

Construction Environmental Management Plan (CEMP)

140 Caerleon Road,
Newport

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1. PROJECT DESCRIPTION

Overview of the Project:

The project will involve the design and construction of new residential extension units, as well as the redevelopment of the existing commercial unit into Specialised Supported Housing apartments. This will include drainage, services, and external works.

Scope of Construction Works:

The site is vacant at present with a derelict former funeral home located at Caerleon Road, with an access road to the side of the property. The site has houses on the one side fronting Caerleon Road. The contractor will ensure that construction operations are segregated from these existing activities.

Site Description:

The site is a sloping site, away from Caerleon Road, down to a level plateau where the existing house is sited. There is an existing vehicle access point to the side of the property on the North-East side. The property is located on the main road of Caerleon Road, with parking available to the front and side of the property. The remaining site boundaries are formed by the gardens of surrounding properties.

Site Services:

The contractor will confirm the location of all services prior to any excavation works. Scans will be carried out, any existing services will be carefully located and exposed. All necessary precautions will be taken to protect, make safe and disconnect as appropriate.



Appendix A: Locality of Project Area

2. PROJECT ROLES, RESPONSIBILITIES AND CONTACTS

The contractor will ensure that the Site Safety Representatives, Contracts Manager, Works Foreman, and employees along with any Sub-Contractors are aware of their health and safety duties and responsibilities.

The Main Contractor has ultimate responsibility for the effective implementation of the CEMP, although safety on site is the responsibility of everybody.

Main Contractor

The Site Manager will advise on all matters concerning Health and Safety at work, appropriate regulations, standards, and codes of practice.

Site Safety Representative

The Site Manager shall be responsible to the Main Contractor for the effective implementation of the Construction Phase Plan within their area of control.

The Site Manager will be based on site and will have general responsibility for safety matters on site. It will be the duty of the Site Manager to report directly to the Main Contractor any safety problems that cannot be immediately rectified.

The Site Manager will liaise with the Principal Designer regarding all health & safety matters on a regular basis, to monitor the implementation of the Health & Safety Plan and discuss any changes that are necessary to modify and up-date the Health & Safety Plan as required to reflect variations in the design or changes on site conditions.

The Site Manager will ensure that all employees under their control fully understand and observe all aspects of the Companies Health & Safety Policy.

The Site Manager shall instruct those under their control precisely and clearly on their duties regarding the safety of themselves and others.

The Site Manager ensures that persons under their control, appointed to operate vehicles, and machinery, have had sufficient training to run them safely.

The Site Manager shall ensure that areas under their control are kept tidy and that materials and equipment are stacked and stored neatly and safely and will set an example by co-operating with all safety policies.

The Site Manager shall ensure that all new employees, particularly those under 18 years of age, are taught safe working practices.

The Site Manager shall inform the Main Contractor at once if any incidents or accidents occur.

Employees

Employees are required to always act in a safe manner ensuring their own safety and that of others. All employees must:

- Take reasonable care of their own health and safety.

- Act in a manner that ensures the health and safety of others who may be affected by their acts or omissions.
- Work in accordance with the information and training provided.
- Use equipment provided for health and safety purposes.
- Report accidents, incidents, near misses and new or developing hazards to their Site Safety Representative.
- Carry out user checks or inspections on plant, equipment and machinery within their control and report any defects immediately.
- Assist as required in the prevention or investigation of accidents and completion of accident reports.
- Refrain from intentionally misusing or abusing anything that has been provided for health and safety purposes.
- Attend health and safety training/instruction as requested.
- Comply with reasonable health and safety instructions.
- Bring health and safety issues to the attention of the Site Manager in the first instance. If the issue cannot be, or is not, resolved in a proper and satisfactory manner then it should be communicated to the Managing Director

3. TRAINING, AWARENESS AND COMPETENCY

The Main Contractor shall ensure that new and existing personnel are adequately trained to perform the tasks assigned to them without leading to environmental or personal harm. It should cover the provision of two types of training - 'competency' and 'awareness' these will be carried out in the form of site inductions and toolbox talks.

4. ENVIRONMENT AND RISK MANAGEMENT

key environmental impacts are:

- Fuel use from vehicles
- Energy use from running sites & offices
- Waste produced from sites
- Waste produced from offices
- Air & noise pollution from sites

Main environmental aims:

- Continual improvement in environmental performance
- Prevention of pollution, or at worst a reduction of pollution
- Compliance with legal and other requirements.

Policy objectives:

- Comply with all relevant regulatory requirements
- Incorporate environmental factors into business decisions
- Minimize impacts of activities, products and services
- Increase staff awareness and promote good environmental performance
- Publish our environmental policy

Objectives to be met by:

- Conserving energy and other natural resources where possible
- Being efficient with material use
- Minimising waste and Maximising recycling
- monitoring and recording regulatory consents and authorisations where applicable
- Assessing the environmental impact of activities and employ robust procedures for measuring and controlling emissions, discharges and wastes
- Providing all staff with relevant environmental training and relevant job-specific training
- Working with suppliers, contractors, and subcontractors as appropriate to help maintain Policy commitments to the environment.

5.0 INTRODUCTION

The site is currently unoccupied and the existing dwelling to be partially ripped out. The existing access will be retained. The development is the construction of six flats intended for private housing including drainage, highway infrastructure, services, and external works.

There will be adequate supervision on site, and residents will be fully notified by newsletter before any work commence. It is recognized that planning approval is also required, and any relevant planning conditions discharged before any works commence. For health and safety reasons self-contained temporary welfare facilities will be placed at the lower area where the existing house stands, until the entrances and level areas in front of the proposed houses are formed, when the main site welfare facilities will be installed.

The following local conditions have been considered in the preparation of this plan:

- Current residential areas
- Local Schools
- Site Gradients
- Ground conditions
- Existing services
- Existing structures
- Existing road systems
- Nearby Watercourses

The content of this plan will be consistently monitored and, where necessary, amended as the site develops by the site and visiting management.

Site offices and Canteen notice board will also display a Traffic Management plan indicating the key elements of this plan, and a copy of the plan retained on site for monitoring and review purposes. The site office and welfare details including all legal health and safety at work act requirements are covered in detail by the Construction Phase Health and Safety Plan, which will be produced and signed off by the Principle Designer before works commence on site.

5.1 SITE PARKING AND VEHICLE SHARING

There is parking available to the side of the property, on Morden Road which is a one-way road not accessible from the main road, where the construction workers can easily access the property. As

well as unlimited parking available on Caerleon Road, directly opposite the property.

The site manager must carefully monitor the parking of contractor's vehicles near the site, where contractors may need to bring their vehicles into the construction area, e.g. unload materials.

Where subcontractors are employed, we will ensure that wherever possible they share vehicles, this will be part of their selection process, and made part of the site induction undertaken by all operatives.

Prior to commencement of works on site, the visibility splays, both vehicular and pedestrian would be provided as per the submitted site plan. No other works will commence prior to these works.

5.2 CONSTRUCTION VEHICLE MOVEMENTS

Site construction vehicles will only be operated by those persons who have received the relevant training, have produced a copy of their certificates of competency and are authorized to use the vehicle / plant by their employer.

All vehicles used on site will be inspected, tested, and serviced at the appropriate intervals laid down by legislation and the manufacturer's instructions. All defects must be reported as soon as possible and, where necessary, the vehicle taken out of use. Records of maintenance, inspection and testing must be produced to the site manager and the visiting Regional health and safety advisor upon request.

All construction vehicles, when not in use and on the conclusion of daily works, must be returned to the designated parking area within the compound. Keys must be removed from all vacated vehicles.

If construction vehicles are operating or being used on infrastructure roads or other areas to which the public have access, roof beacons and headlights must be used.

Where practical to do so, a turning area for vehicles must be installed and identified as such. No vehicles will be permitted to park, and no materials stored, within this area.

Where the provision of such an area is not practicable, or where space is otherwise confined, a trained banks man must, where necessary be provided to assist reversing vehicles. In addition, 360-degree vision mirrors must be fitted to all excavators and Tele handlers.

Vehicles are not permitted to travel in reverse on site or onto infrastructure or other roads used by the public unless under the control of a trained banksman. Audible reversing warning equipment must, where possible, be fitted to all Tele handlers, maintained in working order and used.

5.3 SPEED LIMITS

A speed limit of 5mph will be applied on site and implemented around the site boundaries coming on to site.

5.4 HAZARD FENCING

Where specific hazards may produce additional risks to the movement of site they must, wherever possible, be protected by a physical barrier and high visibility plastic fencing. This will include scaffolding near the roadway, and excavations. Excavations close to vehicle and pedestrian routes will be back filled as soon as practicable.

5.5 PEDESTRIAN ACCESS ROUTES

Pedestrian routes will be installed to segregate personnel from site traffic movement. These will take the form of curbs, fencing or barriers (at least 1 meter in height and visibility) or traffic cones (short term only).

The areas where pedestrians must cross the traffic routes, e.g., for access to parking areas, welfare facilities, etc., are to be shown on the traffic plan. The crossing points must be chosen to afford maximum visibility to pedestrians and vehicle operators. The pedestrian crossing areas must be clearly signed.

Prior to commencement of works on site, the visibility splays, both vehicular and pedestrian would be provided as per the submitted site plan. No other works will commence prior to these works.

5.6 COMPOUND AREAS AND TEMPORARY LIGHTING

The compound areas will have separate access to the pedestrian access (to offices and welfare facilities) and vehicle entrance (to material storage area). These entrances will be clearly identified as per the traffic management plan.

Where necessary e.g., because of poor visibility, pedestrian / vehicle segregation barriers will be placed at the vehicle entrance to the compound.

In the summer months, no temporary lighting will be required on site during working hours.

In the winter months, lighting will be used in working hours only, where poor visibility would introduce a health and safety risk. All temporary lighting used in daytime hours will be the minimum required to manage the site safely, designed to ensure it does not create local disturbance, and turned off when not needed.

Out of hours the site will be locked, but in the event of an intrusion a light with a movement sensor will activate to deter vandalism and theft, but is only lit when movement is detected, reducing any potential disturbance to a minimum.

5.7 MATERIAL DELIVERY AND STORAGE

All deliveries to the site will be via Morden Road, minimising any delivery routes through the main road, Caerleon Road. It will be offloaded in the dedicated storage area. No construction traffic will use Caerleon Road.

Where needed a banksman will monitor all loading and unloading of materials and the area will be kept clear of pedestrians while a delivery is being made. Where materials, particularly bricks, blocks and tiles are delivered to the working area, they must be placed in such a position that they do not obstruct pedestrian or traffic routes or reduce the visibility of site traffic or pedestrians.

The company buying will be to procure materials using a buying schedule to produce a 'Just in Time' delivery sequence to ensure the minimum number of materials are stored on site, to assist with site safety.

Deliveries will only be scheduled between the hours of 9.00am and 2.30pm Monday to Friday and 8:00am and 1:00pm on Saturdays.

5.8 ROAD CLEARANCE

It is planned to retain the existing tarmac entrance and parking area onto the site until the bulk of the excavation works are complete. By doing so a hard-surfaced area will be allocated to clean lorries down when necessary before they exit the site, to avoid taking mud onto the local roads.

A responsible person will be appointed to assist in the delivery and offloading of plant and materials. The importance of this individual will be discussed and included in all site inductions and orders to suppliers who will be visiting/working on site.

All vehicles that take away loose materials will be sheeted to ensure no spillages occur on local roadways.

5.9 HIGH VISIBILITY CLOTHING

All personnel will always wear visibility vests / jackets.

5.10 MONITORING AND CONTROL

This is the responsibility of site and visiting managers. Supervisors appointed by the contractors on this site will also ensure that persons working under their control comply with these requirements.

All personnel will be acquainted with the site traffic management requirements during their induction training. Personnel failing to comply with the requirements of this traffic plan, thus placing themselves or others at increased risk of injury, will be dealt with in accordance with normal disciplinary procedures and may be removed from site.

5.11 WORK ON OR ADJOINING INFRASTRUCTURE ROADS

In the event of a contractor on this development being required to work on or adjacent to the infrastructure roads e.g., ground workers, they must do so only having produced and agreed a site-specific method statement which includes details of additional measures to be adopted to protect pedestrians and other road users.

6.0 DUST SUPPRESSION

The local authority has the power under the Clean Air Act 1993, to limit the dust, emissions and odours generated by a site. Failure to comply with these limits can result in abatement notices being served if complaints are made.

The following good working practices will be adopted:

- Identify sensitive receptors and inform the authorities of any likely nuisances that may occur. Instigate control measures to mitigate any negative impacts.
- Develop a daily monitoring regime to record dust conditions whilst noting weather conditions, construction activities, their location and duration on site.
- The plant and deliveries will be accessed off Caerleon Road and Morden Road. In dry spells the road will be dampened with water to suppress the dust. A road brush will be used as necessary to keep the existing road clean and to suppress the dust. These works will be done as and when needed with a forklift attachment, a road sweeper, and/or a power jet wash. There will also be a speed limit of 10mph.
- During the ground works, water will be used to suppress the dust whilst soil is moved and transported around and off site.
- Dust suppression attachments are a requirement and a site rule for use on all mechanical cutters, and plant that generate dust.

6.1 WATER DAMPING

The fine spraying of water is the most effective way of suppressing dust. This will be carried out with a water bowser and hose. Spraying will be repeated regularly during warm and sunny conditions; however, spraying will not be allowed to create excessive mud, which could cause run-off into drainage systems or water courses.

Considerations for spraying are as follows:

- Areas of unpaved work subject to traffic or wind
- Sand, spoil, and aggregate stockpiles
- During the loading and unloading of dust generating materials
- Damping down of soft landscape and stockpiles will be provided particularly during dry weather to mitigate potential airborne particulate.

6.2 DUST SCREENING

If the generation of dust cannot be avoided, it may be necessary to erect screens to act as wind breaks or dust barriers. These will take the form of permeable or semi-permeable fences, so will be designed to resist high wind loads. Permanent features such as fencing (where practicable), will be erected early in the project.

6.3 AVOIDING DUST GENERATION

The following are measures that will be adopted to avoid dust:

- Haul Roads, the length and width of haul roads will be minimized to reduce the surface area. All deliveries will be subject to planning and coordination by the buyer and site manager.
- Public roads will be swept regularly with a sweeper.
- Vehicles will have speed limits – slower speeds generate less dust.
- Vehicle movements will be minimized – larger vehicles where possible Damp down.

6.4 Hand Tools

Cutters and grinders will have dust suppressor attachments.

Where practicable cutting of masonry will be carried out away from existing houses. Wood cutting tools and drills will have dust suppressor attachments.

Works to existing highway roads will use dust suppressed equipment and water attachments. Pre-construction information inductions and toolbox talks will be provided throughout the project life to communicate the controls.

6.5 Highway Works

A bowser and sweeper brush will be employed in dry and wet spells to keep roads clean and dust free, as and when required. A power washer will be used to wash vehicle wheels exiting site as and when required to suit weather conditions. Consideration will be taken when cutting curbs and forming new access to the existing footpath.

7.0 NOISE SUPPRESSION

To ensure the most effective method of noise suppression is used we will be working in line with BS 5228:2009.

Varying site activities will produce shifting noise levels which will be kept to a minimum from neighbouring properties. Measures to overcome this will be as the following:

- Avoidance of unnecessary revving of engines.
- All Equipment/Plant which is not in use will be switched off or powered down immediately. All Plant/Equipment used on site will be no noisier than the levels

quoted in BS 5228-1:2009. Internal haul routes will be well maintained.

- Drop heights of materials will be minimized.
- The use of foul language and shouting will be prohibited.

Construction site operations will be restricted to 09:00 – 4.30 Monday to Friday and 08:00 to 13:00 Saturdays so that noise is not audible at noise sensitive premises outside of these times. These hours are principally the hours that neighbouring properties will be at work. No construction works will take place on Sundays or on Bank Holidays, but if a road crossing or similar is required outside normal hours this will only be done with permission of the planners and local consultation/ newsletters.

The site will be securely locked outside of these hours.

The site will consist of Heras fencing acting as gates covering the front elevation and the remainder of site surrounded by 2 m Heras fencing to all boundaries. This will be replaced with the permanent boundary treatments as the development progresses.

Live power from the national grid will be provided so the use of generators will be reduced to a minimum within working hours and more importantly will not be required out of working hours to power such items as security lighting, CCTV etc.

Plant and delivery lorries will be used within the construction period. Noise generated by such machines will be reduced by the proposed hoarding, fencing and other mitigation strategies previously stated.

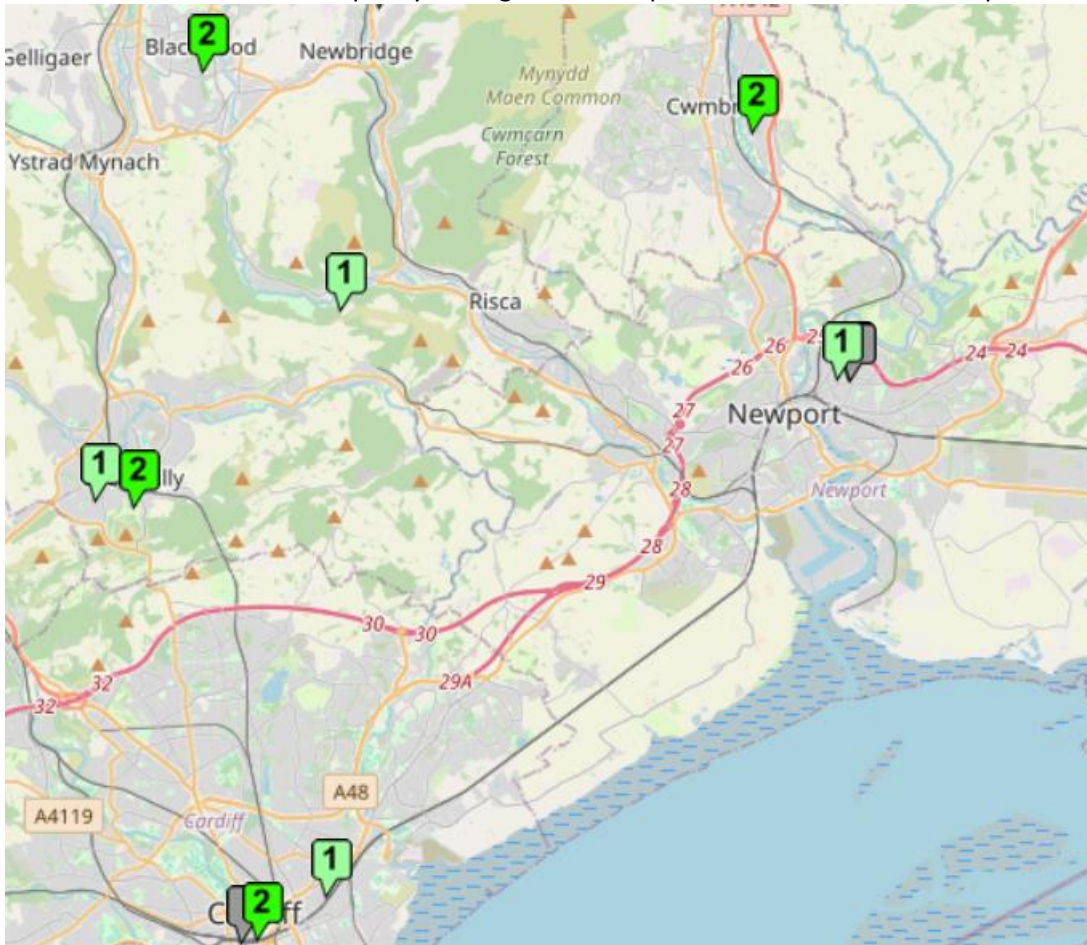
All plant/Equipment will be maintained in good condition in line with manufacturers recommendations and only used for the purpose it is intended and by trained and competent persons. Care will be taken to keep the site equipment/machinery away from noise- sensitive areas and where possible, loading and unloading will be carried out away from such areas.

Any Large Plant/Equipment will be secured on site overnight and during periods of non- use as far away as possible from occupied dwellings to minimize disturbance during start up and shut down.

Communication with residents during the works via letter drops at key stages of the project will be carried out. Site/Project management contact details will be displayed on hoarding on entrance to the site should issues arise.

8.0 AIR QUALITY CONTROL

We have identified that air quality management is in place in areas shown on the plan below.



When the contract materials are procured via our buying department, they will be procured from suppliers who wherever possible will not travel through these sensitive areas.

On site air quality will be controlled by:

- a) Selection of battery or electric powered equipment wherever possible
- b) Hire or purchase of the newest equipment possible where diesel engines are employed, as newer engines produce less pollution
- c) Ensuring engines do not idle unnecessarily, particularly at break times etc.

8.1 TRAINING

All site operatives and line managers should be trained with respect to the environmental emergency control procedure. This will include the location and use of the spill kits.

Control measures for spillages to land and water see Tables 1 and 2. For any abnormal emissions to the air which are likely to influence the local community, stop the relevant activity and follow reporting processes as defined by Line Manager.

Ensure that any verbal reports to the Enforcing Authority are confirmed in writing within 48 hours.

Where the incident is controllable, and no intervention is required from any third party/statutory

Environmental Authority, then controls should be implemented, the incident cleaned up/resolved and a note made in the site diary.

Where the incident cannot be managed using on-site resources or is considered difficult to control (e.g. cannot be cleaned up within one hour of occurring), the relevant Environmental authority must be informed, and an Environmental Incident report should be completed stating the following data:

- Date of incident
- Time of incident
- Exact Location of incident
- Incident details (including type)
- Who incident was first reported to
- Notified relevant Environmental authority details
- Remediation measures
- Measures to prevent a recurrence
- Details of any machinery involved
- Details of any witnesses
- Details of person completing the report
- Witness statements

A copy is to be forwarded to the Construction's Health, Safety and Environmental Manager at the earliest opportunity. Corrective and preventive action will be communicated as a follow up to the Incident Report.

8.2 STORAGE OF HAZARDOUS MATERIALS

Storage will be as follows:

Diesel/Oil

Large quantities of diesel will not be stored on site. Refueling

Fuel tanks must not be refueled when engines are running (allow to cool when refueling with petrol) and only refuel in appropriate designated areas.

Combustible materials including flammable liquids and LPG

All combustible materials will be kept away from temporary accommodation units and buildings being constructed and all escape routes. Consideration will be given to use of less combustible or fire resisting materials.

Note: Use of Acetylene is to be eliminated where possible on site by using alternative methods – when unable to avoid, the fire service must be informed of its presence and its storage methods and location – cylinder numbers must be kept to a minimum.

No highly flammable liquids will be stored on site. All materials and/or substances for inclusion within the works shall be correctly stored prior to use in a suitably ventilated and/or secure area during working and non-working hours. All hazardous materials and substances shall be appropriately stored in accordance with manufacturer's instruction for storage and shall not be placed to cause a Health and Safety Hazard on site.

TABLE 1. CONTROLS TO CONTAIN AND TREAT SPILLAGES TO LAND

Steps	Controls	Absorbent Materials
1.	<p>Health and Safety Controls Identify the type of substance spilled onto the ground and apply appropriate COSHH controls Wear appropriate Personal Protection Equipment; and extinguish all items with potential to cause ignition of the spillage.</p>	
2.	<p>Identify Sensitive Areas and Protect Place a barrier of sand around sensitive areas (surface waters and site drains) to protect from spillage</p>	<p>Sand or inert material</p>
3.	<p>Contain Spillage by Bunds If spillage is onto sloping land contain through developing a bund across its path. The bund should be of a sufficient size and length to contain the whole flow. Small spillages may be contained on gentle slopes by barriers made of absorbent material, located at the stores. On moderate slopes an earth bund should be developed by excavator, dozer, or manual tools. If time permits a plastic lining should be established across the containment area to stop ground penetration.</p>	<p>Booms or sand</p> <p>Available material plastic sheeting</p> <p>Available material plastic sheeting</p>
4.	<p>Treat Source of Pollution Identify source of pollution and apply controls i.e. turn of leaking valves, sealing holes containers etc.</p>	
5.	<p>Demarcate Affected Area and Apply Absorbent Once the spillage has been contained the area should be demarcated. Absorbent material (see below for type) available from the stores should be placed over the surface of the affected area. Once the surface oils have been 'mopped up' the absorbent material should be removed in bags or by a sealed device to the contaminated skip.</p>	<p>Oil Based Treated Granules</p> <p>Oil absorbent rolls</p> <p>Sand</p> <p>Chemicals</p> <p>Chemical Pads</p> <p>Sand</p>
6.	<p>Review Substrate for Contamination The soil below the affected area should be thoroughly inspected for signs of any contamination. Signs of contamination include changes in appearance, odor, and consistency. If the controller is unsure whether any residual contaminants remain then soil testing should be undertaken. If contaminated, then the substrate material should be removed to an appropriate waste disposal area.</p>	

TABLE 2. STEPS TO CONTAIN AND TREAT SPILLAGES TO WATER RESOURCES

Spillages to water resources must be controlled immediately to limit the spread and their effects upon water resources. Any spillage to surface water resources, or to areas which may potentially lead to contamination of the water resources, should be immediately reported to the Line Manager.

Steps	Controls	Absorbent Materials
1.	<p>Health & Safety Controls Identify the type of substance spilled onto the ground and apply appropriate COSHH controls Don appropriate Personal Protection Equipment: and Extinguish all items with potential to cause ignition of the spillage.</p>	
2.	<p>Protect the Water Source Develop bunds on the banks or place absorbent material along ditch banks to prevent or restrict the flow of pollutants to the water resource.</p>	<p>Bunds Oil Absorbent Booms Sand Soil</p>
3.	<p>Spillage to Ditch If the spillage occurs to a ditch dam the affected stretch using sandbags or local material. If unavailable use local material covered by a plastic sheet to create an impermeable dam.</p> <p>Note: if the pollutant floats and time permits, then a drainage pipe should be installed at the base of the dam to allow unaffected water to continue to flow.</p>	<p>Sandbags or local inert material.</p>
4.	<p>Controlling Floating Chemicals Establish booms surrounding the affected area to restrict the affected area.</p> <p>Apply pads or rolls and sweep the booms over the surface of the affected area to remove any chemicals. Continue until the chemical is completely removed.</p>	<p>Booms</p> <p>Oils – white absorbent pads or rolls Chemical – black pads</p>
5.	<p>Sinking Chemicals Apply steps 1 to 3 and immediately contact the Environment Agency.</p> <p>Ensure all possible controls limiting the volume of chemical entering the water resource have been implemented.</p>	
6.	<p>Remove any barriers or booms Once all the contaminants have been removed from the surface of the water resource the booms and dams should be removed and the bed and banks reinstated to the former quality.</p>	