Health and Safety Policy & Arrangements

Geotechnical and Environmental Associates Ltd
Widbury Barn
Widbury Hill
Ware, HERTS
SG12 7QE
Tel: 01727 824666
E-mail – mail@gea-ltd.co.uk
Web – www.gea-ltd.co.uk

In conjunction with

Alban Safety Ltd
Health, Safety & Training Consultants
Gladstone House
2B Freshfield Road
Formby
L37 3JB
TEL: 0800 567 7233
MOB: 07584 637274
E-mail: lroberts@albansafety.co.uk
Web: www.albansafety.co.uk

DOCUMENT CONTROL AND REVISION

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3	January 2019	1.22 Fire policy and procedures Appendix A	Update fire safety equipment checks Update environmental section and GDPR 2018

GLOSSARY OF ACRONYMS

GEA	-	Geotechnical and Environmental Associates Ltd
CHSL	-	Company Health & Safety Consultants
HSE	-	Health and Safety Executive
HASWA	-	The Health & Safety at Work etc. Act 1974
CDM 2015	-	The Construction (Design & Management) Regulations 2015
SMM	-	Site Management Manual

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1.1 PREFACE

Geotechnical and Environmental Associates Ltd (GEA) is an independent specialist providing a high-quality ground investigation and geotechnical and geoenvironmental consultancy service to the property and construction industries. GEA's team of experienced and highly qualified geotechnical and geoenvironmental engineers provides a complete service, from Phase 1 desk studies, through ground investigation, interpretive reporting, analysis and monitoring, to final validation where necessary.
We work for a range of clients, including multinational organisations, property developers, funding institutions, major retailers, educational establishments, local authorities, housebuilders, housing associations and private individuals. Our expertise is applicable to a wide range of projects, including investment acquisitions and divestures, new housing developments, domestic subsidence problems, complex city-centre developments and major contaminated land remediation schemes.

From here on in Geotechnical and Environmental Associates Ltd may also be referred to as GEA or 'the Company'.

This document is the Health & Safety Policy and Procedures for works carried out by, or on behalf of, GEA. The document contains the procedures that need to be followed to ensure the continued health, safety and welfare of its employees, operatives and contractors whilst continuing to comply with the legislation that governs the work we undertake.

This is a comprehensive document that comprises of the following three sections:

- The Health & Safety Policy Statement.
- The Organisational Duties.
- The Companies Policies and Procedures.

Health & Safety Policy Statement – A general statement of the intentions of the Managing Director in regards to health and safety. The policy statement is signed and dated by the Managing Director therefore indicating that health and safety is highly regarded and that commitment comes from the 'top'.

The Organisational Duties – This section commences with a chart showing the safety structure of the company that is then followed by a list of individual responsibilities of personnel and contractors.

Procedures or 'Arrangements' – This section will contain procedures that need to be followed by all levels of management to ensure the company complies with current legislation and reduce the risk to all persons who may be affected by the works carried out on its behalf.

In order to reduce accidents and incidents, all personnel and contractors must adhere to the policies whilst carrying out the company's undertakings.

Where help is needed, the company engages the services of our appointed Health & Safety Consultants, for safety auditing, site safety inspections, advice, training and should the need occur, to investigate or advise on site accidents.

As Managing Director of GEA Mr Steve Branch accepts that he has overall responsibility for health and safety and therefore takes on the responsibility of Director responsible for health & safety.

1.2 HEALTH & SAFETY POLICY STATEMENT

In Compliance to (interalia): The Health & Safety at Work etc. Act 1974, The Management of Health & Safety at Work Regulations 1999, The Workplace (Health, Safety & Welfare) Regulations 1992 and The Health & Safety (Consultation with Employees) Regulations 1996.

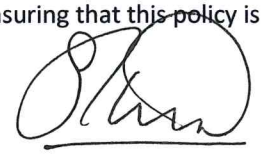
The Managing Director at Geotechnical and Environmental Associates Ltd regards health & safety as an extremely important priority for the company. GEA are committed, through strong visible leadership and engagement with the workforce, in the promotion and achievement of safe and healthy conditions and the formal assessments of our performance to create an incident free environment where accidents are eliminated and health is protected. This applies for all employees, contractors and members of the public who may be affected by the activities of the company.

Every employee has an obligation to take reasonable care for their safety and for the safety of other people who may be affected by their acts or omissions. They are also obliged to co-operate with their employer in respect of matters concerning health and safety. The involvement and co-operation of employees at all levels is essential for the effective implementation of this policy.

GEA shall achieve this by:

- Providing adequate control of health and safety risks arising from our work activities.
- Providing a safe working environment.
- Consulting with our employees on matters affecting their health and safety.
- Enable employees and contractors to raise issues relative to Health and Safety
- Encouraging positive participation from our employees to promote health and safety standards.
- Providing and maintaining safe work equipment.
- Ensuring the safe handling and storage of substances.
- Provide appropriate welfare facilities for all employees.
- Provide such information, instruction, training and supervision as is necessary to enable the safe performance of work activities.
- Ensuring all employees are competent to carry out their tasks and provide adequate training to cover any skills gaps.
- Providing new employees with adequate induction training prior to commencing work.
- Preventing accidents and work related ill-health.
- Maintaining safe and healthy working conditions.
- Promote and encourage mutual respect for people involved in our work activities and also in the communities in which we work.

To assist us in meeting our legal and moral requirements, we have appointed Company Health & Safety Consultants Alban Safety Ltd to provide advice on all matters affecting the health, safety & welfare of those persons coming under our control and all others who may be affected by our undertaking. Our Managing Director is responsible for the implementation, monitoring and adherence to our Policy. GEA will ensure adequate resources are made available to ensure our legal obligations for health and safety are not only met, but also exceeded. GEA Managing Director and Director responsible for health & safety Mr Steve Branch is responsible for ensuring that this policy is regularly reviewed and up to date.

Signed:  Date: 9 January 2019

Steve Branch
Managing Director
Geotechnical and Environmental Associates Ltd

The above policy is displayed on the premises in addition to its inclusion in this manual and will be reviewed and updated at least annually.

1.3 ENVIRONMENTAL POLICY STATEMENT

Geotechnical and Environmental Associates Ltd have agreed that environmental matters are to be recognised as a Management responsibility, which shall be equal to that given to health and safety considerations. We recognise our responsibilities towards protecting and preserving the environment and will encourage all persons associated with their business activities to adopt a similar approach.

We will comply with all appropriate legal requirements. In the absence of legislation, we will undertake activities in a manner consistent with industrial practices to meet the highest standards through implementation of this Policy and the procedures contained herein. In particular, we will endeavour to:

- Pay close attention to the handling storage and transportation of substances or materials that may be hazardous to the environment.
- Pay particular attention to hazardous or harmful emissions such as fumes, noise and dust whilst carrying out our undertakings.
- Reduce, reuse or arrange for the careful disposal of wastes that may be produced during operations carried out by the Company.
- Conserve energy through minimising consumption and maximising efficiency.
- Continually develop an environmentally aware approach within the Company in order to play an important part in reducing the harm caused within the construction industry.
- Promote a sense of responsibility towards the environment by management and staff whilst carrying out their daily duties on behalf of the Company.
- Work alongside Clients and other contractors in fulfilling their legal obligations towards the environment.
- Seek to establish a solid relationship and co-operate fully with the relevant Statutory Undertakers i.e. Environment Agency and Local Authorities.

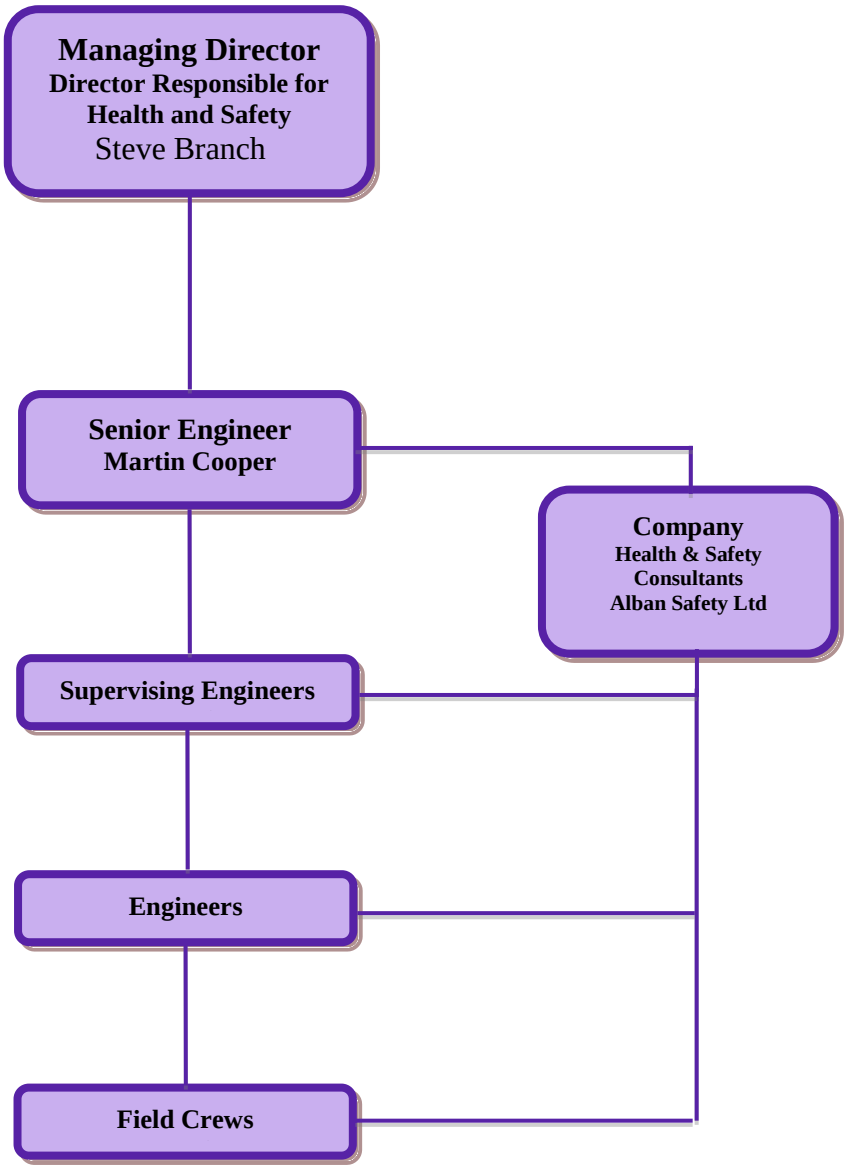
It is the duty of The Director and Senior Engineer to implement the requirements of this policy document. Every contractor is required to take all reasonably practicable steps to ensure compliance with the procedures laid out in this document.
As Managing Director I will take responsibility for ensuring that this Policy and the procedures contained within are regularly reviewed. Subsequent amendments will be notified to all relevant employees by means of bulletins and toolbox talks.

Signed: Date: 9 January 2019

Steve Branch
Managing Director
Geotechnical and Environmental Associates Ltd

The above policy is displayed on the premises in addition to its inclusion in this manual. The EMS Policy will be reviewed and updated each year to redirect our focus on aspects that are not yet under good control and to ensure the system stays appropriate to the size of our company and its activities. This will be available to the public on request. This is also available to persons working on our behalf and will be communicated to our clients.

ORGANISATION



1.4 DUTIES OF MANAGING DIRECTOR

The Managing Director has overall responsibility for the health, safety, and welfare of employees and others affected by the Company's activities.

This responsibility extends to the following:

1. Be aware of the employer's legal duties under the Health & Safety at Work etc Act 1974 and all supporting Regulations made under Section 15 of the Act.

2. Prepare, and keep up to date, a Statement of the Company's Policy for Health, Safety & Welfare and ensure that it is brought to the notice of all employees / operatives.

3. Initiate the Company Health & Safety Policy for the prevention of injury, ill health, damage and wastage and set initiatives to eliminate accidents. Encourage proper reporting, investigation and costing of injury, ill health, damage and loss. Promote action to preclude recurrence and initiate analysis to discover accident trends.

4. Ensure that only competent persons are appointed to carry out work on behalf of the company and ensure that are fully informed of the health and safety issues affecting their task and place of work. Ensure arrangements are in hand to regularly review training to ensure, as far as practicable, that all persons are aware of current statutory requirements.

5. Ensure that adequate time is allowed for planning including the carrying out of specific risk for the Company's activities. Ensure that hazards with the potential to cause harm are identified and avoided or adequately controlled.

6. Monitor the Company's activities to ensure that they are carried out as planned and that the requirements of the Company's procedures as laid down in the Health & Safety Policy and any stipulated Safe Systems of Work are observed.

7. Ensure that adequate time is given for induction training and the communicating of toolbox talks.

8. Reprimand any member of staff for failing to discharge satisfactorily their responsibilities under current legislation and the requirements of this document.

9. When visiting site, set a personal example by wearing the appropriate personal protective equipment and following any relevant procedures.

10. Discuss safety audits with the Company's Safety Consultants and review Company procedures if necessary.

11. Ensure that adequate resources are available to meet legislative and Company requirements on health, safety and welfare.

12. Liaise with the company safety advisers (Company Health & Safety Consultants), including reviewing site inspection reports and taking charge of problems which cannot be solved at site level, especially when this involves communication with any sub contractors.

1.5 DUTIES OF SENIOR ENGINEERS

The health and safety responsibilities of our Senior Engineers are to:

1. Be aware of the employer's legal duties under the Health & Safety at Work etc Act 1974 and all supporting Regulations made under Section 15 of the Act.

2. Initiate the Company Health & Safety Policy for the prevention of injury, ill-health, damage and wastage and set initiatives to eliminate accidents. Ensure that all accidents are reported as required under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrence Regulations) 2013.

3. Ensure that specific risk assessments are carried out within your areas of responsibility. Ensure that hazards with the potential to cause harm are identified and avoided or adequately controlled. High and medium risk activities to be addressed where required by the submission of a method statement or safe system of work. Ensure that the method statements and risk assessments are regularly reviewed to ensure they are still valid. Where changes are required, make those changes then communicate them to those involved.

4. Ensure that an assessment has been carried out of any substance likely to cause a hazard or risk to health and that appropriate control measures, training, instruction, protective clothing etc. have been provided.

5. Ensure that an assessment has been carried out of any noisy process or plant hazardous to health and that appropriate control measures, training, instruction, protective clothing etc., have been provided.

6. Ensure all registers and site documentation are issued and kept up to date in accordance with the site management manual (SMM) and that, at the end of the contract, the SMM is returned to head office for filing.

7. Ensure that supervising engineers and operatives under your control are aware of their responsibilities for safe working and that they are not required or permitted to take unnecessary risks.

8. Ensure that site personnel are only given tasks for which they are competent to do and that they are fully informed of the health and safety issues affecting the task and place of work.

9. Give toolbox talks and the Amery induction to all personnel under your responsibility. Determine when additional toolbox talks are required then write and deliver them as necessary.

10. Ensure that all information available relating to underground services on the site is obtained and that services are located, marked and plotted accurately before excavation/bore hole work starts. Do not allow mechanical excavation within limits of the underground service laid down by the service authority.

11. Check that all machinery and plant on site, including power and hand tools, are maintained in good conditions and that all temporary electrical equipment does not exceed 110 volts unless used as fixed installations.

12. Ensure that the relevant permits to work, as required by the Principal Contractor, have been obtained and all requirements complied with. Ensure the permit is returned at the completion of the work and is signed off by the Principal Contractor's representative.

13. Ensure that the appropriate protective clothing is issued when required and that records are kept of issue in the 'Protective Clothing & Equipment Issue Register' (ensure an adequate supply of protective clothing for visitors).

14. Reprimand any member of staff for failing to discharge satisfactorily their responsibilities.

15. When visiting working areas, set a personal example by wearing the appropriate personal protective equipment and following any relevant procedures.

1.6 DUTIES OF SUPERVISING ENGINEERS

The main health and safety responsibilities of our site management are to:

1. Be aware of the employer's legal duties under the Health & Safety at Work etc Act 1974 and all supporting Regulations made under Section 15 of the Act.

2. Initiate the Company Health & Safety Policy for the prevention of injury, ill-health, damage and wastage and set initiatives to eliminate accidents. Ensure that all accidents, incidents and near misses are reported to the Project Manager.

3. Ensure that the specific risk assessments for the works you are supervising are suitable and sufficient. Ensure that the identified control measures have been put in place and are being followed

4. Ensure all registers and site documentation kept up to date as appropriate and that, at the end of the contract, they are returned to head office for filing in case they are required for future reference.

5. Ensure all persons for whom you are responsible are competent to carry out their work and are fully informed of the health and safety issues affecting their task and place of work.

6. Ensure no-one is permitted to operate any work equipment unless they have received adequate training or hold a relevant certificate of competence.

7. Ensure that all new employees / operatives coming under your responsibility attend a site safety induction and are informed of any site rules that apply to them prior to carrying out any works.

8. Ensure that all persons under your responsibility are in possession of the required personal protective equipment as identified by the task risk assessment and are aware of their obligations to wear it.

9. Keep a safe and tidy site in accordance with the requirements of the Health & Safety Policy.

10. Reprimand any member of staff for failing to discharge satisfactorily their responsibilities.

11. Set a personal example on site by wearing the appropriate personal protective equipment and following any relevant procedures.

1.7 DUTIES OF ENGINEERS/FIELD CREWS

Every employee must take reasonable care of the health and safety of themselves and others who may be affected by their acts or omissions at work. We regard employees as any person who is employed by GEA irrespective of the method of payment made to that person. This includes direct employees, labour-only people, and those holding a CIS Card.

All staff are responsible for the implementation of their part of this policy, and the procedures contained within. All staff should in particular:

1. Be fully aware of the Company Health & Safety Policy, it's procedures and requirements

2. Observe all safety rules, requirements and notices at all times.

3. Ensure that appropriate protective equipment and clothing is used and kept in good working order. Any equipment that is becomes lost, damaged or worn out is to be reported to the Director's Supervising Engineer and replaced as necessary.

4. Ensure that all work equipment that you are responsible for is in good order and that any safety devices provided are fitted, properly adjusted and used. Any defects identified are to be reported to the Supervising Engineer immediately.

5. Ensure that all accidents, incidents, injuries, damage, defects or dangerous occurrences are reported promptly to either a Senior Engineer or Supervising Engineer.

6. Co-operate with the Company in complying with the Health and Safety requirements set out in legislation, guidance, and within this Policy.

7. Take an active role in ensuring and improving the health and safety at GEA.

8. It is important that you feel able to ask questions about health and safety, and that you feel capable of doing the task you are doing in a safe manner. If in doubt, inform your immediate Supervising Engineer. DO NOT TAKE CHANCES.

1.8 DUTIES OF CONTRACTORS

Any health and safety problems arising from the work of subcontracted workers can be prevented where the work of these groups can be adequately controlled. In addition to our general arrangements described in this Policy, we require that:

1. All Contractors will be expected to comply fully with GEA Construction's Company Policy for Health, Safety and Welfare and must ensure their own Company health & safety Policy is made available on site whilst work is carried out.

2. All work is to be carried out in accordance with the relevant statutory provisions and taking into account the safety of others on the site and the general public.

3. Contractor's employees are not permitted to alter any scaffold provided for their use or use or interfere with any plant or equipment on the site unless authorised.

4. All work equipment brought onto site by Contractors must be safe and in good working condition, fitted with any necessary guards and safety devices and accompanied with any relevant certificates. The Contractor must provide information and assessment on noise levels of work equipment or operations before work commences.

5. No power tools or electrical equipment of greater voltage than 110 volts may be brought onto site. All transformers, generators, extension leads, plugs and sockets must meet the relevant British Standards for industrial use, and be in good condition.

6. Any injury sustained or damage caused by Contractor's employees must be reported immediately to GEA Construction's Director's or Supervising Engineer immediately.

7. Contractor's employees must comply with any safety instructions given by this Company's Site Representative.

8. Any material or substance brought on site which has health, fire or explosion risks must be used and stored in accordance with Regulations and current recommendations and that information must be provided to any other person who may be affected on site.

9. Contractors are particularly asked to note that work places must be kept tidy and all debris, waste materials etc. cleared as work proceeds.

10. A detailed Method Statement and Risk Assessment will be required from Contractors. The Method Statement must be agreed with our site management before work begins and copies made available on site so that compliance with the agreed Method Statement can be maintained.

1.9 DUTIES OF DRIVERS OF COMPANY VEHICLES

1. Make sure your driving licence is up to date and a copy has been given to your first line Supervising Engineer. Report any accident or damage, however minor, to the Managing Director immediately. Ensure any traffic violations you are involved in which could result in you being prosecuted, are reported in the first place to your immediate Supervising Engineer and then to the Managing Director.

2. Ensure your vehicle is serviced in accordance with the manufacturers' requirements. Make regular inspections of your vehicle for obvious defects. Check lights, tyres, oil, water, windscreen wipers and washer reservoir, etc. at least every week.

3. When visiting construction sites, park in the designated parking area and keep to site speed limits and other site rules as required. Always report first to the site office or a site Supervising Engineer before travelling around any site.

4. Drive in accordance with Road Traffic Legislation and the Highway Code at all times and be particularly careful when driving on sites, to consider the conditions of temporary access roads or roads that are under construction and being used for access purposes.

5. Report all accidents or damage, however minor, to the Directors.

6. Ensure that any load on your vehicle is well secured or covered if taking onto the highway; also that your vehicle is not overloaded or loaded in such a way as to affect the handling of the vehicle.

7. Check that any necessary signs, vehicle lights, indicator lights, revolving lights or reversing alarms are clean and can be seen easily and lights and alarms are working properly.

8. Goods (e.g. tools and equipment) will be carried in a secure manner having due regard to their hazardous nature and will be carried in accordance with the instructions issued by the Company.

9. Carriage of passengers other than in seats fitted for that purpose and in a safe and proper manner is forbidden and will be subject to disciplinary procedure. It is a breach of the law and could invalidate the Company insurance policy in the event of an accident.

10. Do not drink alcohol or take medication, which could affect your driving ability, before driving a vehicle. Do not drive when you feel drowsy - this is now an offence.

11. Do not use your Mobile Phone whilst driving unless used with a hands-free kit. However, it is better to pull over to take the call or turn it off and take messages when you can.

12. Do not smoke in any company vehicles.

ARRANGEMENTS

Introduction

The Health & Safety at Work etc. Act 1974 *(HASAWA)* requires that arrangements are made, to provide for a safe system of work for all aspects of our undertakings. These arrangements have been developed to cover the company's activities as a whole and must be used when developing systems of work in offices or on sites.

Arrangements or Control Measures?

We have included in this section specific known "Arrangements" to combat hazards that are well established in our line of business therefore complying with the requirements set out in the HASAWA. However, more recently the term arrangements has predominantly been replaced by the term "Control Measure" Either term is acceptable however, "control measure" is a clearer definition of what is required at work when preventing or controlling known hazards in the workplace.

Generic Control Measures:

No two jobs are the same; all have something different about them and therefore it is essential to understand that the Control Measures in this section may have to be made more specific following completion of an individual task risk assessments *as required under The Management of Health & Safety at Work Regulations 1999* to take into account the environmental or other more specific site requirements. When using this section therefore, first check site conditions and any other restrictions that may be imposed due to the environmental circumstances. It is important also to take into account other considerations such as prevailing weather conditions, other people working nearby or other persons having access to or from the area that your works are to be undertaken, this includes members of the public. All these factors can alter what is to be considered when carrying out the on-site 'Risk Assessment' and the 'Control Measure' to be used.

1.10 ACCIDENT REPORTING AND RECORDING

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)

1.10.1 Introduction

The importance of accident, incident and near miss recording, reporting and response cannot be over-stressed. The necessity arises from two fundamental requirements:

a) only if every accident, incident and disease is reported can action be taken to prevent recurrence;

b) a record should be filed in case the accident needs to be reported to the Health and Safety Executive or the accident results in a claim for industrial injury benefit or a claim against GEA.

1.10.2 Near Miss Reporting

A near miss is an incident that has occurred but not resulted in injury or damage. The company will run a near miss system on a 'No Blame Culture' therefore encouraging personnel to report hazardous occurrences that may result in injury or damage. The importance of investigating near misses is to enable measures to be taken to prevent a recurrence which may result in injury or damage.

Where there is a near miss, the person identifying it is to complete the relevant form and pass it onto the Senior Engineer/Supervising Engineer who will take the necessary action to prevent the 'near miss' becoming the next accident.

The Senior Engineer/Supervising Engineer is then to complete the relevant part of the near miss form to record the actions taken. On sites, the near miss report is to be filed in the Site Management Manual, in the offices it is to be given to the Office Manager.

1.10.3 Minor Injuries

All minor injuries reported by employees / operatives are to be entered into the accident book. Where the accident occurs on site and the Principal Contractor wants their accident book completed, a record must still be mad in the GEA accident book unless a copy of the original entry is taken.

1.10.4 Lost Time & Over 7 Day Accidents

Where an employee suffers a lost time accident, The Senior Engineer must be informed and kept up to date with the proposed date of returning to work. An accident investigation will need to be carried out by the injured persons manager to determine the causes so that measures can be put in place to prevent a recurrence.

Where the employee does not return to work for more than 7 days, not including the day of the accident, the Company Health and Safety Consultants will be informed and, as directed by the Director, will carry out the investigation

1.10.5 Specified Injuries

Where an employee, operative or contractor suffers a major injury, or is taken to hospital with a suspected major injury, the Directors are to be informed immediately. These will then in turn inform the Company Health and Safety Consultants who will carry out an investigation as directed.

Nothing is to be moved in the accident area unless instructed by the Directors or where it would otherwise put people at risk to leave it. If the accident area has to be disturbed, where it is feasible, take photographs or make a sketch first as this may help with the investigation. Major injuries are injuries such as:

- Fractures (not to fingers or toes)
- Amputation of an arm, hand, finger, thumb, leg, foot or toe
- Any injury likely to lead to permanent loss of sight or reduction in sight in one or both eyes
- Any crush injury to the head or torso, causing damage to the brain or internal organs
- Any burn injury (including scalding) Which:
  - covers more than 10% of the whole body's total surface area or
  - causes significant damage to the eyes, respiratory system or other vital organs
- Any degree of scalping requiring hospital treatment
- Any loss of consciousness caused by head injury or asphyxia
- Any other injury arising from working in an enclosed space

1.10.6 Dangerous Occurrences

Dangerous occurrences must be reported to The Senior Engineer immediately. These will then notify the Company Safety Consultants. The area must not be disturbed unless the Directors specifies so, or to prevent further danger.

1.10.7 Disease

Any written diagnosis received from a doctor (e.g. medical certificate stating the type of industrial disease.) must be forwarded to the Directors immediately, together with a description of the type of work done by the person concerned to enable an investigation to take place.

The company Health and Safety Consultants will then be contacted to advise whether it needs reporting to the HSE under RIDDOR.

1.10.8 Fatal Accidents

In the event of a fatal accident, the Directors will be notified immediately. The Directors will then notify the Company Health and Safety Consultants.

Accidents resulting in death shall be reported concurrently to the local Police. **Do not** disturb the scene of the accident any more than necessary to make it safe for others to carry out an investigation (see below).

1.10.9 Notification to the Health & Safety Executive (H.S.E)

In cases of death, major injuries and dangerous occurrences, you must notify the enforcing authority without delay, most easily by reporting online. Alternatively, you can telephone 0845 300 9923.

Cases of over-seven day injuries must be notified within fifteen days of the incident, using the appropriate online form (F2508).

Cases of disease should be reported as soon as a doctor notifies you that your employee suffers from a reportable work-related disease using the online form Report of a case of disease (F2508A).

Telephone

All incidents can be reported online but a telephone service is also provided for reporting fatal and specified injuries **only** - call the Incident Contact Centre on 0845 300 9923 (opening hours Monday to Friday 8.30 am to 5 pm).

Reporting out of hours

The HSE and local authority enforcement officers **are not an emergency service**.

More information on when, and how, to report very serious or dangerous incidents, can be found by visiting the HSE ways to contact HSE webpage. If you want to report less serious incidents out of normal working hours, you can always complete an online form.

Paper forms

There is no longer a paper form for RIDDOR reporting, since the online system is the preferred reporting mechanism. Should it be essential for you to submit a report by post, it should be sent to:

RIDDOR Reports Health and Safety Executive Redgrave Court Merton Road Bootle Merseyside L20 7HS

1.10.10 Dealing with Casualties

Do not move a casualty who cannot move himself unless the casualty is in imminent danger. The Supervising Engineer must ensure that the casualty is dealt with as required by a qualified First-aider until medical help arrives or they are taken to hospital.

1.10.11 Emergency Services

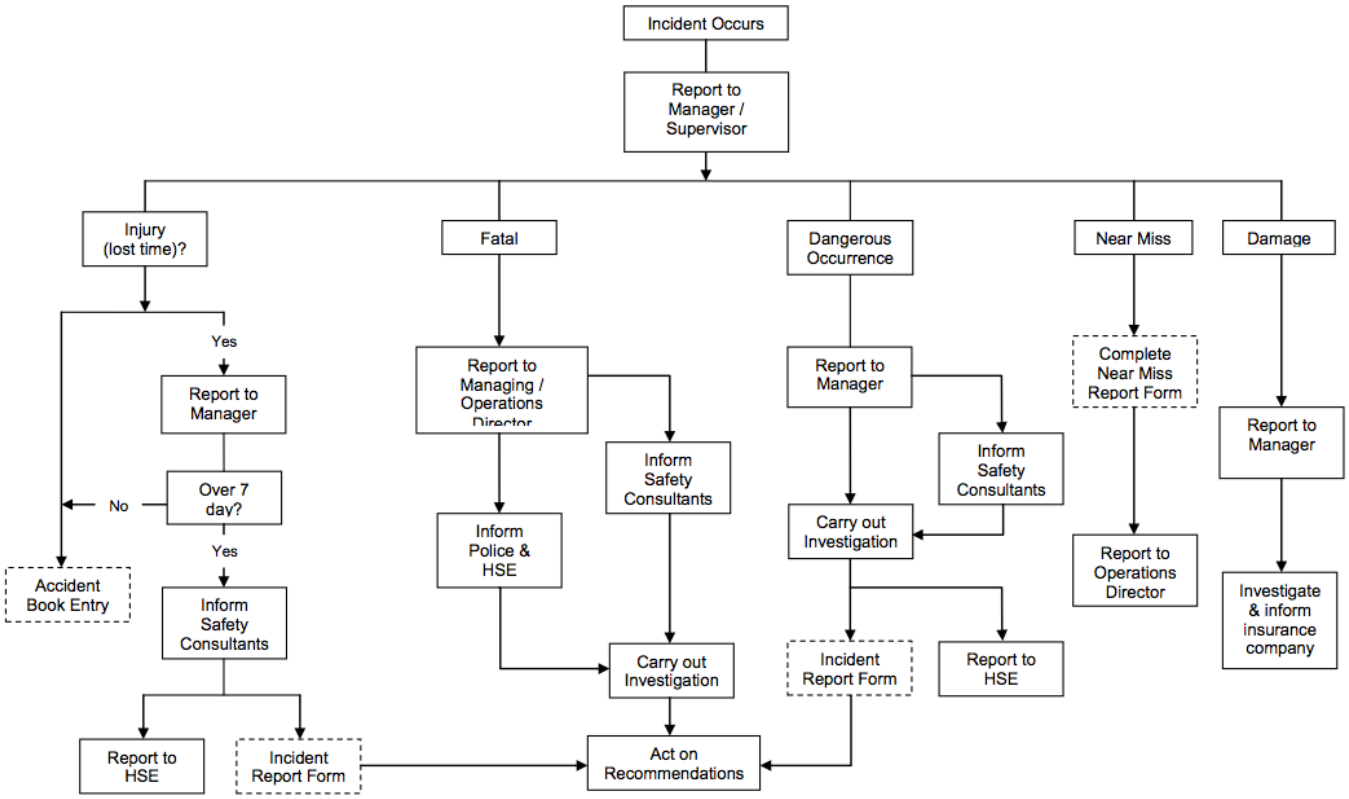
The Supervising Engineer must ensure that the emergency services are contacted immediately in the case of serious injury. Where applicable, the Directors will ensure that the Client is advised of the

circumstance of the incident and the incident reported to the Client's / Principal Contractor in accordance with their site rules.

1.10.12 Accident area

The accident area should be cordoned off and not disturbed any more than necessary (to facilitate safe removal of injured persons) until the accident investigators, i.e. the HSE, Police or our Safety Consultants, have carried out a full investigation. Do not clear away any evidence until given the all clear by the Safety Director.

1.10.13 Accident flow chart



1.11 ALCOHOL AND DRUG ABUSE

1.11.1 Introduction

The Company has a legal and moral duty to ensure the well being of its employees and contractors whilst carrying out work on its behalf. This control measure aims to assist Directors and Supervising engineers to identify and address any drugs or alcohol related issues, which may have an actual or potential adverse effect for individuals, their families, colleagues and in some circumstances the general public.

1.11.2 The Scope of the Policy

The Company requires that its employees and contractors are fit to carry out the work on its behalf and not under the influence of drugs or alcohol whilst at work. This policy applies to all persons, whether directly or indirectly employed.

1.11.3 Principles

The Company will ensure:

- That all employees and contractors are aware of the Drugs and Alcohol Policy;
- All persons will be treated fairly and equally;
- That every persons dignity will be respected and all cases treated with confidentiality;
- That all circumstances relating to inappropriate use of drugs or alcohol will be taken into account;
- That advice from Occupational Health experts will be sought as necessary;
- That all employees experiencing ill health as a result of drug or alcohol abuse are referred to their own GP, or are advised where alternative medical help can be obtained;
- Before dismissal for misconduct under this policy is considered, employees shall be given the opportunity to demonstrate their willingness to comply with the company health and safety procedures together with a commitment of their future conduct;
- All options are explored and considered through discussion with the employee;
- That all employees have a right to be represented or accompanied in such discussions by a person of their choosing; and
- That no person's safety is put at risk due to the abuse of drugs or alcohol of another.

1.11.4 Employees Responsibilities

The employee must:

- Co-operate with the company in recognising and resolving a drug and / or alcohol problem that is affecting their work.
- Provide, at random, a sample drug or alcohol 'proprietary sample test' as may be used by the company.
- Attend a medical examination if required by the company.

1.11.5 Procedures

- If an employee presents themselves for work under the influence of drugs and / or alcohol and are not able to carry out their duties in a proper, fit and safe way they will not be allowed to commence or continue their work.
- Under these circumstances, employees will be suspended without pay and not allowed to return until such time as they are in a competent state to do so. In addition, such an occurrence may generate a disciplinary investigation;
- An employee who suspects that they may have a drugs and/or alcohol problem should in the first instance discuss the matter with their Supervising Engineer. Alternatively, referrals can be made on the employee's behalf by a work colleague where an individual feels unable to make an initial approach, provided the individual agrees with this action;
- Alternatively, employees may contact their 'Employee Representative for Health & Safety' or a Trade Union Representative who may, provide them with contacts who can offer offsite professional counselling service;
- Any person who is concerned an individual may have a drug and/or alcohol problem should first discuss this with the employee
- Where it is clear there is a problem, then advice should be sought from the Managing Director who shall consider the most appropriate action required;
- Should an employee require an extended period to attend such treatment, the company may have to consider future employment prospects;
- Drug and/or alcohol dependency uncovered during the course of *disciplinary procedures shall be dealt with the utmost discretion and supported by Company policy.

1.11.6 Identifying drug and/or alcohol abuse (Key indicators)

No single characteristic exists to identify drug and/or alcohol abuse however, the following characteristics, especially when occurring in combination, or as a pattern over a period of time, may indicates the presence of an drug and/or alcohol related problem. It should be noted that items mentioned below could be due to causes other than drug and/or alcohol related abuse not mentioned here:

- **Absenteeism** – frequent and unexplained absences, excessive sick leave, excessive lateness, leaving work early, frequent trips to the bathroom;
- **High accident rate** – frequent injuries, careless handling of equipment;
- **Poor work performance** – fluctuations in productivity, unreliability, difficulty in concentration, memory slips, telling lies about performance, improbable excuses for poor work, reluctance to accept responsibility;
- **Misconduct** – aggressive behaviours, falling asleep;
- **Changes in personality** – fluctuating relationships with colleagues, irritability, mood swings, lethargy, tendency to blame others, changes in attitude to authority, over sensitivity to criticism, shinning company;
- **Other signs** – smelling of alcohol, facial flushing, blurry eyes, hand tremor, unkempt appearance, frequent boring of money.

***Disciplinary Proceedings**

Disciplinary proceedings shall be in accordance with current employment legislation. Likewise, the Directors shall deal with Health & Safety violations in accordance with company disciplinary procedures.

1.12 ASBESTOS

The Company does not deal with asbestos within their normal day to day operations. However, there may be times when, in the carrying out of our normal day to day works, that our employees, operatives or contractors come across asbestos containing materials (ACM's). It is not uncommon to discover ACM's when carrying out excavation work or bore holing.

The Senior Engineer/Supervising Engineer will liaise with the Principal Contractor, prior to any works starting on site, to ascertain whether any type of asbestos is likely to be present on the site. Prior to commencing any contracts, any relevant pre-construction health and safety information will be obtained from the Principal Contractor. If details provided by the Principal Contractor are inconclusive, then arrangements will be made to take and analyse samples of any materials which are suspected to be ACM's.

All information on the presence, or possible presence, of ACM's along with any working methods and control measures will be issued by the Senior Engineer to the Engineers before work starts.

The company will ensure that all persons, working on its behalf and who may be likely to encounter asbestos containing materials, are adequately trained. In all cases if any ACM's are identified, employees, operatives and contractors are to be informed that work is to cease immediately and the Supervising Engineer informed. The Supervising Engineer is then to inform the Senior Engineer who will instigate an investigation and take necessary action.

1.12.1 Safe system of work

Asbestos in its various forms is found either used on its own or mixed with other materials in many situations in the construction industry e.g.

- Lagging of pipes
- Fire protection for steelwork
- Insulating boards
- Ceiling tiles
- Stipple coatings (e.g. “Artex”)
- Roof and cladding sheets
- Drainage etc.

In many of the above cases, products are now supplied asbestos free. If the materials are cut or damaged, minute fibres of asbestos can be released into the air which may be inhaled if adequate precautions are not taken.

1.12.2 Training

GEA site personnel are to undergo asbestos awareness training, it is recommended that refresher training for asbestos awareness is carried out annually. As a minimum it must be done within 3 years.

1.13 BOREHOLES

1.13.1 Hazards

The main hazards associated with bored piles are:

- Falls from the piling rig or into boreholes;
- Persons being struck by material thrown from the auger or by shell;
- Collapse of piling rig or frame due to improper use, poor base, lack of maintenance;
- Use of defective equipment;
- Persons trapped in the winch;
- Loose clothing entangled in auger shaft;
- Contact with overhead services (particularly electricity);
- Contact with underground services;
- Asphyxiation, poisoning in boreholes;
- Danger to trespassers (particularly children) in piling areas outside of working hours;
- Noise from piling operation.

1.13.2 Planning procedures

The Senior Engineer/Supervising Engineer will ensure, before any piling operation commences on site, the following information is provided to the piling contractor:

- Details of ground conditions are obtained;
- The effect of borehole operations on neighbouring properties is considered;
- Suitable plant and equipment is provided;
- Measures to prevent falls from the piling rig, into boreholes, etc. are specified;
- Underground services are located and marked using cable locating devices and following the HSG47 Avoiding Danger From Underground Services;
- Provision is made for the maintenance and servicing of plant;
- Appropriate noise control measures are in force;
- Adequate protection is provided for the public and others who may be affected;
- Monitoring, ventilation, rescue, access equipment, etc. is provided if persons are required to enter boreholes;

- Adequate protective clothing and equipment is provided;
- Supervisors and operatives are adequately trained and competent;
- An effective Risk Assessment has been made.

1.13.3 Supervision

The Borehole Contractor's Director/ Supervisor will ensure that:

- All preparation work has been carried out as planned in accordance with the method statement;
- Plant and equipment is in good order and that all required tests, thorough examinations and inspections have been carried out. Certification must be present on site;
- No unauthorised person is permitted to operate plant or equipment or to enter piling areas, be lowered into boreholes, etc.;
- All necessary monitoring, ventilation, access etc. requirements are carried out as planned on each occasion that persons enter boreholes;
- Statutory inspections of lifting appliances are carried out and recorded on site;
- Work is carried out in accordance with the method statement and risk assessment;
- Plant and equipment is checked during the working shift and that any reported or noted defect is rectified and, if necessary the use of any plant or equipment is prohibited where a defect could affect its safety.
- All operatives are wearing the correct PPE.

1.14 COMPANY APPROACH TO CDM 2015

The Company realises that good management of health and safety on site is crucial to the successful delivery of a construction project. It therefore intends to carry out all its site works in accordance with the Construction Design and Management Regulations 2015 (CDM 2015).

The Company, in accordance with CDM 2015, will only tender for contracts for which they have the skills, experience, knowledge and Organisational capabilities to fulfill there works package and be able to address all likely health and safety issues. It will ensure that all other parties involved in any contracts are aware of their duties under the Regulations.

1.14.1 Planning

Detailed planning of all tasks will be carried in good time to allow time for safe methods to be established to enable work packages to be adequately planned therefore minimising risk to others.

1.14.2 Method Statements

When working as a Contractor, the company will cooperate with any requirements placed on us by the Principal Contractor and strive to work with them ensuring that effective communication starts and continues throughout a project. The company will be proactive throughout the pre-construction and construction phases to ensure that our methods of works are approved well in advance of planned start dates.

1.14.3 Control and Co-Ordination

Safety procedures, site rules and the overall way in which the site will be managed with regard to health, safety and welfare will be established at a pre-contract meeting with the Principal Contractor. It is vital that the agreed arrangements are reviewed at the first project meeting so that site management can deal immediately with any difficulties at an early stage. Our Directors will ensure that effective co-ordination of our work occurs. Clear lines of communication will be established and maintained

between the Principal Contractor and other contractors. Safety, health and welfare will be included on all project meeting agendas.

1.14.4 Monitoring

Site monitoring by Company Health & Safety Consultants will occur regularly, this is in addition to the regular daily and weekly inspections carried out by site management. Contraventions of statute law, regulations, codes of practice and site procedures will be dealt with firmly and consistently by site management.

1.14.5 Training

On-site training will be necessary for our personnel so that they are aware of the hazards and risks to health and safety on site. It is considered necessary for all operatives to attend a Safety Induction Course prior to beginning work on site. Close liaison with Company Health & Safety Consultants will establish the overall training needs on individual sites.

1.14.6 Records

We will ensure that all records of examination and inspection are carried out and copies kept in the site office. All accidents and dangerous occurrences will be reported to Principal Contractor.

1.15 CONFINED SPACES

Every entry into a confined space is potentially hazardous. However, every confined space is not dangerous but should be treated as such until proved otherwise. A confined space is any enclosed space, above or below ground, where a hazard to health may exist due to lack of oxygen, the presence of a suffocating, toxic or flammable atmosphere, or an actual or potentially hostile environment. Confined spaces are not necessarily small. It could be any air space that cannot support life, e.g. less than 10-19% oxygen in the air.

Fatal accidents are not uncommon and are usually caused by a combination of factors arising from a lack of awareness, supervision and training.

1.15.1 Planning Procedures

The first measure to be taken is ‘Avoidance’. If there is any other practicable means of carrying out the work that would avoid the need for entry by any persons, then this must be adopted.

Where entry in unavoidable the company will ensure, so far as is reasonably practicable, that suitable and sufficient steps are taken to secure the health and safety of personnel. In which case it is imperative that:

- A competent person is appointed to carry out a risk assessment and plan the method of works, including any required emergency procedures.
- A Permit to Work is issued before entry into a confined space takes place. All users of the Permit must be suitably trained.
- Where practicable the confined space is purged to alleviate risk from any toxic or flammable vapours or fumes
- There is a supply of respirable air, preferably natural, where breathing apparatus or any other form of respiratory protective equipment is used.
- The means of access and escape are acceptable.

- Competent persons are outside on standby to assume the role of a 'top-man'. There may also be a requirement for a first aid trained person and a fire marshal both of which will be identified by the risk assessment.
- Suitable rescue equipment will be supplied.
- If hot works are to be carried out, the confined space must be monitored for flammable vapours or gases and intrinsically safe lighting must be provided.
- Where practicable, suitable lengths of hose must be provided in order that gas bottles can be left outside.

1.15.2 Training

There must be suitably trained personnel to write the safe system of work. Personnel carrying out the works will be required to have attended an HSE approved '*Confined Spaces*' training course and have received training on '*Permit to Work*' systems.

1.15.3 Monitoring

The Supervising Engineer Engineer is to ensure all relevant training has been given for entry into confined spaces as well as for the types of work to be carried out in a confined space. Constant supervision is to be given by a competent 'top-man' whilst the work is being carried out.

All equipment is to be checked by the users or an appointed person prior to entry into a confined space.

1.15.4 Control Measures

- No one is to enter a confined space unless competent and authorised to do so.
- No entry into a confined space is to take place unless a current permit to enter has been received and all stated control measures have been put in place.
- Entry into a confined space must not be obtained if the 'top-man' is not present.
- All personal protective equipment, as identified in the task risk assessment, is to be worn at all times.
- There must be no smoking in the confined space at any time. Naked lights may only be used if authorised to do so and then only in accordance with the safe system of work.
- Where working times are limited, they are to be strictly adhered to.
- Only tools identified in the safe system of work are to be used.
- The safe system of work is to be adhered to at all times. Deviations must be first cleared with the person responsible for developing the safe system of work and then only once an amendment has been made.
- Anyone entering the confined space has the right to exit at anytime if they think there could be a risk to their health and safety.

1.16 CONTAMINATED LAND

Building construction and engineering works often involve redevelopment of land which has been contaminated by industrial processes once carried out on the site or by materials which had been stored or dumped there. In some places naturally occurring contamination may be present. Contamination may be a potential health risk to those working on site, visitors or to members of the public unless adequate precautions are taken to control them.

Examples of the types of contamination that may be present are:

- Asbestos
- Lead
- Radioactive materials

- Buried explosives
- Anthrax
- Weill's disease

1.16.1 Planning Procedures

Prior to carrying out any work it is advisable to carry out an investigation to determine what the land was previously used for. Under the CDM (Construction (Design & Management)) Regulations 2015 this should have already been carried out by the Client and notified by the CDM Co-ordinator in the Pre-Health & Safety information.

Where necessary the Company will work with the Principal Contractor to deal with the contamination and the following process is to be followed:

- Carry out a risk assessment.
  Establish whether unacceptable risks exist and, if so, what further action needs to be taken in relation to the site. The health and safety risks associated with contaminated land are:
  - Skin absorption
  - Skin penetration ingestion
  - Inhalation
  - Asphyxiation / gassing fire / explosion
  - Diseases due to biological agents
- Carry out an options appraisal - Evaluate what remediation options are the most feasible and determine the most appropriate remediation strategy for the site.
- Implementation - Carry out the remediation strategy and demonstrate that it will continue to be effective.

1.16.2 Management

When dealing with contaminated land, the Company will appoint a Senior Engineer/Supervising Engineer.

The Senior Engineer/Supervising Engineer must:

- Define the contaminated area and determine the method of remediation to be used to deal with the contaminant.
- Carry out a detailed risk assessment, by developing the initial one then develop a safe system of works. The safe system of works must include adequate emergency procedures in the case of an alarm sounding or high readings taken.
- Ensure adequate hygiene facilities are made available on site. These may be just hand washing facilities but may include showering facilities, clean / dirty changing rooms etc.
- Organise the site before set up commences to ensure, as far as is reasonably practicable, that parking, welfare, maintenance facilities etc. are away from the contaminated area.
- Ensure cross contamination cannot occur due to persons walking or driving off site. There may be a need for wheel wash and boot cleaning systems to prevent this occurring. Cross contamination may also occur due to airborne particles or contaminated dusts. In this case adequate dust suppression may be needed.
- Procure suitable monitoring equipment in accordance with the risk from the contaminant and the works being undertaken.
- Ensure that suitable and sufficient protective clothing and equipment is available and used. There must be adequate supplies available for replacement due to loss or failure. It is important that, where more than one item of equipment is required, they are compatible and that all equipment is suitable for the physical characteristics of the wearer. The Senior Engineer must consider the need for a separate PPE assessment.

- Ensure that and adequate means for the removal of wastes from site is available. There may be a need for sheeted lorries or special waste bags to be supplied.

1.16.3 Monitoring

Dependent on the type and level of contamination, there may be a need for constant monitoring. This will be determined during the risk assessment phase and included in the safe system of work.

Depending on the results from the site investigation or laboratory analysis, there may be a need to arrange for health surveillance and air monitoring to be carried out by competent persons.

1.16.4 Training

Project / Site Management to be competent in dealing with the hazards associated with the site including all the regulatory health and safety aspects.

Training in the use of monitoring equipment may be needed as will training in the actions to be taken if an audible alarm sounds or high reading identified.

Ensure a safe system of work has been written and all personnel involved have been inducted to the requirements for that site including any emergency procedures. There may be a need for specific training to be carried out particularly where specialist equipment is to be used i.e. breathing apparatus.

1.16.5 Control Measures

- Carry out all works in accordance with the safe system of work.
- Be aware of any emergency procedures.
- Wear the correct PPE at all times. If any unusual symptoms are experienced when carrying out the work or there is reason to believe that the PPE supplied has failed or is inadequate, leave the area and inform a Supervising Engineer immediately.
- Do not cause cross contamination by walking or driving off the site without using the appropriate washing facilities.
- A high standard of personal hygiene must be achieved at all times. Any open wounds must be treated immediately to reduce the risk of infection.
- There is to be no eating, drinking or smoking within the defined contamination area. These activities must` only be carried out in designated areas.

1.17 CONSULTATION WITH EMPLOYEES

It is a requirement of the Health and Safety (Consultation with Employees) Regulations 1996 for employers to consult with employees on matters relating to health and safety. These regulations complement the Safety Representatives and Safety Committees Regulations 1977, which place duties on employers to consult with safety representatives who have officially been appointed as such by the trade unions.

The Company will inform its employees of their rights to be represented by a safety committee and, if requested, will form a committee in accordance with the above legislation. If requested, the company will ensure periodic meetings are held with employees to discuss health and safety issues.

Employees will be consulted by the site management, on matters regarding their health and safety, following toolbox talks or inductions.

1.18 CONTROL OF CONTRACTORS

Contractors may be appointed to carry out work on behalf of the Company. It is the policy of the Company that only approved contractors will be employed

1.18.1 Approval of Contractors

Before contractors are considered for the 'Approved Contractors List', they must complete a questionnaire which will be sent out by GEA. Once the questionnaire and relevant documentation have been returned, it will be assessed and determined whether the contractor can be added to the list and, if so, what level of supervision is required.

The list of approved contractors will be consulted prior to appointing a contractor to carry out work on behalf of the Company.

1.18.2 Requirements of Contractors

Contractors will be required to comply with the following requirements which will be explained to them at any pre-contract meeting with The Senior Engineer or other company representative.

All contractors will be required to:

- Work in compliance with the contents of this document and any additional site rules that are been put in place on each site.
- The relevant managers of each contractor will be required to develop a site specific method statement and risk assessment for all their works. All documentation is to be provided to The Senior Engineer at least one week prior to the works commencing on site.
- In addition to the method statement and risk assessment, the following documents must also be supplied before works can commence on site:
  - Copies of relevant CoSHH, noise, vibration, manual handling assessments
  - Copies of any relevant certificates of competence
  - A copy of the companies insurance certificates
  - Copies of any equipment test certificates
  - Any other document asked for by the Contract Supervising Engineer
- All contractors personnel will be required to attend a site specific induction where they will be explained the rules of the site and the requirements from the method statement and risk assessments.
- The site induction is to be followed by a specific induction given by each contractor covering their own methods of work, identified risks and control measures, emergency procedures etc. Proof of this induction having been undertaken is to be given to GEA's Director/ Contracts Supervising Engineer for inclusion in the Site Management Manual.

Contractors are to ensure that they, or their personnel, are competent to carry out the works for which they have been contracted to undertake. Where required they are to supply evidence of this competence as mentioned above.

At any time that it is deemed by the Company that a contractor has failed to carry out work as determined by the method statement or has totally disregarded the requirements of the health and safety policy, that contractor may be asked to leave site immediately.

1.18.3 Management of Contractors

The Senior Engineer for GEA is to ensure that all the relevant documentation is reviewed and approved prior to the contractor commencing works on site. They are also to ensure that the contractor is aware of and complies with the 'Health and Safety Rules for Contractors' which are in the Site Management Manual.

1.19 ELECTRICAL TOOLS AND EQUIPMENT

1.19.1 Hazards

The main hazards associated with this equipment include:-

- Electric shock.
- Unguarded machinery.
- Tripping.
- Fire.

1.19.2 Planning Procedures

When planning work, relevant standards will be taken into account. A risk assessment must be undertaken for the work and the requirements of it and any Health and Safety Plan for the site must also be implemented.

All electrical equipment on the Company's site or other workplaces will be supplied, installed, maintained or used in accordance with the relevant standards. Liaison with the electricity supplier over the type, voltage and MVA rating of the supply must also be undertaken to ensure adequate capability for the sites needs.

To ensure the safety of persons using portable appliances, it is Company policy that all new portable appliances, or used appliances new to the company, are tested before first being put into use. Once an initial test has been carried out by a competent person, subsequent tests will be carried out at the following times:

- Office equipment (except IT equipment) - annually
- IT Equipment - 3 yearly
- Site office equipment - on set up of site then 6 monthly
- Site tools and equipment - 3 monthly

The Senior Engineer/Supervising Engineer will, where necessary:-

- Plan the temporary electricity supply and distribution on site in accordance with the relevant standards. All temporary supplies are to be installed by competent electricians and tested in accordance with the IEE Regulations (see HS(G)141 for guidance on requirements).
- Ensure that all power tools provided for use on site or other workplace are in accordance with the relevant British Standards.
- Ensure that no power tools or electrical equipment of greater voltage than 110 volt (CTE) are used on site unless special arrangements are made and discussed with the safety consultant. Lower voltage tools, lighting, etc. may be required in damp or confined situations. The safety consultant must be consulted in these situations.
- Ensure all sub-contractors are informed of the Company policy on the use of electricity on site and that they will be expected to comply with these requirements.

1.19.3 Training

Training will be provided for employees who are required to inspect, repair or maintain equipment. In most circumstances, only competent electricians will be authorised to carry out repairs or maintenance and to carry out installation work. Regular refresher training to maintain and enhance competence for the work and the safety requirements for working with Electricity will also be provided.

1.19.4 Monitoring

The Supervising Engineer will where necessary:-

- Ensure that any temporary electrical supply is installed and tested as planned. Ensure that the requirements of the Health and Safety Plan are implemented.
- Ensure that all sub-contractor's equipment is in good condition and in accordance with the relevant British Standards before permitted for use on site. Evidence of recent inspection and testing of all electrical equipment should be available before the equipment is used.
- Take immediate action against any person or sub-contractor abusing or incorrectly using electrical equipment on site.
- Ensure that all power cables are installed clear of access ways and preferably above head height.
- Ensure that festoon lighting equipment is secured above head height. Where festoon lighting equipment is installed, it must not be of the screw on pin contact type. Only properly constructed sets with moulded on fittings will be used.
- Ensure that any portable generator or other electrical equipment fitted with an earth rod has the earth rod and connection maintained in good condition.
- Ensure that only authorised persons are permitted to repair or alter electrical equipment.
- Arrange for immediate action to be taken to have defects remedied by a site electrician or hire company, as soon as they are reported. Prevent the use of faulty equipment by removing it to a secure place and label it clearly as being defective.
- All portable appliances have been tested within the time limits set out above.

1.19.5 Control Measures

- All cable connections must be properly made. Under no circumstances will insulation tape alone, be used to protect any repair or join in extension cables. An authorised person will only do work on equipment.
- Only 110V equipment (or less) will be used on site.
- The correct extension cables will be used, to cope with wet and rough conditions. Extension cables will be minimised by the provision of adequate numbers of socket outlets. Extension cables, when used, will be routed so as not to cause tripping of similar hazards.
- Whenever possible, site electrical supplies will be protected by residual current and other such protection devices.
- All portable tools, cables etc. should be identified and regularly inspected and maintained by a competent electrician. Check equipment before use for any sign of damage and report defects immediately.
- All maintenance work on electrical equipment should be undertaken with the equipment 'dead' and the supply cable disconnected where appropriate. Where 'live' work or testing is required for fault finding then an authorised competent person who must apply the relevant control measures to prevent danger must only undertake this.
- Portable generators should be regularly inspected and tested. If fitted with an earth rod, then the connections must be maintained in good condition.
- If anything goes wrong, switch the equipment off and disconnect from the power supply.
- Do not lift or pull equipment by the cable; the connections may become broken and create a hazard.
- Cables will be routed so as to be protected from damage.

- On festoon lighting, all bulb sockets are live. Open sockets must be protected where a bulb is not fitted. As well as the fragments of glass of broken bulbs being a hazard, it must be remembered that the protruding filament wires are still live.
- Other control measures identified on the risk assessment must also be implemented.

1.20 ENVIRONMENTAL MANAGEMENT

The Company realises that the works carried out on their behalf will have some impact on the environment. Environmental hazards will be assessed as part of the site-specific risk assessment and will be monitored in accordance with our monitoring procedures.

The Directors of the company are committed to maintaining high environmental standards throughout its operations. All personnel and contractors are required to take all reasonably practicable steps to ensure that work is carried out in an environmentally safe and efficient manner in accordance with the law and the procedures laid down by the company and with due regard to the environment.

1.20.1 Environmental Impacts

The main environmental impacts from the company's activities are as follows:

- Air pollution
- Energy and fuel consumption
- Noise
- Waste

1.20.2 Air Pollution

Air pollution may impact on human health, ecosystems and the physical environment on both a local and global scale. The company realises that it contributes to air pollution whilst carrying out its undertakings, particularly in the following areas:

- Emissions of oxides of nitrogen, carbon monoxide and benzene due to its transportation activities.
- Emissions of particulate matters from its construction and installation activities.

The company will therefore adopt a policy to reduce the amount of air pollution caused by: -

- avoiding unnecessary movements of vehicles
- vehicle sharing
- taking emissions into account when purchasing equipment
- using battery / electrical equipment rather than petrol driven equipment
- recycling rather than incinerating waste
- controlling the amount of dust produced

1.20.3 Energy & Resource Consumption

The company are aware that to carry out their undertakings they need to utilise many of the earth's resources, whether directly or indirectly, and that the use of the resources will impact on the various environmental receptors, i.e.

- Human beings - noise, dust, loss of amenity
- Flora and fauna - loss of habitats, species, biodiversity
- Soil - the physical removal or damage of soils and natural drainage
- Water - contamination, disruption of flow rates

- Air and climate - pollution on a local and global scale
- Landscape - physical change
- Cultural heritage - loss, destruction, visual intrusion

In order that the company can play a part in sustainable development, it will continue to look into ways of reducing energy and resource consumption. In so doing the company will minimise waste by recycling materials such as:

- Construction / demolition wastes
- Office materials - paper and printing cartridges
- Packaging materials
- Machinery parts
- Waste oils and fuels

The company will endeavour to use low energy equipment and, in addition, encourage staff to switch off electrical equipment and machinery when not in use.

1.20.4 Noise

The company recognises that noise can be a very sensitive issue and is a source of nuisance from works being carried out on its premises and sites. Where practicable, all works on site will be planned in accordance with the planning requirements.

Wherever practical, all activities will be undertaken within the ambient noise level existing in the vicinity of the site. To help meet this objective, a noise survey will be carried out in areas of concern to establish background noise levels before commencing operations. This will be especially important when operating near hospitals, schools, residential areas and places of work.

The company will endeavour to purchase machinery and equipment which emit low levels of noise. Where our activities will cause increased noise levels that may be perceived as nuisance, we will use the quietest machinery at our disposal. To minimise noise levels the machinery will be properly maintained to further mitigate the transfer of noise.

1.20.5 Waste Management

All personnel, particularly Line Management, are responsible for minimising waste through recycling.

Under the *Environmental Protection (Duty of Care) Regulations 1991* and the *Hazardous Waste Regulations 2005* the services of competent contractors will be employed to dispose of any wastes which cannot be recycled by us.

The company recognises its responsibilities under *Part 3 of the Environmental Protection Act 1990* and will, as far as reasonably practicable, take suitable measures to ensure that any works carried out on its behalf do not cause a nuisance to the local community or the environment by controlling the spread of litter.

Where the company are working as a contractor, The Senior Engineer is responsible for identifying the waste that will be produced and inform the Principal Contractor. The Senior Engineer/Supervising Engineer will arrange for any necessary segregation and disposal.

If the company utilises an outside waste disposal contractor, the contractor must be licensed in accordance with The Waste Management Licensing Regulations.

1.21 EXCAVATIONS

All excavation work will be carried out in accordance with Regulation 31 of The Construction (Design & Management) Regulations 2015.

1.21.1 Hazards

The main hazards created by excavations and groundworks are:

- Collapse of the sides
- Materials falling onto people working in the excavation.
- People and vehicles falling into the excavation.
- The undermining of nearby structures.
- Contact with underground services.
- Water inflow.

1.21.2 Planning Procedures

When planning to carry out excavations or groundworks, the Senior Engineer/Supervising Engineer must:

- Carry out a risk assessment to establish the risks from the hazards mentioned above.
- If personnel are to enter the excavation and there is insufficient room to batter back the sides, suitable supports will be needed.
- Arrange for suitable and sufficient edge protection to ensure that people, vehicle and materials cannot fall into the excavation.
- Carry out an investigation to determine whether any underground services are present. Local service providers should be contacted and cable avoidance tools used by competent persons.
- Ensure that a suitable distance is left when excavating near to structures or pylons. If this is not practical then competent advice must be sought to ensure continued stability of the structure and the excavation.
- Ensure that a suitable means of access and egress is available for anyone working in the excavation.
- Determine whether measures need to be taken to establish whether there is a presence of gas or other harmful vapours, odours etc. If so, suitable monitoring equipment must be provided and relevant training given to personnel.
- Establish a safe system of work.
- Introduce a permit to dig system where the works are of high risk.

1.21.3 Training

When carrying out excavations or groundworks, competent persons may be required for the following:

- Use of cable avoidance tools.
- Reading of service diagrams.
- Use of permit to works systems
- The use of gas monitoring equipment

1.21.4 Monitoring

Regular monitoring of the excavation needs to be carried out by the Supervisor to ensure that continued stability is maintained. Excavations must be checked and a record made in the Site Management Manual:

- A competent person who fully understands the dangers and necessary precautions should inspect the excavation at the start of each shift.

- Excavations should also be inspected after any event that may have affected their strength or

stability, or after a fall of rock or earth.

- A record of the inspections will be required and any faults that are found should be corrected immediately

The Contracts Supervisor must ensure:

- The safe digging plans are checked before starting and that a relevant permit has been obtained from the Principal Contractor.
- That cable locating devices are used prior to carrying out any excavating work.
- That if underground services have been identified, ensure that trial holes are hand dug first to establish exact depth and location.
- That no structures are undermined.
- That the excavation is adequately supported before anyone is permitted to enter.
- That excavations are adequately protected to ensure that people or machinery cannot fall in.

1.21.5 Emergency action:

If damage or leakage is caused or an escape of gas is smelt or suspected:

- Remove all personnel from vicinity.
- Prohibit smoking.
- Extinguish all naked flames or source of ignition (hot works, engines, electrical power) within 25 metres.
- Inform site manager.
- Inform local gas authority.
- Inform client.
- Prevent approach of public or personnel.
- Assist gas personnel, police and fire service as required.
- Inform Company Health and Safety Consultant via Head Office.

If in doubt, seek advice from local gas authority, whose telephone number for emergencies and enquiries can be found in the directory under GAS.

1.22 FIRE POLICY & PROCEDURES

The policy and procedures for the control and management of fire risk reflects the requirements of the Regulatory Reform (Fire Safety) Order (FSO) 2005. In accordance with the FSO, the 'Responsible Person' for the Company is GEA Ltd.

For any construction sites / contracts outside of the Companies offices, the relevant Director for the contract will take on the duties of the 'Responsible Person'

1.22.1 Duties Of The 'Responsible Person'

It is the duty of the 'Responsible Person', under the Regulatory Reform (Fire Safety) Order 2005, to ensure that all the requirements are put in place. The areas that need to be taken into account are:

- Fire risk assessments
- Fire training for employees / operatives
- Fire procedures
- Fire detection and alarm systems
- Means of escape
- Records of fire tests

1.22.2 General Fire Precautions

In the event of fire, it is the policy of the company that safety of life shall override all other considerations, such as saving property and extinguishing the fire. The company refutes the notion that the alarm should only be raised in the event of a large fire.
All employees / operatives are empowered to take this action if they believe there is a fire and authority need not be sought from any other person. The company will always support employees / operatives who operate the fire alarm system in good faith, regardless of whether or not the fire was a threat to life or property.

The 'Responsible Person' will ensure that suitable fire precautions have been developed for each workplace which are suitable and sufficient for that workplace. These fire precautions will then be communicated to all persons working in the premises with suitable information provided for visitors.

1.22.3 Risk Assessments

The relevant manager, for all workplaces, will carry out, suitable and sufficient fire risk assessments.

Fire risk assessment in the company's offices will be reviewed on an annual basis, or following any changes that may result in them being invalid.

Fire risk assessments on site will be the responsibility of the Supervising Engineer. Individual Contractors may be required to carry out their own fire risk assessment; this will be determined and enforced by GEA Director. Fire risk assessments on site will need to be regularly reviewed, as the contract progresses, to determine their validity.

1.22.4 Fire Fighting Equipment

Where risk assessments for the work require fire fighting and other emergency equipment to be provided it will be planned for meeting the relevant standards as appropriate.

The requirements of any Health and Safety Plan and or Emergency Plan will also be planned for meeting the specification for equipment. Procedures for the inspection and maintenance of the equipment will be developed along with the requirements for periodic testing and evaluation of emergency procedures.

1.22.5 Training

All personnel must be provided with training on the emergency procedures relevant to their place of work. Specific personnel will be trained as Fire Marshalls so that they are competent to deal with situations likely to arise in the course of their work. Relevant refresher training will be undertaken to maintain and enhance competence.

Fire drills in the Companies offices will be carried out on a 6 monthly basis, these will be initiated by the Managing Director. Fire drills on site will be carried out as determined by the Principal Contractor.

Records of all training undertaken, and instruction and practice in emergency procedures will be kept to comply with statutory requirements.

1.22.6 Monitoring

The Senior Engineer/Supervising Engineer will:

- Ensure that the requirements for fire-fighting and emergency equipment necessary for the work and/or site are available.
- Ensure that the equipment is inspected and maintained in accordance with the defined procedures and the appropriate records maintained.

- Ensure that personnel involved in the work are trained and competent to use fire-fighting and emergency equipment.
- Ensure that discharged fire-fighting extinguishers and other emergency equipment is returned to its operation state as soon as practical after use.
- Ensure that all personnel understand emergency procedures and they are evaluated as appropriate to the circumstances prevailing at each work site.

Regular monitoring in the office will include:
Fire exits – visual (daily) - recorded(weekly)
Fire points – visual (daily)
Fire extinguishers – visual (weekly) - service (annually) – 6 yearly maintenance
Means of escape – visual (daily)
Fire drills - (twice yearly)
Fire alarm system - test (weekly) – maintenance (6 monthly)
Emergency lighting – visual (daily) – test (monthly) – discharge (yearly)
Fire warden competence – (3 Yearly)
Fire risk assessment review – (Yearly)
Arson reduction – (daily)

1.23 FIRST AID ARRANGEMENTS

The prevention of accidents at GEA is everyone's responsibility, and each member of staff should ensure that they are familiar with any special instructions relevant to the area(s) in which they work for the proper handling of emergency situations.

1.23.1 Planning Procedures

The Senior Engineer will ensure that any necessary first aid arrangements determined by the expected risk environment, employee/contractor population, available local hospital facilities, etc. have been considered when allocating personnel and resources to a site. Within the office environment, this will be determined by the Office Manager.

Where the Company are working for a bigger contractor or client that has a first aid system established, the Senior Engineer may arrange for that contractor / client to give cover for first aid. The Senior Engineer must:

- Ensure that the first aid trained personnel are competent to deal with the types of injuries that could be sustained from the Company's work; and
- Obtain confirmation, in writing, that the facilities will be provided by others.

In order to meet the requirements of the Health and Safety (First Aid) Regulations 1981 for the provision of suitable person(s) to administer first aid, the Company will ensure that sufficient numbers of trained and certificated 'suitable persons' are available in each work location.

The Company will establish the necessary procedures and arrangements to:-

- Communicate the first aid facilities to all persons on site through the site / company induction;
- Communicate the names of first aid trained persons to all persons in the workplace;
- Ensure that first aid materials are replenished when used;
- Arrange all necessary first aid equipment, with guidance from the safety adviser if needed. The safety adviser can arrange the supply of materials if required.

1.23.2 Training

Appropriate first aid training and refresher training for personnel nominated as suitable person(s) will be provided to ensure that competence is established and maintained. If work processes require additional specialised first aid provision, then appropriate personnel must be trained for that requirement. Sickness and holiday cover will be taken into account.

Basic Training Requirements are:

• Offices	– At least one appointed person
• Offices(over 5 persons	– At least one First Aid emergency trained person (1 day)
• Sites (less than 5 persons)	– At least one appointed person
• Sites (5 – 50 persons)	– At least one First Aider (3 day course)

1.23.3 Monitoring

- The Senior Engineer will ensure that all arrangements for first aid are established and that they are used and maintained to the required standards.
- The Senior Engineer will ensure that all certification remains current and must highlight any requirements for refresher training.
- Where the Company is utilising arrangements made by the principal contractor then any deficiencies in that provision must be reported to the principal contractor by the Contracts / Project Manager.
- Directors, Contract Supervising engineers or nominated first aiders are to ensure that first aid boxes are re-supplied each time they are used and have enough equipment in them (as per the contents list in the box). In the office, it is the Office Manager's responsibility to check the first aid box. Those who have the responsibility for first aid kits are to ensure that suitable equipment is still available and in date.

1.23.4 First Aid Arrangements

The first aid arrangements made for the site / workplace in question must reflect the likely circumstances in which an employee, visitor, or contractor could be injured or become ill at work.

Arrangements should include:-

- The nomination of 'suitable person(s)' trained and certificated to 'first aid certificate level by an approved organisation e.g. St John's Ambulance, British Red Cross etc. Suitable person(s) must be available whilst work is being undertaken on the site.
- Means of communicating the arrangements made, to all employees, operatives, visitors and sub-contractors with reference to the emergency plan (fire and evacuation) where appropriate.
- A means of recording on a suitable form the first aid treatment given. This should include patient's name/address, patient's occupation, date of entry, date/time of accident, place/circumstances of the accident, injury details and treatment given, signature of person making the entry.
- The maintenance of first aid materials at appropriate levels.

1.24 HAZARDOUS SUBSTANCES

The Control of Substances Hazardous to Health Regulations 2002 imposes duties on every employer to identify all substances in use and to assess the risk to their employees (and others) from the substance,

taking into account the manner in which it is being used, the quantities involved, and the possible numbers affected.

The work of the Company and its employees / operatives brings us into daily contact with substances, which, to varying extents, are hazardous to health. Our general policy on dealing with these substances is given below:

- Exposure to substances hazardous to health will be prevented where possible, or adequately controlled by suitable protective or preventative measures.
- As far as practicable, the control shall be by means other than provision of personal protective equipment. Where required, however, adequate and appropriate protective equipment or clothing shall be supplied.
- It is important that employees / operatives receive adequate information, instruction and training in order for them to be aware of the risks to health from exposure to a substance, and the precautions and control measures that should be provided and carried out.

1.24.1 Hazard Causes

Substances can have ill effect on health via four main routes of entry to the human body, these are defined as follows :

- External contact - corrosive, skin absorption, dermatitis, etc., e.g. cement, acids, epoxy resins, etc.
- Inhalation - gases, fumes, dusts, vapours, vehicle exhaust fumes etc.
- Ingestion - swallowing.
- Injection – when a substance in directed into the body via injection.

1.24.2 Hazard Classifications

Hazards may be classified as toxic, harmful, irritant, corrosive, biological, or a combination of these.

1.24.3 Planning Procedures

Where practicable, the Company will avoid the use of substances hazardous to health by finding an alternative method. Where this is not practicable and hazardous substances are used, a relevant safety data sheet will be obtained from the supplier so that The Senior Engineer can carry out a CoSHH assessment or arrange for one to be carried out.

Where The Senior Engineer is not competent to carry out a CoSHH assessment, the company health & safety consultants will be engaged to provide written assessments and advice on precautions required with any substance where any risk to health is known or suspected. The details of assessments will be kept in a suitable register.

The Senior Engineer/Supervising Engineer will:

- Verbally communicated the findings of the CoSHH assessment to those using the substance or those who could be affected by them. This communication is to be carried along with the requirements of task risk assessments and method statements and must be done so prior to works commencing.
- Make a record of the communication process.
- Ensure copies of the assessments are available to those using the substance or managing the process.

1.24.4 Training

All operatives engaged in any process involving the use or handling of any hazardous substance must be given full instructions and any necessary training in the health hazards and precautions, use of protective clothing, equipment, hygiene measures, etc. as required. Regular refresher training must also be provided to maintain and enhance competence in handling or using these substances.

1.24.5 Monitoring

The Senior Engineer/Supervising Engineer will ensure that the written assessment, control measures and other information is on site and that all procedures planned to handle or use any hazardous substance or process are carried out fully and that any equipment, hygiene measures, and protective clothing are provided and maintained as required.

Where the use of a particular substance necessitates the need for health surveillance to be carried out, The Senior Engineer will arrange it with a suitable Occupational Health Specialist. Where necessary, The Senior Engineer will seek assistance from the Company Health & Safety Consultants.

Note: The Senior Engineer/Supervising Engineer is, under no circumstances, allowed to let any substance be used unless a CoSHH assessment has been carried out and communicated.

1.25 HIGHLY FLAMMABLE LIQUIDS & LIQUID PETROLEUM GAS

HFL's and LPG's come under the Dangerous Substances & Explosive Atmosphere Regulations 2002 as they are substances that could cause a fire or explosion that could cause harm to people.

The company will ensure that where these types of substances are used the following will occur:

- A risk assessment will be carried out of the substance and activity;
- Measures will be provided to eliminate or reduce the risk;
- Emergency equipment will be provided and suitable procedures developed;
- Information will be communicated to those involved and training will be given as necessary; and
- Suitable warning signs will be erected to warn of the dangers.

The procedures to be taken into account are as follows:

- Quantities of the substance will be kept to a minimum;
- The accidental release of the substance is to be minimised by ensuring containers are kept sealed and equipment is regularly checked;
- As far as practicable, the substance will be used in a well ventilated area away from catchment areas such as excavations;
- All sources of ignition will be removed from areas where an explosive atmosphere is likely to be formed;
- Incompatible substances will be kept apart;
- In the case of fire or explosion, measures are to be taken to prevent its spread; and
- The numbers of persons exposed will be kept to a minimum.

1.25.1 HIGHLY FLAMMABLE LIQUIDS (HFL'S)

1.25.1.1 Storage

The Senior Engineer/Supervising Engineer will ensure that storage facilities are provided and maintained and all HFL are kept in such storage until required. Maximum storage is thirteen litres, otherwise a petroleum licence must be held. Contact the Petroleum Officer at the Trading Standards Office, the County Council or the fire brigade.

Other storage requirements are:

- less than fifty litres can be in lockable metal bins in the open air
- cans or drums should be stored so that the contents can be easily identified and removed in the event of leakage or damage
- drums should be stored on their sides and prevented from rolling by wooden chocks
- storage bins are to be kept locked at all times.

1.25.1.2 Control Measures

- The Senior Engineer/Supervising Engineer will ensure that fire resistant absorbent material is available to soak up any spillage of HFL and that the material is disposed of immediately after use.
- The Senior Engineer/Supervising Engineer will ensure that any fire fighting equipment, storage facilities, signs, notices, containers, etc are checked at weekly intervals and that action is taken to rectify any defects.

  Appropriate action will be taken against any person disregarding safety instructions, signs or notices or misusing HFLs.

1.25.2 LIQUID PETROLEUM GASES (LPG'S)

LPG is a gas but, as supplied, is a liquid under pressure. When this pressure is reduced, e.g. the control valve is opened, the liquid starts to boil and gas evolves. One litre of liquid will provide about two hundred and fifty litres of gas. It is colourless and the liquid weight is about half that of water. However, propane vapour is at least one and a half times heavier than air (Butane 2X) and, because of this, it tends to flow along the ground, often a considerable distance, and collect in cellars, drains, excavations and other low lying places. The vapour can remain for some time if the air is relatively still and, if ignition occurs at a remote point, the fire may travel back to the source of the leak.

LPG is not toxic but can produce a narcotic effect leading to asphyxiation if sufficient air is displaced. There is also danger of asphyxiation when LPG is burnt to provide heating, lighting, cooking, etc, unless there is adequate ventilation.

LPG is usually 'stenched' before distribution and is generally detectable by smell before a flammable mixture of gas and air results (2-10%).

LPG is sold as

Propagas	-	grey/red top cylinder
Bottagas	-	grey/red top cylinder
Glogas	-	yellow cylinder
BOC Propane	-	red cylinder
Calor Propane	-	red cylinder
Calor Butane	-	blue cylinder.

1.25.3 Storage of Gas Cylinders

Oxygen **-** Cylinders must not be stored with LPG or acetylene and should be stored at least 3 metres away. Oxygen cylinders may be stacked horizontally, a maximum four high, and wedged to prevent rolling.

Acetylene & LPG **-** Whether full or empty, cylinders should always be stored and used in the upright position. If they are allowed to lie horizontally, acetone or LPG liquid will be withdrawn from the cylinders with the gas and safety devices, such as bursting discs, temperature sensitive fusible plugs and

relief valves will be rendered ineffective. Vertically stacked cylinders, whether full or empty, should be secured against falling. Full cylinders should be kept away from empty ones and be shielded from direct sunlight or other heat to avoid pressure build up. If acetylene cylinders have been stored horizontally, they must be stored upright for approximately ten minutes to settle before use.

1.25.4 Handling

- Gas cylinders must be treated with care and not subjected to shocks or falls. They must never be left free standing, whether full or empty. If not in cages, they are to be on purpose built trolleys. They must never be rolled along the ground.
- Hands and clothing should be free from grit, grease and oil when cylinders are handled, to prevent them slipping and prevent grit getting into the valve. Every effort should be made to stop nozzles being used for handling purposes.
- If cylinders are craned, they should be secured in a special carrier. On no account should they be lifted with chain or wire rope slings that can easily slip.
- When loaded onto vehicles, cylinders must be kept upright and secured. A minimum of 2 x 4.5kg dry powder extinguishers must be carried and a warning notice displayed.

1.26 LADDERS & STEP-LADDERS

1.26.1 Standards required

In accordance with the Work at Height Regulations 2005 there is a hierarchy that employers must follow prior to carrying out any work at height (see working at height section). This control measure must be read in conjunction with the working at height section before carrying out any work from ladders.

All ladders must be provided and used in accordance with Schedule 6 of the Work at Height Regulations 2005, and GS31 "Safe use of Ladders, Step Ladders and Trestles". There are three classes of ladders:

Class 1. Industrial (Heavy duty)
Class 2. Light Trades,
Class 3. Domestic (Under no circumstances are Class 3 ladders/steps to be used on site).

1.26.2 Hazards

The main hazards associated with ladders and step-Ladders are:

- Not securing the ladder / stepladder properly.
- Unsafe use of ladder / stepladder (over-reaching, sliding down, etc.).
- Using a damaged ladder / stepladder.
- Placing the ladder / stepladder on an unsuitable base.
- Insufficient handhold at top of ladder or at stepping off position.
- Insufficient overlap of extension ladders or using too short a ladder / stepladder.
- Overloading of ladders / stepladders.

1.26.3 Planning Procedures

The Senior Engineer/Supervising Engineer will avoid the use of ladders / stepladders as far as possible. Where unavoidable:

- Arrange for the sufficient number and suitable types of ladders / stepladders to be provided.
- Ensure that the means of securing ladders is planned as far as possible and sufficient materials made available.
- Ensure that the use of the equipment is adequately risk assessed and monitored.

1.26.4 Training

Training provided to Supervising Engineering staff and operatives will include the hazards and precautions relating to ladders and their use.

1.26.5 Monitoring

The Supervising Engineer will:

- Check ladders / stepladders before use to ensure that there are no defects and then check at least weekly whilst in use on site.
- Ensure that where a defect is noted or a ladder / stepladder is damaged, it is taken out of use immediately.
- Ensure that ladders in use are secured, have a solid, level base and are being used correctly.
- Ensure that ladders / stepladders are not used to provide a working position if the type of work cannot be carried out safely from the equipment (e.g. carrying large items, work requiring both hands, etc.). (See risk assessment).
- Ensure the methods of use, which could result in damage to the ladder / stepladder, are not permitted.
- Ensure that proper storage is provided for ladders and stepladders e.g. under cover, where possible and with the equipment properly supported throughout its length.

1.27 LIFTING OPERATIONS & LIFTING EQUIPMENT

Lifting operations will only be carried out where personnel have the suitable training and experience. Where this is not available, a competent operator will undertake a contract lift.

1.27.1 Hazards

The main hazards associated with lifting gear include:

- Overloading and incorrect use of equipment.
- Use of defective equipment.
- Using damaged equipment.
- Incorrect slinging method.
- Unsuitable or inadequate base for lifting appliance.
- Incorrect positioning of lifting appliance.
- Contact with overhead electricity cables (see separate section).
- Failure of equipment due to lack of maintenance.
- Incorrect signals.

1.27.2 Planning Procedures

The Senior Engineer will:

- Ensure that all lifting operations are adequately planned by a competent ‘Appointed Person’ as defined by the Lifting Operations & Lifting Equipment Regulations 1998.
- Arrange for suppliers to provide information on weights, lifting points, safe slinging procedures etc. of materials or articles supplied.
- Consider any height, weight, overhead service or other restrictions on or adjacent to the site before work starts, especially taking into account the safety of the public.
- Ensure that servicing and maintenance of all lifting appliances is planned before it is taken into use on site.

- Ensure that all lifting gear provided for use on site is in good order, has a test certificate and has been thoroughly examined, in accordance with statutory requirements, within the previous 6 months.
- Arrange for proper storage facilities for lifting gear.
- Ensure that areas where mobile cranes are to be set up to carry out lifting operations are firm and level.

1.27.3 Training

Where the Company are to take on the responsibility of the lifting operation itself, training will be provided for:

- Appointed Persons to plan and manage the lift;
- Lifting supervising engineers to ensure the lifting operation is carried out in accordance with the lifting plan, and
- Slinger / banksmen will be responsible for attaching and detaching loads and controlling the crane.

1.27.4 Monitoring

The Lifting Supervising Engineer will:

- Ensure that only the right type of lifting gear, as identified in the lifting plan, is used and that it is visually checked before use.
- Ensure that only authorised slingers are used to connect loads.
- Ensure that where defects are noted or reported with lifting gear, the equipment is taken out of use immediately.
- Ensure that the lifting plan is communicated to all persons involved in the operation prior to commencement. These people are to sign to say they are aware of and understand the contents of the lifting plan.
- Ensure that all control measures identified in the risk assessment(s) are implemented.
- Stop work where adverse weather conditions could affect the safety of lifting operations, until conditions improve.
- Ensure that all lifting appliances are inspected weekly and a record of the inspection made in the site register for LOLER (The Lifting Operations & Lifting Equipment Regulations 1998).

1.28 MANUAL HANDLING AND LIFTING

1.28.1 Standards required

The Manual Handling Operations Regulations 1992 apply to any situation where a load has to be moved by hand or bodily force.

The regulations state “A person shall not be employed to lift, carry or move any load so heavy as to be likely to cause injury to him”.

1.28.2 Planning

The Company will, as far as reasonably practicable, reduce the risk of injury through manual handling operations to all employees / operatives by:

- Avoiding, where practicable, the need to lift items manually or failing this by;
- Assessing the operations which pose a significant risk of injury;
- Ensuring all persons are given suitable manual handling training;

The company realises that some tasks may have to be postponed until the appropriate number of persons are available to safely carry out the task (the average male should not lift more than 25kgs manually **or what they are comfortable with** and the average female to lift no more than 16kg **or what they are confortable with**.).

It is the Policy of the Company that a preliminary manual handling assessment is to be carried out as part of the general risk assessment. Where this identifies that there is a significant risk from manual handling a more detailed assessment will to be carried out by the Project, or other, Manager who has been trained in risk assessments. The manual handling assessment will be recorded.

A detailed assessment will need to be carried out if the preliminary assessment shows that the manual handling task involves:

- the lifting or lowering of a load which is unstable, difficult to grasp or greater than the weights identified in Figure 1 or the operation is carried out where there are adverse working conditions; or
- The carrying of a load, with a weight exceeding those stated in Figure 1 and the distance exceed 10 metres without rest; or
- The pushing or pulling of a load from start where the force required exceeds 25kgs for men or 16kgs for women; or
- The lifting of a load, weighing more than 5kg load for men or 3kg load for women, from a seated position.

Where the use of a machine is impracticable, sufficient labour must be available to handle any heavy or awkward loads and instructions must be issued to site on the handling of these loads.

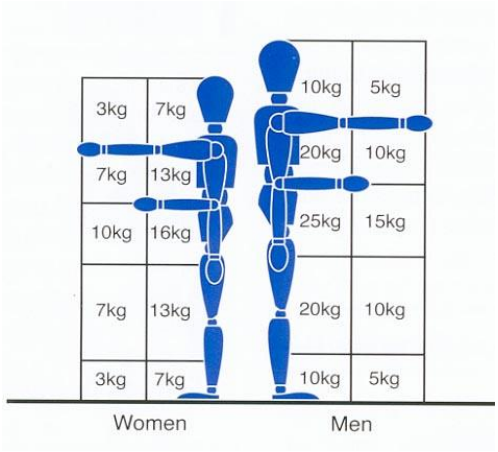
All staff will be given training in the correct methods of handling and lifting loads as part of their normal site safety training.

1.28.3 Training

All operatives and Supervising Engineering staff involved in manual handling operations will be trained in the relevant procedures. Regular refresher training will also be provided to maintain and enhance competence in manual handling operations.

Training will be based on the physical structure of the body and the effect of attempting to handle loads in various positions.

Figure 1.



1.28.4 Monitoring

Director/ Office Manager / Supervising Engineer will:

- Ensure any persons required to complete manual lifting work have been given and have understood training on manual handling and associated lifting techniques.
- Ensure a Manual Handling assessment has been completed for the manual handling operation in question.
- Ensure that the required control measures for the works are being implemented.
- Instruct any operative in the correct handling and lifting of loads as required.
- Ensure that a supply of suitable gloves is available for issue as required for the handling of materials, which could cause injuries to the hands.
- Enforce the wearing of safety footwear and Supervising Engineering staff will caution any employee or sub-contractor wearing unsuitable footwear.
- Ensure that no operative, particularly a young person is required to lift without assistance a load, which is likely to cause injury.
- Re-assess any manual handling operations which an employee has reported as being too difficult, unachievable or they do not feel comfortable with.

1.29 MONITORING HEALTH AND SAFETY PERFORMANCE

Direct information on the safety performance of the Company will be obtained from the following.

- The findings of routine site inspections carried out by our external safety advisers (Alban Safety Ltd.)
- Accident, incident, and disease statistics
- The conclusions of any accident, incident, near miss, or disease investigation
- Any comments from HSE, our clients, including Principal Contractors, or other parties
- The findings from the health and safety committee.
- Comments or suggestions coming directly from employees or contractors
- Direct checking of the particular safety arrangements, such as electrical testing of power tools, COSHH etc, according to the systems described in the relevant sections later in this Policy.

On request from the Managing Director / Senior Engineer, our safety advisers will make routine inspections of workplaces, including sites, offices and workshops to monitor working practices, and they will also advise the Senior Engineer/Supervising Engineer and operatives of any health and safety issues as they are raised. As well as monitoring work in progress they will be concerned with work to be completed in the immediate future, discussing with the Senior Engineer/Supervising Engineer the items that should be included in the risk assessment, and what job planning has been carried out.

On completion of the visit a written report will be produced of the findings. These will be discussed with the Senior Engineer/Supervising Engineer who will sign, acknowledging receipt of the report. The "action" column on the report, will at this stage be blank. As the Senior Engineer/Supervising Engineer actions the items raised, he should indicate this in the "action" column with his initials and the date action was taken. Once all items have been cleared, the Supervising Engineer should send one copy to the Managing Director as confirmation that the items have been actioned. The safety adviser will also send the Managing Director / Senior Engineer a copy of the report for his information.

If on a subsequent visit the safety adviser is of the opinion that adequate action has not been, and will not be taken, he will inform the Managing Director as quickly as possible.

If the safety adviser is of the opinion that an operation constitutes a risk of serious injury to any person then he will take whatever action he feels necessary. If the Senior Engineer/Supervising Engineer disagrees with this action, the safety adviser will record his opinion in his written report and inform the Managing Director as quickly as possible and copy him with the report by the quickest possible means. The Managing Director will then resolve the issue.

1.30 NOISE

1.30.1 Hazards

The main hazard associated with noise is hearing loss or impairment. This may be long term due to prolonged exposure, or could be due to excessive peak levels. Another hazard is impaired communications, which could lead to other safety problems due to unheard or misinterpreted instructions.

1.30.2 Planning Procedures

When planning work, the Control of Noise at Work Regulations 2005 will be taken into account. Noise measurements must be made by a competent person to ascertain where control measures are required. The requirements of the site Health and Safety Plan must also be planned for.

The Senior Engineer will:

- Ensure that information on the noise level of any plant or work equipment, which it is intending to hire, or purchase is obtained and taken into account before hiring or purchase takes place.
- Ensure that all plant provided is fitted with silencers, mufflers, doors, canopies, etc.
- Ensure that where personnel will be required to work in situations where potentially harmful levels of noise are likely to be encountered, full information is obtained before work commences on the levels and frequencies of noise. Details should be included in the task method statement and risk assessment along with any designated hearing protection zones.
- Arrange for the following depending on levels of noise and the exposure levels that apply to that level, i.e.

Lower Exposure Action Value (EAV)	80 - 85 dB(A) daily personal exposure.
Upper Exposure Action Value (EAV)	above 85 dB(A)
Exposure Limit Value (ELV)	87 dB(A)

- At the Lower EAV a noise assessment must be carried out by a competent person and recorded in writing.
- Ensure that suitable measures to reduce the risk to employees / operatives (other than PPE) are available. Where there is no other means of reducing the risks, suitable PPE may be issued, employees / operatives do not have to wear it at these levels.
- At the Upper EAV a noise assessment by a competent person as above and actions taken, other than PPE, to reduce the noise levels. If noise levels cannot be reduced to below the Upper EAV, the following actions must be taken:

  - Suitable ear defenders must be provided and worn.
  - Ear protection zones must be demarcated and BS5378 signs displayed.
  - Equipment **must be maintained.**

- At no time must employees / operatives be exposed to noise levels above the ELV of 87 dB(A). Exposure can be brought down to below this by means of PPE.
- Arrange for supplies of hearing protection, appropriate to the noise source, be made available on the site or for any operations where it is not practicable to reduce the noise level to a safe limit.

1.30.3 Training

Instruction and training will be provided to employees / operatives required to work on or near plant which is likely to result in exposure to noise levels above the first action level. Regular refresher training must be provided to maintain awareness of the hazards to health of noise.

1.30.4 Monitoring

The Senior Engineer/Supervising Engineer will:

- Ensure that all the control measures identified in the noise assessment are implemented.
- Arrange for hearing protection equipment to be issued to operatives as required and ensure that it is worn at all times when operatives are exposed to noise above the Second Action level or Peak Action level.
- Ensure that any hearing protection supplied is worn as required by the method statement and risk assessment.
- Ensure that all noise control items fitted to plant are kept in good order and that any defects noted are reported to the Senior Engineer/Supervising Engineer, or hire Company immediately.

1.31 OCCUPATIONAL HEALTH

1.31.1 Introduction

The organisation has a legal and moral duty to ensure the health and wellbeing of anyone who may be affected by the possibility of ill health arising from their work activities. Occupational health covers many areas namely:

- **Chemical hazards**. These may occur when an employee is exposed to chemical agents that may arrive in many forms e.g. dusts, liquids and gases.
- **Biological hazards**. These may occur when employees are exposed to bacteria, viruses, animals and plants as well as food stuffs.
- **Physical hazards**. These may occur when employees are exposed to excessive noise, vibration, extreme heat and cold, musculoskeletal injuries.
- **Stress**. This may occur when employees are exposed to excessive workloads and tasks which affect their emotions.

1.31.2 Legal Duty

There are several pieces of current health and safety legislation that cover the area of occupational health. These include the duty to ensure the health, safety and welfare of employees, the management regulations and the hazardous substances legislation, to name a few. There is also a legislative requirement to conduct health surveillance where certain situations arise e.g. noise, exposure to certain substances.

1.31.3 Recognised Control Measures

Hazards that have the potential to harm employees should be identified in your risk assessments which should be contained in the relevant section of the **Risk Assessments Manual.** These assessments should identify any occupational health issues that require controlling.

If the risk assessments deem it necessary, you should institute monitoring procedures for the health of your employees who are, or may be, exposed to health risks whilst carrying out work activities. In areas of work activity that are recognised to pose a known health risk, it is wise to ensure that new employees are sent for a pre-employment medical. This will provide the organisation with a bench mark of the new employee's pre-employment health condition and may in some cases be a deciding factor whether the new employee is suited to the task.

Some occupational health hazards will require continual monitoring of the workplace and the employees undertaking tasks within the workplace. The employer must undertake surveying, sampling and testing to satisfy the exposure standards. Exposure standards are established by the Health and Safety Executive along with various medical advisory bodies. The standards are identified as maximum and occupational exposure levels. Examples of this include:

- Atmospheric dust sampling in a dusty woodworking workshop. The employer will be required to prove that the dust extraction mechanism and personal protective equipment is adequate for the control of the associated hazard.
- Noise survey in a manufacturing, production line environment. The employer will be required to prove that the noise levels remain within the current exposure standards.

- An assessment of the vibration transmitting tools and materials that the employee is required to use to undertake their daily task, so that the exposure is kept within the current exposure standards.

Dependant on the associated occupational health risk, employees may require a referral for occupational health screening. This may be due to the fact that they have come into contact with something that is likely to cause long term harm and may affect their ability to safely continue with their normal duties.

Occupational health screening can be described as a planned, medical assessment of a persons' general health, which is usually undertaken by an Occupational Health Practitioner who has specialised knowledge in the field of concern.

You should instigate controls to ensure that employees who suffer from any of the following medical conditions inform management so that, in case of need, the appropriate action can be taken:

- Bronchitis.
- Heart complaints.
- Epilepsy.
- Allergy to any substance e.g. penicillin.
- Asthma.
- High / low blood pressure.
- Giddiness / fainting.
- Diabetes.

This is not an exhaustive list. Any condition that affects ability to work, or which would affect the safety of others must be reported to the management.

1.31.4 Dust Hazards

Due to the nature of the works undertaken by the Company it is inevitable that quantities of dust are generated. It is also realised that dust is a hazard that can affect the health and safety of personnel. Therefore the Company undertakes, as far as is reasonably practicable, to control dust emissions and will consider the risk from dust when carrying out specific job risk assessments.

1.31.5 Planning Procedures

- Dust Generated by mobile Plant and Vehicle Movements
- Where there is a risk to health and safety of personnel, visitors or other contractors due to dust being disturbed during hot and dry conditions, the site management is to ensure, as far as is reasonably practicable, that a means of dampening down is employed to reduce the risk of respiratory and other dust created problems.
- If due to the climatic conditions dusts are still generated then suitable respiratory protective equipment, generally dust masks, are to be made available.
- There may at time be other processes that produce dusts. These are to be sufficiently risk assessed to determine the type of dust to be produced and suitable control measures to be put in place.
- Visibility – if there is a risk of a person or group of people's visibility being affected then suitable eye protection is to be supplied and used.
- Respiratory – where a dust is produced which could give rise to respiratory problems then a suitable mask will be supplied and worn by those affected. It is important that the type of dust is correctly determined to ensure that the right type of respiratory protection can be supplied.

1.31.6 Training

Training will be given, where necessary, for the use of dust suppression units and the correct fitting of respiratory protective equipment.

1.31.7 Monitoring

Dust monitoring will be carried out, where applicable, in accordance with local planning restrictions and environmental legislation. This would normally be left to the main contractor to organise. On site monitoring will be carried out by the site Supervising Engineer to ensure that suitable PPE is being worn and to determine when dust suppression is required

1.31.8 Control Measures

The following considerations are to be taken into account when carrying out processes or operations that gives rise to the generation of dust:

- All persons are required to wear suitable eye and respiratory protection as stated in the risk assessment or as instructed by the site Supervising Engineer.
- Personnel are required to inform their Supervising Engineer if they believe there is a risk resulting from excessive dust

1.32 OFFICES

The following safety arrangements will be adopted for all offices occupied by company personnel whether on-site or at head office.

The Health and Safety Consultants will carry out routine safety inspections as requested by the Senior Engineer. Due regard to the requirements of the Workplace (Health & Safety) Regulations 1992 will be taken for our offices and suggestions from employees / operatives to improve facilities will be considered and brought up at routine Board meetings.

1.32.1 Hazards

The main hazards associated with the office environment are:

- Trailing wires / cables and other items left in walkways
- Manual handling
- Use of display screen equipment
- Flammable materials

1.32.2 Planning Procedures

The Office Manager will ensure that all offices are suitably laid out in accordance with the Workplace (Health, Safety & Welfare) Regulations 1992, to ensure that work can be undertaken in a comfortable manner.

All equipment purchased for use will meet the requirements of

- the Provision & Use of Work Equipment Regulations 1998
- the Electricity at Work Regulations1989
- the Display Screen Equipment Regulations 1992

Suitable and sufficient assessments will be carried out by the Company Safety Consultants to identify the main hazards and any necessary control measures needed to be implemented.

1.32.3 Monitoring Procedures

All fire equipment will be checked, tested and maintained in accordance with the Regulatory Reform (Fire Safety) Order 2005 and the relevant Section of this document.

The Office Manager, or other nominated person, will carry out daily checks of the offices to ensure that they are in good order.

Our Safety Consultants will carry out regular inspections of the company's offices as requested by the Managing Director. Site offices will be inspected as part of the general site inspection.

1.32.4 Training

It is the Company's policy to ensure as far as reasonably practicable the health, safety and welfare of personnel working in or persons visiting our offices. To ensure the safety of employees, all office staff will be trained in:

1) Office Safety
2) Fire Safety
3) Manual Handling Techniques.
4) Safe Use of DSE (only those persons classed as 'users').

1.32.5 Display Screen Equipment (DSE*)*

The Company will ensure that, as far as is reasonably practicable, only DSE that does not give rise to health risks is purchased. To further reduce any residual risks to employees from DSE, the Office Manager will ensure that a suitable and sufficient risk assessment of work undertaken in the offices and the office environment itself.

All persons classified as 'users' (see below), once trained, will be given a self assessment checklist to complete. On completion the checklists will be analysed by the Safety Consultants to determine whether a detailed risk assessment is required and any subsequent changes need to be made to an individual's work station or work pattern.

- ***'User'*** – Is defined as an employee who habitually uses an item of DSE for an hour or more during each working day.

- Employees classed as 'users' must ensure they leave their workstation for at least 5 minutes in every hour. Other works such as filing and photocopying can be carried out in this time. 'Users' are expected to inform their line managers of any physical or psychological problems they may be experiencing due to excessive use of DSE.

- ***Eye Tests*** – The cost of an eye test will be covered for any user who may have a problem with their eyes due to continuous use of DSE. If an optician specifies the need for corrective lenses for the use of DSE, the Company will cover the basic cost. Anyone wishing to upgrade will be expected to cover the difference in cost.

1.32.6 Office Safety

- ***Working space*** – Each person will be allocated a sufficient amount of space to enable them to carry out their daily duties. Sufficient storage space will be allocated to prevent the build up of paper / files in gangways or under desks.

- ***Lighting*** – As far as reasonably practicable natural lighting will be used throughout the offices and to aid this all office windows will be regularly cleaned. Suitable blinds will be placed at office windows where a risk of glare may cause discomfort.

- ***Furniture*** – All office furniture is purchased and maintained so as not to present a risk to the health, safety and welfare of employees.

- ***Filing Cabinets*** will be used with care:
    a. Only one drawer open at a time
    b. Heavy items or large files of paper stored in the bottom drawer
    c. Drawers will not be left open where there is a danger of someone walking past and tripping over them.
    d. Stacking/storing of files, books etc. on top of cabinets will be avoided.

1.33 PERSONAL PROTECTIVE EQUIPMENT

1.33.1 Hazards

Refer to the specific sections of this policy for the relevant hazards and the protective equipment required. Some examples include:

1.33.2 Planning Procedures

Risk assessments of work activities are to be carried out by the relevant Engineers. During the risk assessment process, the Senior Engineer/Supervising Engineer must identify how the risk will be managed, by means other than the issue of PPE. Where the risk cannot be reduced to an acceptable level by other means, PPE will be issued.

The relevant Senior Engineer/Supervising Engineer will establish what protective clothing and equipment will be necessary and will ensure that any special protective clothing or equipment required and any signs relating to the wearing of PPE are obtained and available for use on site.

Senior Engineer/Supervising Engineer will ensure that sub-contractors are made aware of the site requirements for the wearing and provision of personal protective equipment for their own employees.

The company will provide a suitable means for storing personal protective equipment to its employees / operatives.

1.33.3 Training

Where necessary, e.g. the use of harnesses, training will be provided to staff in the use and maintenance of the protective clothing and equipment issued.

1.33.4 Monitoring

The Senior Engineer/Supervising Engineer will:

- Ensure that adequate supplies of all necessary protective clothing or equipment are available on site/workplace for issue as required and that when issued to employees / operatives a record is to be kept in a protective clothing issue register in the SMM.
- Ensure that the protective clothing or equipment is suitable for the specific process for which it is provided. The safety consultant as required can provide information and advice on the correct equipment to be issued.

- Ensure that before employees / operatives are set to work, they are in possession of any necessary protective clothing.
- Ensure that signs are erected where the wearing of PPE is mandatory, if it hasn't already been erected by others.
- Ensure that all persons are aware of the actions to be taken if their PPE becomes lost, stolen, damaged or worn out.
- Set a good example in the wearing of safety helmets, protective footwear, etc. and will use all necessary protective clothing and equipment where required.

1.33.5 Misuse

Misuse or intentional damage to any items of personal protective equipment that can be attributed to an individual may result in disciplinary action being taken which may lead to dismissal. Where the damage is caused by a contractor, the individual will be removed from site and the act referred to his / her Company.

1.34 PERMITS TO WORK

A Permit to Work procedure will be required as part of a safe system of work when, because of potentially hazardous circumstances, there is a need to strictly control access into areas, rooms, confined spaces, etc. and/or control specific work to be carried out.

Examples are:

- Excavating in toxic ground or where there are underground services.
- Bore holes
- Work on plant when guards have been removed.
- Work on electrical installations.
- Entry into confined spaces.
- Work near overhead power lines.
- Welding or use of any tools in areas where there are flammable liquids, gases or dust.

1.34.1 Planning procedures

A Permit to Work procedure may be a requirement of a client, controller of premises or other contractor or may be set up by this Company.

In the case of procedure operated by others, detailed discussions will be requested between management and supervising engineers from our project management team involved in the contract and the organisation on the Company operating the procedure.

If the permit procedure does not cover the requirements of this policy, improvements must be requested.

Where Permit to Work procedures are set up by this Company, the Senior Engineer/Supervising Engineer will ensure that the procedures are clearly defined and the personnel who will operate the system have been fully instructed.

The following check list will be used by Senior Engineer/Supervising Engineer to ensure that any permit procedure fully meets this company's policy:

- Does the permit procedure satisfy the legal requirements applying to the site/installation?

- Is the permit procedure recognised through the site/installation as being essential for certain types of work?
- Are the types of work or areas where permits must be clearly defined and known to all concerned.
- Does the permit procedure extend to all other contractors, client personnel, etc.?
- Is it clearly laid down who may issue and authorise permits and how permits may be obtained?
- Is the permit procedure flexible enough to allow it to be applied to other potentially hazardous work other than that for which it was originally set up?
- Does the Permit procedure contain clear rules about how the job should be controlled or abandoned in the event of a major or general site emergency or new hazard,
- Do permits specify clearly the job to be done and to whom it is issued?
- Does the recipient have to sign the permit to show that he has both read the permit and understood the conditions laid down in it?
- Do permits specify clearly a time limit for expiry or renewal?
- Do permits specify clearly the plant or geographical area to which work must be limited?
- Is a hand-back signature required when the job is complete?
- Is there a system of spot checks to ensure that permits are being followed?
- Is there a procedure for reporting any incidents that have arisen during work carried out under a permit and for reviewing the permit procedure as necessary?

1.34.2 Supervision

The Senior Engineer/Supervising Engineer must ensure that all persons under their control are aware of a permit procedure and the areas/work for which a permit is required.

Notices, signs, etc. prohibiting access to areas, plant, specific work permits must be displayed and supervising engineers must ensure that they are maintained in position and replaced immediately if lost, damaged or become unreadable.

Disciplinary action will be taken against any person disregarding the permit procedure.
Site Managers must carry out regular checks to ensure that the permit procedure is being followed and that current permits are in the possession of persons in areas/carrying out work covered by the permit system.

1.34.3 Safe system of work

Where works have to be carried out under a permit procedure set-up by this company e.g., entry into confined spaces then the standard Company Permit to Work will be used as part of the procedure.

A Permit Record Book must be maintained for Permits with details of each Permit issued.

The record book must be kept by the person responsible for issue of permits and permit numbers recorded consecutively.

1.35 RISK ASSESSMENTS

The Management of Health and Safety at Work Regulations 1999, require that suitable and sufficient assessments of risk should be carried out for all operations or undertakings in the workplace.

The most significant risks arising out of our work include the following:

- Working at heights
- Plant and machinery movements

- Carrying out of excavation work
- Manual handling
- Noise
- Dust
- Electrical safety
- Slips and trips generally around sites

1.35.1 Explanation

A Risk Assessment is a step-by-step analysis of a job, task or process that takes into account the risks likely to be encountered and the necessary control measures required to reduce the risk.

The following definitions are based on those used in the English Courts:

Risk
The likelihood that a specified undesired event will occur, due to the realisation of a hazard by or during, work activities or by the products and services created by work activities.
Hazard
The potential to cause harm, including ill health and injury; damage to property, plant, products or to the environment; production losses or increased liabilities.

Danger
A person is in danger when they are exposed to a risk. The degree of danger is dependent on the hazard or risk.

1.35.2 H.S.E.'s '5 STEPS TO RISK ASSESSMENT'

1. Look for the hazards
If you do the assessment yourself, walk around your workplace and look at the significant hazards which could result in serious harm or effect several people. Also ask your employees or their representatives what they think. Check Manufacturers' instructions or data sheets, they can help you spot potential hazards and put them in their true perspective.

2. Decide who might be harmed, and how
Firstly, decide which **hazards** are likely to cause harm and to what effect they could have on those carrying out the work and others who may be affected and rate these as high, medium or low risk.
You will need to take in to consideration people who will not always be on site e.g. cleaners, visitors, contractors, maintenance, etc., is there a chance they could be hurt by your activities.

3. Evaluating the risks
Your real aim is to combat risks at source to either eliminate or reduce to the minimum. With this approach you can immediately reduce the potential for accidents in the workplace and to others who may be affected. Once this process has been achieved a decision can then be made on the residual high, medium risk where control measures can now be considered.

4. Record your findings
This means that you need to write down the more significant hazards; record your conclusions and inform your employees regarding your findings. These findings should be kept on file for future reference. The written document can help you if an Inspector questions your precautions, or if you become involved in any action for civil liability. (If there are fewer than 5 employees you do not need to write anything down as you can simply explain to them the precautions to be taken but if

you have 5 or more, you must record the significant findings of your assessments) and inform those affected in writing. This is so there will not be any misunderstanding.

5. Review your assessment from time to time and revise it if necessary

You don't need to amend your assessment for every trivial change, but if the job involves a significant new hazard you will need to review and implement any changes and advise those persons affected in writing (see item 4 above).

When considering new work, use these risk assessments to base your judgement when writing the next risk assessment. However, it is important to note, environmental and site conditions may be very different, these aspects must be taken into account when making your next risk assessment.

Assessments will be carried out prior to commencement of work to ensure the appropriate protective and preventative measures, including information, instruction and training, are undertaken. A specimen risk assessment form used by the Company is included as an Appendix to this document.

1.35.3 Planning Procedures

It is an important point that risk assessments are carried out prior to an operation being undertaken and any significant findings recorded. It is the responsibility of the Senior Engineer/Supervising Engineer to carry out suitable and sufficient risk assessments for their areas of responsibility.

Contracts Supervising engineers are responsible for ensuring that the risk assessments covering their work areas are suitable or sufficient. Where there appears to be a deficiency, they are to inform The Senior Engineer before continuing with the work.

A copy of each risk assessment is to be made available for those carrying out the work.

1.35.4 Reviewing Risk Assessments

Risk Assessments should be reviewed on a regular basis by the relevant Senior Engineer/Supervising Engineer. In the offices, this should not exceed annually, on sites the review will need to be carried out more regular and in some cases monthly or weekly. The review is to ensure that they are applicable to the specific work.

Where the methods of work are different, or the risks are unusual, the Supervising Engineer should ensure that they are amended before the work activity commences

1.35.5 Emergency and Non-routine Operations

Where any activity does not have a corresponding risk assessment / method statement, blank forms are available in the SMM so they can be carried out by the Director/ Contract Supervising Engineer. The Senior Engineer has overall responsibility for implementing these systems, but he may delegate carrying out the risk assessments to a Contract Supervising Engineer.

Where risks are considered to be very high and normal means of reducing the risks cannot be used, these risks should be notified to the Senior Engineer/Supervising Engineer for discussion and approval prior to the task being undertaken.

1.35.6 Training

GEA shall ensure that appropriate training in risk assessment techniques will be provided to staff to enable them to carry out their assessments.

1.35.7 Communication

On the completion of all risk assessments and the introduction of the required control measures, the findings are to be communicated to those who are affected along with any actions that they must take to prevent to risk being realised.

The communication of the findings of a risk assessment can be given as a toolbox talk or a method statement briefing and must be recorded on a relevant form.

1.36 SAFETY MONITORING

In order that the Managing Director can be sure that the procedures laid down in this document are controlling the hazards to which they were designed to control and that they are being adhered to, a series of monitoring arrangements, involving personnel at all levels, are to be implemented.

1.36.1 Employees / Operatives

All employees, operatives and contractors are to carry out self-monitoring to ensure that they are following the procedures laid down in this document. Any work equipment that is used is first to be inspected by the individual and any subsequent faults reported to their line manager or to the stores immediately.

Once an employee carries out an inspection, any relevant documentation is to be completed.

All employees / operatives are expected to bring to the notice of their immediate Supervising Engineer any areas where the Company policy on Health, Safety, Welfare and Environment appears to be inadequate. The suggestions will be passed to the Business & Director for consideration.

1.36.2 Contracts Supervising engineers

Contracts Supervising engineers must continuously monitor their areas of responsibility for any further hazards that have not already been identified by the current risk assessment. They must ensure that employees / operatives are conforming to the method statement, risk assessment, site rules and any procedures laid down in the Health & Safety Policy.

Where a procedure proves to be ineffective, it is to be brought to the attention of The Senior Engineer so that it can be reviewed and changed as necessary.

1.36.3 Directors

The Senior Engineer is to ensure that they carry out regular safety checks of the company's sites. Each of them will carry out a formal safety check on one site every month and complete the weekly safety check sheet in the SMM.

1.36.4 Health & Safety Consultants Inspections

The Company Health & Safety Consultants will carry out a safety visit of each site on a regular basis. It is the responsibility of The Senior Engineer to notify the CHSC of any new sites.

The Company Health & Safety Consultants will look at site conditions and audit the Site Management Manual to ensure it is up to date and valid. On completion of the inspection / audit a written report will be left with the Director/ Contracts Supervising Engineer who is to take action as detailed and in accordance with the given priorities.

Once all the necessary actions have been taken, the Director/ Contracts Supervising Engineer is to sign the report and place it in the relevant section of the Site Management Manual where it will be checked during the next inspection.

1.37 TRAINING, INSTRUCTION, INFORMATION

It is Company policy to ensure that all employees / operatives are adequately trained to carry out their duties competently. Current health and safety legislation frequently specifies that competent persons are employed by companies to carry out their undertakings. The Company Directors will be responsible for ensuring all persons are adequately trained. Advice on this may be sought from the company safety consultants.

1.37.1 Safety Awareness Training

It is Company policy that all personnel who are to go onto site as part of their working day will attend a CITB 1 day Safety Awareness course every three years and hold an in date CSCS card that is relevant to their trade.

1.37.2 Manual Handling Training

It is Company policy that all personnel attend a manual handling course and are updated on the techniques and the requirements of the legislation every three years.

1.37.3 General

The Company is aware that under The Health and Safety at Work etc. Act 1974 and various supporting regulations, it has a duty to ensure employees / operatives receive sufficient information, training, instruction and supervision to allow them to carry out the Company undertakings efficiently and safely. Therefore, wherever a training need is identified, the Company is committed to supplying the relevant training where practicable.

1.37.4 Inductions & Toolbox Talks

In compliance with Section 2(2(c)) of The Health and Safety at Work etc. Act 1974, the Company is aware of the need to give continual information and instructions on any newly identified hazards in the workplace. Therefore, it is Company policy that all employees, operatives and contractors are inducted to each site, by the Director/ Contracts Supervising Engineer, in accordance with the induction format in the Contract Site Safety Manual. Records of the induction will be kept in the main office. Copies of method statements and risk assessments will be held on each site.

Toolbox talks must be given on a regular basis depending on the nature and size of the contract, the frequency being decided by the owner unless already stated by a principal contractor or client.

After any toolbox talks are given, whether general or specific, all in attendance must sign the appropriate form stating that they understand the information given. The signatory form must then be returned to the Partners for the records.

1.37.5 Managers & Supervising engineers

The company realises the importance of making sure everyone understands their health and safety responsibilities in the workplace. The Company's Senior Engineer/Supervising Engineer are controlling the works on a day to day basis so it is important that they are fully aware of their legal requirements and how to apply them to their work situations.

Therefore, it is the Company's Policy that all those who have a managerial responsibility for sites will attend the Site Managers Safety Training Scheme (SMSTS) or IOSH managing Safely in Construction and all those who put men to work on site will attend the Site Supervising Engineer Safety Training Scheme (SSSTS).

1.38 TRANSPORT & OCCUPATIONAL DRIVING

It is policy of the Company that all transport provided for work purposes is of sound condition and suitable for the purpose for which it is provided. The Company will ensure that all transport is used by competent persons and that regular maintenance and inspections are carried out to ensure safe operation. Where practicable, suitable procedures shall be designed and communicated to employees / operatives to eliminate or sufficiently reduce the risk of harm to anyone working on or near the transport operations.

Transport means any vehicle or item of mobile equipment, including cars, vans, lorries, mobile plant or rubber tyre platforms.

1.38.1 Competence

All persons required to drive or operate any form of transport owned by or hired by the Company to carry out its undertakings must be suitably competent and, as a minimum, hold a full UK driving license. Operators of mobile plant, unless under training, must also have a relevant certificate of competence, e.g. CPCS card, training provider's certificate. When a new vehicle is purchased which is different from the one it is replacing, adequate training will be given by a competent person as nominated by the Directors.

Whichever form of license or certificate held by a driver must be produced when requested by the Company. Only originals will be accepted and a photocopy will be taken. Copies will be held at Head Office and the original checked on an annual basis. When it is noted that an employee has 6 points on his / her license, visual checks will be carried out by their manager on a quarterly basis. If an employee has 9 or more points the checks will be carried out on a monthly basis.

It is the responsibility of any driver to inform their Senior Engineer/Supervising Engineer if they are convicted of any offence in relation to their driving license and penalties bestowed upon them. Failure to do this could result in the dismissal of that employee.

1.38.2 Risk Assessment

Wherever transport is used, a suitable and sufficient risk assessment (as required by Regulation 3 of The Management of Health and Safety at Work Regulations 1992) is to be carried out by the Senior Engineer/Supervising Engineer in control of that department or site. Such possibilities to be looked at and assessed are:

- Persons being struck by vehicles – separation of traffic routes and pedestrian routes, reversing (a vehicle marshal must always be used when reversing is carried out in a confined area or where people are working if it cannot be avoided).
- Contact with other plant or vehicles – one way systems, traffic control, speed limits etc.
- Items falling from vehicles – sheeting, stacking of materials.
- Overturning of vehicles – stability, ground conditions, operating procedures.
- Persons falling from transport – mounting and dismounting.

1.38.3 Safety Devices

All persons driving or carrying out maintenance on transport are to ensure that they use safety devices, e.g. seat belts, reversing mirrors, cameras, lights, horns, amber flashing lights, body props, anti-slew bars, etc. Safety devices are never to be intentionally damaged, disconnected or abused.

1.38.4 Reporting Defects

All drivers of vehicles / mobile plant must ensure that they report all defects to their manager. If the defect presents a significant hazard the Manager must be informed immediately.

Drivers of road going vehicles must ensure they check their vehicles in accordance with the vehicle handbook.

1.38.5 Security

All drivers are responsible for the safety of their own vehicles. They must ensure that they leave their vehicles / machines in a safe condition whereby unauthorised start-up is prevented. Each vehicle / machine must be parked in a sensible area where it does not present a hazard to other people. Keys must be removed and the vehicle / machine locked. Any other safety devices or immobilisers that are supplied by the Company or manufacturer must be fitted. If the vehicle or machine is left in the yard over a non-working period, the keys must be placed in the office.

1.38.6 Conduct

All persons driving on behalf of the Company must do so in accordance with the Road Traffic Act and Highway Code. At no time, during business or private use, will the Company accept responsibility for any offences committed. If an offence is committed, the employee will be responsible for any fines imposed and may be subject to disciplinary action, which may result in their dismissal.

1.38.7 Mobile Phones

The Company does not allow any person to use a mobile phone whilst driving unless it is a total hands free set. Any hands free kits fitted to vehicles owned by the Company must only be done so with the approval of the Managing Director.

1.38.8 Smoking

All vehicles and mobile plant which have the ability to carry a passenger will be classed as enclosed workplace and will be subject to the smoking bans. A relevant sign will be placed in the vehicle where it can be seen. Anyone found to be smoking in such a vehicle will be dealt with under the company's disciplinary procedures.

1.39 WELFARE ARRANGEMENTS

Welfare at workplaces other than transient sites is governed by the Health and Safety (Workplace) Regulations 1992 or the Construction (Design & Management) Regulations 2007. In particular, the welfare facilities for our offices and site will comply with the following:

1.39.1 Planning Procedures

The Senior Engineer will establish what welfare facilities will be provided before works starts. The Senior Engineer will ensure the following is provided:

- Sanitary conveniences and washing facilities
- Drinking water
- Accommodation for clothing and facilities for changing
- Facilities for rest and to eat meals
- A means to heat food or somewhere that hot food can be bought

1.39.2 Supervision

Where the Company has arranged to use the facilities provided by the Principal Contractor the Supervising Engineer will report to management any deficiencies in facilities provided.

1.39.3 Special welfare arrangements

Where short term work is to be carried out on a site where the provision of huts or mobile units is not reasonably practicable, the minimum of equipment to be carried in vehicles is:

- Drinking water containers.
- Means of boiling water (taking into account requirements for safety and ventilation if LPG is used).
- Hand wash basin and cleaner in dispenser.
- Paper towels or other suitable means of drying hands.
- Storage facilities for protective and other clothing.
- Adequate first aid equipment.

Before work commences, The Senior Engineer must make arrangements for the use by operatives of convenient sanitary facilities throughout the duration of the work.

1.39.4 Toilet Facilities

Toilet units shall:

- Have plumbed in WCs and washbasins complete with plugs
- Have doors and locks fitted to the cubicles
- Be provided with toilet consumables
- Be provided with sanitary disposal facilities
- Have adequate lighting, including in cubicles
- Be accessible, with non slip steps
- Be well stocked
- Be maintained in a clean and hygienic condition
- Be installed, level and stable
- Have all waste contained and removed from site as required
- Be robust enough to withstand day to day use

No. of persons (men or women)	No. of toilets	No. of washbasins
1 – 5	1	1
6 – 25	3	3
26 – 50	5	5
51 – 75	7	7
76 – 100	9	9

Table A.2 – Toilet facilities for mixed use

No. of men	No. of toilets	No. of urinals	No. of washbasins
1 – 15	1	1	1
16 – 30	3	3	3
31 – 45	3	3	3
46 – 60	5	5	5
61 – 75	5	5	5
76 – 90	7	7	7
91 – 100	7	7	7

Table A.3 – Toilet facilities for men only

1.40 WORK EQUIPMENT & PLANT

1.40.1 Hazards

Hazards associated with the use of work equipment arise out of:

- Unskilled operation.
- Incorrect use.
- Poor maintenance.
- Unsupervised reversing of plant.
- Defects in machine unchecked.
- Noise (see separate section).

1.40.2 Planning Procedures

All work will be planned in accordance with the relevant standards, the required risk assessments and any Health and Safety Plan for the site. The Senior Engineer will take all aspects of the work into account to ensure that sufficient information is provided to hire companies to enable correct type of equipment to be provided.

Any plant equipment that is required to drive on the road must be in a safe condition before it does. It must also have an amber flashing light switched on and working at all times and must only be driven by an operator who is certified to drive that item of equipment and who holds a full UK driving license. All the requirements of the relevant statutory provisions regarding driving on public roads must be adhered to at all times.

The Senior Engineer will:

- Ensure that competent operators are provided or that, where necessary, full training and instruction is arranged.
- Determine whether any preparatory work is required for the installation or use of equipment on site and ensure that any requirements are planned, e.g. fork lift truck storage areas, loading towers, solid base for mobile cranes.
- Give special consideration to the stability of equipment when working on unstable ground to ensure that the loading can be supported adequately.
- Ensure a planned servicing schedule is prepared for all Company equipment and records kept of repairs, alterations, maintenance etc.
- Take account of the local environment to ensure the equipment is not only suitable for the task but also for the surroundings it is to be used in.

1.40.3 Training

Training will be provided to all equipment operators and, where relevant, only holders of an approved up to date certificate (e.g CPCS, CSCS, abrasive wheels etc.) will operate equipment. Regular refresher training will be provided to enhance competence levels.

1.40.4 Monitoring

The Supervising Engineer will:

- Ensure that equipment delivered to site is in good order and fitted with any necessary safety devices and guards.
- Ensure any defects noted, are reported to the manager or hire company immediately.
- Ensure that only authorised and, where appropriate, certificated operators are permitted to operate any item of equipment.
- Ensure all equipment is properly secured and immobilised at the end of each day.
- Ensure all necessary testing and thorough examination certificates are requested and checked and all items of equipment requiring inspections by operator or other competent person have the inspection recorded in the register.

- Ensure that any defect notified by the operator is reported immediately for repair and that where defects could affect safety; the equipment is not used until the repairs are carried out.
- Ensure that all safety equipment e.g. reversing horns / lights, seat belts, amber flashing lights etc. are being used at all times

1.40.5 Control Measures

- Carry out daily checks on equipment before use and report any defects. Notify your Supervising Engineer immediately if any defect could be hazardous and do not operate the equipment until it has been rectified.
- Only trained, authorised and, where relevant, current certificated persons will operate equipment.
- All guards must be in good order and in position while equipment is operating.
- Only use the correct item of equipment for the work required.
- Ensure the work area is suitable for the job being done e.g. clear working area, good ventilation etc.
- Ensure servicing schedules are available and maintained.
- Secure and immobilise equipment when left unattended. Do not leave engines running when operator is not present, especially in public areas.
- Hearing protection must be worn when working in high noise levels.
- Lifting appliances will be inspected weekly and have a thorough examination at the specified period in accordance with statutory requirements.
- Ensure other control measures identified in the risk assessment for the work are implemented.
- Use all safety equipment provided in the manner for which it was intended.

1.40.6 Petrol Operated Tools

At times, personnel are required to use power tools that are run on petrol. Only competent personnel are permitted to use this equipment and must be authorised by a Senior Engineer or Supervising Engineer.

Due to the flammability of the energy source, additional precautions must be taken when using this equipment. These are:

- Only refuel in an area where there are no ignition sources and where a fire extinguisher is at hand e.g. near an oil container.
- Use a suitable funnel to reduce the risk of spillage. If any spillage does occur ensure it is cleaned up immediately. Any surface that the petrol has spilt on must also be wiped.
- Any remaining petrol must be returned to a suitable storage area.
- Do not smoke when refuelling or using this equipment.
- If there is a fuel cut off switch, ensure it is in the ‘off’ position when not in use.

1.40.7 Pneumatic Tools

It is Company policy that users of this equipment are only those who have been shown how to use it correctly and have been authorised by a Senior Engineer or Supervising Engineer. It is Company policy that anyone using this equipment carries out a visual check to confirm its serviceability prior to commencing work. Any faults identified must be reported to the Stores immediately so the equipment can be taken out of use.

The Manager will ensure that the main compressor is checked on a daily basis and that regular pressure testing is carried out.

1.40.8 Cartridge Tools

Only cartridge tools of low velocity indirect type will be used on the Company sites. Senior Engineer/Supervising Engineer will ensure all Contractors are made aware of the Company Policy.

Only trained persons are to operate cartridge operated tools. The Senior Engineer or Supervising Engineer will arrange for all operatives who will be required to use cartridge tools on site to be trained by the cartridge tool manufacturer's representatives and Certificates obtained which will be maintained on site.

Suitable storage facilities will be provided where cartridges are stored on site. The Senior Engineer/Supervising Engineer will ensure that all cartridges are stored on site in the storage facilities provided.

The Site Supervising Engineer will ensure that sufficient and suitable eye protection is available and issued when required in accordance with the risk assessments. All personal protective equipment identified in the site specific risk assessment must be worn when using cartridge operated tools.

1.40.9 Planning Procedures

Risk assessments of work activities are to be carried out by the relevant managers. During the risk assessment process, the Senior Engineer or Supervising Engineer must identify how the risk will be managed, by means other than the issue of PPE. Where the risk cannot be reduced to an acceptable level by other means, PPE will be issued.

The Senior Engineer or Supervising Engineer will establish what protective clothing and equipment will be necessary and will ensure that any special protective clothing or equipment required and any signs relating to the wearing of PPE are obtained and available for use on site.

The Senior Engineer/Supervising Engineer will ensure that sub-contractors are made aware of the company and site requirements for the wearing and provision of personal protective equipment for their own employees.
As a minimum, the PPE that must be worn on all sites managed by RVB will be:

- Safety helmets
- High visibility vests or jackets
- Safety boots with steel midsoles and steel toe caps
- Eye protection
- Suitable gloves
- Any other PPE required by the risk assessment.

1.40.10 Training

Where necessary, e.g. the use of harnesses, training will be provided to staff in the use and maintenance of the protective clothing and equipment issued.

1.40.11 Monitoring

The Senior Engineer/Supervising Engineer will:

- Ensure that adequate supplies of all necessary protective clothing or equipment are available on site/workplace for issue as required and that when issued to employees. A record is to be kept in a protective clothing issue register in the SMM.
- Ensure that the protective clothing or equipment is suitable for the specific process for which it is provided. The safety consultant as required can provide information and advice on the correct equipment to be issued.

- Ensure that before employees are set to work, they are in possession of any necessary protective clothing.
- Ensure that signs are erected where the wearing of PPE is mandatory, if it hasn't already been erected by others.
- Ensure that all persons are aware of the actions to be taken if their PPE becomes lost, stolen, damaged or worn out.
- Set a good example in the wearing of safety helmets, protective footwear, etc. and will use all necessary protective clothing and equipment where required.

1.40.12 Control Measures

- Operatives will comply with the company and site requirements and any sign or notice indicating that equipment is to be worn.
- All persons issued with protective clothing or equipment must immediately report to supervision any loss or defect in the equipment.
- Personnel are responsible for the hygiene aspects of their personal protective equipment and should ensure high standards are maintained. The Supervising Engineer should monitor this requirement and take appropriate action where the condition of equipment is not acceptable.
- Specialised and complex items of personal protective equipment will only be issued to competent users. Specific training may be given for such items.

1.40.13 Misuse

Misuse or intentional damage to any items of personal protective equipment that can be attributed to an individual may result in disciplinary action being taken which may lead to dismissal. Where the damage is caused by a contractor, the individual will be removed from site and the act referred to his / her Company.

1.41 WORKING AT HEIGHT

Under the Work at Height Regulations 2005, working at height means carrying out work in any place (whether above, at or below ground level) or gaining access to such a place where if measures were not taken to prevent falling, a person could be injured. Such places include:

- Working on a scaffold or mobile elevating work platform;
- Working on the back of a lorry;
- Connecting lifting chains to the top of a container or cabin;
- Working close to an excavation where someone could fall in and sustain injuries; or
- Using ladders, stepladders, towers, hop-ups etc.

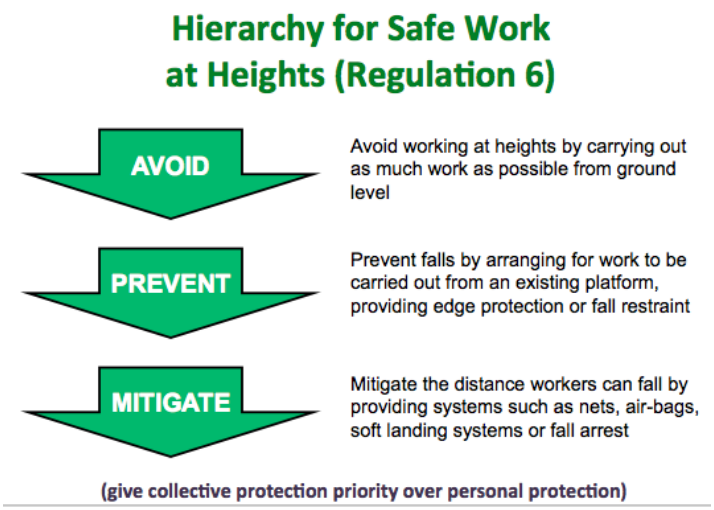
1.41.1 Hazards

The main hazards associated with work at heights include: -

- Falls of persons from working place or accesses.
- Falls of materials or articles.

1.41.2 Planning Procedures

All work will be planned taking into account the work at height hierarchy, risk assessments and the requirements of any Health and Safety Plan required for the work.



The Senior Engineer will: -

- As far as reasonably practicable, avoid carrying out work at heights by carrying out as much as possible at ground level. Where this is not possible, the hierarchy in the Work at Height Regulations will be followed by ensuring that:
  - Work is carried out from an existing workplace;
  - Providing a suitable working platform that gives collective protection e.g. a scaffold, mobile tower, MEWPs etc;
  - Using personal fall restraint; then
  - Mitigating the distance a person can fall e.g. by using nets of airbags at lower levels, using fall arrest gear etc.
- Ensure that work is planned to ensure that a safe access/egress and working place is provided for operatives to work at heights before work commences on site.
- Ensure that where practicable, work at heights is carried out from a safe position.

1.41.3 Training

Training must be provided for any operative required to work at heights in the use of safety belts or harnesses and other equipment before work commences. Regular refresher training to maintain and develop competence levels must also be provided.

3.39.4 Monitoring

The Senior Engineer/Supervising Engineer will:

- Ensure that work is carried out as planned and in accordance with the relevant standards and risk assessments. Also those operatives have received instructions in safe working procedures and the use of any safety equipment provided.
- Inspect weekly, all safety equipment, staging, safety belts, harnesses, anchorages, etc. and any defects noted at weekly inspections or reported by operatives shall be attended to immediately. Ensure that individuals inspect their equipment immediately prior to use. Any defective equipment should be exchanged, repaired before use.
- Ensure that all necessary precautions are taken to ensure that persons do not walk or work beneath operatives carrying out work at high level.

1.42 WORKING OVER OR NEAR WATER

1.42.1 Hazards

Accidental entry into water can be caused by falls, trips and slips, being knocked over by moving objects, e.g. crane loads, loss of balance, high winds, missing barriers, rising swell/tide and swell from passing water traffic.

1.42.2 Planning Procedures

If employees / operatives have to work near or over water The Senior Engineer must:

- Take suitable precautions to ensure that persons do not fall into water by the provision of barriers, fencing, safety harnesses, covers to openings etc. These precautions must also protect the safety of the public, especially children.
- Carry out a risk assessment and develop a suitable safe system of work.
- Establish adequate emergency procedures.
- Ensure there are sufficient numbers of personnel trained to carry out the emergency procedures and use the emergency equipment.
- Ensure there is a suitable place for the storage of emergency rescue equipment. Additional specialist PPE required for this type of work will be automatic life preservers.

Other factors to be taken into consideration are the weather forecast, which should be obtained and published at the beginning of each shift, and tidal information.

Suitable security measures will be necessary to prevent the theft of rescue equipment, boats etc. outside working hours.

There must be on site:

- Rescue equipment
- An audible alarm system.
- Good communication, e.g. telephone or radio.
- Displayed telephone numbers of emergency services.
- Access for emergency vehicles.
- Trained first aiders.

1.42.3 Training

All persons carrying out work over or near water will be trained in any specific PPE that they may be issued with for their safety. It may be necessary to train some personnel in rescue procedures in the event of someone falling into the water.

1.42.4 Monitoring

Senior Engineer/Supervising Engineer are to ensure that all works is carried out in accordance with the safe system of work and that all persons are wearing their PPE correctly.

It will be necessary for supervising engineers to carry out regular checks to ensure that any physical barriers and rescue equipment are still securely in place.

APPENDIX A - PRIMARY CURRENT LEGISLATION

The following is a list of Health and Safety, Environmental and Other relevant legislation. Every attempt has been made to ensure the statutory legislation listed is up to date but, with an ever-changing legislative programme, no warranty is given or implied that it is complete or exhaustive. It is, however, representative of the legislation applicable to work in offices and on construction sites. The legislative framework is constantly being reviewed and updated. Check with the HSE for correct legislation applicable at any one time.

ACTS AND STATUTORY REGULATIONS

Health & Safety
Employer's Liability (Compulsory Insurance) Act 1969
Health & Safety at Work etc Act 1974
Highways Act 1980
New Roads and Street Works Act 1991 (Chapter 22)
Regulatory Reform (Fire Safety) Order 2005
Building Regulations 1991
CLP Regs 2015
The Confined Spaces Regulations 1997
Construction (Design & Management) Regulations 2015
Contaminated Land (England) Regulations 2006
Control of Asbestos Regulations 2012
Control of Lead at Work Regulations 2002
Control of Noise at Work Regulations 2005
Control of Substances Hazardous to Health Regulations 2002
Control of Vibration at Work Regulations 2005
Dangerous Substances and Explosive Atmosphere Regulations 2002
Electricity at Work Regulations 1989
Electricity Supply Regulations 1988
First Aid Regulations 2013
Gas Safety (Installation and Use) Regulations 1998
Health & Safety (Consultation with Employees) Regulations 1996
Health & Safety (Display Screen Equipment) Regulations 1992
Health & Safety (First Aid) Regulations 1981
Health & Safety (Information for Employees) Regulations 1989 (Poster)
Health & Safety (Safety Signs & Signals) Regulations 1996
Lifting Plant & Equipment (Records of Test & Examinations etc) Regulations 1992
Lifting Operations and Lifting Equipment Regulations 1998
Management of Health & Safety at Work Regulations 1999
Manual Handling Operations Regulations 1992
Personal Protective Equipment at Work Regulations 1992
Provision and Use of Work Equipment Regulations 1998
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
Smoke-Free (Premises Enforcement) Regulations 2006 (England)
Supply of Machinery (Safety) Regulations 1992
Work at Height Regulations 2005
Working Time Regulations 1998
Workplace (Health, Safety & Welfare) Regulations 1992

Environmental
Anti-Pollution Works Regulations 1999
Health & Safety (Emissions into the Atmosphere) (Amendment) Regulations 1989
Clean Air Act 1993
Control of Pollution (Amendment) Act 1989
Environment Act 1995
Environmental Protection Act 1990 (Duty of Care)
The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2011
The Groundwater (England & Wales) Regulations 2009
The Conservation (Natural Habitats, &c.) (Amendment) (England and Wales) Regulations 2009
The Hazardous Waste (England and Wales) (Amendment) Regulations 2016
Land Drainage Act 1994
Noise and Statutory Nuisance Act 1993
The Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulations 2002
Road Traffic Act 1991
Town and Country Planning Act 1990
The Water Supply Licence (Prescribed Water Fittings Requirements) Regulations 2005
Wildlife and Countryside (Amendment) Act 1991
The Waste Electrical and Electronic Equipment (Amendment) Regulations 2018
Water Industry Act 1999
Waste Management Licences 1994
Water Resources Act 1991
The Environmental Damage (Prevention and Remediation) Regs 2009
Pollution Prevention & Control Act 1999
Collection and Disposal of Waste Regulations 1988
Contaminated Land (England) Regulations 2012
Control of Pollution (Oil Storage) (England) Regulations 2001
Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991
Controlled Waste (England and Wales) Regulations 2012
Environmental Protection (Duty of Care) Regulations 1991
Environmental Protection (Prescribed Processes and Substances) Regulations 1991
Pollution Prevention & Control Regulations 2000
The Environmental Permitting Regulation 2013
The Waste Regulations 2011

Other
General Data Protection Regulation (GDPR) 2018
Equality Act 2010
Employment Act 2008
Employment Rights Act 1996
Party Wall Act 1996
Social Security Act 1998

APPENDIX B - DECLARATION

HEALTH & SAFETY POLICY,
ORGANISATION & ARRANGEMENTS

The relevant pages from the Company Safety Policy document have been explained to me by my Supervising Engineer or other person nominated by the company.

It is my intention to carry out my duties, as far as is reasonably practicable, in a safe and proper manner, without causing unnecessary risk to the health and safety of other persons, who may be affected by my acts or omissions whilst at work. I will co-operate with any instructions given to me by my employer and follow the procedures set out in the Arrangements Section of the Document.

I will co-operate with any instructions given to me by my employers or any passed on to me by my employers whether imposed by them or other persons with the authority to request certain safe working procedures, to ensure so far as reasonably practicable, the safety and absence of risk to myself or others affected by my work activities.

I undertake not to interfere with or misuse anything provided in my interests of health, safety or welfare and to wear any personal protective equipment as instructed to do so.

I will carry out my duties when using any work equipment in accordance with the training I have received whether by the Company, a previous employer or training establishment.

I will report any hazards to my employer if seen by me and where necessary, will bring to my employer's notice any matter signaling a shortcoming in their arrangements for my Health, Safety or Welfare at work.

Where required to do so, I will comply to any permit to work system, risk assessment or method statement to the best of my ability in accordance with any training received or instructions given.

I am prepared to sign this declaration on the understanding that my employer will, so far as reasonably practicable, provide me with a safe place of work, with a safe access and egress, safe and properly maintained plant and equipment and that he shall undertake to train me where necessary to comply with the provision and use of work equipment and safe working arrangements for me to carry out the duties I am being paid to carry out, and on the understanding that my employer will do all that is reasonably practicable to ensure his part as stated in the current legislative frame-work governing the safety and absence of risk to my place of work.

Print Name:	
Signed:	
Position in Company:	
Date:	