

EP 0105/19/DOC 2a

Waste Processing Report
for
End of Life Vehicle (ELV) plant



JAC Steel Ltd
Waste Treatment Complex
MRA 001 Marsa Industrial Estate
Marsa

Dr. Joe A Doublet PhD (Wales)

Applicant

Mr Conrad Baldacchino

Architect

Perit Joe Grech B.E.& A. (Hons), A.& C.E.

February 2014



Declaration

The information found in this report is the outcome of a site visit, meeting with the developer and his representatives and from information collected by the author of this report. The report is considered to be as objective as possible under the present circumstances.

Dr Joe A Doublet

26th February 2014



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Objectives of report

[REDACTED]

This report will give an overview of the operational features of the proposed development including the infrastructural requirements and equipment which is intended to be used on site. The proposed ELV equipment will be temporarily set up in the basement area of the existing premises found at the Marsa Industrial Estate (See: Site Plans 1, 2 and 3). Eventually it will be moved to another location on the same site once a number of changes in the infrastructure of the place would be completed. The report will focus on the temporary location, however, an updated version could be produced on request when the equipment is moved to the other site.



Operational details

The premises will be open from 06.00hrs to 18.00 hrs Monday to Saturday and ELV facility will open from 07.00hrs to 16.00hrs during same period. The only occasions where overtime work would be carried out is under extraordinary circumstances.

Depollution of ELV for passenger cars would take around 20-45minutes whereas that for ELV over 3.5tonnes would take around 1 to 1.5hrs. The applicant aims to process around 5 tonnes of vehicles daily (approximately 6-7 vehicles). There could also be between 1-2 vehicles over 3.5tonnes at any time which would need to be processed.

It is estimated that more than 85-95% by weight of an ELV could be recycled or reused limiting the remaining small percentage to waste which has to be landfilled. By 2015, the re-use and recovery of end-of-life vehicles would have to increase to a minimum of 95% by average weight per vehicle. The recycling component depends much on the car make and year of manufacture, those manufactured in recent times having a greater facility of recycling than previous ones.



Depollution of ELVs

Background legislation

In the absence of local guidance with regards to depollution of ELVs, the following guidance¹ published by the Department for Environment Food and Rural Affairs (DEFRA) together with the Department for Business Innovation and Skills (BIS) of the UK will be used.

The ELV Directive (2000/53/EC) introduced measures to promote and increase recycling and to further protect the environment by requiring adequate depollution and set minimum technical requirements for the treatment of ELVs. This directive was transposed into the local legislation through LN 99 of 2004. Minor changes were effected as a result of subsequent legislation².

The depollution requirements of the ELV Directive are found in Annex I of the Directive and give the minimum technical requirements for treatment in accordance with Article 6(1) and (3) of same. This involves:

- Removal of batteries and liquefied gas tanks;
- Removal and neutralization of potential explosive components (e.g. air bags)
- hydraulic oil, cooling liquids, antifreeze, brake fluids, air-conditioning system fluids and any other fluid contained in the ELV, unless they are necessary for the re-use of the parts concerned;
- Removal, as far as feasible, of all components identified as containing mercury.

The ELV Directive only applies to a specified range of vehicles, by reference to European Whole Vehicle Type Approval legislation. This means that vehicles designated as M1 (passenger vehicles comprising no more than 8 seats, in addition to the driver's seat) and N1

¹ Department for Environment Food and Rural Affairs (DEFRA), Department for Business Innovation and Skills (BIS) (2011) *Depolluting End-of-Life Vehicles (cars and light goods vehicles) Guidance for Authorised Treatment Facilities*, BIS London UK

Department for Environment Food and Rural Affairs (DEFRA) (2004) *Depollution Guidance for End-of-Life Vehicles over 3.5 tonnes*, DEFRA, London, UK

² LN 340/10, LN 244/11, LN96/12 and LN 346/13



Waste Management Report JAC Steel Ltd Waste Treatment Complex Marsa Industrial Estate, Marsa (vehicles used for the carriage of goods, having a technically permissible maximum mass not exceeding 3.5 tonnes).

The European Waste Catalogue (EWC) and Hazardous Waste List (HWL) were first published in 1994. They are used for the classification of all wastes and hazardous wastes and are designed to form a consistent waste classification system across the EU. They form the basis for all national and international waste reporting obligations, such as those associated with waste licences and permits and the transport of waste. An updated version of the EWC and HWL was published as a harmonised list of hazardous and non-hazardous wastes in 2001 and came into force on 1st January 2002. The list of Waste Decision includes ELVs (Category 16 01) and lists a number of hazardous wastes in this category. This has been implemented locally through LN 337/01, Waste Management (Permit and Control) Regulations 2001 and LN 106/07 Waste Management (Activity Registration) Regulations 2007, which provide additional measures and guidance to LN 337/01.

Although the List of Wastes decision could be interpreted as implying that, for example, every drop of engine oil must be removed in order to classify an ELV as non-hazardous, the cost for achieving this would be high. More importantly, there is likely little environmental benefit in removing the very small quantities of oil which is likely to remain in practice. Consequently the DEFRA guidance was prepared on practical trials that have been shown to achieve an acceptable level of decontamination which would meet the requirements of both ELV Directive and the List of Wastes Decision.

Vehicle depollution involves the removal of fluids and components which may be either explosive or corrosive. The operator is legally bound to follow all Health and Safety procedures as established by local and international legislation with respect to the safety and



Waste Management Report JAC Steel Ltd Waste Treatment Complex Marsa Industrial Estate, Marsa
wellbeing of his employees and also towards safeguarding the surrounding environment. This should be done by carrying out risk assessments prior to commencing new activities, follow procedures in a rigorous manner, utilisation of personal and protective equipment by all employees and implementing an accident reporting procedure from where one could derive feedback to prevent accidents in the future. New employees should undergo an induction course and if need be a period of apprenticeship prior to being left alone to carry out certain tasks.

Facilities

Sites for ELV treatment and storage of vehicles prior to treatment must have:

- Sites for Storage

The proposed facility will have an impermeable surface, both on the external and also on the internal areas. This is mainly due to the nature of the work which would be taking place on site.

- Site for Treatment

Standard and certified ELV equipment (see: Appendix II) will be utilised on site. Appropriate spillage collection facilities and bunded areas will be constructed in the ELV areas, thus preventing any possibilities of spillages to the external grounds.

Furthermore, there will be:

- Appropriate storage containers for oil dripping parts, batteries, oil-filters, PCB/PCT containing condensers and any hazardous components identified in IDIS³;
- Appropriate storage tanks for the segregated storage of ELV fluids;

³ IDIS (the International Dismantling Information System) has been developed by vehicle manufacturers and provides information on both the depollution and dismantling of ELVs. IDIS should be consulted to obtain information on any specific depollution procedures which may be required, and to obtain information on procedures for removal or in-situ deployment of air bags.

The information provided in IDIS is regularly updated. Treatment facilities must ensure that they are using the latest version.

Note: IDIS is one method of obtaining depollution information but is not the only method. Appropriate information should be sought from wherever suitable.



Waste Management Report JAC Steel Ltd Waste Treatment Complex Marsa Industrial Estate, Marsa

- Appropriate storage for used tyres, including the prevention of fire hazards and excessive stockpiling.

The depollution process varies between different cars and involves the removal of hazardous substances, including different fluids, and could also involve the removal of explosive material such as airbags. The whole procedure from the point the vehicle enters the premises until it is declared depolluted is shown in Figure 1). In view of the fact that one encounters variations in the process to carry out this work it is highly recommended that one consults the IDIS information system or similar information systems published by the car manufacturers prior to commencement of the depollution process. This is also in view of the fact that cars have evolved from the petrol/ diesel engines to hybrids, electrical and LPG driven engines. The type of hazards encountered varies considerably and hence precautionary measures need to be undertaken both to safeguard the workers and also to avoid inherent dangers when handling the different parts of the vehicles, hence the importance to consult the appropriate information systems which are available on line. A copy of depollution guidance for authorised treatment facilities is found in Appendix III.

Once the depollution process is complete, then one could proceed to the process of removing and separating all the other different components left in the car which are non hazardous.

These include the glass panels, rubber fittings and trimmings, plastics and electrical and electronic parts. These will be dismantled manually and stored in separate containers for recycling purposes or disposal. Once this process is ready, the remaining skeleton vehicle is sheared and stored with other similar material until shipment stage.

The depollution of ELVs over 3.5 tonnes requires different techniques than those for smaller vehicles mainly due to the fact that these are usually commercial vehicles used for specific tasks and would therefore have slightly different and also larger components than smaller



Waste Management Report JAC Steel Ltd Waste Treatment Complex Marsa Industrial Estate, Marsa vehicles. The process is shown in Figure 2. Following depollution, the glass panels, rubber fittings, plastics, electrical and electronic parts are dismantled manually. The remaining metal frame is then sheared.

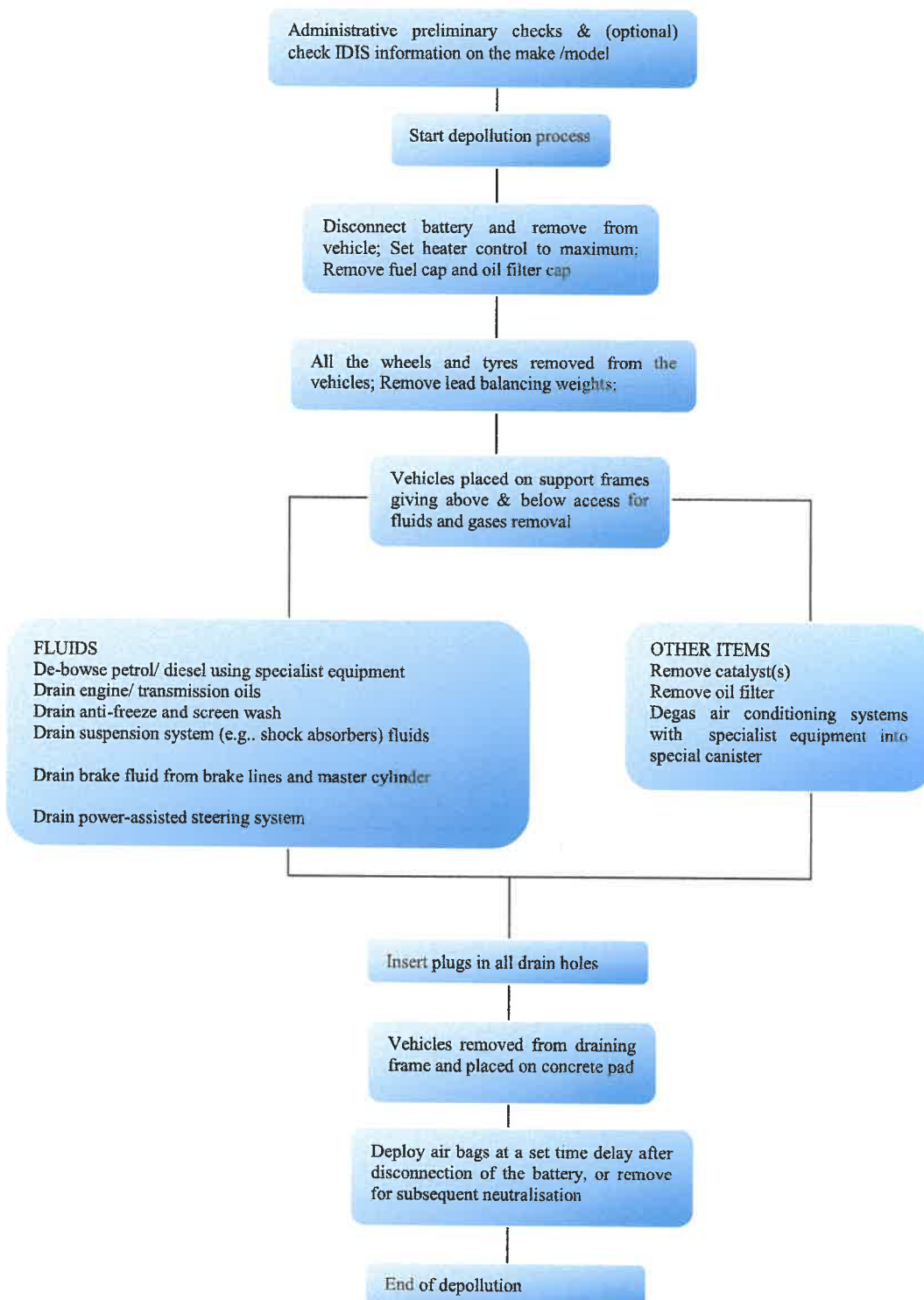


Figure 1 : Depollution Process Flow Diagram for vehicles under 3.5 tonnes (adapted from BIS (2011))



The hazardous materials collected through the above mentioned ELV processes will be kept in appropriate storage tanks and areas on the same premises as shown in Site Plan 3. It is estimated that there will be enough storage space for materials arising from more than 40 vehicles which is about that arising from one week of ELV work. This would imply that by the end of each week, most of the hazardous material collected would be disposed of in an appropriate manner and there wouldn't be any excessive stockpiling on site which could result as a potential hazard in the area. This implies that the different materials will be disposed of in the manner described in the (Table 2). All the metals found in the ELV will be recovered and treated to be reused.

None of the material arising from the ELV process will be stockpiled and sold for re-use as second hand parts. The developer is not interested in embarking in such a commercial enterprise.

The approximate quantities of materials produced from the ELV process is shown in Table 1. The estimates were based on an average processing of around 50 vehicles per week together with information found in the *End-of-Life Vehicles Reporting Table and Guidance* produced by the Department for Business Innovation and Skills (BIS) (2011).

Item	Quantity per week
Ferrous and non ferrous metals	
Batteries	
glass	
tyres	
plastics	
electric parts	
upholstery	
catalytic converter	
oils	
coolant liquids	

Table 1: Approximate quantities of materials which would be produced on a weekly basis from the ELV process

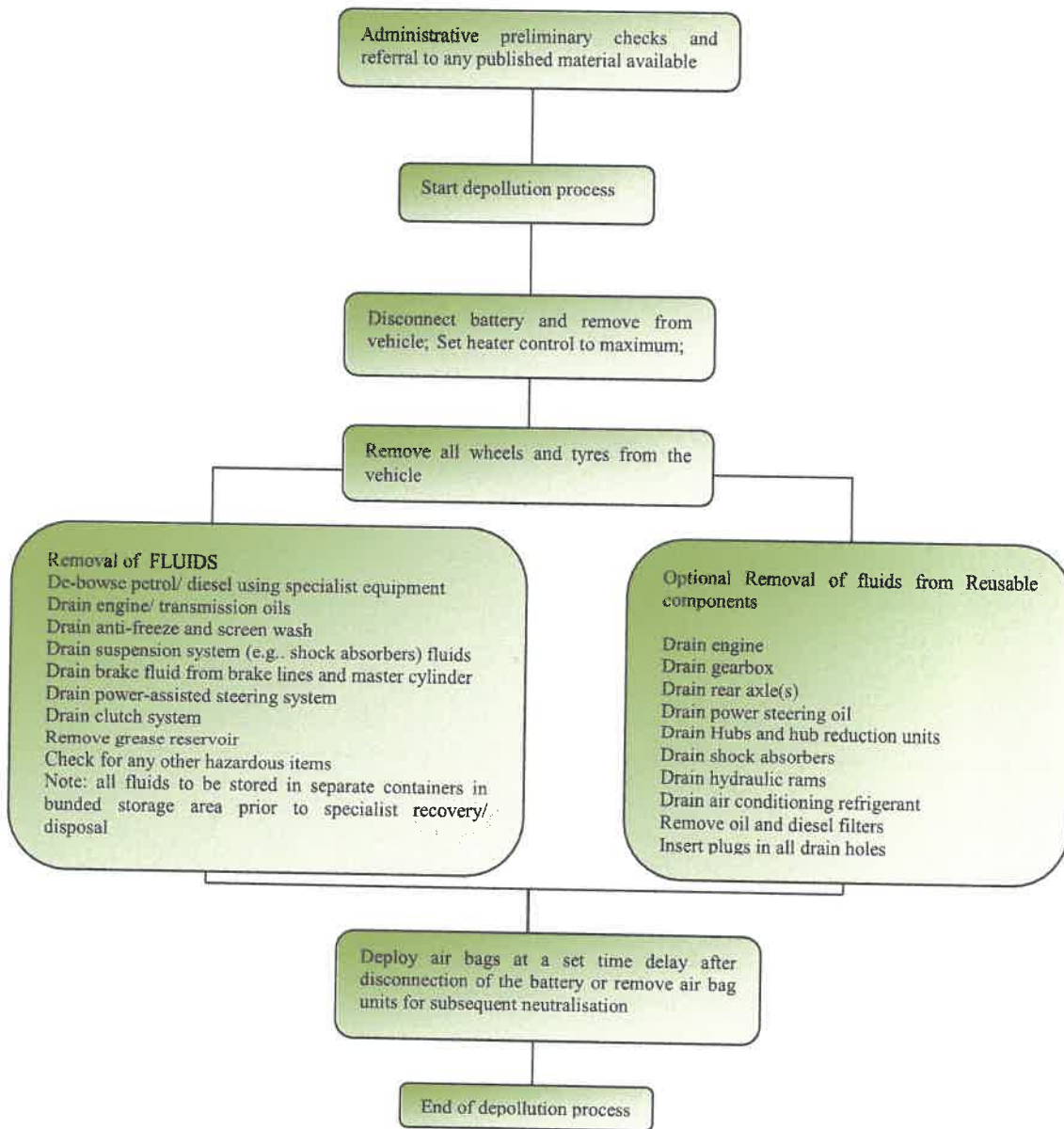


Figure 2: Depollution Process Flow Diagram for vehicles over 3.5 tonnes (adapted from DEFRA (2004))



Activity	Waste Description	EW Code	H Code	Quantity Projected	Internal Handling and Storage	Frequency and Method of Transport to Disposal Site	Offsite Disposal Site/ Waste Management Company
ELV facility	Batteries	1606..	H5, H8		Stored in banded area under cover and sold to registered broker	Secure truck	
	Glass	160120			Stored under cover and exported	Container	
	Plastic	160119			Baled and stored under cover and exported	Container	
	Tyres	160103	N/A		Stored under cover cut and exported	Container	
	ELV Vehicles	160106			Depolluted, sheared and stored in yard and exported	Trucks and ship	
	Upholstery	160199			Shredded and landfilled	Truck	
	Engine, gear, lubricating oils	130204-6	H3-H6		Stored in special tanks in banded area	Weekly transferred to registered waste company for processing	
	Absorbents, oil filters	150202	H4		Drained and compressed in special compressor	Same as ferrous waste	
	Brake pads and other parts containing asbestos	160111	H7		Stored in 45 gallon drums and exported	Exported, depending on availability	
	Brake pads and other parts	160102	N/A				
	Brake fluids	160113	H4, H5, H6, H8		Stored in special tanks in banded area	Weekly transferred to registered waste company for processing	
	Oil filters	160107	H3-H6		Drained and compressed in special compressor and shredded	Same as ferrous waste	
	Antifreeze fluids containing dangerous substances	160114	H4,H5,H6, H8		Stored in sealed plastic tanks in banded area and exported	Exported, depending on availability	
	Other antifreeze fluids	160115	N/A		Stored in sealed plastic tanks in banded and exported	Sealed plastic tanks in banded area	
	WEEE	1602...			Dismantled and exported	Stored under cover	

Table 2: Waste streams generated from ELV process.



Site Plan 1



MEPA - www.mepa.org.mt

St. Francis Ravelin
Floriana FRN 1230, Malta
PO Box 200, Marsa MRG 1000, Malta
Tel: +356 2290 0000 Fax: +356 22902295

Site Plan, Scale 1:2500
Printed on: Tuesday, October 08, 2013

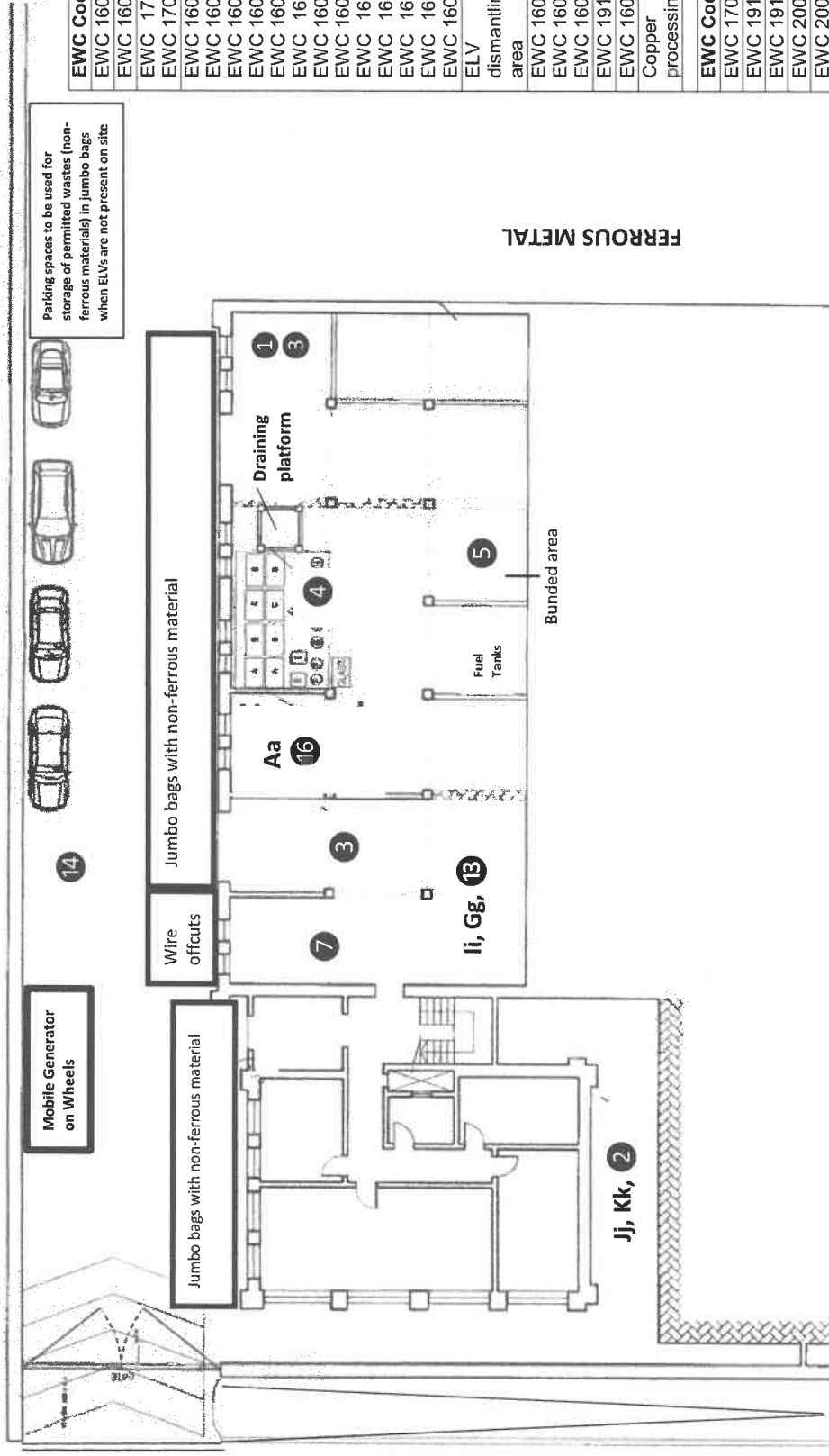
Not to be used for interpretation or scaling of site plan drawings
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Site Plan 2

JAC STEEL LTD, MRA 001, Triq Garibaldi, Marsa
 Basement Plan
NOT TO SCALE

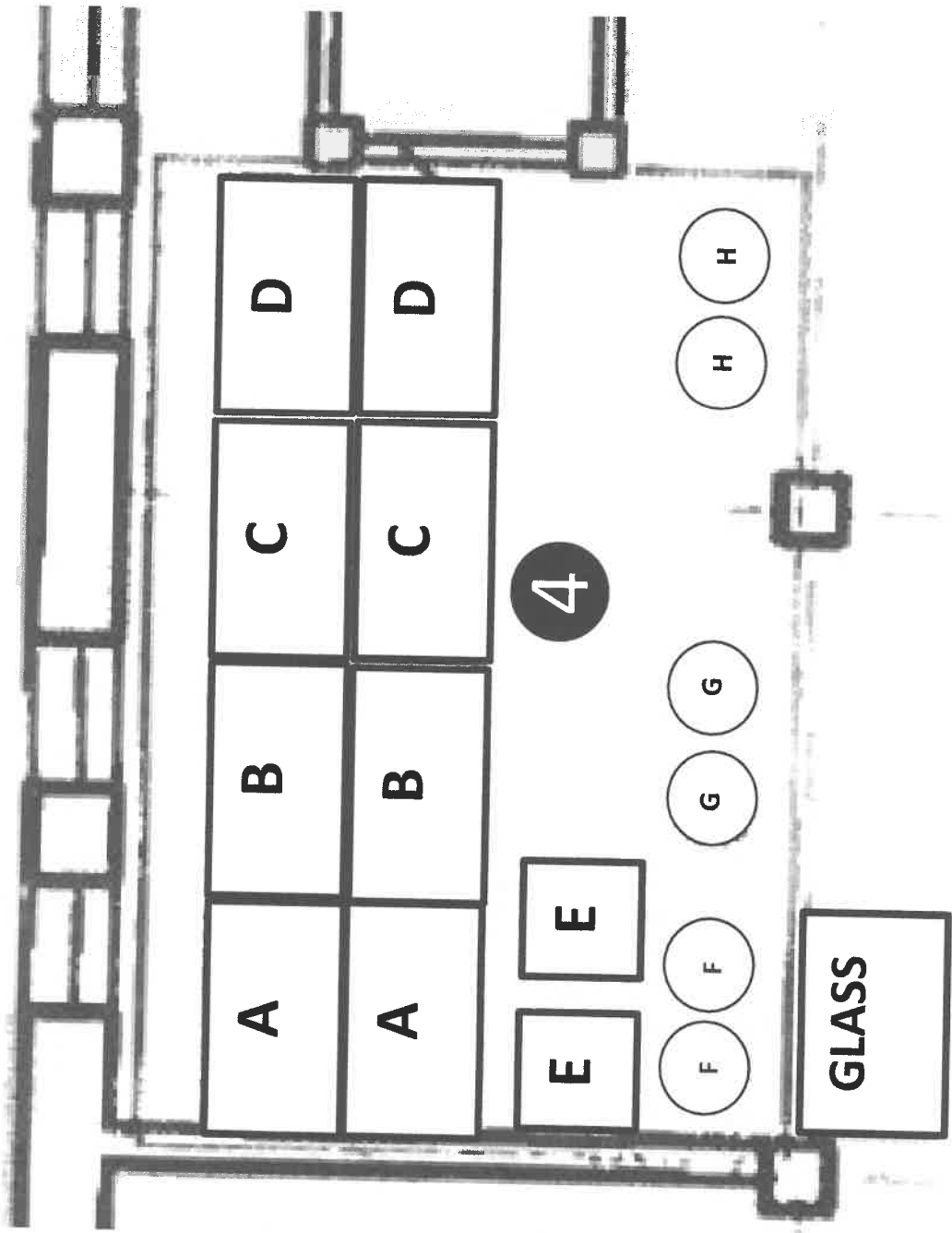


Parking spaces to be used for storage of permitted wastes (non-ferrous materials) in jumbo bags when ELVs are not present on site

FERROUS METAL

EWC Code	Annotation
EWC 160103	1
EWC 160601	2
EWC 170410, EWC 170411	3
EWC 160107*, EWC 160108*, EWC 160109*, EWC 160110*, EWC 160111*, EWC 160112, EWC 160113*, EWC 160114*, EWC 160115, EWC 160116, EWC 160119, EWC 160120, EWC 160199	4
ELV dismantling area	5
EWC 160213*, EWC 160215*, EWC 160216	7
EWC 191203	13
EWC 160104*, Copper processing	14
	16
EWC Code	Annotation
EWC 170401	Aa
EWC 191002	Gg
EWC 191203	Ii
EWC 200133*	Jj
EWC 200134	Kk

DEPOLLUTION 3 CARS ONLY



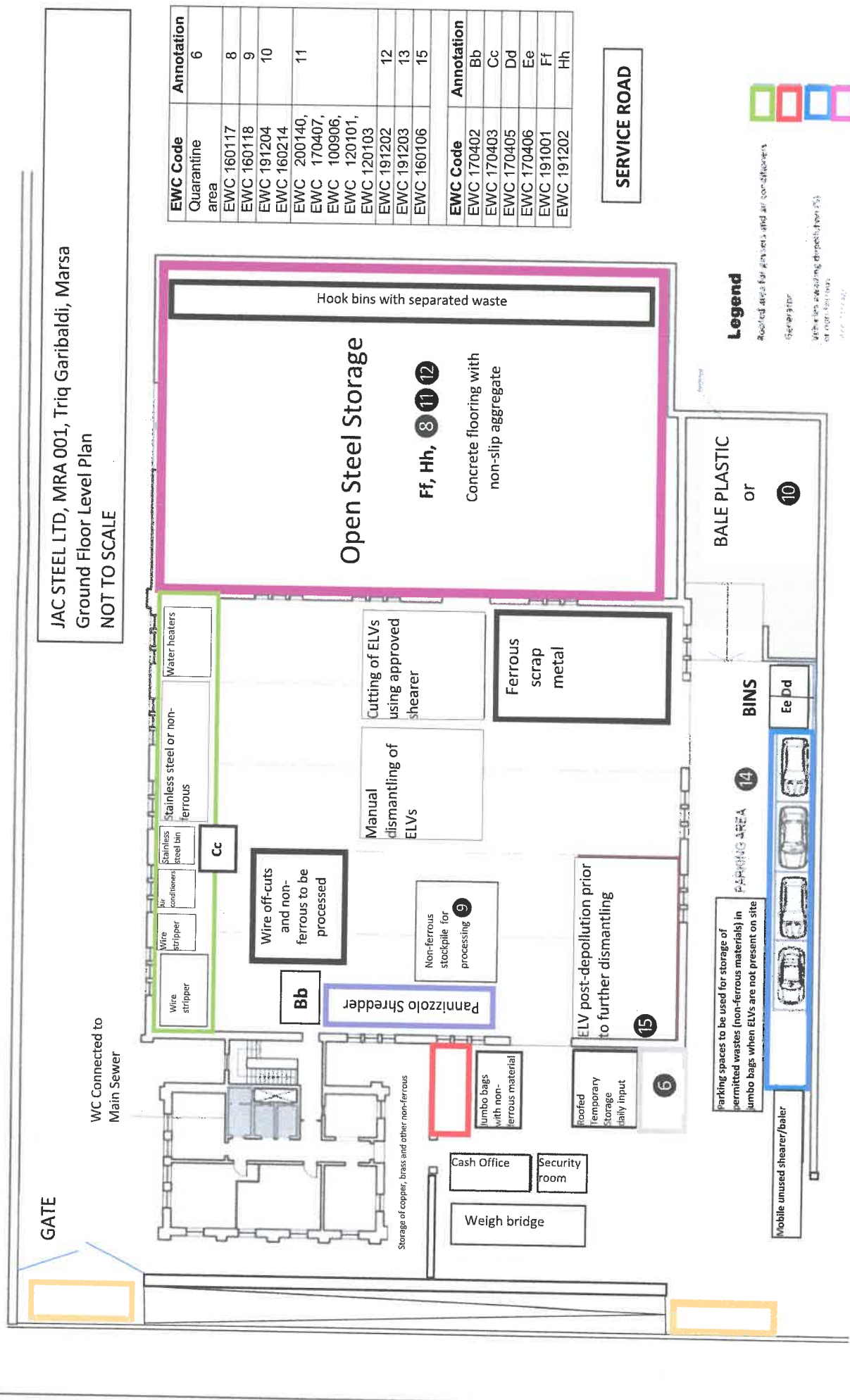
- Legend:**
- A: Diesel
 - B: Petrol
 - C: Engine Oils/Oils
 - D: Coolant Liquids
 - E: Oil Filters/Absorbants
 - F: Mercury Switches
 - G: Brake Pads with Asbestos
 - H: Brake Pads without Asbestos

JAC STEEL LTD, MRA 001, Triq Garibaldi, Marsa
 Detail from Basement Plan
NOT TO SCALE



Site Plan 3

JAC STEEL LTD, MRA 001, Triq Garibaldi, Marsa
 Ground Floor Level Plan
 NOT TO SCALE



EWC Code	Annotation
Quarantine area	6
EWC 160117	8
EWC 160118	9
EWC 191204	10
EWC 160214	
EWC 200140,	11
EWC 170407,	
EWC 100906,	
EWC 120101,	
EWC 120103	
EWC 191202	12
EWC 191203	13
EWC 160106	15
EWC Code	Annotation
EWC 170402	Bb
EWC 170403	Cc
EWC 170405	Dd
EWC 170406	Ee
EWC 191001	Ff
EWC 191202	Hh

Legend

- Roofed area for plants, and air conditioners
- Generator
- Wire bin separating ferrous from non-ferrous
- Aluminium shredder
- Other plants and/or accessories
- Queue service area



Appendix I



[Redacted text block]

[Redacted text block]

[Redacted text block]



Appendix II

Load Lift

The quick and easy way to access End of Life Vehicles



Really speeds up your depollution process

- 5 second loading time, full height in 38 seconds
- Height adjustable- The operator can work at the right height for each part of the depollution process without having to move the vehicle, which creates a faster turnaround.
- All doors can be opened for quick and easy access

Packed with safety features

- Fully Health and Safety compliant- no more worries about a visit from HSE
- The operator can work at a comfortable height, reducing bending and stretching and reducing the risk of repetitive strain injuries (RSI).

Patented Design

- Vehicles can be loaded damaged or with suspension parts/wheels missing
- The frame protects the lift from any damage



Watch our video at www.autodrain.net to see all the benefits of a Load Lift.

So if you want to quickly and easily load End of Life Vehicles in a safe and efficient way, call AutoDrain today!

AutoDrain

Experts in Vehicle Depollution

Call **AutoDrain** today on 0044 (0)113 2059332
E: info@autodrain.net W: www.autodrain.net

Load Lift

The quick and easy way to access End of Life Vehicles

- Sold steel robust construction providing you with a long service life
- Secure working platform that can take a weight up to 3000kg
- Patented loading frame that prevents damage to the lift and enables you to load a damaged vehicle
- Fitted with a safety system to lock the lift and prevent uncontrolled descent.

Training

Training is vital to ensure you maximise the profitability and longevity of your Load Lift and we have the following training options available for you:

- 1 Free online training information and video
- 2 Certificated training at our own ATF in Leeds- price on application

FACT!

With hundreds of Load Lifts sold to our customers, we are incredibly proud of their reliability record. One of our clients, having seen how much his first Load Lift sped up car depollution, has gone on to buy more than a dozen.



The Load Lift prevents operator bending and stretching and reduces the risk of objects falling from the vehicle, which are both dangers associated with fixed frame stands.

AutoDrain
Experts in Vehicle Depollution

Call **AutoDrain** today on 0044 (0)113 2059332
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Brake Fluid Mobile

Safely and effectively sucks brake fluid from End of Life Vehicles



Huge 90 litre capacity means emptying less often!

>> Simple and effective

- Designed to quickly suck brake fluid from vehicles
- Empties the full system in seconds by connecting to all four brake nipples at the same time

>> Packed with useful features

- The robust steel construction and heavy duty wheels means the unit provides you with a long service life.
- Level Gauge allows quick and easy viewing of contents.
- Tool tray, tool holder and probe kit included
- Large 90 litre capacity means less time spent emptying the unit and greater productivity



The probes attached to the brake fluid nipples

Training

Training is vital to ensure you maximise the profitability and longevity of your Brake Fluid Suction Unit and we have the following training options available for you:

- 1 Free online training information and video
- 2 Training at our own ATF In Leeds- price on application

Specifications:

- 90 litre capacity
- Weight 20.5kg
- H 980 x L740 x W515.
- 8mm and 12 mm flexible probes included
- Low pressure air discharge

So if you want a compact, efficient and fully compliant machine for brake fluid, you need the Brake Fluid Suction Unit.

AutoDrain
Experts in Vehicle Depollution

Call **AutoDrain** today on 0044 (0)113 2059332
E: info@autodrain.net W: www.autodrain.net

Coolant Suction Mobile

Quickly and safely sucks coolant from End of Life Vehicles



Huge 120 litre capacity means emptying less often!

>> **Simple and effective**

- Designed to quickly suck coolant from vehicles
- Coolant spike to puncture radiator hoses and to quickly remove coolant.
- Multiple ways to access system with flexible probes

>> **Packed with useful features**

- The robust steel construction and heavy duty wheels means the unit provides you with a long service life.
- Level Gauge allows quick and easy viewing of contents
- Tool tray, tool holder and probe kit included
- Really large 120 litre capacity means less time spent emptying the unit, increasing productivity



Coolant spike piercing the hose

Training

Training is vital to ensure you maximise the profitability and longevity of your Coolant Suction Unit and we have the following training options available for you:

- 1 Free online training information and video
- 2 Certificated training at our own ATF In Leeds- price on application
- 3 Training on your site- price on application

Specifications:

Coolant spike included
120 litre capacity
Weight 27.5kg
H 980 x L740 x W515.
8mm and 12 mm flexible probes included
Low pressure air discharge

So if you want a compact, efficient and fully compliant machine for waste coolant, you need AutoDrain's Coolant Suction Unit.

AutoDrain
Experts in Vehicle Depollution

Call **AutoDrain** today on 0044 (0)113 2059332
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Workshop Fuel Scavenger

Designed to quickly remove petrol, diesel or contaminated fuel from all makes of vehicle.



>> **Satisfy the inspectors**

Complies fully with the HSE's and insurance companies requirements to remove petrol and petrol vapours.

>> **Vapour removal**

Includes a unique system to exhaust petrol vapour from the workshop.

>> **Simple to use**

3 tools included to allow a number of methods to be used to recover fuel.

>> **Return on investment**

With no moving parts a long and productive life is promised.

>> **Recommended by leading car manufacturers**

Including Ford, Renault, Jaguar, Land Rover, Aston Martin, Saab and Honda.

Compressed air operated with no pump or moving parts. Supplied with suction probes to recover fuel via the filler neck, fuel line or sender unit. The unit offers a high degree of safety, efficiency and ease of use and is fully ATEX compliant.

From HSE - The Safe Recovery of Petrol from End of Life Vehicles

Extracting petrol from a vehicle fuel tank is a potentially hazardous operation, as petrol is an extremely volatile liquid. Poor equipment can increase the risks of petrol or vapour explosions. You will need to ensure that any equipment is designed and operated to minimise release of petrol vapours. DSEAR places the responsibility on employers to select appropriately designed equipment.

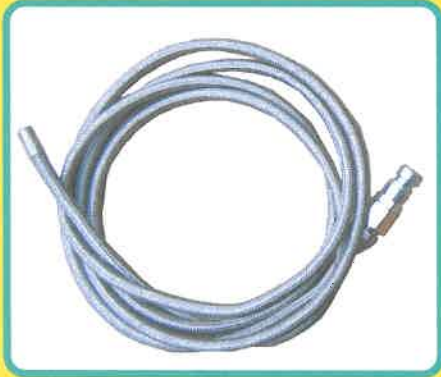
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Workshop Fuel Scavenger

Designed to quickly remove petrol, diesel or contaminated fuel from all makes of vehicle.

The three standard tools included in your Workshop Fuel Scavenger package



Hose - Passes anti-siphon measures for draining from filler neck.



Cone - To attach to the fuel lines.

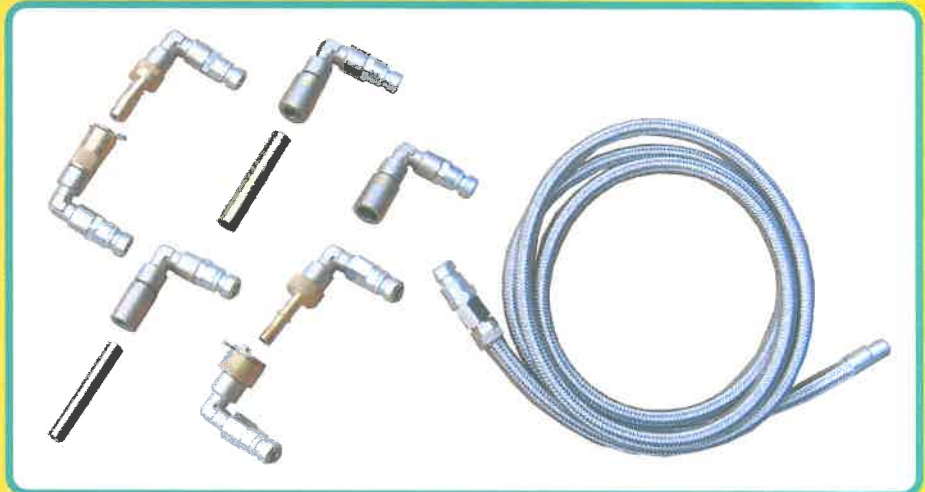


Tube - for draining from the sender unit and dispensing.



Watch our video at www.autodrain.net to see how easy to use the Workshop Fuel Scavenger is.

Additional Fuel Tool option for high volume recovery



If you are handling several misfuels a week or want to speed up your fuel recovery operation, this optional extra set of fuel tools will maximise time efficiency.

Fact!

Fuel recovery and storage is not without its dangers. This may not come as news to you, but still we see people taking unnecessary risks with the safe removal and storage of hazardous substances. This goes against important legislation and can leave employees and visitors open to danger, which in turn can leave your company liable for any deaths or injuries that occur.

On average, four people die per year in the automotive industry due to petrol being removed and stored unsafely. You can help prevent this by investing in good quality, fit for purpose equipment such as the Workshop Fuel Scavenger.

AutoDrain are the market-leaders in depollution systems, tailoring products and services to your specific requirements – all designed to save you time, make you extra profits and ensure you comply to all legislation.

Call **AutoDrain** today on 0044 (0)113 2059332

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Petrol Storage Tank

The safest way to store contaminated fuel



>> **Extremely safe**

- Fully compliant with the requirements of different agencies—Health and Safety Executive, the Environment Agency, Trading Standards, the Fire Service and insurance companies.
- Explosion, pressure and shock proof
- Leak detection system

>> **Packed with features**

- Hot dipped galvanised
- Integrally bunded with no further bunding required

>> **Easy and convenient**

- No electricity or pipework required
- Designed to be moved easily with a forklift truck

This tank is safe to store petrol that has been removed from End of Life Vehicles.



Electric or manual pump options available

Specifications:

980 litre capacity
Lockable cabinet
Pump
Meter
4m hose

So if you want to store the petrol removed from End of Life Vehicles in a tank that meets all the regulations and keeps your workshop safe, then you need to call AutoDrain today!

AutoDrain

Experts in Vehicle Depollution

Call **AutoDrain** today on 0044 (0)113 2059332
E: info@autodrain.net W: www.autodrain.net

Diesel Storage Tank

The safest way to store valuable diesel



>> **Extremely safe**

- Safely stores diesel on your site
- Fully compliant with the requirements of different agencies- Health and Safety executive, the Environment Agency, Trading Standards, the Fire Service and insurance companies.
- Explosion, pressure and shock proof
- Leak detection system

>> **Packed with features**

- Hot dipped galvanised
- Integrally bunded with no further bunding required
- Complete with pump and meter for easy dispensing

>> **Easy to use**

- No electricity or pipework required
- Designed to be moved easily with a forklift truck

Specifications:

980 litre capacity
Lockable cabinet
1.2m x 1.2m footprint
Net weight 318kg
Pump and meter
Forklift base

Electric or manual available
Filling points
Explosion and shock proof
Leak detection system
All steel construction
Brass fittings
Lockable fittings

So if you want to store the valuable diesel removed from End of Life Vehicles in a tank that meets all the regulations and keeps your site safe, then you need to call **AutoDrain today!**

AutoDrain

Experts in Vehicle Depollution

Call **AutoDrain** today on 0044 (0)113 2059332
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Budget Shocker

Oil recovery from vehicle shock absorbers



- » **Fully Compliant**
The draining of shock absorbers is compulsory under Environment Agency legislation. The Budget Shocker will ensure you are meeting all of the required regulations
- » **Quick and easy**
A stand alone unit that can drain a shock absorber in as little as one minute
- » **Return on investment**
The solid construction means a long and productive life
Purpose built and cost effective unit
- » **Safe and easy removal of oil from shock absorbers**
Drills into the shock absorber
Combines suction and gravity for clean, fast oil removal
70 litre capacity

Specifications:

The recommended approach is to drain the fluid from the shock absorber without removing it from the ELV. If the shock absorber is removed it is classified as hazardous waste, therefore preferable to drain in situ.



Pneumatic drill to pierce the shock absorber

So if you want to be compliant with Environment Agency regulations by draining shock absorbers in a safe, clean way, call AutoDrain today!

AutoDrain

Experts in Vehicle Depollution

Call **AutoDrain** today on 0044 (0)113 2059332

E: info@autodrain.net W: www.autodrain.net

Oil Suction Mobile

Quickly and safely sucks waste oil from End of Life Vehicles



**Huge 120
litre capacity
means
emptying
less often!**

>> **Simple and effective**

- Provides a low cost solution to compliance with depollution regulations
- Quickly and safely sucks oil and power steering fluid from an End of Life Vehicle.

>> **Packed with useful features**

- Tool holder
- Level indicator for ease of use
- Supplied with flexible metal probes and adaptors
- Robust construction with heavy duty wheels
- Large 120 litre capacity means less time spent emptying the unit and greater productivity

Training

Training is vital to ensure you maximise the profitability and longevity of your Oil Suction Unit and we have the following training options available for you:

- 1 Free online training information and video
- 2 Certificated training at our own ATF In Leeds- price on application
- 3 Certificated training on your site- price on application

Specifications:

120 litre capacity
Low pressure air discharge
Weight 27.5kg
H 980 x L 740 x W 515

So if you want a compact, efficient and fully compliant machine for waste oil, you need AutoDrain's Oil Suction Unit.

AutoDrain

Experts in Vehicle Depollution

Call **AutoDrain** today on 0044 (0)113 2059332

E: info@autodrain.net W: www.autodrain.net

Oil Filter Crusher

A simple and time efficient way to deal with waste oil filters



>> **Space Saving**

Reduces waste volume
Reduces need for storage space

>> **Money Saving**

Eliminates alternative disposal costs
Produces saleable scrap metal material

>> **Safe and Easy to Use**

Easy to operate– simply press button and walk away!

Cleaner and safer workshop

As the filter is flattened, the oil is collected in a container placed underneath.

Comes in car and commercial models



The Oil Filter Crusher is so simple to use– just push the button and walk away

So if you want to deal with oil filters from End of Life vehicles safely and easily, you need to call AutoDrain today!

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Air Bag Tool

Safe and efficient air bag deployment for End of Life vehicles



>> Efficient

Deploys all makes of air bags in situ
Certificated training included if required

>> Safe to Use

Pre detonation warning siren
Distance activation
Fully compliant with EU legislation
Includes safety key

>> Money Saving

All necessary connectors supplied
as standard, no extra purchases



Watch our videos at www.autodrain.net
to see how safe and easy to use the
Air Bag Tool is.



FACT!

Air bags are actually classed as 'explosive articles' due to the way in which they work. Deploying an air bag is a dangerous task and should only be done by fully trained and competent workers. You must be aware of your work area at all times during air bag deployment to ensure you are not endangering others.

Training

Training is vital to ensure you maximise the profitability and longevity of your Air Bag Tool and we have the following training options available for you:

- 1 Free online training information and video
- 2 Certificated training at our own ATF In Leeds

So if you want to have the right tools for safe and effective air bag deployment, call AutoDrain today!

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GlassPopper

Simple and effective tool for removing glass panels

>> Simple and effective

- Allows you to profit from recovering glass from End of Life Vehicles
- Used for removing urethane-bonded windows.
- Gets to those hard to reach areas where other glass tools can't (deep pockets and tight curves)
- Eliminates the damage normally associated with conventional glass tools.
- Quick and easy to use
- Unique 'Flameless Heat' technology



The GlassPopper is quick, easy and safe to use



Comes complete with glass removal tool

If you want to remove glass panels quickly and safely without damaging them, you need the GlassPopper!

AutoDrain
Experts in Vehicle Depollution

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WheelPopper

Removes scrap tyres from steel and alloy rims in seconds



» **Saves money**

Through reduced labour costs and improving the speed and efficiency of your operation.

» **Fast, efficient, time and money saving**

Complete separation in just 15 seconds, meaning you can get through up to 240 wheels per hour.

» **Easy and comfortable to use**

The design reduces bending and stretching, which in turn reduces back pain and is much better for Health and Safety requirements. No dangerous crushing of the wheel is involved.

» **One machine required**

The WheelPopper does steel, alloy, light commercial and 4x4 wheels.

» **Built to last**

Robust all steel construction means low maintenance costs and a long service life.

So would you like to save a massive amount of time with fast, easy and safe removal of all types of tyres with our WheelPopper?

AutoDrain

Experts in Vehicle Depollution

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WheelPopper

Removes scrap tyres from steel and alloy rims in seconds



The WheelPopper is so quick and simple to use— just position the wheel, grab the edge and pop out the middle!



Watch our video online at www.autodrain.net to see how fast and simple to use the WheelPopper is.

Training

Training is vital to ensure you maximise the profitability and longevity of your WheelPopper and we have the following training options available for you:

- 1 Free online training information and video
- 2 Training at our own ATF in Leeds— price on application

What we have seen
We visited an ATF recently having been told by the owner that separating 50 wheels and tyres in the traditional method would be just as quick as our WheelPopper. So, we stayed around to watch and his man did 11 up to coffee break, 16 more then a loo break, the last 23 took him up to lunch - all morning to do 50 tyres. The owner was amazed and can now do 50 in less than 20mins with his new WheelPopper.

Specifications:

- Electro hydraulic
- Three phase electric motor or diesel options
- All steel construction
- Easily moved with a forklift truck
- No installation required
- L170cm x H230cm x W115cm
- Designed to complement our existing depollution system the compact design allows this machine to be located in the depollution bay to maximise efficiency.

AutoDrain
Experts in Vehicle Depollution

Call **AutoDrain** today on 0044 (0)113 2059332
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Air Conditioning Unit

Safe and efficient refrigerant gas removal from End of Life vehicles



>> **Efficient**

Works on every make and model of vehicle

Fast and easy to use, increasing productivity

Removes both R12 and R134a refrigerant gas

>> **Safe to use**

Fully compliant with EU regulations and F Gas legislation

>> **Value for money**

- High and low pressure couplings
- Connection hoses
- Gas bottle
- Fluoro-elastomer gloves

FACT!

To remove refrigerant gas from an End of Life vehicle, you must hold an F Gas Qualification. AutoDrain can provide this accredited training and qualification at their ATF for your staff to ensure they are operating safely and legally.



Watch our videos at www.autodrain.net to see how safe and easy to use the Air Con Kit is.

Training

Training is vital to ensure you maximise the profitability and longevity of your Air Con Kit and we have the following training options available for you:

- 1 Free online training information and video
- 2 Certificated F Gas training at our own IMI accredited training centre – price on application



So if you want to safely and efficiently remove refrigerant gas from End of Life vehicles, call AutoDrain today!

AutoDrain
Experts in Vehicle Depollution

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Appendix III