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# ENVIRONMENTAL HANDBOOK

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# INDEX



## WATER POLLUTION 4

Storage of Fuel & Oil	4
Use of Fuel & Oil	5
Cement & Concrete	6
Silt	7
Pumping & Overpumping	8
Washing Down Plant & Machinery	9
Bentonite	10
Spill Control	11

## LOCAL ENVIRONMENT 12

Be a Good Neighbour	12
Material Handling & Housekeeping	13
Dust & Air Quality	14
Noise & Vibration	15
Working on Previously Developed Land	16

## WASTE 18

Legal Duties	18
Collecting Waste	19
Storage of waste	20
Delivery of Waste for Recycling or Disposal	21
Checking Records	22
Collecting Recycled Aggregates	23
Waste management – Reduce, Re-Use, Recycle	24
Segregation of Waste	25

## WILDLIFE & PROTECTED AREAS 26

Tree protection	26
Archaeology	27
Legally protected areas	28
Bats	29
Badgers	30
Great Crested Newts	31
Japanese Knotweed	32
Other invasive plants	33

## GRAB LORRY PROCESS 34

# INTRODUCTION

M Group Services Telecoms Division aims to operate with environmental integrity and have made significant progress in its approach to environmental impact management. Our aim is to go beyond compliance by preventing pollution, complying with legislation and maintaining continual improvement.

### ENVIRONMENTAL STRATEGY

Our strategic Environmental targets are:

- Retain ISO 14001 accreditation across all operations
- Enhance reporting and measurement of;
  - Carbon (to include willing supply chain partners)
  - Waste
  - Recycling

### FUEL AND CARBON EMISSIONS REDUCTION

Report on fuel and carbon emission reduction targets via case studies, press releases and within company reports.



This handbook provides staff with information on the main environmental issues that affect our work and gives guidance on the steps that need to be taken to ensure our operations are conducted in compliance with legal requirements and good practice standards. The handbook is structured into colour coded sections containing guidance on:



# WATER POLLUTION

## STORAGE OF FUEL & OIL



Petrol, diesel and oil are all highly harmful to plants, animals and humans and can give rise to pollution of the environment.

Such substances are released into the environment through spillages during delivery or use or through waste materials being poured directly to drains or gullies.

Storage of oil is subject to specific legal minimum standards. If pollution is caused then prosecution may follow. The cost of clean up and legal proceedings following a spillage incident far exceeds the cost of putting proper controls in place.



**DON'T**

- ✗ **DON'T** refuel or store oil within 10m of watercourses or surface water drains.
- ✗ **DON'T** leave bunds and drip trays to overflow.
- ✗ **DON'T** leave refuelling hoses outside of bunds after use.
- ✗ **DON'T** use high pressure delivery systems when filling small containers.

**DO**

### GENERAL

- ✓ Store oils away from drains or watercourses.
- ✓ Return oil and fuels to storage areas after use.
- ✓ Locate oil stores away from areas of high vehicular movement to prevent accidental damage.
- ✓ Bund individual 205 litre drums to 25%.
- ✓ Supervise all fuel deliveries.
- ✓ Lock oil stores or bowzers when not in use.
- ✓ Use drip trays under all static plant and during refuelling from mobile plant.

### BULK STORAGE

- ✓ Bund tanks and bowzers to 110%.
- ✓ Ensure bunds are free from cracks and leaks.
- ✓ Regularly empty bunds and drip trays of rainwater, which should be treated as contaminated.
- ✓ Keep all hoses and pipe work within bunded area after use.
- ✓ Keep a spill kit near to fuel and oil storage areas and refuelling areas.
- ✓ Report any irregularities or incidents.



## USE OF FUEL & OIL

**DO**

- ✓ Always put lids on any containers after use.
- ✓ Use the automatic shut off "pistol grip" delivery systems when refuelling from tanks or mobile bowser – do not tamper with the shut off system at any time.
- ✓ Ensure that all refuelling is constantly attended and only undertaken at least 10m away from watercourses and drains.
- ✓ Clean up any minor spillages.
- ✓ Use funnels when refuelling small plant and equipment to avoid spillages.
- ✓ Use plant nappies or drip trays under all plant or equipment that contains fuel or oils.
- ✓ Ensure that a fully stocked spill kit is easily accessible at all work sites.

### DISPOSAL

- ✓ Ask your manager what to do with waste oil, petrol and diesel and any materials contaminated with such substances, prior to any disposal



**DON'T**

- ✗ **DON'T** leave refuelling operations unattended at any time.
- ✗ **DON'T** leave containers open when unused.
- ✗ **DON'T** leave containers in an area where they can be damaged.

### DISPOSAL

- ✗ **DON'T** pour petrol, diesel or waste oil down drains or gullies.
- ✗ **DON'T** try to dispose of petrol, diesel or waste oils by setting fire to them.
- ✗ **DON'T** dispose of used spill kits in general waste, place them only in a hazardous waste container.



# CEMENT & CONCRETE

Water contaminated with cement is highly alkaline and can be toxic to fish, plants and animals living in watercourses. Cement particles entering a watercourse can clog fishes' gills and also destroy their spawning grounds.

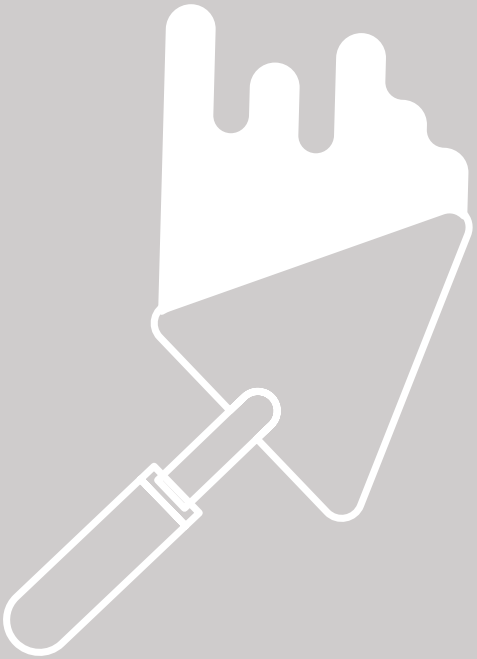
**It is illegal** to allow cement, unset concrete or washout water containing cement to enter a watercourse or drain.

Special permission is needed before construction work can take place in a watercourse.



DO

- ✓ Identify all watercourses, gullies and drains prior to commencing work.
- ✓ Store bulk and bagged cement and concrete additives at least 10 metres away from watercourses, gullies and drains.
- ✓ Undertake mixing/batching works well away from watercourses and drains.
- ✓ Use only designated areas for concrete washout.
- ✓ Where necessary protect nearby drains against washout water running into them.
- ✓ **NOTIFY** your manager **IMMEDIATELY** if you see any concrete spillages or concrete washout likely to cause pollution.



DON'T

- ✗ **DON'T** hose down spills of concrete or cement into surface water drains.
- ✗ **DON'T** allow washout water to flow into any watercourse or drain.
- ✗ **DON'T** allow ready-mix trucks to washout anywhere other than in safe areas designated for the purpose.
- ✗ **DON'T** wash off any tools or plant in watercourses.



# SILT

High levels of silt suspended in water can suffocate fish by blocking their gills, can remove essential oxygen from the water and can kill plants, animals and insects living in the water by stopping sunlight.

Because of the potential for harm, it is illegal to allow silt to enter a watercourse or drain.

Silt pollution spoils the appearance of watercourses, is easily traceable to the site from where it originated and, in the past, has been a major cause of prosecution.

DO

- ✓ Only discharge silty water into designated settlement systems or through a filter.
- ✓ Check that site drainage and settlement systems are working – discolouration may indicate high pollutant loading.
- ✓ Stop pumping and contact your manager if you think a problem is arising.
- ✓ Ensure that all hardstandings are kept clean – notify your manager if an area is silty or is covered in mud.
- ✓ Notify your manager immediately if you see silty water entering a watercourse or drain and do try to stop it or divert it away by, for example, using sand bags.



DON'T

- ✗ **DON'T** dewater any excavation without getting permission from your manager.
- ✗ **DON'T** pump silty water directly into rivers, ditches or surface water drains.
- ✗ **DON'T** strip land of vegetation unless it is absolutely necessary – vegetation reduces silt run-off.
- ✗ **DON'T** store soil, stone or similar materials within 10 metres of watercourses or drains.
- ✗ **DON'T** dig a grip to release ponded water to a watercourse or drain.



## PUMPING & OVERPUMPING



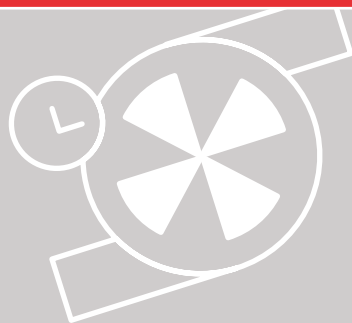
Excavations often require prior dewatering. Water pumped from excavations can be muddy (silty) and can be contaminated. Sections of existing sewers and pipelines are sometimes taken out of service to allow repair or alterations and flows can be maintained by installing temporary pumps and 'overpumping' those sections.

The improper discharge of water polluted by mud or contaminants can cause serious damage to watercourses. It is illegal to allow polluted water to enter a watercourse or surface drain. If water is discharged into a sewer or gully of insufficient capacity then flooding will occur, potentially causing pollutants to enter watercourses or creating nuisance to site neighbours.



### DON'T

- ✗ **DON'T** leave pumping operations unattended for long periods unless authorised to do so by your line manager.
- ✗ **DON'T** continue with overpumping if the receiving sewer or pipeline cannot cope with the capacity.



### DO

- ✓ Check with your line manager whether any treatment systems are required before final discharge of pumped out water. Typical systems include: settlement tanks, discharge over grassed areas, through silt socks or hay bales.
- ✓ Check that the point of discharge is to the correct location, that is to the sewer, manhole or gully as set out by your line manager.
- ✓ Check that all couplings and other pipework fittings are secure.
- ✓ Periodically check that any treatment systems are working, water being finally discharged is clear of silt or solids and is not causing damage to the bed or banks of any watercourse.
- ✓ **NOTIFY** your line manager **IMMEDIATELY** if you notice: pollution (muddy water, oils etc) occurring; the discharge causing flooding; or any pipework is damaged or connections have broken or are leaking.



## WASHING DOWN PLANT & MACHINERY

Washing down plant and machinery, hosing down concrete trucks/mixers or degreasing engines can all lead to serious pollution incidents if it is not properly carried out. The resulting dirty water should not be allowed to enter surface water drains or road gullies. Careful consideration must be given to where washing down is carried out.

Dirty washing and rinsing water may contain dislodged mud, grease, oils, detergents, cleaning agents or toxic chemicals and materials that can kill fish and other aquatic life and which may also seriously affect the surrounding environment.

**It is illegal** to allow polluting matter such as silt, cement, concrete, fuel, oils, cleaning chemicals and detergents to enter a watercourse or a drain.

### DO

- ✓ Ask your manager if there is a place specially designated for washing down plant and machinery.
- ✓ Use only these designated wash down areas whenever they are provided.
- ✓ Ensure that any wash down slurry or residue is contained and cannot enter drains or watercourses.
- ✓ Check with your manager before using degreasing or cleansing solutions – don't just assume they can be used.
- ✓ Report to your manager any washing down that may cause a pollution incident.



### WASH DOWN AREA



### DON'T

- ✗ **DON'T** wash down before finding out the proper place in which to do it.
- ✗ **DON'T** wash down directly into watercourses or surface water drains.
- ✗ **DON'T** allow dirty wash down water to go down roadside gullies.
- ✗ **DON'T** wash down near material or storage areas or immediately next to working areas.
- ✗ **DON'T** use any more water than is necessary – reduce waste.



## BENTONITE

Bentonite is a type of clay that swells and gels when dispersed in water. It acts like a liquid when agitated or stirred and like a solid when left at rest.

As "mud" it is used as a lubricant when drilling or pipe pushing and as "slurry" it is used to fill and support the sides of excavations during the construction of diaphragm walls, cut-off walls, or piles. The use of bentonite can lead to spillage around operational areas and around

mixing, pumping and storage equipment. Liquid bentonite is highly polluting and if it enters watercourses or drains can give rise to damage to plants and animals in watercourses. Pollution of watercourses by bentonite may lead to prosecution.

If not correctly managed, bentonite in powder form can become airborne causing dust nuisance to local residents leading to legal action by the Local Authority.



DO

- ✓ Keep dry powder or granule containers closed to prevent dust or damage by rain or moisture.
- ✓ Ensure that bentonite does not spill onto the ground.
- ✓ Ensure that if spillages do occur they are promptly cleared up.
- ✓ Protect watercourses and drains from any spillage of liquid bentonite.
- ✓ Report immediately to your manager any incidents where bentonite is seen entering a watercourse or a drain, or is becoming airborne.
- ✓ Ask your manager what to do with waste bentonite.



DON'T

- ✗ **DON'T** leave containers or bags containing bentonite open to the air.
- ✗ **DON'T** ignore spillages on the ground.
- ✗ **DON'T** intentionally allow liquid or powdered bentonite to spill onto the ground.
- ✗ **DON'T** pour bentonite into watercourses or drains.
- ✗ **DON'T** give bentonite away to third parties without checking with your manager.



## SPILL CONTROL

Accidental releases of oils and chemicals from construction-sites make up a large number of pollution incidents that occur each year, polluting water courses and contaminating land and groundwater.

Substances we use that could cause harm if spilled include: fuel, oils, paints, solvents, antifreeze, concrete. Spills spread very quickly and lead to environmental harm. Fines and clean up costs can be expensive and even individuals can be held responsible.



DO

- ✓ **STOP WORK** immediately.
- ✓ If spillage is flammable, extinguish all possible sources of ignition.
- ✓ Identify the source of pollution and rectify the problem.
- ✓ Contain the spillage – on land use socks, earth or sand to construct a bund around the spill to stop it spreading. Use booms to contain oil spills that have already entered a watercourse.
- ✓ Contact your Line Manager.
- ✓ Put on appropriate PPE – typically rubber gloves.
- ✓ Protect sensitive areas (e.g. watercourses or surface water drains – use drain covers or use earth/sand to construct a bund).
- ✓ Clean up the spill. Use absorbent granules/pads to mop up spills. Large pools of oil or spills which cannot be absorbed should be removed by gulper.
- ✓ Dispose of all contaminated materials correctly – those containing substances such as oil, diesel or paint will be hazardous waste. Ensure any contaminated water is taken to an appropriately licensed disposal site.
- ✓ Notify your line manager of actions taken.

DON'T

- ✗ **DON'T** ignore it! **STOP WORK** and **ACT** immediately.
- ✗ **DON'T** hide the incident – ensure you report it and implement controls.
- ✗ **DON'T** ever hose a spill into the drainage system. Always use absorbent materials.





# LOCAL ENVIRONMENT

## BE A GOOD NEIGHBOUR

Being a good neighbour creates a positive image of the industry. If neighbours complain to their Local Authorities about dust or noise nuisance caused, the Local Authority can impose conditions and restrictions on working, which can lead to delays.

If any problems being caused by dust or noise are not satisfactorily resolved the Local Authority can prosecute those responsible.

If good relations can be established with neighbours, many issues such as access to site, material deliveries and working hours can be improved through friendly negotiation.







- ✓ Be polite and considerate to members of the public at all times.
- ✓ Take accurate notice of any complaint made by a neighbour and pass it on to your line manager.
- ✓ Only use approved routes to access the site.
- ✓ Use only designated parking areas, if they are provided, otherwise always park vehicles with consideration for the needs of others.
- ✓ Keep dust and noise to a minimum.
- ✓ Always close any noise reducing engine covers while plant is in use.
- ✓ Direct site lighting and task lighting away from neighbouring properties.
- ✓ Tell your line manager if rubbish bins or skips are full or nearly full.
- ✓ Notify your line manager immediately if you find any fly tipped waste in the area.





- ✗ **DON'T** obstruct vehicle accesses or driveways to neighbouring properties.
- ✗ **DON'T** obstruct public rights of way such as pavements, footpaths, bridleways. **DON'T** drag mud onto the roads outside the site - make sure vehicle wheels are clean before leaving.
- ✗ **DON'T** trespass on neighbour's land.
- ✗ **DON'T** leave engines running unnecessarily.
- ✗ **DON'T** shout on-site or have noisy radios on.
- ✗ **DON'T** shout or whistle at passers-by.
- ✗ **DON'T** drop litter or leave sites untidy.
- ✗ **DON'T** leave gates to the site open.

## MATERIAL HANDLING & HOUSEKEEPING

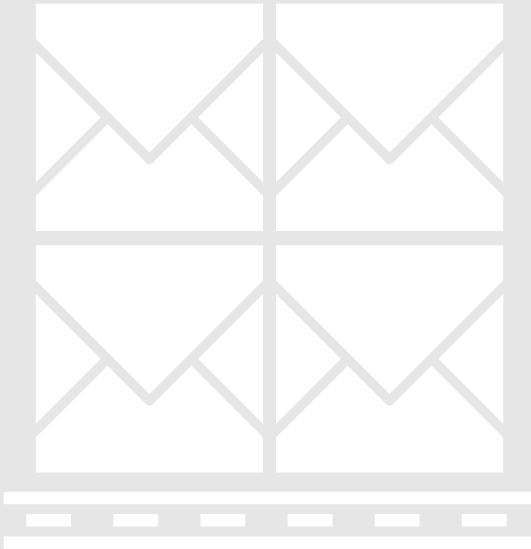
Poor storage and handling of materials creates waste, which is a loss of resource and is very costly. Poorly stored materials increase the risk of pollution incidents. A tidy site is a safe site.

Good housekeeping creates a positive image to the general public.





- ✓ Avoid double handling as much as possible: less effort, less damage, less wastage.
- ✓ Supervise the delivery of materials to ensure correct location and method of storage.
- ✓ Check that a material is fully used prior to starting a new batch.
- ✓ Return to storage any materials that have not been used.
- ✓ Use off-cuts where possible.
- ✓ Re-use formwork as often as practically possible.
- ✓ Designate an area for surplus concrete - it can be crushed and re-used.
- ✓ Pick up litter.



- ✗ **DON'T** store or leave unprotected any materials that can be damaged by weather, eg. cement bags.
- ✗ **DON'T** over order materials.
- ✗ **DON'T** put materials in a skip if they still have a use.
- ✗ **DON'T** use new lengths of pipe or cable for short pieces of work. Minimise the need for off-cuts.
- ✗ **DON'T** store together any materials that can contaminate each other.



## DUST & AIR QUALITY

Dust, emissions and odours can annoy neighbours and may cause health risks at very high concentrations, such as eye irritation or making asthma worse.

Dust can damage the ecology of a watercourse and affect plant growth, including crops.

The Local Authority has the power to stop works if dust is causing a nuisance. Emission of dark smoke from plant and fires **is illegal**.



### DON'T

- ✗ **DON'T** burn materials on-site without approval from your Project Manager. Permission is required first from the Environment Agency.
- ✗ **DON'T** use poorly maintained plant. Black smoke may give rise to poor health and can cause a nuisance.
- ✗ **DON'T** leave plant running if not in use.
- ✗ **DON'T** ignore sources of poor air quality, notify your line manager.
- ✗ **DON'T** ignore complaints.



### DO

- ✓ Keep surfaces swept and damp down with water at regular intervals.
- ✓ Minimise drop heights into haulage vehicles and into conveyors.
- ✓ Ensure cutting and grinding operations are adequately shielded or wetted.
- ✓ Sheet lorries carrying dry materials off-site.
- ✓ Keep to site speed limits to minimise dust generation.
- ✓ Use the wheel wash, for appropriate vehicles, if one is provided on-site.
- ✓ Store fine, dry materials within buildings or provide adequate protection from the wind.
- ✓ Store bulk cement and bentonite in silos.
- ✓ Position silos and stockpiles away from residential areas or watercourses.
- ✓ Clean up or damp down any spillage of dry dusty materials.
- ✓ Notify your Line Manager if work activities are causing poor air quality.

### DO

## NOISE & VIBRATION

The Construction Industry is one of the leading sources of noise complaints made to Local Authorities.

Noise and vibration emissions can disturb local residents and give rise to complaints and delays.

Noise can disturb wildlife as well as humans.

Noisy activities include: excavation, tunnelling, concrete cutting, piling, using un-silenced generators and concrete pours.

The Local authority have the power to stop works if noise from the site is causing a nuisance. Failing to meet noise constraints can result in fines.



### DO

- ✓ If possible, restrict noisy activities to certain times of the day.
- ✓ Adhere to working hours. Some sites are only consented to work at certain times.
- ✓ Plan deliveries. Arrange routes and times to minimise potential nuisance to the local community.
- ✓ If possible, keep noisy plant away from public areas.
- ✓ Minimise drop heights into hoppers, lorries and other plant.
- ✓ Use local screening where necessary. Noise can be reduced if a screen is placed between plant and nearby sensitive locations eg. houses. Screens can be straw bales or ply board.
- ✓ Use silenced generators and tower lights where necessary.
- ✓ Keep acoustic doors and hoods on plant closed – it does make a difference!
- ✓ Contact your Line Manager if you are in doubt about noisy activities.

### DON'T

- ✗ **DON'T** undertake noisy works during the evening, at night or very early in the morning if it can be avoided!
- ✗ **DON'T** leave doors and hoods open on plant.
- ✗ **DON'T** leave plant running unnecessarily.
- ✗ **DON'T** use poorly maintained plant.
- ✗ **DON'T** ignore complaints from the local community.
- ✗ **DON'T** undertake activities that could cause damage to nearby structures through vibration unless approved by your line manager.





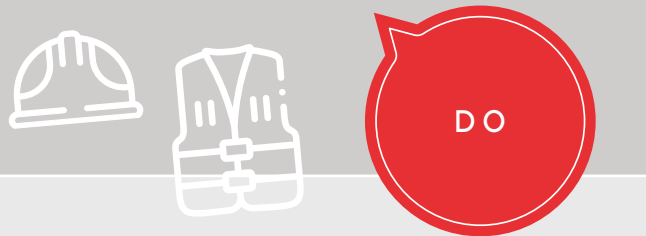
WORKING ON PREVIOUSLY DEVELOPED LAND

Land which has previously been built on or used by industrial processes (“brownfield land”) or which has in the past had imported material placed upon it (“made ground”) may be contaminated with substances which are harmful to humans, wildlife and / or the surrounding environment.

Since potentially contaminated material can sometimes be discovered where it is not expected it is always wise to remain observant during digging operations.

Exposure to certain contaminants may cause harm to health. Working in contaminated soils without the proper precautions and controls may result in pollution and/or harm spreading into the surrounding land, adjacent watercourses or into the atmosphere.

Any pollution escaping from the site **may lead to prosecution.**



- ✓ Always wear the correct protective clothing.
- ✓ Wash your hands and all areas of exposed skin after working in made ground or brownfield land.
- ✓ Look out for changes to the types of material being worked in which may show up as:
  - Differences in colour or texture.
  - The presence of refuse (rubbish) or other foreign objects.
  - Differences in smell - common contaminants such as oils, landfill gases and degrading waste have distinctive odours.
- ✓ If you see changes like these **STOP WORK** make the area safe and notify your Line Manager.
- ✓ Prevent the spread of contaminated dust – either cover the source or damp it down.



- ✗ **DON'T** take off PPE.
- ✗ **DON'T** smoke or eat whilst working in made ground.
- ✗ **DON'T** permit colleagues or other operatives to enter the contaminated land until your line manager instructs you to do so.



# WASTE

## LEGAL DUTIES

All businesses are required by law to comply with legislation that sets out how they must manage waste. The legislation applies to all waste producers, waste carriers, waste recyclers and waste disposal sites. It is referred to as the ‘Duty of Care’ for Waste and was introduced by the 1990 Environmental Protection Act.

**Failing to follow the requirements of the Duty of Care is a criminal offence and could lead to the prosecution of Morrison Telecom Services, sub-contractors and individual employees.**

This section of the pack explains each of these three requirements as they apply to grab and support operations and gives simple guidance on what steps to take to ensure that the legal duties are adhered to.

In addition to the Duty of Care, which applies to all wastes, there are extra duties that apply when waste is classed as hazardous. The main duties that affect grab and support operations are:

- **All hazardous wastes must be segregated from non-hazardous waste (i.e. it must not be mixed).**
- **Hazardous waste must be transported to recycling or disposal sites that are licenced to accept hazardous waste.**



The Duty of Care imposes **THREE MAIN REQUIREMENTS** on any person who produces, carries, keeps, treats, or disposes of waste as follows:

- 1 **Preventing waste from escaping.**
- 2 **Transfer only to legally authorised persons; and**
- 3 **Provide a waste transfer note that gives a written description of the waste and meets minimum legal standards.**

Where waste is transferred from one person to another, there is a legal duty that requires that the person transferring the waste must sign a declaration to confirm that the ‘Waste Hierarchy’ has been followed. The Waste Hierarchy promotes the reduction, reuse and recycling of waste and thereby minimises the environmental impacts of disposal of waste to landfill.



## COLLECTING WASTE

### SITE SPECIFIC RISK ASSESSMENT

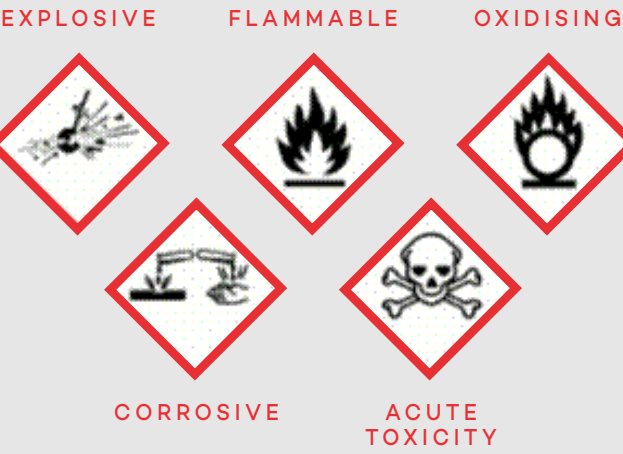
When attending a site, it is important that site specific environmental risks are identified and assessed before waste collection or reinstatement commences. For many sites the team leader will have prepared a site specific risk assessment. The team leader should talk you through the risk assessment and any control measures that apply. You should check to ensure that the team’s risk assessment covers any further risks created during collection of waste or reinstatement. For example, if there are trees near to the site, the grab may cause damage to them if operations are not properly planned or controlled. Any further site specific risks that are identified should be assessed and appropriate control measures identified and recorded. If the team are no longer present, a new site specific risk assessment should be prepared.

### INSPECT AND CLASSIFY WASTE (EWC CODES)

All wastes throughout the UK are coded using a Europe-wide system known as the European Waste Catalogue (EWC). The EWC lists different waste types and gives each of them a unique six-digit code. The EWC codes are used by waste producers to identify the type of waste on their waste transfer documentation. The EWC codes are also used by persons who hold a licence to help identify which types of waste they can legally deal with under their licence conditions – so called ‘permitted wastes’.

Grab and support operators must visually inspect the waste they are picking up and decide on the type of waste and its correct EWC code. This code is then recorded on the Waste Transfer Note or Multi Site Waste Pickup Register.

The Contract Waste Matrix lists all recycling or disposal sites which are approved for contract waste and identifies the EWC codes for the permitted wastes that each site can legally accept. Grab operators must take the load to a recycling, transfer or landfill site that is permitted to accept the type of waste they are carrying. If wastes are wrongly coded, or are taken to a site that is not licenced for that type of waste, it is likely that the load will be rejected. So making sure that the correct code is used is important.



You’ll see that the old ‘harmful/irritant’ symbol is missing. This has been replaced by the exclamation mark pictogram.



**HEALTH HAZARD / HAZARDOUS TO THE OZONE LAYER**

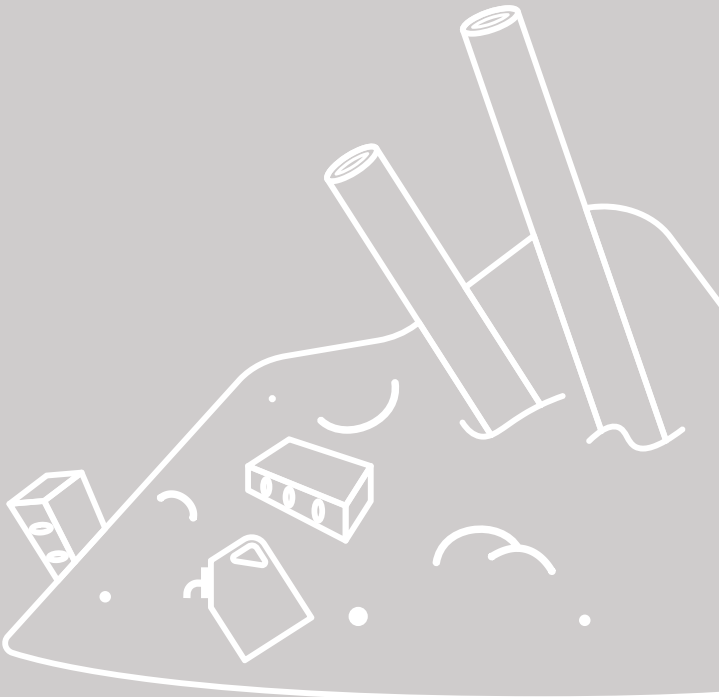
The most commonly encountered EWC codes for grab and support operations are:

WASTE DESCRIPTION	EWC CODE
Asbestos cement pipes	17 06 05 *
Aerosols	15 01 10 *
Bituminous mixtures containing coal tar	17 03 01 *
Bituminous mixtures	17 03 02
Bricks	17 01 02
Concrete	17 01 01
Cardboard	15 01 01
General municipal waste	20 03 01
Metal	17 04 07
Mixed construction waste	17 09 04
Plastic	17 02 03
Soil and stones	17 05 04
Soil and stones containing asbestos	17 06 05 *
Spill kits, absorbents and oily waste	15 02 02 *
Wood	17 02 01
Wooden packaging	15 01 03

## STORAGE OF WASTE

It is the duty of all waste producers to prevent their waste escaping into the environment. The segregation of waste into separate containers or stockpiles can lead to lower costs by:

- Reducing disposal costs and landfill tax payments through preventing the contamination of inactive wastes by active wastes.
- Maximising the potential for reusing and recycling materials.
- Making it easier to see how much of each type of waste is being produced and hence where efforts to reduce waste need to be targeted.



DO

- ✓ Keep sites tidy and collect up any waste regularly.
- ✓ Use waste containers, skips or bays suitable for the type of waste being stored.
- ✓ Use skips with lids or cover them with sheets or nets to prevent dust and litter being blown out.
- ✓ Check that containers and skips are not corroded or worn out to minimize the risk of accidental spillages or leaks.
- ✓ Mark waste stores clearly with their intended contents and ensure labels on containers are kept in good order.
- ✓ Segregate waste before putting it into the designated containers.

DON'T

- ✗ **DON'T** throw materials into the wrong container or stockpile.
- ✗ **DON'T** contaminate one waste type with another.
- ✗ **DON'T** overfill skips or bays.
- ✗ **DON'T** give waste away, all waste taken off-site needs to be accompanied by paperwork.
- ✗ **DON'T** damage covers over, or bunds around, any skips or containers.
- ✗ **DON'T** burn or bury waste – it's illegal.



## DELIVERY OF WASTE FOR RECYCLING OR DISPOSAL

### COMPLETING WASTE TRANSFER DOCUMENTATION

At the recycling or disposal site, you should check with the operator that your load is suitable for tipping. If you are unsure whether you have correctly coded the waste, or are not certain that they can accept some or your entire load, always ask before tipping. If they can accept your load, then complete this section of the Waste Transfer Note as follows:



#### WASTE TRANSFER/DISPOSAL SITE DETAILS (TRANSFeree)

Site Operator:

Site Name:

Site Address:

Site Licence Number/  
Exemption Number:

On behalf of Site Operator:

Signature:

Date:

Name:

Time:

When you arrive at the disposal/recycling site, hand your form to the site operator or weighbridge operator for them to complete this section.

If they are happy to accept your waste, they should add in details of:

- **Site Operator**
- **Site Address,**
- **Site Name**
- **Site Licence Number/Exemption Number**

*(this is important as it confirms that they hold a licence to accept waste).*

Some sites have a stamp that the weighbridge operator will use to complete this section.

The representative of the disposal site **MUST** sign and date – make sure the name is legible.

Leave the Blue copy at the disposal site.

Now the form is complete you should keep it together with any tipping ticket/receipt issued by the disposal/recycling site and hand them in to your office for checking as soon as possible.

## CHECKING RECORDS

### CHECKING

Before handing in waste documentation to your office, check that all documents are legible and have been fully completed and that all documents relating to each transfer are together -

***i.e. the waste transfer note, MSWPR, weighbridge or tipping ticket.***



## COLLECTING RECYCLED AGGREGATES

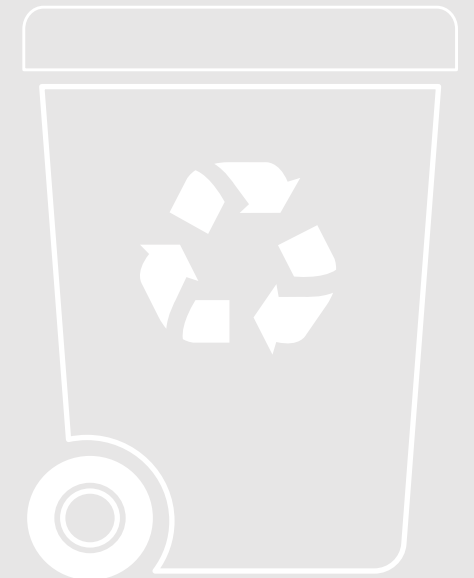
### CHECKING QUALITY OF RECYCLED MATERIALS

To promote the recycling or reuse of waste construction materials, Waste and Resources Action Programme (the WRAP Protocol) has produced a Quality Protocol for recycled aggregates. The Protocol is important as it sets out standards for the manufacture of secondary (recycled) aggregates from waste. Where a producer follows the Protocol, this allows them to demonstrate that the secondary aggregates are suitable for use and comply with the relevant standards applying to the grades of materials they are supplying.

The Protocol requires that procedures are in place for the checking of wastes prior to processing to ensure they are compliant materials, then controlling the manufacturing process to ensure consistent quality of final products. If the Protocol is not followed, or if the final products do not conform to their specification, the Environment Agency and local highways authorities would regard the product as still being waste.

This would mean that anyone using such products would be in effect reinstating with waste and would therefore require an environmental permit covering their use. In any event if poor quality materials are used, the reinstatement may fail to meet the Specification for the Reinstatement of Openings in Highways. This would make the use of non-compliant materials unlawful and risk costly remedial works to excavate and replace reinstated carriageway or footway.

When collecting recycled aggregates from a producer it is therefore essential that they supply the purchaser with documentation, including a description of the material, its industry specification and a statement to confirm that the aggregate was produced in accordance with the WRAP protocol. Most suppliers will provide this documentation on their collection/delivery tickets. Grab drivers should therefore check that the materials they are collecting are correctly identified on the ticket and that there is a written confirmation that they have been manufactured under the quality protocol.



### CORRECTING MISTAKES

If you notice that any parts of your documentation are incomplete or need to be changed, it is important that you ensure that all copies are amended, including the copy left at the recycling or disposal site.



### RETURN TO OFFICE

Hand in all waste documentation to your office frequently, at least weekly if possible.

When your pre-printed books of transfer notes and MSWPR are complete, these should also be handed in to the office for filing.

All waste transfer documentation is required by law to be kept for at least 2 years.

When loading recycled aggregates, you should also visually check the materials to ensure that they appear to be suitable for their intended purpose. Examples of things to look out for that could suggest that the aggregate may be non-compliant would include:

- **Moisture content - too wet**
- **Particle size - too fine or too coarse**
- **Presence of non-aggregate contaminants - such as glass, plastic, metal or organic materials.**

If you suspect that the material may not be compliant, contact your line manager for advice.



# WASTE MANAGEMENT - REDUCE, REUSE, RECYCLE

Reduction, reuse and recycling of waste minimises the environmental impacts of disposal of waste to landfill. To minimise waste we must:

Firstly **Prevent** the waste if we can.

Secondly **Reuse** waste materials and only then **Recycle** the waste.

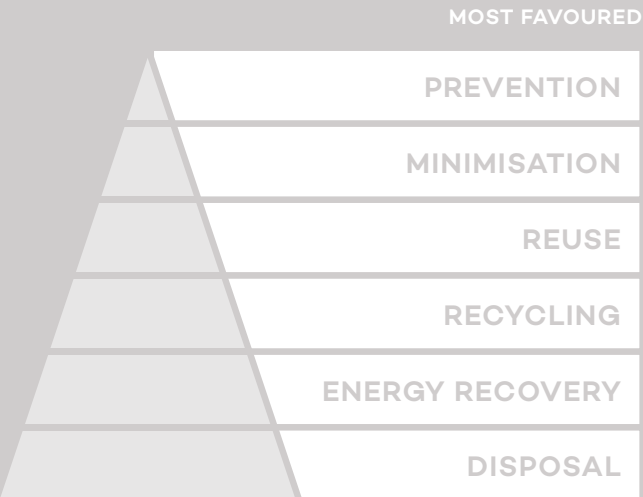
Only if we can't recycle can we send them for **Recovery**, such as energy recovery and finally **Dispose** of the waste to landfill as a last resort.



- ✓ Eliminate unnecessary wastage by storing materials neatly on flat solid ground to avoid damage and loss.
- ✓ Reduce the amount of waste you create on-site.
- ✓ Keep materials in their packaging for as long as possible to protect them from damage.
- ✓ Keep significant offcuts for use elsewhere.
- ✓ Reuse materials until no longer fit for purpose, for example, shuttering, fencing.
- ✓ Then reuse materials for alternative purposes, for example, use old shuttering ply for hoardings.
- ✓ Recycle materials whenever possible.
- ✓ Segregate waste on-site into different types.
- ✓ Store waste safely in the appropriate skip or container until removed from site.



- ✗ **DON'T** put waste materials into the wrong waste container. **DON'T** open new cans or pallets before the ones in use are empty.
- ✗ **DON'T** leave materials unprotected and where they are likely to be damaged by, for example, rain or mud.
- ✗ **DON'T** burn or bury waste – it's illegal.
- ✗ **DON'T** mix different types of waste – it prevents recycling.



# SEGREGATION OF WASTE

Segregating waste into hazardous, non-hazardous and inert waste types for disposal can help minimise costs and maximise the opportunities for recovery and recycling of wastes.

**It is illegal** to mix hazardous waste with other waste types. You could be fined up to £50,000 and imprisoned for up to 5 years.

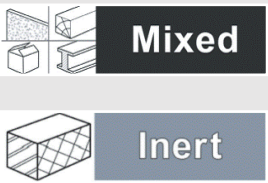
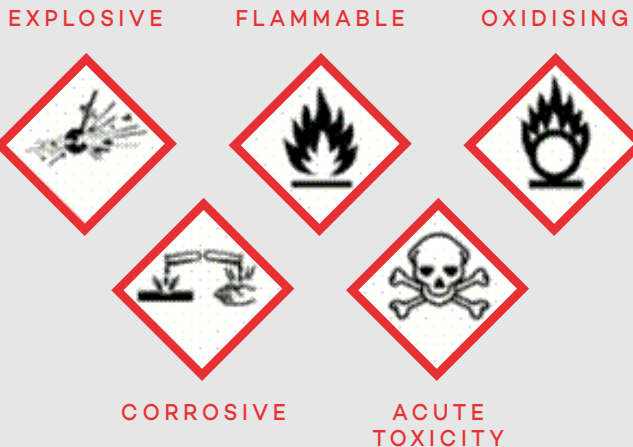
Incorrectly disposing of hazardous waste could cause water pollution and damage habitats.

Landfills and waste treatment centres are specially designed to be able to handle specific wastes without causing environmental harm.

Segregating wastes can minimise landfill tax and can also allow certain types of waste to be recycled and reused on site.



- ✗ **DON'T** mix different types of waste.
- ✗ **DON'T** put liquids and flammable wastes (aerosols) into skips.



- ✓ Segregate wastes into different types
- ✓ Use enclosed or covered skips or stockpile excavation wastes carefully
- ✓ Ask your line manager for advice if you are unsure about correct waste segregation on site.



You'll see that the old 'harmful/irritant' symbol is missing. This has been replaced by the exclamation mark pictogram.



**HEALTH HAZARD / HAZARDOUS TO THE OZONE LAYER**



# WILDLIFE & PROTECTED AREAS

## TREE PROTECTION

Trees and hedgerows provide a vitally important habitat for wildlife and many trees and hedgerows are protected by law.

**It is illegal** to cut down trees protected by law under a Tree Preservation Order or to grub up certain countryside hedges. During certain times of the year trees and hedgerows may contain nesting birds. Nesting birds are protected by law against disturbance under the Wildlife and Countryside Act. Damaged trees may become unstable and potential hazards.



DON'T

- ✗ **DON'T** undertake tree felling or hedgerow clearance during the bird nesting season.
- ✗ **DON'T** undertake any works to, or near to, trees without authorisation from your manager.
- ✗ **DON'T** track vehicles or plant over tree protection areas.
- ✗ **DON'T** store materials, especially fuels and oils, under or near trees.



DO

- ✓ Check with your manager before felling any trees or removing any hedgerows.
- ✓ Clear only vegetation as instructed by your manager.
- ✓ Check for nesting birds and if any are found contact your manager immediately.
- ✓ Ask your manager what protection is required to trees and hedgerows.
- ✓ Check with your manager before excavating near to trees and hedgerows.
- ✓ Take photographs if there is any doubt.
- ✓ Remember the safe excavation zones:
  - **All Prohibited Zone** (1 m from trunk)
  - **Precautionary Zone** (4 x tree circumference)
  - **Permitted Zone** (outside the precautionary zone).



TREE TRUNK

PROHIBITED ZONE - 1 M

PRECAUTIONARY ZONE

PERMITTED ZONE

## ARCHAEOLOGY

Archaeology is the study of human history through the excavation of sites and the analysis of physical remains. Archaeology is an important part of our heritage and valuable and irreplaceable remains can easily be damaged on construction sites.

It is not only buildings and their foundations but also artefacts such as jewellery, pottery, coins, bones and skeletons that need expert examination before removal and preservation.

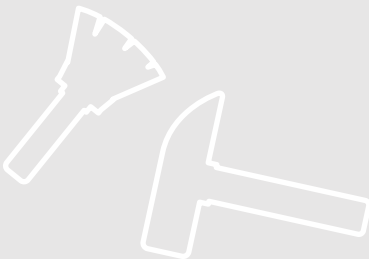
**It is illegal** to damage some monuments and archaeological structures.



DO

- ✓ Stop work if you find any archaeological features and immediately contact your manager for instructions.
- ✓ Obey the advice provided by any appointed archaeologist.

i



DON'T

- ✗ **DON'T** assume that any artefacts or features discovered are unimportant.
- ✗ **DON'T** remove any 'finds' such as coins, pottery, or bones from the site, it is illegal.
- ✗ **DON'T** undertake work adjacent areas of archaeological importance without considering if any damage may be caused.
- ✗ **DON'T** cause vibration near to remains as this may cause cracking.
- ✗ **DON'T** dewater as this may cause a preserved feature to settle and crack.
- ✗ **DON'T** drive vehicles through protected sites.





## LEGALLY PROTECTED AREAS

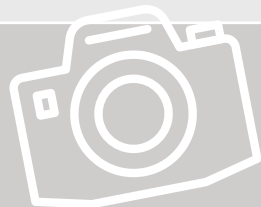
Sites of Special Scientific Interest (SSSIs) are nationally important habitat areas that are legally protected. Many SSSIs are also internationally important and are protected under European legislation. An SSSI can be harmed in many ways, such as trampling, cutting vegetation, excavation or tipping waste. They may even be damaged by works some distance away, through for example noise, dust or water pollution.

**It is illegal** to undertake potentially damaging operations or disturb wildlife on or near a SSSI without consent from Natural England, Scottish Natural Heritage or Natural Resources Wales. Prosecution could lead to a fine of up to £20,000 per offence and in some cases unlimited fines.



### DO

- ✓ If working on or near an SSSI, check to find out why the area is important and what activities may cause damage to it.
- ✓ Only undertake works that have been given consent by the regulator.
- ✓ Restore the works area to the condition it was in before works started.
- ✓ Replant using only approved species that are native to the site.
- ✓ Keep noise, dust and silt to a minimum if working within 250m of an SSSI.
- ✓ Take photographs of work areas before, during and after works are completed.



### DON'T

- ✗ **DON'T** clear vegetation unless you have permission.
- ✗ **DON'T** remove any SSSI signs.
- ✗ **DON'T** use pesticides or tip any waste in or near an SSSI.
- ✗ **DON'T** spread seeds or other plant matter within an SSSI.
- ✗ **DON'T** pump silty water across an SSSI.
- ✗ **DON'T** remove any plant or animal from the site.
- ✗ **DON'T** alter drainage arrangements in any way, even improving drainage could harm wildlife.
- ✗ **DON'T** use vehicles that are likely to damage the area, such as heavy plant.



## BATS

There are 16 species of bat in the UK, many are endangered. Bats are a legally protected species.

**It is a criminal offence** for anyone to:

- Intentionally kill, injure or handle a bat
- Possess a bat (whether live or dead)
  - Disturb a roosting bat
- Damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

Breaking the law can lead to fines of up to £5,000 per bat and/or up to 6 months in prison. Since they tend to return to the same roosts each year, these sites are also protected whether the bats are present or not.

Places where you might find bats include holes and cracks in trees, roofs and walls of houses and buildings, under bridges, underground in caves and old railway tunnels. Every building and mature tree is a potential bat roost. Look out for bat droppings – dark brown or black, about 4 to 8mm in length. They look like mouse droppings but crumble easily, as they are made up of insect fragments. In well-established roosts, droppings may be several centimetres deep.



### DO

- ✓ If you think you have found a bat or a bat roost on site, **IMMEDIATELY STOP** all works in the area and inform your line manager.

### DON'T

- ✗ **DON'T** try to touch or handle a bat. They are very delicate and you are very likely to cause them serious harm – it is also breaking the law.



# BADGERS

Badgers are a legally protected species. Both the animals and their setts are protected by law.

**It is a criminal offence to:**

- Kill, injure or take a badger
- Disturb a badger when it is occupying a sett
- Interfere with a badger sett by damaging or destroying it
- Obstruct the access to, or any entrance of a badger sett.

**It is illegal** to carry out any construction work close to a badger sett without taking steps to positively avoid damage and without an appropriate Licence.

It is no excuse in law to be unaware of the presence of Badgers. Most badgers have the characteristic black and white striped face although very occasionally they can be creamy white (albino) or red/ginger in colour. Fully grown adults can be up to 1 metre in length and weigh up to 14 kg. The sett entrance is usually D shaped and at around 300mm wide by 200mm high is larger than either a fox or rabbit hole. There may be signs of freshly excavated material at the entrance or piles of leaves, dry grass, straw or bracken, which the badgers take inside to use as bedding.



**DON'T**

- X DON'T** use heavy machines within 30 metres
- X DON'T** use light machines within 20 metres
- X DON'T** hand dig or clear scrub within 10 metres of a badger sett before checking with your line manager whether a licence is necessary.

**DO**

- ✓ **IMMEDIATELY STOP WORK** and inform your line manager if you discover a badger sett or see a badger on your site.



# GREAT CRESTED NEWTS

The Great Crested Newt is the largest and the rarest of the 3 species of newts found in the UK. Their numbers have been declining rapidly over the past thirty years due to loss of habitat.

They live in ponds and very slow moving watercourses but are also found in woodland, scrub, hedgerows, rough grass land and derelict sites surrounding ponds and watercourses.

**It is an offence to:**

- Intentionally or recklessly kill, injure, capture, trade or even to disturb a Great Crested Newt.
- Damage, destroy or obstruct habitats where Great Crested Newts live or breed.

Prosecution could lead to a fine of up to £5000 per newt affected and in some cases up to 6 months imprisonment.

They grow to around 170mm (almost 7 inches) in length with a rough, granular skin.

Back and flanks are brownish black with darker spots.

Vivid orange or yellow belly has an irregular pattern of black spots or blotches. Males have jagged crest on the back with a smoother edged crest above and below the tail and white, silver or grey stripe running from the tail tip, fading as it reaches the abdomen. Females do NOT have a crest and have a yellow-orange stripe running along the lower edge of the tail.

**DO**

- ✓ **STOP WORK** in the immediate area and contact your manager for instruction if you think you have identified Great Crested Newts on your site.
- ✓ Watch out when moving logs, stones or rubble or clearing the site near to ponds. These are favourite habitats for Great Crested Newts.



UP TO  
6  
MONTHS

**DON'T**

**X DON'T** try to touch or otherwise disturb any Great Crested Newt.



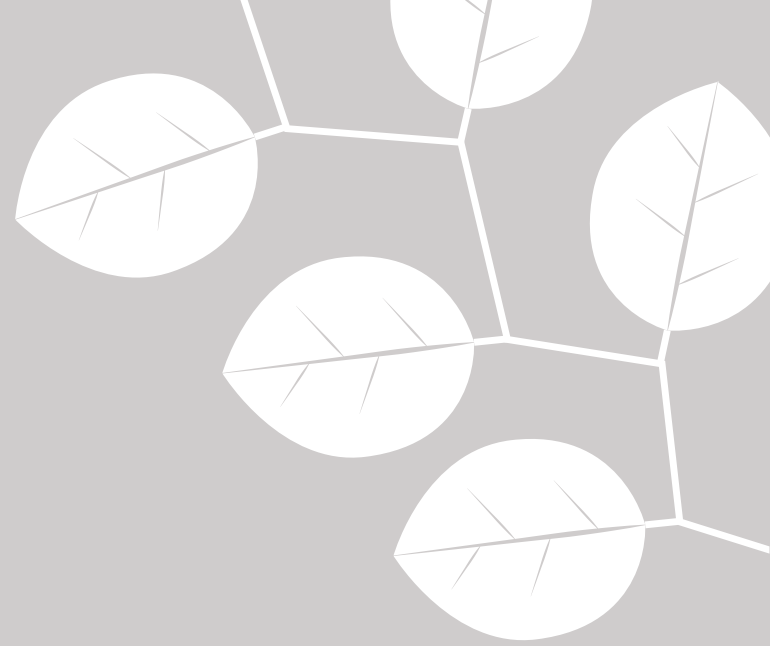
# JAPANESE KNOTWEED

**It is illegal** “to plant or otherwise encourage” the growth or spread of invasive plants, such as Japanese Knotweed, Himalayan Balsam or Giant Hogweed. They spread quickly, dominate habitats, grow densely and shade out native plants. Biodiversity is affected as the consequent loss in plant diversity leads to a reduction in the population of insects and birds.

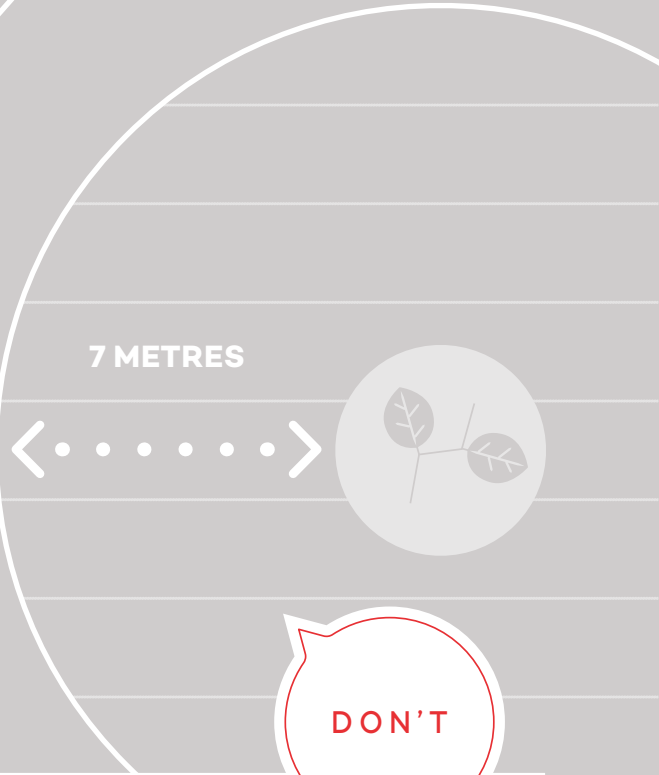
Japanese knotweed forms dense clumps over 3m high. The rhizome roots can extend several metres away from the original plant and be up to 2m deep. The plant is strong enough to penetrate foundations, walls, roads and drainage pipework. It spreads through progression of its root system and through fragments of its stem or root (a piece as small as 0.8 grams can regenerate). The stem is hollow with distinct nodes like bamboo and breaks easily.

In Spring it is fleshy and red tinged and in Summer it is green with purple speckles. Leaves in Spring are pinky red and uncurl as the stem grows. In Summer they become large oval or heart shaped mid-green.

Flowers are cream coloured and appear in drooping clusters towards the end of August. The plant dies before November often leaving behind the upright brown, hollow, woody stalks.



UP TO  
3 M



DO

✓ **IMMEDIATELY STOP ALL WORK** within 7 metres of the suspect plant and contact your line manager for instructions if you think you have identified Japanese Knotweed on your site.



DON'T

- ✗ **DON'T** excavate or move any soil from within 7 metres of a Japanese Knotweed plant without instruction.
- ✗ **DON'T** track plant or vehicles over the area.
- ✗ **DON'T** stockpile potentially contaminated material within 10 metres of a watercourse or drain.

# OTHER INVASIVE PLANTS



## HIMALAYAN BALSAM

Himalayan Balsam produces more than 500 seeds before it dies. The slightest touch to seed pods causes them to burst open catapulting and dispersing the seeds up to 7m away. It grows up to 2.5m tall and the stem is pinky red, hollow, sappy and brittle.

Leaves occur in two's or three's from the same point on the stem, are spear shaped with serrated edges, shiny and dark green with a reddish mid-rib.

Flowers, which are similar to a Foxglove, are purplish pink, carried on long stalks and appear from June to October.

STOP

DO

- ✓ **STOP WORK** in the immediate area and contact your manager for instruction if you think you have identified either Himalayan Balsam or Giant Hogweed on your site.
- ✓ Wear protective clothing before touching Giant Hogweed and seek medical advice if you have been in contact with the sap.



## GIANT HOGWEED

Giant Hogweed is now wide spread throughout the UK. It grows to over 5m tall. The seeds can remain viable on or in the ground for up to 15 years.

The plant contains large amounts of poisonous sap, which, on contact with the skin and in the presence of sunlight, causes severe irritation, swelling and painful watery blisters. This reaction can occur up to 24 hours after exposure to sunlight. Contact with eyes can cause temporary blindness.

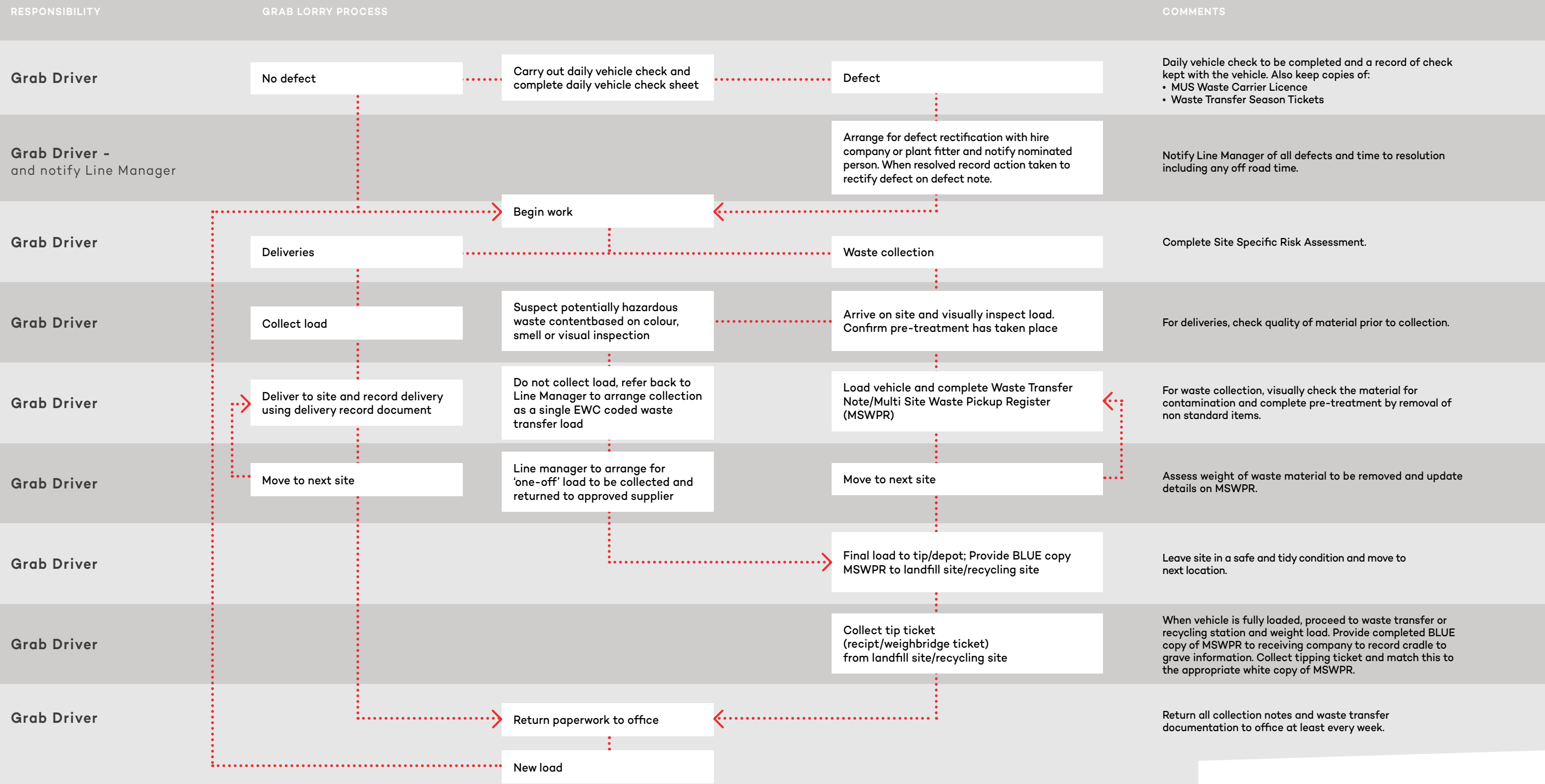
Giant Hogweed can cause significant harm to grazing animals.

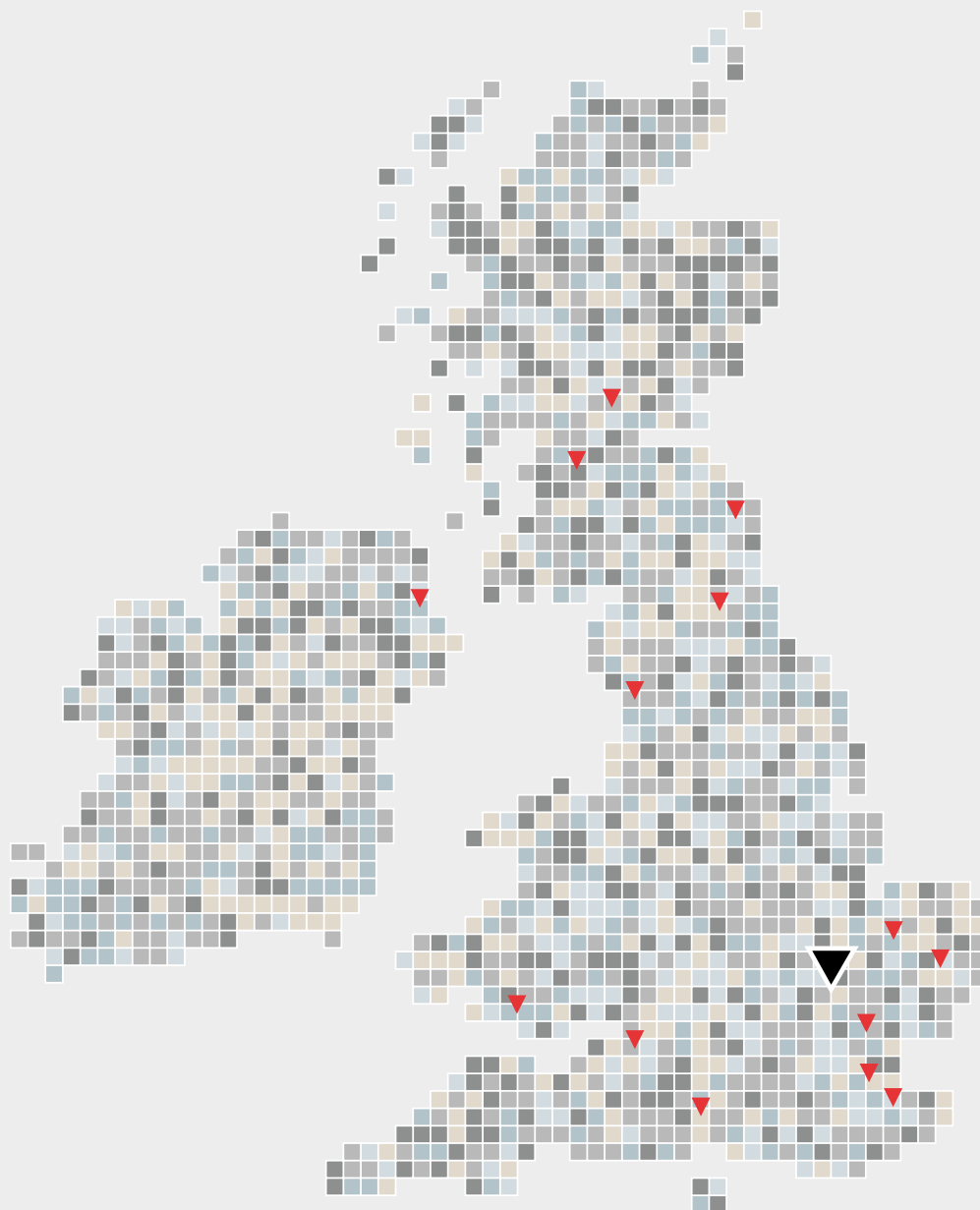
DON'T

- ✗ **DON'T** disturb the seedpods.
- ✗ **DON'T** move soil that may contain seeds or other plant materials without specific instructions.
- ✗ **DON'T** handle Giant Hogweed until further advice is taken.



# GRAB LORRY PROCESS





For more information contact

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