



**ENVIRONMENTAL
POLICY
&
OPERATIONS MANUAL**



Environmental Policy & Operations Manual

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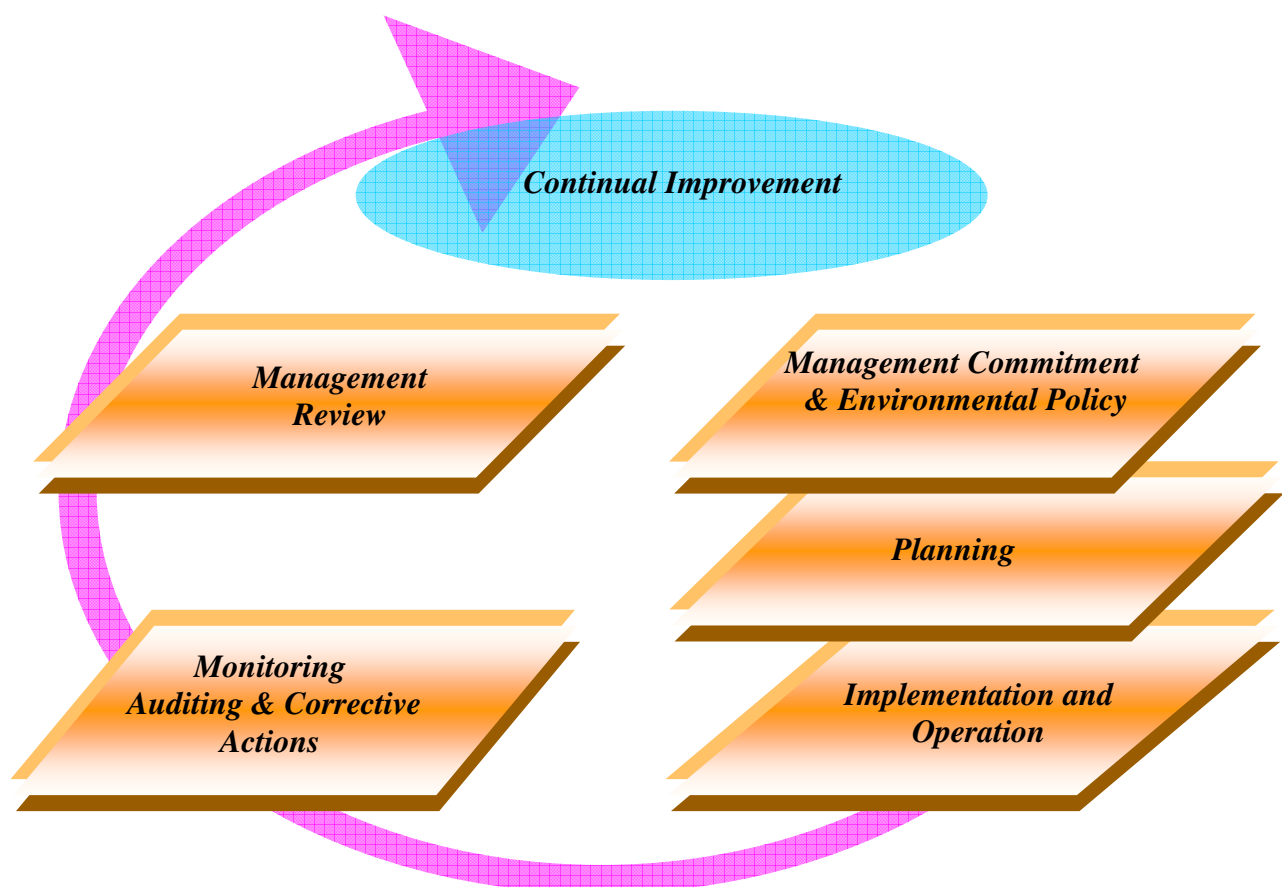
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1. ENVIRONMENTAL MANAGEMENT SYSTEM

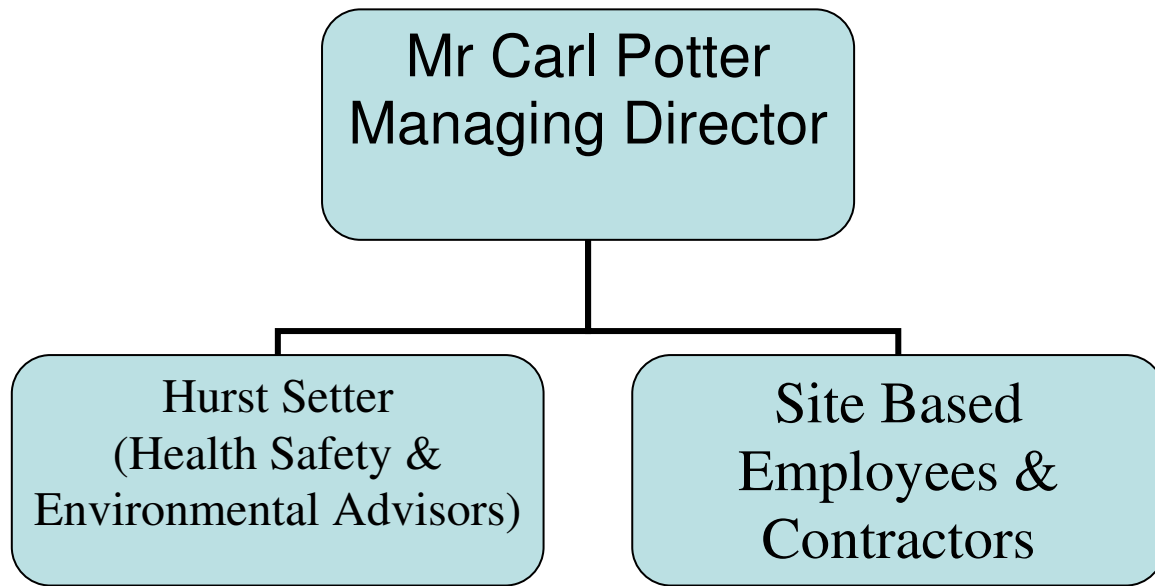
The Managing Director accepts that he is ultimately responsible for the actions of the company under his control. However he clearly cannot be responsible for every aspect of Environmental Management; these duties will be delegated to others within the company structure. The organisation chart identifies the Environmental Management structure within the company and shows the way in which this promulgated throughout the company to senior managers.

With regards to driving Environmental Management forward there must be a strong commitment from all Directors and senior managers. The Managing Director has demonstrated this commitment through the company's Environmental Policy & Operation Manual.

The diagram below illustrates the basic building blocks of a progressive ISO 14004 Environmental Management System. The company's systems and procedures are based on this accepted standard.



2. ENVIRONMENTAL MANAGEMENT ORGANISATION



3. ENVIRONMENTAL POLICY STATEMENT

Potter Brickwork Ltd considers themselves to be a leading figure in the (**Bricklaying – Stonework & Masonry**) Industry. We have been in business for many years and throughout that time we pride ourselves on our environmental achievements.

The company is committed to protecting the environment by complying with all relevant UK legislation, meeting national standards relating to the environment and in accordance with best working practices currently in use by the industry. This is an ongoing commitment which requires working procedures to be frequently reviewed and adapted to reflect the continual changes that are taking place in the industry to ensure the company is at the forefront of the changes with regards to environmental protection.

The company uses the word environment to cover natural environment and ecosystems as well as the built environment and the effect the company's operations can have on people's lives and heritage. As a **Bricklaying – Stonework & Masonry** contracting company working on infra structure schemes, this pledge to environmental protection is further extended to protect the health & safety of employees and the public in general so that the company's impact on people's environment is beneficial and not harmful.

To achieve these objectives the company will:

- Fully comply with current legislation, our own company operating procedures and/or clients operating procedures to ensure the highest standards are obtained. The company is not satisfied with merely satisfying minimum legal requirements but will be pro active with its clients in setting and achieving higher standards when practicable.
- Ensure any subcontractors working under the company's control also follow similar standards and attitudes.
- Ensure company staff are aware of environmental issues and the procedures they must follow.
- This awareness training will be encouraged at all levels and in subcontract companies as well as our own.
- Minimising the impact of the company's activities by adopting best practices that are available at that time. This maxim will be applied to all aspects of the company's activities including design, site operations, plant & transport selection and use, energy efficiency, re-use and recycling options, and waste minimisation
- Ensure that adequate resources are made available to fully implement the objectives of this policy.

With regards to fixed location operations, the company will carry out an environmental impact assessment of the premises and activities and produce an action plan covering what changes can be made to reduce the effect. With regards to site activities, Environmental issues will be considered along with quality and Health & Safety issues at the planning stage and the environment impact assessment will be incorporated into the project Health, Safety & Environmental plan and agreed with the client before work commences.

The environmental performance of the company is to be monitored by those nominated and will be reviewed annually by the Managing Director. Objectives will be set and the monitoring and review is to ensure the company is achieving these objectives. This review will also take into account changes in legislation, advances in technological knowledge and changes in industrial practice, and if required, the company's objectives will be re-set taking into account these changes.



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The company is aware of ISO 14001 and will adopt the philosophy detailed in these standards in its operations.

This environmental policy will be subject to Monthly Monitoring and Annual Review by our Safety, Health and Environmental Committee chaired by the Managing Director.

Signed _____

Dated _____

Mr Carl Potter
Managing Director

4. DUTIES & RESPONSIBILITIES

4.1 Duties of the Director with Special Responsibility for Environment Issues

In addition to his general director duties the HS&E director, Mr Carl Potter shall have additional responsibilities for:

- Providing a Company statement on any issue of environment that requires a formal statement.
- Ensuring he is informed of and agrees with any correspondence to/from the Environment Agency.
- During operational meetings with the contract managers ensure that the environmental performance set has been achieved, set objectives for the next period, and receive feedback in general on environmental issues.
- Ensure the Board are informed of any major environmental issues affecting or likely to affect the Company, and through the Board promote a pro-active approach to the solution on such issues.
- Ensure there is sufficient environmental advice and awareness at all levels of the Company; ensuring all employees are made aware of the company's policy and that there are adequate training resources available.
- Ensure all company employees receive adequate training and consultation to enable them to contribute to minimising the companies' impact on the environment.
- Setting a good personal example and having adequate knowledge of environmental legislation relating to aspects of the Company's activity.

4.2 Duties of Directors and Other Senior Managers - Supervisors

Directors and senior staff should implement the Policy by:

- Ensuring environmental issues are considered throughout the operational activity of the company and that such issues are identified so that an effective control strategy can be developed.
- Ensuring employees and where appropriate contractors at all levels receive appropriate training to enable them to understand environmental issues and the important role they play in minimising negative environmental impact.
- Monitoring environmental performance through meetings with personnel and responding to actual operational conditions observed when on routine location inspections.
- When holding meetings with employees and stakeholders, ensure environmental issues are discussed and receive comments and suggestions on ways in which the Company's performance can be continually improved.
- Setting a good personal example and having adequate knowledge of environmental legislation relating to aspects of the Company's activity.

4.3 Duties of Supervisors and Contractors

These duties are as detailed in the site manager's duties, but in addition you should:

- Ensure all plant sent to site is safe, is in accordance with manufacturer's specifications, and when applicable, has been tested and thoroughly examined in accordance with current EC & UK environmental regulations.
- When accepting plant and equipment onto site ensure the item meets UK and EC requirements, especially with regards to guarding, operator noise levels, environmental noise levels and emissions and is totally secure in relation to hydraulic fluids. Ensure that whenever possible "quiet plant" is hired.
- In order to minimise noise levels and the possibility of fluid leaks arrange for regular servicing and maintenance of all plant and that adequate records are maintained to corroborate this. Any item of plant reported as being defective should be taken out of service until repaired/checked.
- Ensure any waste from the plant and vehicle workshop is correctly handled and recycled where possible. If the waste has to be disposed, ensure this is done in accordance with current legislative and company requirements.
- Assist the Site Manager; Principal Contractor & Client fulfil their duties under the SWMP2008 Regulations.
- Set a good personal example at all times.

4.4 Duties of All Staff and Operatives

The Company has a strong commitment to both health & safety and environmental issues. To be successful, the Company needs your assistance in following the Company's procedures and so minimising safety risks and negative environmental impact. In addition the Company needs employees to be pro-active in these areas in identifying areas in which improvements can be made; this can be achieved by:

- Cooperating fully with all appointees associated with the Site Waste Management Plan.
- Ensuring that precise instructions to operatives working under your direction, detailing what precautions/actions must be taken to minimise environmental impact.
- Ensuring that all personnel understand the environmental requirements placed upon them
- Setting a good personal example and ensure small plant, tools and equipment is being used correctly.

5. OBJECTIVES TARGETS & PROGRAMMES

The Managing Director and senior management team shall carry out an annual review of all health, safety & environment procedures. Major element of the process is to determine past performance and set new performance targets for the coming period. When setting our objectives and targets consideration will be given to:

- Legal & other requirements.
- Significant aspects.
- Technical. Operational & business issues (Commercial).
- Other interested parties.

Included in the review will be:

- Review last year's performance in particular incident reports, comments from enforcing authorities, comments from clients or their representatives, audit reports and critical site inspection reports any comment from the stakeholder group.
- Review changes in legislation and assess the impact on company operations.
- Review of the company aspects and impacts register.
- Set environment objectives for the coming year.
- Taking into consideration the objectives that have been set, review staff awareness and produce training suitable programme for the coming year.

The company's objectives for the current year will be attached as an appendix to this policy

6. MONITORING AND REVIEW OF THE MANAGEMENT SYSTEM

6.1 *General company Arrangements*

The nominated directors, the company health, safety and environmental advisers and other staff nominated by the directors, will monitor the implementation of the company's Environmental Policy and review the company's performance. To assist in this role, there will be a formal report produced at 6 monthly intervals and the report will cover:

- Review of any significant near miss or incidents - is a procedural change required?
- Review of any criticisms from The Environment Agency, clients or other parties - is a procedural change required?
- Review of last period's "environmental objectives". Have they been achieved?
- Review any new legislation, guidance notes, or initiatives.
- Review the company's environmental policy document and working procedures as appropriate.
- Review training requirements.
- Set environmental objectives for next period.

On a regular basis, the health, safety and environmental adviser will carry out audits of the company's procedures and will submit a formal report to the safety director. In addition, the health & safety adviser will carry out routine site inspections to monitor working practices and be available to advise all employees on health, safety and environmental issues.

These objectives will be carried out jointly with the objectives laid down in our Health and Safety Policy.

6.2 *Site Based Arrangements*

In any management system there must be an element of monitoring. If the system is not monitored and performance is not measured then it simply will not happen. Therefore the company has introduced the following monitoring regime

- Each major project will have an environment plan produced at tender stage and the pre contract issues described above will be considered. At contract award stage, the plan will be finalised to cover the construction phase.
- The company health and safety advisers carry out routine site inspections monitoring the health and safety performance. This scope has been extended to also monitor environmental performance.
- In addition to the above routine monitoring, the Senior Management Team will carry out an audit of a project under their control on a quarterly basis and report directly to the managing director.
- The major review of environmental performance will be carried out annually by the senior management team and report to the Managing Director.

7. RECORDS

Within the project health, safety & environment plan will be details of any planning constraints or site discharge consents together with details of project specific records required. There are variations in the requirements for on-site monitoring of environmental issues such as noise, vibration, dust levels etc.

With regards to other records, the site manager will ensure copies of the following are held on site:

- A register of environmental legislation relevant to the project.
- Copy of any local authority prohibition / control documentation.
- Check with the client or principal contractor with regards to environmental impact assessments completed.
- Copies of contractor pre construction meeting discussions with contractors.
- Transfer notes for controlled waste and consignment notes for any hazardous wastes. At the end of the contract these must be returned to the head office records relating to waste disposal and be retained for a **minimum 3 years**.
- Copies of the company's and any other waste carrier's registration license.
- Copies of licences for the actual deposit location of the waste ensuring that the location is licensed for the type of waste being sent.
- A logbook of complaints for neighbours, client's representatives and others who may have reason to comment.
- A register of induction training to contractors and employees.
- Copies of any internal incident report forms and periodic environmental inspection reports.
- Copies of any on site environmental monitoring undertaken during the project.

8. COMPETENCE TRAINING & AWARENESS

The company has a strong commitment to training and this commitment will be extended to environmental issues. If the company is to progress and go forward on environmental issues its staff must understand the basic issues before they can contribute to changing procedures and improving performance. Therefore environmental issues will be included with health & safety project induction training, on the company training courses and refresher courses.

8.1 *Company Employees*

The Managing Director and Safety Director will carry out an annual review of Environmental training needs and will produce an annual training programme for all levels of staff. In carrying out the review they will pay particular attention to persons whose role has changed, possibly due to a change in their scope of work, or possibly due to legislation changes. Employees taking onboard additional responsibility may need additional training. The training needs will be agreed by the board and budgets allocated. The Safety Director and Health & Safety Adviser will monitor that the training schedule is completed. New employees will receive induction training in environment as well as health & safety.

- Roles & Responsibilities.
- Company Aspects & Impacts.
- Emergency Arrangements

8.2 *Site Induction Training*

The site manager (or his delegated representative) will carry out induction training for all new arrivals to site informing them of the significant environmental risks identified in the Health, Safety and Environmental Plan together with the sites emergency procedures.

Environmental Induction will cover:

- Site specific aspects & impacts.
- The significant risks and precautions to be taken.
- Details of environmental emergency procedures.
- Site Waste Management Plan details.
- Details of any method statements relevant to the actual work the person is involved.
- The site rules in general.
- Confirmation of the induction talk will be recorded in the site diary or the induction register.

8.3 *Plant Operatives*

All plant operatives will be trained and certificated in accordance with the training schemes run by the National Plant Operators Registration Scheme or to a similar standard including for any environmental considerations such plant use may imply. Training records will be maintained in the Administration Office.

9. ENVIRONMENTAL INCIDENT AND REPORT PROCEDURES

“pollution of the environment due to the release , into any medium of the environment, from any process of substances which are capable of causing harm to man or any other living organism supported by the environment”

“The “Environment” consists of all, or any, of the following media, the air, water, and land. The medium of air includes the air within buildings and the air within other natural or manmade structures above or below ground level”.

9.1 Data Protection Act

Environmental Incident Reports are an item for consideration under the Data Protection Act. As such, any completed reports must be kept confidential and only seen by those persons authorised to do so.

9.2 Incidents and Near Miss Occurrences

All Incidents or Near Miss Occurrences which occur on premises or sites under the company’s control should be entered in the Environmental Record System, no matter how trivial and irrespective if the cause of the incident is as a result of actions taken by an employee, self-employed, subcontractor, authorised visitor or member of the public. Completed report forms must be submitted and actioned in accordance with The Company Incident and Near Miss Reporting and Investigation Procedures.

9.3 Environmental Incident Reporting Procedures

Premises, Site Managers or any person responsible for the day to day Environmental Arrangements should in the event of an incident:

- Undertake an investigation of any Category 1 or Category 2 incidents to assess the environmental impact and inform the Environmental Agency if serious risk is involved.
- Complete a Incident Report Form contained in the Erectors Site Briefcase and submit it to the Safety Director as soon as possible.

9.4 Definition of an Environmental Incident

There are no legal definitions of Environmental Incidents, common occurrences that would be defined as an incident include but are not restricted to:

Emissions to Atmosphere

Methane Leakage/Loss	More than one tonne or where widespread complaints are received.
Ozone depleting substances	Greater than 100kg
Odours	Any complaints
Anti toxic gas	Any unplanned release
Dust, smoke & aerosols	Any complaints
Breach of emission limits	All occurrences

Emissions to Land

Spillage of Hydrocarbons	50 litres or more
Pesticides & Herbicides	Any uncontrolled/accidentals spillage/run-off or spray drift
Contaminated or polluted water	500 litres or more
Chemicals	Any uncontrollable or accidental spillage
Unauthorised waste deposit	Any occurrence
Breach of emission limits	Any occurrence

Discharges to Water

Breach of any consent discharge limit	Any occurrence
Unauthorised discharge or deposit of solids or liquids into water.	Any occurrence
Deliberate acts of vandalism that result in substances stored causing contamination.	Any occurrence
Breach of any of the following pollution categories listed below	Any occurrence

9.5 Pollution Incident Categories

Category 1

A 'major' incident involving one or more of the following:

- Potential or actual persistent effect on water quality or aquatic life.
- Closure of potable water, industrial or agricultural abstraction necessary.
- Extensive fish kill.
- Excessive breaches of consent conditions.
- Extensive remedial measures necessary.
- Major effect upon amenity value.

Category 2

A 'significant' pollution incident, which involves one or more of the following:

- Notification to abstractors necessary.
- A significant fish kill.
- Measurable effect on invertebrate life.
- Water unfit for stock.
- Bed of watercourse contaminated.
- Amenity value to the public, owners or users reduced by odour or appearance.

Category 3

'Minor' suspected or probable pollution, which, on investigation, proves unlikely to be capable of substantiation or to have no notable effect

9.6 Noise

Breach of any regulatory limit(s) set by planning consent	Any occurrence
Breach of any local authority limits	Any occurrence
Any complaints of noise due to out of hours activities	Any occurrence

9.7 Damage to Amenity and Cultural Heritage

Reports will be required on any complaints arising from a reduction in the aesthetic amenity or public enjoyment value of areas such as:

- National parks or national trails.
- County parks and other forms of recreational areas.
- Local authority and private recreational areas.
- Damage or near miss situations involving listed building, public monument, conservation area or other building or archaeological importance.

10. WORKING PROCEDURES

10.1 Dust

With any construction based activity there is always a risk of creating levels of dust. This must be eliminated whenever possible by using the most practicable method to produce least environmental impact. If the production of dust cannot be eliminated, it must be controlled. Typical control measure includes a combination of the following:

- Using dust suppression systems such as water sprays to damp down any dust.
- Using vacuum capture systems to contain dust at source.
- Using sheeting to screen and contain any dust within the curtilage.
- Using local screen areas and water sprays to damp down dust at loading or material handling positions.

During dry conditions, dust can be both a nuisance problem and well as an environmental problem. Precautions such as enforcing strict speed limits for vehicles, and in extreme conditions, using water dousing will help to minimise the problem.

If the dust has the potential to contain hazardous substances such as silica (from some concrete aggregates) the protection of the employees must also be considered as well as protection to the environment.

10.2 Fuels, Oils and Other Fluids Stored or Used on Site

The storage area should be chosen, having taken into consideration, the environmental factors surrounding the site. If there are watercourses or open drains, tanks should be positioned as far away as possible to minimise spillage to such areas.

Diesel and fuel tanks will be bunded and the bund capable of holding 110% of the largest tank capacity. The bund will be fitted with a drain valve to allow rainwater to be drained away. This drain valve will normally be locked shut. As an alternative, a purpose designed double-skinned storage tank can be used.

The discharge hoses should be kept in good condition and inspected on a weekly basis. The discharge nozzle should have a holding bracket to eliminate repeated small discharges after plant and vehicles have been re-fuelled. The discharge line should have an isolating valve positioned as close as possible to the tank and this discharge valve should be locked closed whenever the tank is unattended.

If possible, a hard standing should be provided for the re-fuelling area. When re-fuelling static plant and equipment, absorbent mats or granules should be available to deal with a spillage and drip trays should be used under such plant. Fuel being transported or carried around the site should be in purpose-designed bowzers or carrying containers.

With regards to oils and other fluids, consideration will have to be given to health and safety aspects of these substances as well as environmental aspects. If it is safe to do so, they should be stored in a secure container where they are protected from vandalism and any spillages are contained within the container. With some substances, it is essential they are stored in open, well ventilated areas in which case, bunding or other impermeable layer is placed under the storage area.

10.3 Fume Emissions

The Site/Plant Manager should ensure that plant sent to site is in good condition and filled with the correct grade of fuel and lubricants. It is important that Site Manager's ensure the daily checks are carried out and that the correct grade of fuel is used in the plant. If the Site Manager is not satisfied with the condition of the plant on arrival to site, he should reject the plant and demand improved quality from the plant suppliers. The plant owner should arrange for the routine Servicing & Maintenance to be carried out. If the plant's performance starts to deteriorate, and exhaust fumes and smoke are clearly visible, the Site Manager should stop the plant and arrange the corrective action to be taken.

10.4 Noise Emissions

Consideration must be given to the noise levels that will be produced from the vehicles, plant and site activities. Plant should be selected with noise levels in mind. If the plant has to be left running overnight, it is important that *quiet plant* or *silence plant* is used. If possible electrically power plant should be used.

The Site or Plant Manager should consider the noise levels of plant and equipment when actually selecting and purchasing/hiring plant. It is important that any acoustic covers or panels are kept in position when the plant is being operated.

If operations involving high noise levels have to take place, consideration should be given to the people in the immediate vicinity and such works should be limited to the times which will have least impact on the neighbourhood. Noisy operations should be suspended at times such as morning breaks and lunch break periods.

10.5 Vibration Levels

When selecting plant and methods of operation consideration must be given to the vibration levels likely to affect adjacent properties and operations. If the contract specifies vibration levels, then obviously these must not be exceeded. If no standards are set, vibration levels should still be considered and the guidance contained in BS 5228 Part 4 relating to Piling operations is relevant and can be used as guidance for other construction related operations.

10.6 Hazardous Materials or Conditions during Construction Activities

During demolition/refurbishment or refitting it is common to find a building or process that contains a number of potential hazardous substances with little or no information of the substance. Therefore a site investigation and assessment exercise has to be carried out. Some typical areas of concern include:

- Water tanks still containing liquids.
- Other tanks, sumps, pits and pipe work containing unknown products.
- Old engines and mechanical plant.
- Old electrical transformers and capacitors (potential hazard of PCB's).
- Fire extinguishing systems containing halon.
- Air conditioning units of fridges/cold rooms (containing ammonia or other refrigerants).
- Battery banks for UPS power system backups.
- Old telephone switching and backup systems.

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- Large quantities of fluorescent and other light bulbs.
- Large quantities of smoke detectors
- Large quantities of luminous materials.
- Building infested by bird droppings, rats, mice etc.
- Buildings that have been occupied and used for illegal uses such as drug users. These can easily be contaminated with human excrement and other body fluids as well as discarded syringes and needles.

10.7 Light Pollution

In some locations, light pollution from site security lighting left on overnight can be a problem. Site Manager's should be aware of this potential nuisance factor when planning sites. Consideration should be given to neighbouring properties when positioning security and flood lights. Measurement of the light emission levels should be taken if the likelihood of contamination of neighbouring areas exists.

10.8 Management of Top Soil and Sub-Soil

In planning the site, the Site Manager will take into consideration, the need to segregate stripped top soil from sub-soil and from other material. If the topsoil is to be stored for a considerable period of time, intermediate action may be needed to keep the topsoil in good condition. This will usually be under the control of the principal contractor.

10.9 Hedges and Trees

In general terms, all hedges and trees (and their roots) should be protected (if necessary, by fixed fencing) to ensure plant and site operations do not cause damage.

10.10 Wildlife Habitats

The contract documentation will generally identify any special wildlife habitats and the precautions that the Company has to take. If a previously unknown wildlife habitat is found, this should be identified to the client and a course of action agreed.

10.11 Waste Water and Ground Water

Waste waters from the canteen and welfare facilities must be discharged to a normal main sewer system or to a storage tank for removal by septic tank service.

Ground water that forms in excavations could be classed as contaminated. The contamination could be due to substances leaching out of the surrounding materials or it could merely be due to high suspended solids content of the water. If this type of water was to be discharged into an open water course, it could result in fish losses and damage to that water course ecology.

Site Manager's should take this into consideration when pumping out excavations, sumps pits etc and generally planning the site.

All discharges of water into water courses shall be subject to Environment Agency; Local Drainage Boards or Local Authority Approvals. These approvals may have conditions relating to suspended solids and rate of discharge to avoid bank erosion and scouring.

10.12 Waste Management (Also See Section on Duty of Care)

With regards to site operations, it is the Site Manager's responsibility to develop a waste management plan for the project, taking into the consideration the type and quantities of waste that are likely to be produced. If hazardous waste will be produced, waste removal; contractors should be vetted to ensure they have the necessary registration and approvals for handling such waste. Waste separation is a requirement and hazardous waste must be segregated from other types.

Section 10 deals specifically with consignment notes and the "Duty of Care".

Section 11 deals specifically with Site Waste Management and the 2008 SWMP Regulations.

10.13 Work On or Near Water Courses

If work has to take place on or near to a water course, a method statement will be required detailing the scope of work and the precautions that have to be taken to minimise environmental damage.

The method statement should also give details of emergency or out-of-hours arrangements so that someone from the site can be contacted should an emergency situation develop. These people should have received specific instructions on the action to be taken to minimise environmental impact should an incident occur.

11. THE ENVIRONMENTAL PROTECTION (DUTY OF CARE) REGULATIONS

Anyone who “imports, produces, carries, keeps, treats or disposes of waste or a broker who has control of such waste” is subject to the Duty of Care. Controlled waste is defined as any household, commercial or industrial waste, including building and demolition waste therefore any waste that leaves site is defined as controlled waste and must only be moved after a transfer note has been issued.

11.1 *The Duty of Care*

The duty of care is described in Section 34 of the Environmental Protection Act 1990 which states that all those subject to the Duty of Care must:

- Prevent others from depositing, storing, treating or otherwise disposing of waste without a valid licence or contravene the licence conditions; or act in a manner likely to cause environmental pollution or harm to human health. These are offences under section 33 of the 1990 act (note: licensing is currently regulated by the Control of Pollution Act).
- Prevent the waste from escaping
- Ensure that waste is only transferred to an authorised person
- Include with the waste transfer a written description sufficient to enable others to comply with the duty and avoid committing an offence under section 33. A compulsory transfer note system was introduced by the Environmental Protection (duty of care) regulations 1991.

This duty has been further extended by the Hazardous Waste Regulations 2005 and the Site Waste Management Plan Regulations 2008

11.2 *Definitions*

Hazardous Waste - Subject to regulation 9, a waste is a hazardous waste if it is

- Listed as a hazardous waste in the List of Wastes[24];
- Listed in regulations made under section 62A(1) of the 1990 Act; or
- Specific batch of waste which is determined pursuant to regulation 49 to be a hazardous waste, and the term "hazardous" and cognate expressions shall be construed accordingly.

Non-Hazardous Waste

- Waste which is not a hazardous waste pursuant to regulation 6; or
- A specific batch of waste which is determined pursuant to regulation 9 to be a non-hazardous waste, and the expression "non-hazardous" and cognate expressions shall be construed accordingly.

Waste Producer

The starting point for deciding is to identify who the waste producer is and to decide how the material became waste. A material may become waste by being changed in some way, for example demolition waste, in which case the waste producer is the person

carrying out the change. Alternatively waste can be created by a decision or change of attitude, for example, the decision that material is surplus or unwanted, in which case the waste producer will be the person in possession of the object or substance who makes the decision that it is waste.

"producer" means anyone whose activities produce waste ("original producer") or anyone who carries out pre-processing, mixing or other operations resulting in a change in the nature or composition of this waste;

Waste Manager - A person who keeps, treats or disposes of controlled waste.

Waste Carrier - A person who transports waste. The company should be registered with a waste regulation authority and have a licence to confirm this registration.

To further clarify the responsibilities held in situations of contracting the following explanation is provided in the code of practice.

With regard to demolition or construction contracts the producer of construction or demolition waste may be regarded as the person undertaking the works which give rise to that waste, not the person who issues instructions or lets contracts which give rise to waste.

The client for works, although he may take decisions as a result of which waste is created, is not himself producing the waste created by the works. If there are several contractors and sub-contractors on site, the producer of a particular waste is the particular contractor or sub-contractor who (or whose employees) takes an action which creates waste, or, who begins to treat something as if it were waste (by discarding it). Where a client or contractor makes arrangements for the carriage or disposal of waste, for example by letting a disposal sub-contractor to haulier for waste produced on site by a demolition sub-contractor, then that client or contractor will be acting as a broker in respect of the transfer between the two sub-contractors; in such case all three parties will be under the duty.

In practice it is likely that every contractor involved on a site will either be producing or carrying away some waste and will be subject to the duty as a producer or carrier and therefore liable to account for the measures they have taken to comply with the duty in respect of that waste. It would also be prudent for the client to take reasonable steps to ensure that all the contractors he employs or supervises comply with the Duty of Care.

11.3 Requirement to Notify Premises

Where hazardous waste is produced at, or removed from, any premises other than exempt premises, the premises must be notified to the Environmental Agency in accordance with the statutory requirements.

Premises duly notified to the Agency “notified premises” for the purposes of these Regulations are notified for a period of twelve months, which will then have to be re notified to keep the registration valid. It is the duty of a hazardous waste **producer** to notify the relevant premises in accordance with regulations 24 and 26 if they have not otherwise already been notified.

Prohibition on removal of hazardous waste from premises unless notified or exempt “no person shall remove, or cause to be removed, or transport, hazardous waste from any premises unless those premises are, at the time of removal of the waste, notified premises or exempt premises.”

11.4 Duties of a Waste Producer

A waste producer is responsible for providing an accurate description of the waste. This should include:

- The type of premises or business from which the waste is generated.
- The process that produces the waste and the quantity of waste.
- The name of substances which comprise the waste including a physical and chemical analysis, if applicable.
- The care of the waste whilst they hold it including the packaging of the waste to prevent its escape during transfer.
- Using a registered (or exempt) carrier to transport the waste.
- The final disposal of the waste depending on the degree of involvement in the selection of the waste carrier, manager or broker.

11.5 Duties of a Waste Carrier

The Waste Carrier is responsible for:

- The adequacy of packaging and security of the waste whilst under his control.
- Ensuring that a description accompanies the waste and that this description is accurate.
- Ensuring that any alteration to the waste is recorded in the description of the waste.
- To deliver the consignment to the consignee promptly and without undue delay

Any requests for contract vehicles to transport waste must be made to the site or contracts manager who should ENSURE the contractor is registered for the transport of waste. Waste carriers are subject to the Controlled Waste (Registration of Carriers) and Seizure of Vehicles Regulations 1991.

11.6 Duties of the Waste Broker

The Waste Broker is responsible for ensuring that the waste is correctly and adequately described and is transferred by a registered (or exempt) carrier and that all documentation is properly completed.

11.7 Duties of the Waste Manager

The Waste Manager is responsible for:

- Carrying out the disposal operation in accordance with the conditions of the Waste Regulation Authority Licence.
- Checking the description of the waste they receive. Sample checks on the composition are considered to be “good practice” and should be implemented.
- Ensuring that correctly completed documentation accompanies the waste.

11.8 Duty Holders

All duty holders should look out for breaches of the duty committed by others in the chain. Breaches of the duty should be reported to the Waste Regulation Authority and further dealings with the offenders should be reconsidered.

Duty holders are only expected to do what is “reasonable in the circumstances”. The extent to which they should check up on others in the chain depends on the nature of the waste, how it is to be dealt with and what the holder might “reasonably be expected to know or foresee”. It is, for example, more important to check up on a consignment of toxic chemical waste than a load of waste paper.

11.9 Waste Transfer Notes & Consignment Notes

A waste transfer note or a hazardous waste consignment note must be used before any waste is transported off site.

11.10 Completion of Site

On completion of the site, all **Waste Transfer Notes** and **Hazardous Waste Consignment Notes** should be archived with the contract papers and retained :-

- For a period of 2 years in the case of transfer notes.
- For a period of 3 years in the case of hazardous waste consignment notes.

Copies of the waste transfer notes should also be included in the health & safety file and handed to the client via the planning supervisor.

12. SITE WASTE MANAGEMENT PLANS

12.1 SWMP Regulations 2008

The Site Waste Management Plan Regulations came into force on the 6th April 2008 and are applicable only in England. This does not absolve the company of any other duties held under statutes in Scotland, Wales or Northern Ireland. Whenever the SWMPR 2008 is applicable we shall assist the Client and/or Principal Contractor to achieve the goals and targets set.

12.2 Contractor Appointment

When undertaking the Contractor appointment on project the company, employees and those representing the Company shall:

- Assist the Principal Contractor in the promotion and coordination of the work throughout the construction phase in relationship to the SWMP.
- Comply with all measures, controls and arrangements provided to ensure compliance with the terms of the SWMP.
- We shall; so far as is reasonably practicable ensure that all waste produced during our construction phase is reused, recycled or recovered.
- We shall provide the Principal Contractor or client with all necessary information to the SWMP to be maintained in accordance with regulations 7 & 8.

13. CONSTRUCTION PROCEDURES & BEST PRACTICE

Objectives of Best Practice Guide

The aim of this guide of good practice is to assist site management and staff in identifying suitable and sufficient methods of protecting the environment. The aim is also to present a standard of performance which will reduce the number of pollution incidents and result in significant cost benefits to all.

There are 10 key issues facing the construction activity.

1. Site set-up
2. Site drainage
3. Treatment of site water and Disposal
4. Material storage
5. Silt
6. Fuel oil storage and use
7. Concrete, Cement And Bentonite
8. Working near watercourses
9. Demolition
10. Emergency response

Environmental regulators in England and Wales are the Environment Agency. Where Environment Agency Pollution Prevention Guidelines (PPG) is referred to, similar versions may be obtained from the Scottish Environmental Protection Agency.

Where guidance refers to asking permission this includes obtaining permits to work, regulatory consents, approvals or verbal agreement as required, and should be sought from the person in control of the site e.g. main contractor, and or the environmental regulator as required

13.1 PROCEDURE 1 SITE SET-UP

Contact the environmental regulator at an early stage of the project to seek advice on the probable pollution prevention measures and licences that will/may be required during the

project. Ensure the environmental regulator or relevant body has given permission before work commences.

Be aware if the site is in a sensitive area, for example near a watercourse or in a designated conservation area. If so there are likely to be restrictions placed on the site such as limited fuel/oil storage (Confirm with Client, CDMC and Principal Contractor).

- Include environmental issues as part of the site set-up risk assessment; identify all aspects and impacts from the register
- If the site is classified as contaminated prior to project commencement, ensure that Company is not identified as the polluter.
- Identify all potential drainage on site and be aware of the location of outfalls. These may include land drains, foul sewers, surface water drains and soak-aways. Mark them appropriately to allow them to be identified easily.
- Consider different techniques for dewatering (see water disposal) prior to beginning work.
- Consider sewage disposal (portable-loos, cabins etc) where no mains sewerage is available
- Locate all plant and activities away from drains and watercourses, particularly, fuel/oil storage; top soil storage; material storage; plant maintenance areas; waste disposal area.
- Locate fuel stores (tanks, drums and bowsers), plant storage, maintenance areas and waste storage areas on impermeable surfaces; consider protecting them from rainwater. **Ensure that the requirements of PPG2 and PPG26 are complied with.**
- Minimise the length of haul routes, reduce the gradient where possible and keep at least 10 m away from watercourses (regional restrictions apply to distances from watercourses). Where practicable consider construction of haul routes with a permeable surface laid on geotextile if possible.
- Consider construction of gullies/ditches alongside haul routes and around the perimeter of the working area to collect and channel surface water.
- Surface water runoff should be intercepted and diverted before entering the site.
- Provide a secure area for storing waste materials.
- Provide wheel wash facilities and/or methods to keep haul routes and accesses free from mud and dust to minimise silt runoff. Contain the water and dispose of it correctly.
- Ensure the site is adequately protected and secured against trespassers and vandalism to prevent damage to fuel stores or water protection measures.
- Ensure that all personnel on site receive environmental awareness training during their site safety induction, and programme environmental toolbox talks into a training and awareness programme. Ensure that they are aware of spill response procedures.

13.1.1 Checklist for Procedure 1 Site Set Up

Site/Location _____ Date _____

- Have environmental issues been included on a site set-up risk assessment?
- Has permission been granted by the environmental regulator or relevant body to discharge water and effluent from the site?
- Is drainage plan identifying foul and surface water drainage accessible?
- Have nearby rivers, streams or groundwater etc been identified and protective actions considered?
- Are drains etc appropriately marked to distinguish them?
- Are fuel bunds and/or suitable double skinned tanks provided?
- Is a waste storage area provided?
- Has de-watering and disposal of water been considered?
- Is the site adequately protected against vandalism, theft and breakage?
- Is a wheel wash or road cleaning equipment provided?
- Is/are a designated haul route(s) indicated?
- Have environmental issues been included in the site induction?
- Are site personnel aware of the spill response procedure and storage issues?

ACTION:

There are generally three types of drainage on site:

Environmental Policy & Operations Manual

- **Surface water drains** are designed to carry uncontaminated rainwater directly to a stream, river or soak away, which may be some distance from the site.
- **Foul water drains** are designed to carry foul water directly to a sewage works for treatment before being discharged to a watercourse.
- **Soak-aways.**

Existing and constructed site drainage plans should be readily accessible. Clearly distinguish between the surface and foul manhole covers and gullies on site and marks them appropriately.

NOTHING should be allowed to enter surface water drains, except clean rainwater. Materials and plant should not be stored near drains (e.g. stockpiles, fuel, paint, pumps, and generators).

Even if described as biodegradable, detergents are not suitable for discharge to surface water drains. Use of detergents should be carried out in designated areas draining to the foul sewer.

It is **ILLEGAL** to discharge into foul sewers without agreement from the sewerage undertaker.

Reduce Water Usage

- Construct temporary and permanent drainage works as early as possible to divert surface water away from the earth works operations.
- Divert clean surface water away from bare ground using trench drains.
- Prevent surface water entering excavations - use sandbags or similar.
- Minimise groundwater ingress into excavations.

Reuse Water

- If settlement facilities are being used on site, use water from them to damp down haul roads in dusty conditions.
- Use water from settlement facilities to wash out concrete Lorries.

Recycle water

- Recycle water used in concrete batching plants.
- Recycle water in wheel washes.

13.2.1 Checklist for Procedure 2 Site Drainage

Site/Location _____ Date _____

- Is the site drainage plan up to date and accessible?
- Are foul and surface drain types appropriately marked and known to site personnel?
- In wet weather is site runoff contained and not directly entering a watercourse or surface water drain?
- Are materials and plant stored away from all drains? (e.g. stockpiles, fuel, paint, pumps, generators)

ACTION:

13.3 PROCEDURE 3 TREATMENT OF SITE WATER & DISPOSAL

The main pollutants from construction are **silt, fuel/oil, concrete and chemicals**. These could come from general site runoff, pumping out excavations and spills for example.

It is **ILLEGAL** to put any polluting matter into controlled waters without obtaining permission from the environmental regulator. Controlled waters include rivers, streams, coastal waters, ponds, lakes, lochs, docks, and groundwater.

Prior to discharge, even to foul sewer, **ALL** site water may require treatment by on or a combination of simple methods.

Silt can be removed by:

- Settling out in a tank, ponds or lagoons, AND/OR
- Allowing it to infiltrate through a large area of grassy ground, geotextile filters,
- Straw bales or a skip containing fine aggregate
- Chemical treatment with flocculants.

Where sustainable drainage systems (SUDS) such as ponds are to be part of the completed construction, consider installing these at the outset and utilising them as a means of treating silt laden waters during construction.

Use a silt removal method that will cope with the volume of water, concentration and type of silt (chalk/clay etc) - water should be kept as still as possible. Around two to three hours retention time is generally required to reduce suspended solids. Finer materials will take longer to settle.

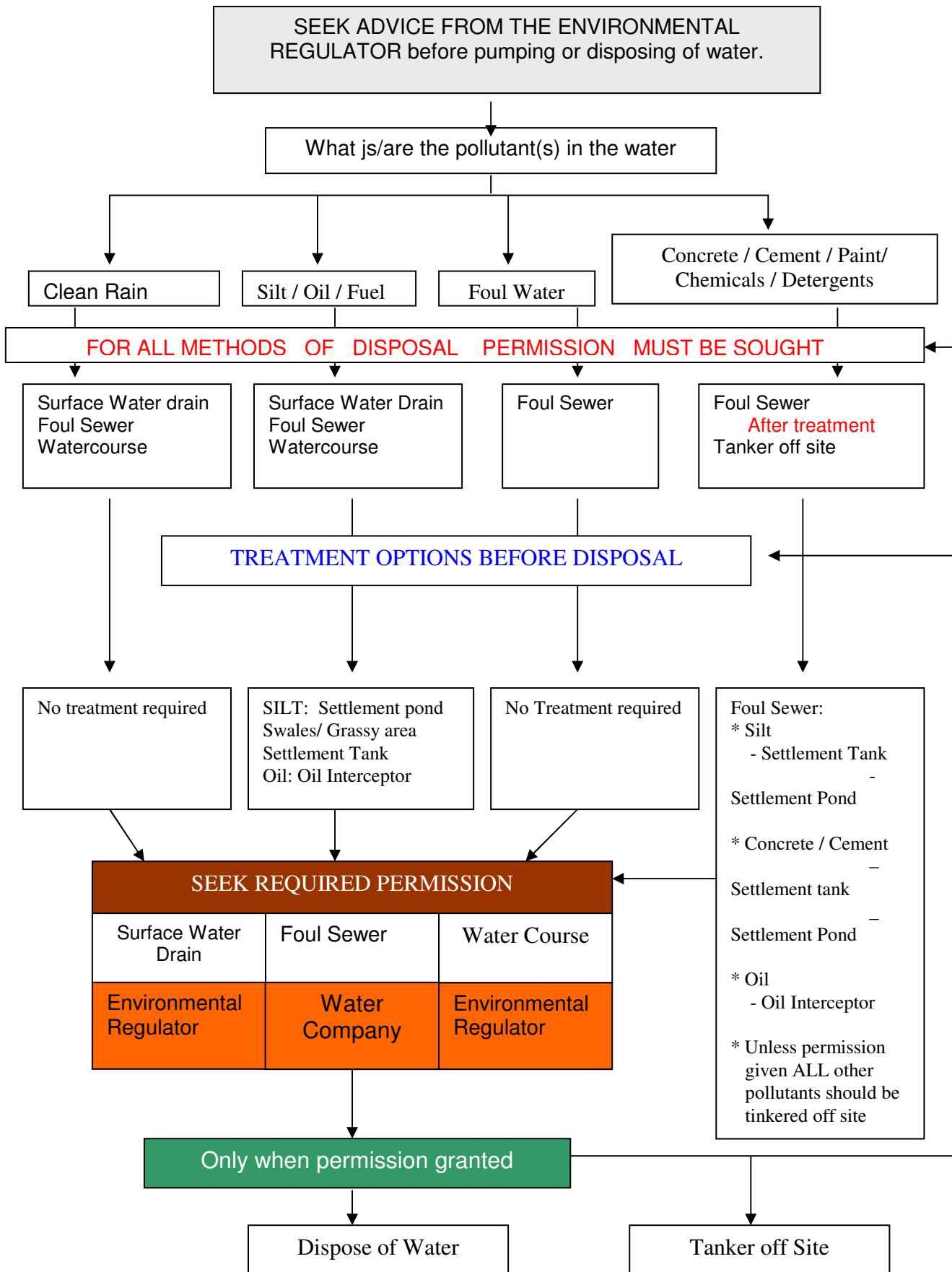
Oil and concrete should **NOT** enter site water in the first place.

Prevent oil pollution by using:

- Suitable bunded storage of fuel/oil, and use of drip trays under plant, AND
- An oil separator (if a permanent interceptor is required, consider installing it as
- Early in the works as possible, or install a temporary one), AND/OR
- Commercially available absorbent granules, pads or booms.

Wet concrete pollution is silt and can have very high levels of alkaline (high pH), which can have a serious effect on watercourses; consider treating by the following before disposal:

Checklist: Treatment of Construction Site Water and Disposal



Things to consider when disposing of site water:

- Where contaminated waters are to be disposed of from project sites the operator should consider the availability and access to foul sewers as a first option.
- It is **ILLEGAL** to discharge to the foul sewer without permission (see the flowchart on treatment of site water to determine who permission is required from).
- **ONLY** clean water can be discharged to surface water drains/sewers, as they may outfall into a watercourse, possibly some distance from the site. **The source can easily be traced back.** Permission is required from the sewerage undertaker first to check that surface water sewers and pumping stations have capacity to take the volume.
- It is **ILLEGAL** to put any polluting matter into controlled waters without obtaining permission from the environmental regulator. Controlled waters include rivers, streams, coastal waters, ponds, lakes, lochs, docks, groundwater
- **DO NOT** discharge anything to a watercourse without consent from the environmental regulator.
- Care should be taken to discharge to watercourses at a rate that **DOES NOT ERODE** the bank or bed of the watercourse mobilising silt. Consider more than one discharge point. If a settlement tank is being used to treat water, ensure that the flow rate of the water will allow settlement.
- Prior to discharge, even to foul sewer, **ALL** site water may require treatment by one or a combination of simple methods.
- Follow the flowchart provided in the treatment of site water section to determine appropriate treatment and disposal routes.
- Inspect discharges regularly to check for signs of pollution, monitor flow rates and check that the correct disposal route is being used (foul sewer/surface drain/designated disposal point). You may need to carry out monitoring of sediment/chemical loads to ensure that the discharge complies with the consent(s).
- Where not connected to foul sewer, sewage (from portable toilets etc) should be disposed of under Duty of Care and not through site surface drainage (unless a consent has been given) or direct to a watercourse.

13.3.1 Checklist for Procedure 3 Water Treatment & Disposal

Site/Location _____ Date _____

- Is there any visible sign or smell of pollution in watercourses at or near the site (if applicable)?
- Is the water treatment method effective?
- Is the water discharged from the site silt or discoloured?
- Is there an oily sheen visible on site discharge?
- Is there oil visible in water storage areas, e.g. pond/lagoon?
- If a settlement tank is used, is water moving too fast and/or is it overflowing?
- Are straw bales and/or oil absorbent materials securely fixed, if used?
- Do any oil absorbent materials require replacing, if used?
- Is any sediment/chemical monitoring required to comply with discharge consents?
- Are outfalls and pipe work clean and clear of litter etc?
- If a flow meter is required to monitor discharge or dewatered volumes what is the reading?

ACTION:

13.4 PROCEDURE 4 MATERIAL STORAGE

- First ask “do I need to store large volumes of potentially polluting material the site. Can I apply just in time delivered principals i.e. material be delivered to site in quantities that can be used on the day delivered, or delivered at a rate that prevents a large volume building up on site?”
- Consider whether potentially polluting materials can be eliminated from the activity for example work such as painting or stripping beams could be undertaken off site or alternative processes may be suitable.
- Use “*material safety data sheets*” (*COSHH Sheets*) to identify potentially polluting materials, this information will also identify how these materials should be stored safely.
- Make sure that appropriate spill response equipment is located near to the material should containment fail or material be spilled and ensure site staff know how to use it.
- Consider the correct disposal route for waste materials (Duty of Care), check to see if they can be reused or recycled but ensure they are stored safely on site prior to disposal. Cover skips to prevent litter being blown out. Label skips.
- Consider establishing a central store location away from sensitive areas of the site such as rivers, streams, and drainage or settlement facilities. Identify how pollution could occur and what measures should be implemented to reduce the likelihood of water pollution. Protect stores from flooding where required (e.g. if the site is near a river or on the flood plain).
- Ensure stores are adequately protected and secured against trespassers and vandalism. Regularly check to see what materials are in stock.
- Store drums, oil and chemicals on an impervious base and within a secure bund. Keep lids on. Always store containers upright unless using flow control taps for controlled pouring from barrels and drums.
- Raise the awareness of safe storage and disposal of material on site using the toolbox talk type training method.
- Train the site manager to give out instructions on the safe storage of materials to personnel booking out material from the store compound.
- Ensure topsoil and/or spoil heaps are located at least 10 m away from water courses (regulator may vary this distance), consider seeding them or covering with a tarpaulin to prevent silty runoff and losses due to wind. Consider constructing a silt fence at the base of the pile using a suitable geotextile.

13.4.1 Checklist for Procedure 4 Material Storage

Site/Location _____ Date _____

- Are all containers of materials e.g. oils, paints, chemicals etc stored in a bunded area
- Is/are the area(s) clearly marked?
- Are materials stored in suitable containers that are appropriately labelled with fitted lids, taps and tops in good condition?
- Are there control measures and/or spill response kits/material located near to bulk store, accessible and in appropriate quantities?
- Is material stored so as to guard against breakage or vandalism (vehicle movements, corrosion or theft)?
- Are stores protected against flood damage or inundation (e.g. if site within flood plain etc)?
- Is waste stored in a designated area?
- Is the waste storage area in good condition and contained to prevent rainwater infiltration?
- Are stockpiles causing silt runoff?
- Are stockpiles too steep and/or stored near drains or watercourses?

ACTION:

13.5 PROCEDURE 5 SILT

Things to consider when managing silt:

- The most common form of water pollution from construction is suspended sediments - more commonly known as silt water, muddy water or dirty water.
- Silt also carries other contaminants such as oil and chemicals.
- Silt pollution is easily identified by discoloration of the water.
- Do not pump silt water to watercourses.
- Do not strip more land than is needed.
- Divert clean water away from bare ground.
- Divert silt water away from drains and watercourses using sand bags for example.
- Consider alternative de-watering methods e.g. sump pumping
- Plan for the treatment of silt water when pumping out excavations or managing surface water runoff.
- Regularly check nearby water courses for silt pollution
- Silt can be removed by:
 - Settling out in settlement tank, pond or lagoon, AND/OR
 - Allowing it to infiltrate through a large area of grassy ground, geotextile filters, straw bales or a skip containing fine aggregate
 - Chemical treatment with flocculants (advice from a specialist and environmental regulator required).

Use a silt removal method which will cope with the volume of water, silt concentration and silt type (chalk, clay etc) - water should be kept as still as possible. Around two to three hours retention time is required to reduce suspended solids; finer materials will take longer to settle. Ensure that water flowing through these systems is moving slowly enough to allow the sediment to settle out and that the systems do not overflow.

Provide wheel wash facilities and/or methods to keep haul routes and accesses free from mud and dust to minimise silt runoff. Contain the water and dispose of it correctly.

13.5.1 Checklist for Procedure 5 Silt

Site/Location _____ Date _____

- Is there a regular check of water courses being done (if applicable)?
- Is there any visible sign of discoloration in watercourses (if applicable) at or near the site?
- Is water discharged from the site silt or discoloured?
- Is surface water runoff directly entering a watercourse or drain?
- Is any water treatment method (if applicable) effective?
- If a settlement tank is used is water moving too fast and/or is it overflowing?
- Are straw bales securely fixed, if used? Actions:

ACTION

13.6 PROCEDURE 6 FUEL & OIL

Things to consider when storing and using fuel or oil:

- Consider whether fuel storage is needed on site, how much is to be stored and how:
- Check whether the main contractor, if applicable, has fuel storage requirements, and ensure your procedures follow them.
- Risk assesses the fuel/oil storage location identifying potential routes for pollution should containment fail.
- Fuel/oil stores must be located away from the site drainage system and the edge of watercourses. If this is not possible, ensure adequate measures are identified to prevent or contain any spillage such as creating a fall away from any drainage grid or blocking drainage points.
- Fuel/oil stores must be located in an area away from vehicle movement to prevent collision.
- Fuel/oil storage must be sited on an impermeable base within a bund to contain at least 110 per cent of the maximum capacity. (See Environment Agency PPG 2 and 26 for a standard fuel storage design). All ancillary equipment (valves, hoses etc) should be contained securely within the bund when not in use. Ensure that tanks are properly labelled as to their contents and capacities.
- Keep a store of spill response equipment at the fuel facility and bowzers, if necessary locate a sign telling the operator what to do in the event of a spillage and where the nearest spill response kit is located (see the section on spill response for further advice).
- Consider protecting the fuel bund from rainwater - this can be achieved by building a scaffold lean-to or other appropriate sheeted or enclosed structure.
- Guard facilities against vandalism and theft, ensure that hoses are not vulnerable to being tampered with or cut for unauthorised access; the facility should be locked off when not in use.
- Use drip trays under all static plant such as pumps and generators and during refuelling from mobile plant and empty them regularly into an appropriately contained area (main fuel bund or designated bowser) for disposal off-site.
- Ensure that the facilities are checked on a regular basis to ensure any leaks or drips are fixed to prevent loss and pollution.
- Fuel/oil deliveries should be supervised by a designated person. Bulk fuel stores must be clearly marked as to their content to help prevent delivery personnel mixing fuel types. Check there is enough capacity in the tank before a fuel delivery.

Checklist for Procedure 6 Fuel & Oil

Site/Location _____ Date _____

- Is the bund in good condition with no cracks or evidence of leakage, particularly at corner points?
- Is the bund is free from excessive rainwater and debris build-up?
- Are all tank components (hoses, valves etc) contained within the bund?
- Are there any leaks from the hoses, joints or valves on the facility?
- Is the facility locked off when not in use?
- Is the fuel/oil facility appropriately labelled as to its content and capacity?
- Is the fuel/oil facility guarded against vehicle damage?
- Are spill response material and emergency instructions located nearby and readily accessible by the operator?
- Is the spill response material in good condition?
- Have spills been effectively managed, if necessary, including disposal of absorbent materials?
- Are drip trays in place beneath all un-enclosed plant?
- Do the drip trays need emptying / are they overflowing in rainy weather?

ACTION:

13.7 PROCEDURE 7 CONCRETE CEMENT & BENTONITE

Things to consider when using concrete, cement or Bentonite:

- Concrete, cement and Bentonite are highly alkaline and corrosive and can have a devastating impact on watercourses.
- Take particular care with all works involving production, transport and placement of concrete, cement or Bentonite especially if working near a river, stream or surface water drain and ensure operations are planned and supervised.
- Use methods to minimise grout loss during shuttered pours.
- Place covers over freshly poured concrete to prevent the surface washing away in heavy rain.
- Do not hose down spills of concrete, cement or Bentonite into surface water drains.
- Washout of concrete, cement or Bentonite mixing plant or ready-mix lorries and equipment should be carried out in a designated impermeable contained area.
- Washout water must not be allowed to flow into any drain or watercourse. If necessary protect nearby drains from receiving washout water.
- Try to reuse washout water as much as possible, and then dispose of it by tankering off site in accordance with Duty of Care or discharging to foul sewer with agreement from the sewerage undertaker.
- Washout water, surface water runoff and water from excavations may require adjustment of the pH in a lagoon prior to discharge due to the alkaline cement -obtain specialist advice from the environmental regulator as acid conditions can also have a serious effect on watercourses.
- If a concrete or Bentonite batching plant is used, recirculate the water used in it.
- Ensure Bentonite lagoons are adequately contained to avoid leakage.

13.7.1 Checklist for Procedure 7 Concrete Cement & Bentonite

Site/Location _____ Date _____

- Are measures being used to protect drains and watercourses from liquid concrete, cement or Bentonite?
- Are concrete Lorries washing out in the designated area?
- Is the designated area away from drains and watercourses?
- Is the washout being suitably contained?
- Does the washout area require pumping out to tanker (or foul sewer if agreement from sewerage undertaker is given)?

ACTION:

13.8 PROCEDURE 8 WORKING NEAR WATERCOURSES

Things to consider when working in or near watercourses:

- Working over or near to watercourses carries additional concerns due to the risk of pollutants directly affecting water quality.
- Avoid entry into water where possible. Stabilise routes used for construction traffic or construct a temporary bridge or culvert crossing.
- Plant working in or near the watercourse should be well maintained and regularly checked.
- Consider erecting barriers on crossings or around working areas to prevent excessive amounts of dust and spray entering the watercourse.
- An impervious bund (i.e. cofferdam) should be constructed around works in a watercourse to prevent water entering the area of works. Additionally, no water should be allowed to escape from the cofferdam into the watercourse during works.
- If working adjacent to a watercourse, ensure that a suitable method for containing any surface water is provided (e.g. cut off ditches and interceptors).
- Avoid locating cabins, containers, workshops, plant, materials stores and storage tanks on the floodplain of watercourses.
- The risk of fuel spillage is greatest during refuelling activities. No refuelling should be undertaken in, over, or adjacent to watercourses. Refuel plant in a designated area at least 10 m away from the watercourse.
- Consider using biodegradable oils when working in or near watercourses.
- Adequate stocks of absorbent materials, such as sand or commercially available spill kits and booms, should be available at all times. Establish spill response stations.
- Use of wet concrete and cement in or close to any watercourse should be carefully controlled. The use of quick setting mixes may be appropriate. Prevent concrete pumps, Lorries and skips from slewing over water while placing concrete.

13.8.1 Checklist for Procedure 8 Working near Watercourses

Site/Location _____ Date _____

- Is any material, plant, plant movement etc within 10 m "buffer zone" (environmental regulator may vary this distance) from edge of watercourse (where NOT undertaking works on the banks.)?
- If using a cofferdam to retain water, is it in good condition and working effectively?
- Is the watercourse silt or discoloured downstream of the works?
- Is there an oily sheen visible on water?
- Is enough emergency spill response material nearby?
- Is all staff aware of the location of spill kits and know how to use the kits properly?
- Is approach ways to the watercourse kept free from build up of mud?
- Are the banks or bed of the watercourse being affected outside the area of works due to water pumping or vehicle movement's etc?
- Are any spray, dust or other airborne materials entering the watercourse?

ACTION:

13.9 PROCEDURE 9 DEMOLITION

Things to consider when working on demolition sites:

- Identify all tanks and pipelines both above and below ground before work begins.
- Identify and mark out all existing live/redundant services (e.g. water mains, sewers and storm drains). Be aware of the routes for surface water, foul water, and trade effluent.
- Before removing or perforating tanks or pipelines check that all of their contents and residues have been emptied by a competent operator for safe disposal (Duty of Care). Pipes may contain significant quantities of contaminants, and should be capped, or valves closed to prevent spillage.
- Identify and label all drums and containers of waste materials.
- Consider establishing a bunded central store location for waste materials away from sensitive receptors such as watercourses, drainage or settlement facilities.
- Store drums, oils and chemicals on an impervious base and within a secure bund.
- Consider the correct disposal route for waste materials (Duty of Care), check if they can be reused or recycled but ensure they are stored safely on site prior to disposal.
- Cover skips to prevent litter being blown out. Label skips to distinguish general and hazardous (e.g. oily) wastes.
- Identify any contaminated ground and/or groundwater at the site. Ensure it is controlled and handled appropriately (Health and Safety, Duty of Care).
- If contaminated materials are encountered seek specialist advice before carrying on.
- Consider damping down the site to prevent dust blowing into watercourses. Prevent silt runoff due to damping down or rainfall from entering watercourses (see the section on silt).
- Ensure all plant and equipment is well maintained to prevent leakage and store away from watercourses.
- Ensure you have sufficient types and quantities of spill response equipment available on site.

13.9.1 Checklist for Procedure 9 Demolition

Site/Location _____ Date _____

- Have all underground tanks, pipes and services been located and their locations marked?
- Are tanks etc appropriately labelled as to their content and capacity?
- Is there any visible sign of leaking tanks or pipes etc?
- Is there any visible sign of contaminated ground or groundwater?
- Are all waste materials being stored in suitable labelled containers in designated area?
- Is dust being generated by site activities? If so, is a bowser or other source of water available?
- Is dust or other materials entering a watercourse, (if applicable)?
- Is runoff from the site adequately prevented from entering watercourses or soakaways?
- Are spill response materials and emergency instructions located nearby and readily accessible?

ACTION:

Date

Consider a professional 24 hour call-out clean-up service. Names and numbers of companies are available from the local environmental regulator.

Company Name

Address

Telephone No

Emergency No

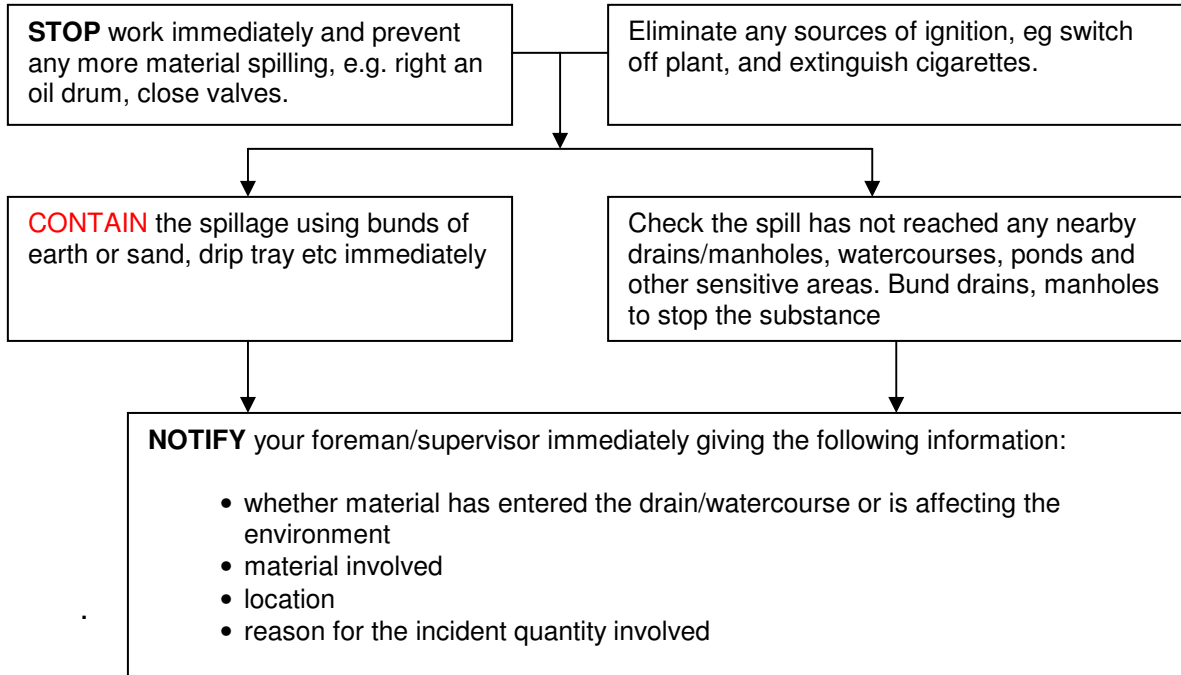
- Ensure you have sufficient types and quantities of spill response equipment available on site. Keep spill kits where spills may occur, e.g. at refuelling points or on plant working near a watercourse.
- The material safety data sheets and COSHH assessments will assist in identifying appropriate spill measures for dealing with hazardous materials.
- Dispose of used spill response material appropriately, e.g. oily granules or pads should be bagged up and placed in the designated hazardous waste skip.

13.10.1 Checklist for Procedure 10 Spill Response

Site/Location _____ Date _____

SPILLAGE RESPONSE PROCEDURE

What to do if you find a spillage of any substance on site.



SPILLAGE TYPE
MAJOR: Cannot be controlled; pollution has entered, or could enter drain or watercourse. Report to Site / Project Manager immediately.
MINOR: Can be controlled; pollution has not entered, and cannot enter a drain or watercourse.

FOREMAN / SUPERVISORS INSTRUCTIONS
 MAJOR: Contain and report immediately to contact detailed below.
 MINOR: Clean up immediately using appropriate materials (granules, pads etc).

CONTACT NAMES AND NUMBER
 Hurst Setter Associates: 01283 569 625
 Environment Agency,
 Scottish Environmental Protection Agency,

APPENDIX A ENVIRONMENTAL INCIDENT REPORT

Site Address		Date of Incident					
		Site Tel No.					
Site Manager							
HS&E Director Informed		Yes/No	HS&E Advisers Informed		Yes/No		
1. Brief description of incident or near miss incident							
2. Details of corrective action taken and when it was completed							
3. Is more action required? If yes give details							
4. Details of other parties informed of this incident							
5. Summary of damage caused							
6. If the incident was a complaint, has the complainant been contacted? If so by whom & when Give details							
7. Cause Analysis - Site Manager (or more senior person) to indicate root cause of the incident.							
8. Details of person completing this report							
Name (Print)		Position		Date			
Report copied to:							
Site Manager (Site Files)	<input type="checkbox"/>	Contract Manager	<input type="checkbox"/>	HS&E Director	<input type="checkbox"/>	HS&E Advisers	<input type="checkbox"/>

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APPENDIX B ENVIRONMENTAL COMPLAINTS LOG

Project Name _____

Project

Manager _____

Date	Name and address of Complainant	Nature of Complaint	Time	Corrective / Containment action	Signature

APPENDIX C OBJECTIVES & TARGETS