there is little potential for malodorous emissions.

Should any of the materials become malodorous they will be immediately removed from the facility.

No waste consisting of or containing substances with significant hazard of odour will be accepted at the site only what is agreed to on the permit.

6.3 Control of pest infestation

The waste type that is stored on site is unlikely to attract pests and therefore any infestation.

The facility will be inspected for the presence of vermin and insects by the site supervisor.

A specialist contractor will be employed if a pest infestation is found, they will be responsible for the eradication of the infestation.

Details of the site inspections and any control measures undertaken, including types and quantities of pesticides used will be recorded in the site diary.

6.4 Control of litter

Litter is not anticipated to be an issue at the facility. All vehicles taking waste from the site will be checked to prevent any spillage on roads and highways.

Details of all site inspections and cleaning schedules will be recorded in the site diary.

6.5 Noise

There is regular monitoring of noise at different places and times, the equipment is maintained regularly to reduce noise levels, plant equipment and vehicles are switched off when not in use, consideration is taken not work during evenings and weekends. To minimise noise outside the buildings deliveries and export of materials will be within the designated times stated in the local planning consent.

6.6 Technical Competence

The site will be manned during the receipt of Scrap Metal and End of Life Vehicles and removal of materials with at least two operatives. During the processing period the facility will be manned by four operatives and could increase due to work load. The appointed facility manager Mr Nathan Curtis has been booked in with Brightwater Training for the required level of WAMITAB certification within 1 year of the issue of the permit.

6.6.1 Management and supervision for the Facility

The facility will have an appointed manager. The manager will meet the requirements of the Natural Resources Wales for Technical Competence. In addition, an assistant manager will be based on site who will take over the responsibilities of Technical Competence should the manager be unavailable.

The site will be manned with enough
personnel so that the operations of the waste acceptance, storage and processing are undertaken safely and efficiently and ensure compliance with the requirements of the Permit and the Health & safety Executive (HSE).

Any changes to the named competent personnel will be forwarded to Natural Resources Wales for approval and any changes only made when agreement has been received from the Agency.

6.6.2 Training requirements

All site personnel will be trained in the use of equipment and or plant that they operate. Such training will include the following:

- Specific training in the use of equipment and plant offered by the manufacturers.
- Operational training by outside organisation for safe use of equipment.
- General Health and Safety training.
- Onsite training by Company staff.

Section 7 Site Records

7.1 Security and availability of records

All records relating to the operation of the site will be kept in the facility's office.

The site records will contain a copy of the waste permit this Plan and site diary.

The site diary will contain a minimum detail as follows:

- Non-conforming waste acceptance at the facility.
- Site incidents, accidents and emergencies.
- Site inspections and any corrective actions taken.
- Schedule maintenance and cleaning.
- Visitors on site.

All other records will be available for inspection by the Natural Resources Wales officers as required. Requests for all relevant information must be made directly to the manager.

Appendix A

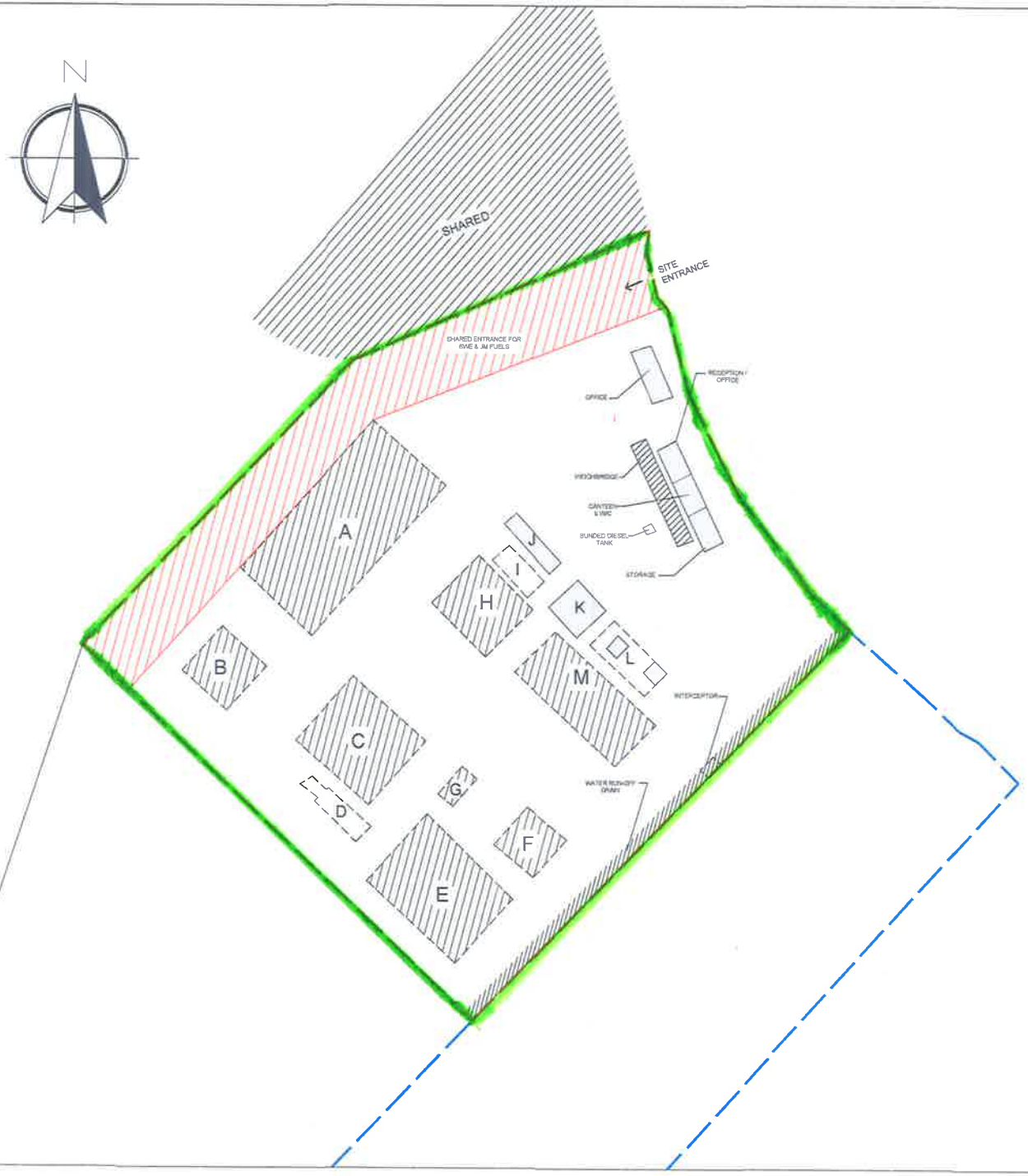
Site Plan

N.B. EACH ZONE MAY INCREASE/DECREASE IN SIZE DEPENDANT ON WORK FLOW ETC

RED LINE SHOWS SITE BOUNDARY NOT OWNERSHIP BOUNDARY

GRABS & OTHER VEHICULAR OR NON PERMANENT FEATURES AND MACHINERY ARE NOT SHOWN IN THIS PLAN

DO NOT SCALE FROM THIS DRAWING



A	LIGHT IRON & WEEE
B	ELV's
C	UNPROCESSED
D	SHEAR
E	PROCESSED MATERIAL
F	INHERT FINES
G	SHAKER
H	CUTTINGS
I	BALER
J	NON-FERROUS CONTAINER
K	PUMP HOUSE
L	ELECTRICITY SUB STATION
M	QUARANTINE

Rev	Amendments	Date
B	Amendments as clients request	12/16
A	Amendments as clients request	12/16

ANDREWS ARCHITECTURE

NTS A2

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Appendix B

Emergency Plan

South Wales Exports Limited

Emergency procedures for WEEE Facility

DEFINITION OF AN EMERGENCY

Emergencies covered by this procedure include the following: -

- outbreak of fire in plant
- catastrophic failure of plant
- spillage or leakage of
- oils
- other uncontrolled situations likely to result in pollution or serious risk to ealth, safety or the environment.

Any of the above, or any situation likely to lead to any of the above, is to be treated as an EMERGENCY and MUST be dealt with according to this procedure.

IMMEDIATE ACTION

Any person detecting an **EMERGENCY** must ensure the safety of themselves and other people as a first priority. If there are risks to safety, the site must be completely evacuated until expert help is obtained.

Before taking any action to deal with the **EMERGENCY**, expert assistance MUST be sought using the telephone numbers listed below.

Once expert assistance has been requested, the most senior person operating the plant should take charge as **Acting Incident Officer** until expert assistance arrives at the site.

The **Acting Incident Officer** should ensure that the area surrounding the plant is evacuated of all non-essential personnel and ensure that no one enters the area surrounding the plant without his/her express permission.

If safe to do so, the **Acting Incident Officer** should arrange for a brief visual inspection of the plant to determine whether immediate action is necessary to contain the **EMERGENCY** or lessen the risks to health, safety or the environment. Once this inspection has been completed, the **Acting Incident Officer** should determine whether it is safe to take any action or whether it should be delayed until help arrives. If there is any doubt, **NO ACTION SHOULD BE TAKEN.**

DEALING WITH THE EMERGENCY

If the emergency services are in attendance the **Incident Controller** will either be a member of the **Police or Fire Service (as appropriate). If the Natural Resource Wales** is in attendance the **Acting Incident Officer** should determine whether the **Agency** wish to take charge of the situation. Otherwise, the most senior member of staff will take charge as the **Incident Controller.**

The Incident Controller must obtain a verbal report from the **Acting Incident Officer** as to the circumstances of the emergency and persons/ organisation contacted to provide expert assistance.

The Incident Controller must establish an **Incident Control Point** at a suitable position so that everyone who is involved with the incident has clear access. **The Incident Control Point** should always have access to a working telephone during the emergency.

The Incident Controller must assess the available information as to the circumstances of the **Emergency** and should decide whether additional help is required, if so arrange for additional help forthwith.

If action can be taken to deal with the emergency, the **Incident Controller** must ensure that he has assessed the risk to health and safety before allowing such action to be undertaken. If there is any doubt no action should be taken.

Contact Numbers:

Site Manager: Nathan Curtis – 07891 107 786

In Case of Fire or Rescue of Trapped Personnel:

Local Fire Service: - Dial Emergency Number 999

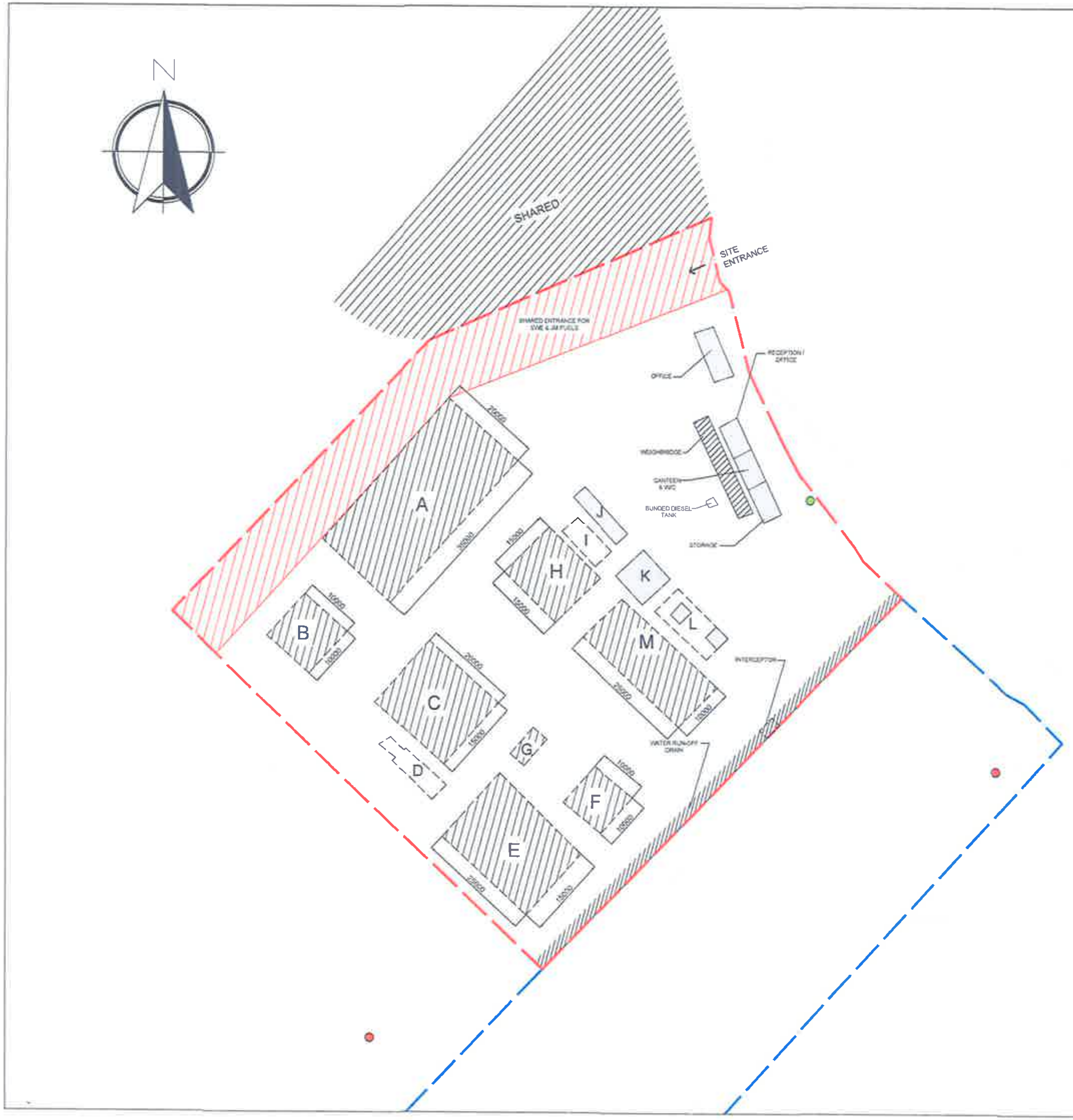
In Case of leakage of Liquids that cannot be dealt with by plant personnel:

Natural Resource Wales: 0300 065 3000
Fire Services: As above

Health and Safety Executive: 0345 300 9923

Barry Hospital – Colcott Road, Barry CF62 8YH - 01446 704 000

Ambulance Service/Fire and Rescue Service: 999



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H	CUTTINGS
I	BALER
J	NON-FERROUS CONTAINER
K	PUMP HOUSE
L	ELECTRICITY SUB STATION
M	QUARANTINE
(green dot)	FIRE ASSEMBLY POINT & SITE INFORMATION PACK
(red dot)	FIRE HYDRANT

A		12/18
Rev		

ANDREWS ARCHITECTURE

SITE FIRE PLAN

02/12/18

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Appendix C

Permitted Waste

Permitted Waste Types

The following table lists the European Waste Catalogue (EWC) Codes for the types of wastes which shall be accepted on site.

02 WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING

02 01 wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing

02 01 10 waste metal

12 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS

12 01 wastes from shaping and physical and mechanical surface treatment of metals and plastics

12 01 01 ferrous metal filings and turnings

12 01 03 non-ferrous metal filings and turnings

15 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED

15 01 packaging (including separately collected municipal packaging waste)

15 01 04 metallic packaging

16 WASTES NOT OTHERWISE SPECIFIED IN THE LIST

16 01 end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14,6 06 and 16 08)

16 01 03 end-of-life tyres

16 01 04* end-of-life vehicles

16 01 06 end-of-life vehicles, containing neither liquids nor other hazardous components

16 01 07* oil filters

16 01 11* brake pads containing asbestos

16 01 12 brake pads other than those mentioned in 16 01 11

16 01 13* brake fluids

16 01 17 ferrous metal

16 01 18 non-ferrous metal

16 01 22 components not otherwise specified

16 02 wastes from electrical and electronic equipment

16 02 09* transformers and capacitors containing PCBs

16 02 10* discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09

16 02 11* discarded equipment containing chlorofluorocarbons, HCFC, HFC

16 02 12* discarded equipment containing free asbestos

16 02 13* discarded equipment containing hazardous components(2) other than those mentioned in 16 02 09 to 16 02 12

(2) Hazardous components from electrical and electronic equipment may include accumulators and batteries mentioned in 16 06 and marked as hazardous; mercury switches, glass from cathode ray tubes and other activated glass, etc.

16 02 14 discarded equipment other than those mentioned in 16 02 09 to 16 02 13

16 02 15* hazardous components removed from discarded equipment

16 02 16 components removed from discarded equipment other than those mentioned in 16 02 15

16 06 batteries and accumulators

16 06 01* lead batteries

16 06 05 other batteries and accumulators

17 04 metals (including their alloys)

17 04 01 copper, bronze, 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

19 WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE

19 01 wastes from incineration or pyrolysis of waste

19 10 wastes from shredding of metal-containing wastes

19 10 01 iron and steel waste

19 10 02 non-ferrous waste

19 10 04 fluff-light fraction and dust other than those mentioned in 19 10 03

19 10 06 other fractions other than those mentioned in 19 10 05

19 12 wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified

19 12 02 ferrous metal

19 12 03 non-ferrous metal

20 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

20 01 separately collected fractions (except 15 01)

20 01 23* discarded equipment containing chlorofluorocarbons

20 01 33* batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries

20 01 34 batteries and accumulators other than those mentioned in 20 01 33

20 01 35* discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components[6]

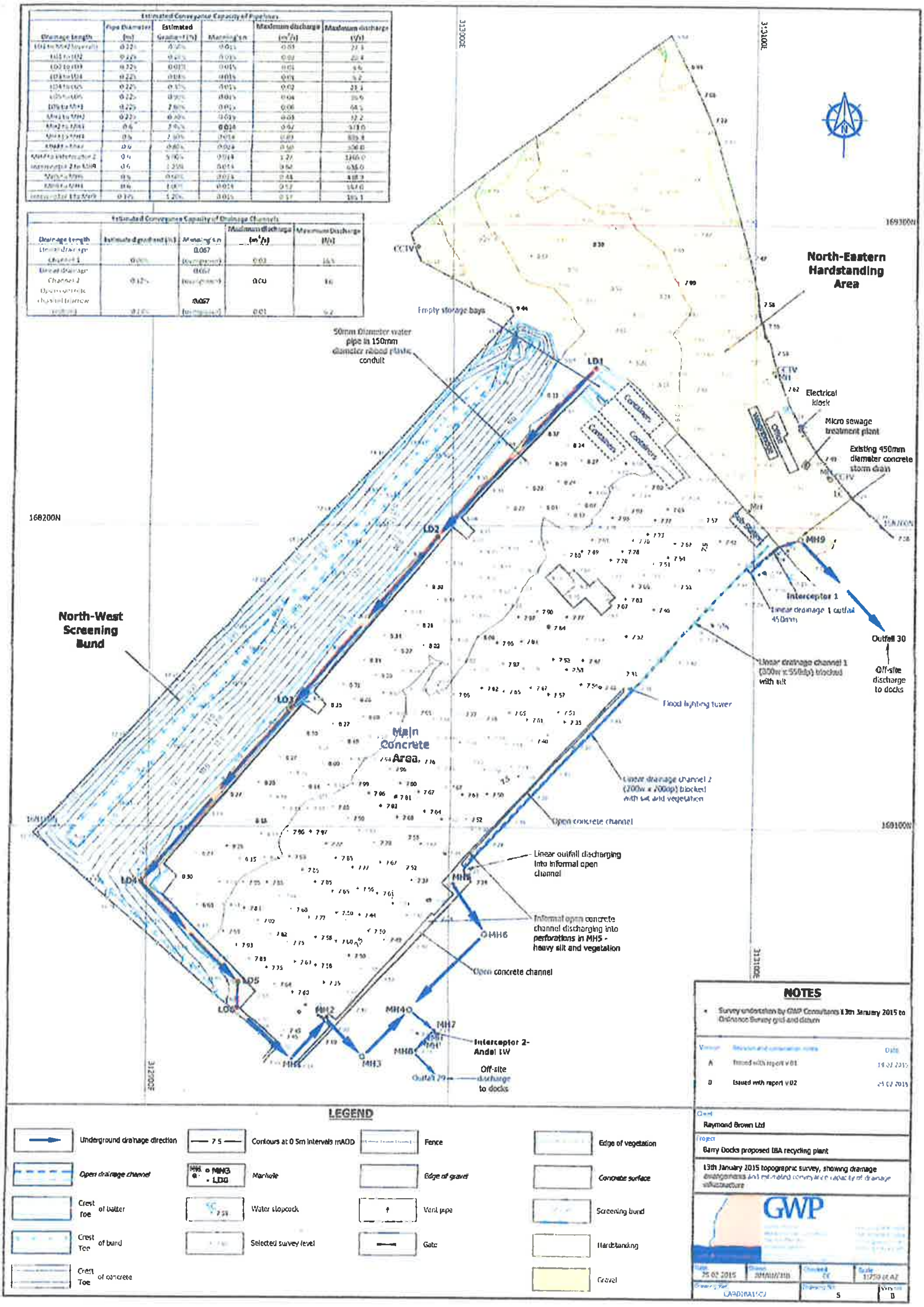
[6] Hazardous components from electrical and electronic equipment may include accumulators and batteries mentioned in 16 06 and marked as hazardous; mercury switches, glass from cathode ray tubes and other activated glass etc.

20 01 36 discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

20 01 40 metals

Appendix D

Drainage and Interceptor



Estimated Conveyance Capacity of Pipelines
Drainage length
Pipe Diameter (m)
Estimated Gradient (%)
Manning's n
Maximum discharge (m³/s)
Maximum discharge (l/s)
Estimated Conveyance Capacity of Drainage Channels
Estimated gradient (%)
Maximum Discharge (l/s)
0.067
North-Eastern Hardstanding Area
North-West Screening Bund
Main Concrete Area
Empty storage bays
50mm Diameter water pipe in 150mm diameter ribbed plastic conduit
Containers
Electrical kiosk
Micro sewage treatment plant
Existing 450mm diameter concrete storm drain
CCTV
Interceptor 1
Linear drainage 1 outfall 450mm
Outfall 30
Off-site discharge to docks
Linear drainage channel 1 (300w x 550dp) blocked with silt
Flood lighting tower
Linear drainage channel 2 (200w x 200dp) blocked with silt and vegetation
Open concrete channel
Linear outfall discharging into informal open channel
Informal open concrete channel discharging into perforations in MH5 - heavy silt and vegetation
Interceptor 2- Andel IW
Outfall 29
LD1
LD2
LD3
LD4
LD5
LD6
MH2
MH3
MH4
MH5
MH6
MH7
MH8
MH9
168200N
168100N
169300N
312900E
313000E
313100E
NOTES
Survey undertaken by GWP Consultants 13th January 2015 to Ordnance Survey grid and datum
Version
Date
A
Issued with report v01
B
Issued with report v02
LEGEND
Underground drainage direction
Open drainage channel
Crest
Toe
of batter
of bund
of concrete
Contours at 0.5m intervals mAOD
Manhole
Water stopcock
Selected survey level
Fence
Edge of gravel
Vent pipe
Gate
Edge of vegetation
Concrete surface
Screening bund
Hardstanding
Gravel
Client
Raymond Brown Ltd
Project
Barry Docks proposed IBA recycling plant
13th January 2015 topographic survey, showing drainage arrangements and estimated conveyance capacity of drainage infrastructure
GWP
25.02.2015
1:1750 at A2
5
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