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## **HEALTH and SAFETY POLICY 2011**



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**GENERAL POLICY STATEMENT OF**  
**BOWMITE ELECTRICAL & MECHANICAL LIMITED**

Bowmite Electrical & Mechanical Limited recognises and accepts our responsibilities under the Health and Safety at Work etc. Act 1974 for the Health, Safety and Welfare of employees and contractors.

The declared Policy of the Company is to achieve and maintain a safe and healthy environment for all employees and others who may be affected by the Company's operations.

The Company takes all reasonable measures to ensure the Health, Safety and Welfare of all its employees in fulfilment of its moral, legal and economic responsibilities. These measures also are aimed at protecting others who may be affected by our works.

All employees are issued with a copy of the Company Health and Safety policy and a copy is available on each site and at our offices. The Policy is constantly updated in line with new legislation and Company policy. The Company undertakes training programmes to advise of statutory and Company revisions to Health and Safety arrangements.

The Company notifies all persons who are employed by the Company, sub-contracted to the Company, visiting the Company's premises, sites of operation or to whom the Company owes a duty of care, to co-operate with and conform to the Safety Policy of the Company.

The Directors have overall responsibility for Health, Safety and Welfare for the company.

All staff and sub-contractors are made aware of their particular responsibilities in regard of Health, and Safety/Permits to Work of themselves and of those under their control.

Signed .....Mr. Paul Brighty

Signed.....Mr Ian Macdonald

Directors of Bowmite Electrical & Mechanical Limited

Dated: February 2011

This Policy will be reviewed on an annual basis or:  
If there is reason to suspect that it is no longer valid; or  
If there has been a significant change in the matters to which it relates.

## **ORGANISATION FOR THE ACHIEVEMENT OF SAFE WORKING PLACES**

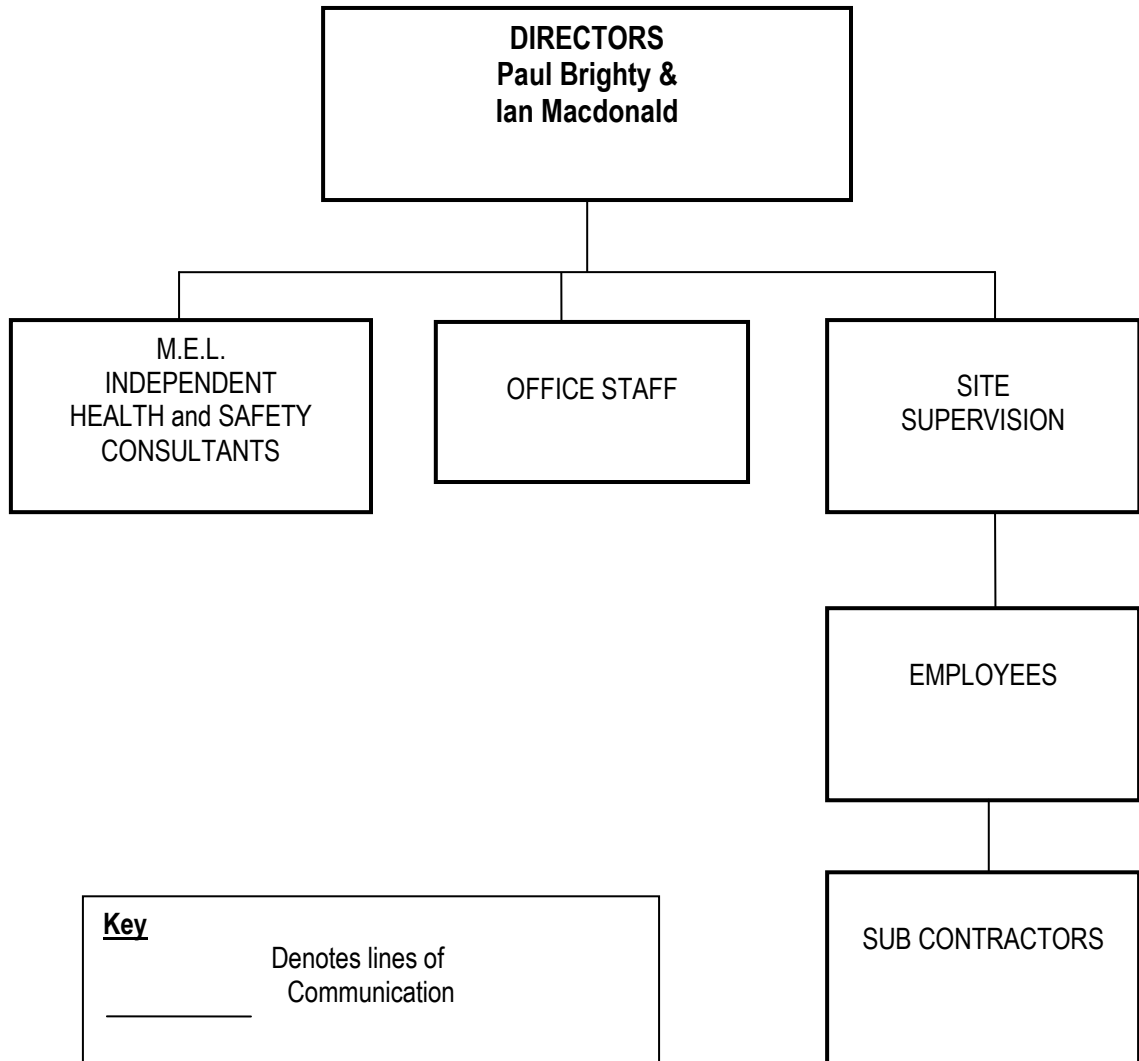
The effectiveness of the Safety Policy is dependant on the people who are responsible for ensuring that all aspects of work are carried out with due consideration for safety and with minimum risk to health. Bowmite Electrical & Mechanical Limited will ensure that this Policy is applied and is adopted by all Personnel, sub-contractors and visitors to their premises or sites. In order that this can be achieved Bowmite Electrical & Mechanical Limited has a management structure as outlined below with individual responsibilities detailed on the following pages.

Each individual person within the organisation has a duty of care to themselves and other persons who may be affected by their actions.

Any recognised breach of any Health and Safety Legislation or any potential hazard observed while at work is to be reported.

Employees are to pay due regard to any duty or requirement imposed on the Company or other person by or under any of the relevant statutory provisions and to co-operate with the employer so far as is practicable to enable that duty or requirement to be complied with and are to act with all reasonable haste on advice and instructions given on matters of Health, Safety and Welfare.

**ORGANISATION CHART**



## **THE RESPONSIBILITIES OF THE DIRECTORS.**

The overall responsibility for co-ordinating Health and Safety rests with the Directors. However each individual person has a duty of care to himself as well as to all those they come into contact with during any part of the working day. The Directors will ensure that this Policy is applied throughout the Company as well as being adopted by all operatives, sub-contractors and visitors to premises where contracts are undertaken.

Under their guidance effective accident prevention and safety training programmes are developed and procedures introduced to bring about a Safe and Healthy working environment. He will also ensure that, as appropriate, management are trained in these policies and play their part in promoting Health and Safety. All new employees will be trained in the Company Health and Safety requirements. Training received by all employees will be entered in their personal training record file, this will be reviewed and any further training needs will be established. Each individual person has a duty of care to himself as well as to all those they come into contact with during any part of the working day.

The Directors have a responsibility to ensure that adequate funds and time are allocated throughout the Company with regards to safety and health and that:-

- At all times consideration is given to health and safety in order that risks are reduced to levels which are as low as is reasonably practicable.
- Statistics are regularly checked with an aim of continual improvement.
- There is continued communication between all persons within the organisation with the external safety consultants to ensure best practice is followed and expert advice sought.
- This Policy is implemented by all, and individuals meet their responsibilities.
- The Company's Employees and Sub-contractors are aware of their responsibilities and that each administers and promotes with enthusiasm the requirements of this Policy throughout the entire Company.
- That the competence of employees and contractors are assessed on a regular basis to ensure that training is adequate.
- Sanction the necessary resources and time for training and all matters of Health and Safety to meet the requirements of the Company Policy.
- Ensure the overall monitoring of all projects is undertaken to enable compliance with Health and Safety Legislation.

## **THE RESPONSIBILITIES OF THE HEALTH AND SAFETY CONSULTANTS**

The responsibility of the Health and Safety Consultants is to monitor changing Health and Safety Legislation and good working practices with an aim of advising and recommending revisions, modifications and amendments to the existing Health and Safety Policy, documentation and systems of work to enhance the Health and Safety culture and comply with the existing and/or new legislation.

In addition the Health and Safety Consultant will undertake to perform when requested to do so those duties laid out below when requested or should the necessity arise:

- To advise Management at all levels on the implementation of Health and Safety, i.e. relevant legislation, Codes of Practices and guidance material, fire precautions, the suitability of safety equipment and accident reporting procedures.
- To monitor by inspection of the workplaces, workshops and accommodation, the Health and Safety performance of employees and to report back to the Directors on such inspections.
- To monitor by inspection of the workplaces, workshops and accommodation, the Health and Safety performance of any other persons and to report back to the Directors on such inspections.
- To monitor by inspection of the workplaces, workshops and accommodation compliance with the Company procedures.
- To advise on and prepare, if requested, Health and Safety documentation.
- To investigate and report major injuries, notifiable dangerous occurrences, other accidents and incidents and to attend and report on legal proceedings in which Bowmite Electrical & Mechanical Limited may be involved.
- To promote good working relations with the Health and Safety Executive and other Enforcing Authorities and to strive at all times to achieve with the co-operation of the Management, compliance with current legislation.
- To advise on fire precautions, signage and best practices with regards to fire prevention.
- To assist in the choice and suitability of safety equipment and methods of training in its use and storage etc.
- Give guidance on the correct reporting procedure with regards to accidents at work in accordance with RIDDOR 95.
- To give guidance on training required ensuring continued competency and maintain a training programme.

The Health and Safety Consultant or his nominee is also empowered during an inspection to stop machinery, systems of work or processes which he considers presents hazards to the operators or to other personnel and to bring to the immediate attention of the Directors details of such actions.

## THE RESPONSIBILITIES OF THE SITE SUPERVISORS

- Develop a strong concern for the safety of those that the Company engages on its sites and for those who may be affected by the activities of the Company. Understand that the Company safety culture is a serious one and that Health and Safety is paramount at all times. Know, understand and implement the Company Health and Safety Policy with the objective of ensuring a safe workplace.
- Ensure that all employees and sub-contractors engaged on sites under your control have a good understanding of the risks associated with their activities and the materials they handle. Ensure that Risk Assessments and COSHH data information is issued or otherwise related. Check that those who need to be aware of it understand it. If not implement and re-check. Never assume or leave Health and Safety matters to chance. Be pro-active and prevent accidents from happening.
- At the start of every project ensure that all persons are inducted and provide a briefing on Health and Safety issues to those engaged to undertake the works. Ensure that any operatives who join the project at a later date are similarly briefed. Frequently update operatives and sub-contractors on Health and Safety matters.
- Ensure that adequate personal protective equipment is available on site, provided, worn when appropriate, replaced when damaged and is stored in an orderly fashion.
- Stop any unsafe or potentially unsafe working practices immediately and notify the Directors if personnel of a particular subcontract Company persistently breach health and safety rules.
- Ensure that a tidy site, workplace and storage area, are maintained, heat, light and ventilation are adequate and materials not needed are removed or stored in an orderly fashion.
- Always prevent obstruction of access and egress routes by the safe delivery, stacking and storage of materials.
- Ensure that each project under your control has adequate emergency procedures, fire fighting equipment and first aid kit, and a trained First Aider or appointed person where required by law. If work is undertaken without your presence on site ensure that those requirements which are normally shared i.e. provision of a First Aider and first aid kit are available to those on site.
- Work equipment is to be maintained in a fit state and inspected prior to the commencement of a shift, ensure that these inspections are undertaken by all staff. Equipment requiring repairs must remain safely out of use until such time as repairs that may be required are completed.
- If for any reason, you are away from work or unable to fully attend to Health and Safety responsibilities at your site, immediately refer the matter to the Directors.
- Wherever possible take responsibility for fully briefing whoever takes over your position on any safety matters or issues particular to the sites concerned. Take responsibility for sites, inducting your replacement if necessary.
- Never, under any circumstances, allow works to proceed in an unsafe manner and report all accidents in accordance with the Accident Procedure and RIDDOR Procedure as laid out elsewhere in this Policy, whether or not anyone is injured.
- To set a good example while attending sites and to ensure that all site rules are considered and correct Personal Protective Equipment is worn at all times where necessary.

- When at any time standing in for another employee or assuming the duties of another employee to carry out those duties in accordance with the appropriate section of this Policy.

**Above all else understand and accept that those whom you manage are likely to have or be involved in accidents if you personally do not take positive steps to prevent them. In this respect your responsibility to others is considerable. Be safe rather than sorry. Failure to establish, maintain, monitor and control Health and Safety matters within your remit is regarded as extremely serious by the Company.**

The Site Supervision must also determine:

That all hazardous materials are properly marked, used and stored, as outlined in the COSHH assessment.

Those flammables are stored in a suitable environment with adequate fire fighting equipment to hand.

Those competent / trained persons are available to undertake work and use work equipment.

That a tidy site is maintained and areas of works barriered (When required) and adequate signage erected. The delivery and safe stacking of materials to prevent obstruction of access and egress routes.

Those arrangements are made between employees, sub-contractors and others at the premises to avoid confusion about areas of responsibility for Health, Safety and Welfare.

That an adequate supply of personal protective equipment is available.

That any accident on site, which results in an injury to any person, is reported in accordance with RIDDOR, if applicable, and entered into the accident book.

That the safety of third parties is considered at all time before the commencement of any activity on site and to ensure that the site is left in a safe and secure manner at the end of each working day.

That there are suitable and sufficient Risk Assessments for any hazardous situation and that controls are adequately implemented.

## **THE RESPONSIBILITIES OF OPERATIVES AND LABOUR ONLY CONTRACTORS**

All employees of the Company are to comply with their individual duties under Section 7 and Section 8 of the Health and Safety at Work etc. Act 1974 and Regulation 14 of the Management of Health and Safety at Work (Amendment) Regulations 2006. That is to ensure their own safety and the safety of others and to generally co-operate with their Employer so as to enable the Employer to carry out his Health and Safety duties towards them. Failure to comply with Health and Safety duties and regulations on the part of the Employee, may lead to dismissal from employment.

To ensure that the locations where work is undertaken remain safe places of work, all operatives and contractors must:

- Read and understand the Company Health and Safety Policy, and comply with its requirements and develop a personal concern for the safety of yourself and others who may be affected by your activities.
- Obtain a good understanding of the risks associated with your activities. Risk Assessments will have been produced for any activity involving a significant risk. Ensure that they are seen, read and fully understood. In the event of any uncertainty stop work and ask for guidance.
- Never, under any circumstances, work in an unsafe manner. If you feel you have been asked to do so – don't! Contact the Directors immediately.
- Wear personal protective equipment when necessary but regard its usage as a means of last resort. Work to eliminate or control the risk first,
- Do not use plant and equipment for work for which it was not intended, or if you are not trained or experienced to use it and report any damaged plant or equipment. Keep all tools and plant in good condition inspect them frequently and do not use them if they are damaged or inadequate for the job.
- Be aware that site emergency procedures exist. They are for your benefit. Find out what they are and establish the location and how to use fire-fighting equipment. Find out where First Aid equipment is kept and who the site First Aider is.
- Keep the work place tidy at all times to make it a safer and healthier place to work. Be aware of trip hazards and when possible remove any hazards observed i.e. nails protruding from timber or cables unsafely located.
- Do not play dangerous practical jokes or partake in "horseplay". Always consider how your acts or omissions may impinge on the Health and Safety of others.
- Report any injury to yourself, which results from an accident at work, even if the injury does not stop you working.
- Work in a safe manner at all times. Do not take unnecessary risks, which could endanger yourself or others. Suggest safer methods of working and to ensure that you and the general public are not put at any risk. Warn any other persons sharing the workplace of particular known hazards.
- Regard Health and Safety information and training as your right. Ask the Site Supervisor for it and do not start work until you are satisfied as to its adequacy. Ask for and expect to receive a toolbox talk on any work and Health and Safety matters you feel unsure about.

- When at any time standing in for another employee or assuming the duties of another employee to carry out those duties in accordance with the appropriate section of this Policy.

**Above all else understand and accept that you are likely to cause or be involved in an accident if you do not take positive steps to avoid them. In this respect your responsibility to yourself and to others is enormous. Be safe rather than sorry.**

## **THE RESPONSIBILITIES OF ALL EMPLOYEES**

The attention of all employees is drawn to their responsibilities under the Health and Safety at Work etc. Act 1974. These include the following in particular: -

- It shall be the duty of every employee while at work to take reasonable care for the Health and Safety of him / her self and of any other persons who may be affected by his acts or omissions while at work.
- As regards to any duty or requirement imposed on the employer or any other person by or under any of the relevant statutory provisions, to co-operate so far as is reasonably practicable to enable that duty or requirement to be performed or complied with.
- No person shall intentionally or recklessly interfere with or misuse anything provided in the interests of Health, Safety and Welfare in pursuance of any of the relevant statutory provisions.
- Employees are reminded here, that a breach of safety procedures could result in disciplinary action being taken by the Company that in some instances could be instant dismissal, and that provision is made in the Health and Safety at Work etc. Act 1974 for certain breaches to be actioned by the Health and Safety Executive.
- All equipment should be fitted with safety devices or cut outs and these should never be by-passed. All equipment has been tested and supplied in accordance with the current legislation. Defects in plant, equipment and tools must be reported immediately.
- Do not attempt to repair or maintain plant or equipment unless you have been properly trained to do so, particularly when it may involve electrical devices or the removal of safety guards. Ensure that the guard protection is always in place where required for the safe use of equipment. Ensure the working environment meets the safety requirements for operating plant/equipment and tools, so that heat, light and ventilation are adequate.
- All faulty equipment is to be isolated immediately and warnings given to others who may be at risk. Inform the Site Supervisor and ensure that no work is carried out in the hazard area or with the faulty equipment until such time as the hazard has been cleared.
- All injuries to yourself must be reported to the competent and/or qualified First Aider immediately. Details are also to be entered into the accident book.

## **THE RESPONSIBILITIES OF SUBCONTRACTORS AND THEIR EMPLOYEES**

- All Subcontractors will be expected to comply with the Company Health and Safety Policy of Bowmite Electrical & Mechanical Limited and must submit their own Health and Safety documentation to Bowmite Electrical & Mechanical Limited for verification. This will include as a minimum, Risk Assessments, Method Statements, COSHH assessments, Health and Safety Policy, Insurance details and any details of training undertaken by operatives.
- Contractors are expected to read this Health and Safety Policy and will be expected to be fully aware of what is required of them whilst working on sites.
- All work must be carried out in accordance with the relevant statutory provisions taking into account the safety of others whom may be present in the work area and comply with any safety instruction given to them by the Site Supervision or other representative of Bowmite Electrical & Mechanical Limited.
- All plant and equipment brought into a work area by Sub-contractors must be safe and in good working condition, fitted with any necessary guards and safety devices, with any certificates available for checking. All operatives must be adequately trained in the use of such equipment and where appropriate have available any certificates of competence.
- All electrical equipment is to be regularly tested and suitable for the conditions in which it is to be used or provided.
- Any injury sustained or damage caused by Sub-contractors employees must be reported immediately to the Site Supervisor.
- Subcontractors when informed of any hazards or defects will be expected to take immediate action to implement given controls.
- Welfare facilities will be available at sites as well as extinguishers and first aid personnel, in circumstances where this is not possible Bowmite Electrical & Mechanical Limited will make alternate arrangements with the Principal Contractor. Subcontractors when undertaking works on the behalf of Bowmite Electrical & Mechanical Limited will be required to comply with the Construction (Design and Management) Regulations 2007.
- Bowmite Electrical & Mechanical Limited will provide COSHH assessments for any material or substance supplied by them for use on site. Contractors are to provide COSHH assessments for materials provided for their own use.
- Sub-contractors are particularly asked to note that workplaces must be kept tidy and all debris, waste materials, etc. cleared as work proceeds.
- It is the Policy of Bowmite Electrical & Mechanical Limited that all operatives, contractors, sub-contractors and persons within the works area wear the protective clothing or equipment appropriate to the works being undertaken or as requested by the Site Supervision or other representative of the Company.
- Sub-contractors are required to ensure that copies of all Risk Assessments, Method Statements, COSHH Assessments and any other Health and Safety documentation are available for inspection by Bowmite Electrical & Mechanical Limited. Such assessments must be provided before work is due to commence and in sufficient time to allow submission to the client when required.

- Sub-contractors are to provide appropriate protective clothing and safety equipment and to ensure that their employees use both clothing and equipment at all times when required by the PPE assessment or as advised by the Site Supervisor or other representative of the Company.

### **THE RESPONSIBILITIES OF OFFICE PERSONNEL**

- To understand the Company's Health and Safety Policy. Ensure that systems of work are planned in accordance with its requirements and that it is regularly examined to establish if improvements or additions should be made.
- It shall be the duty of every employee while at work to take reasonable care for the Health and Safety of themselves and of any other persons who may be affected by their acts or omissions while at work.
- To pay particular attention to ensuring that Health and Safety matters are effectively communicated to those at the work place.
- Ensure that safe systems of work are used and that there is perseverance towards the continual improvement in the company's Health and Safety performance and those that the Company employs.
- To assist the Directors to ensure that accidents and incidents are fully investigated and the causation discovered and to ensure that in the event of an accident that requires the Health and Safety Executive to be notified that such notification is given and the records kept in good order.
- To pay particular attention ensuring that rules that are displayed in the welfare and on the office notice board are understood and complied with at all times.
- To ensure that the office is kept clean and tidy and that escape routes are kept clear at all times and frequently inspect immediate working environments to ensure that if a hazard presents itself it is reported directly or immediately corrected, when possible.
- To become aware of emergency procedures and to ask for and expect to promptly receive assistance and guidance on any matter that relates to Health and Safety at work.
- Report any incidents that may, if not corrected subsequently cause an accident.
- Provide the Directors with details of any areas where the Company Health and Safety Policy and actual Health and Safety practice differ and to highlight those areas where up to date refresher training may be required.

## GENERAL ARRANGEMENTS

### HEALTH AND SAFETY OVERVIEW

Under the Environmental Protection Act 1990 and the Health and Safety at Work etc. Act 1974, the Secretary of State is empowered to make regulations for a number of purposes, which are listed in the Schedules to the Acts. The environmental Agency and the Health and Safety Commission may approve and issue Approved Codes of Practice, and although failure to observe such a code would not in itself be illegal, it may be referred to in criminal proceedings to show that the failure to comply with the code or any provision of it constitutes, a contravention of any particular requirement or prohibition of the Act. All Acts, Orders, Regulations and ACoP's remain in force until they are modified or repealed.

### ENFORCEMENT

This is the responsibility of the Environmental Agency and the Health and Safety Executive appointed by the Commission, with the proviso that responsibility may be transferred in certain cases to local authorities. Enforcement Officers operate along the lines of the old Factory Inspectors but have considerably more power. If an inspector is of the opinion that a person is contravening a statutory provision or is likely to repeat a contravention, he may serve on that person an Improvement Notice requiring specified remedial action to be taken within a specified time. If the inspector considers that the contravention involves a risk of serious injury, they may serve a Prohibition Notice having immediate effect if considered necessary, directing that the specified activities must not be carried on until the specific matters have been remedied.

If an Improvement Notice or Prohibition Notice is not complied with, persons responsible are liable to imprisonment for up to six months (3 months under the Environmental Protection Act 1990) and a fine of up to £20,000. Either of these notices may (but need not) include directions as to the measures to be taken, except where a Notice has immediate effect it may be withdrawn by the inspector before the date specified, or on the other hand, the period specified may be extended. An inspector may seize any plant, article or substance he finds on any premises, if they consider it to be a cause of imminent danger.

An inspector may give to persons employed (or their representatives), factual information obtained by them relating to the premises and anything undertaken there and informs them of any action they are taking in connection with the premises.

A person found guilty of an offence under the Acts is liable, on indictment for certain offences, up to two years imprisonment, and / or an unlimited fine. Continuation of an offence for which a person has been convicted constitutes a further offence and that person is liable to a fine for each day on which the contravention continues.

### ACCIDENT INVESTIGATION

Bowmite Electrical & Mechanical Limited together with our Independent Health and Safety Consultants will undertake a thorough investigation of any accidents. Accidents will be investigated to ensure that suitable controls are safe systems of work are implemented with the aim of preventing recurrence, removing the hazard and reducing the risk.

### ACCIDENT PROCEDURE AND RIDDOR

The Directors together with the Independent Health and Safety Advisors of Bowmite Electrical & Mechanical Limited will ensure the reporting of all injuries and dangerous occurrences in accordance with RIDDOR. In recognition of its duties under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR), the Company has instituted a chain of command for reporting accidents, diseases and dangerous occurrences to the "competent person" who will notify the Health and Safety Executive. In the first instance Bowmite Electrical & Mechanical Limited will, so far as is reasonably practicable, provide and maintain a safe place of work, a safe system of work, safe appliances for work and a clean, safe and healthy working environment. Information, instruction, training and supervision will be provided as may be necessary to ensure the Health and Safety at work of its employees and to promote awareness and understanding of the Environment and Health and Safety throughout the workforce.

Following an incident on site the site supervisor will ensure the person injured is transported to a hospital for treatment if required and if not to ensure that they are provided with adequate First Aid on site before recommending that they visit their Doctor, then:

**All Accidents and First Aid Incident:**

- Ensure the safety and absence of risk in association with the cause of the accident.
- Write up the incident in the accident book.
- Undertake an accident investigation.
- Promptly inform the Directors and provide a copy of the accident book entry and accident investigation.
- Ensure that the preventive/protective measures are relayed to other Site Supervision and the Directors in the prevention of a possible similar incident on another site.

In respect of the above an accident is an occurrence that was not expected which may or may not have resulted in an injury.

Promptly means at the earliest opportunity, but should be no later than the following working day.

**RIDDOR Incident:**

- If an employee, a labour only contractor or a subcontractor or any other person attends hospital as a result of an injury sustained while at work telephone the Directors directly. Should they not be available contact the most senior person available.
- If a person does not arrive for work following an incident as outlined above, telephone the Directors directly. Should they not be available contact the most senior person available.
- As soon as possible provide the Directors with a copy of the accident book and accident investigation together with a report, including:

Name and address of injured person(s) (*see Data protection section of this policy*)

Telephone number.

Date, time and place of accident(s)

A full explanation of the circumstances leading to the accident(s)

Name of injured person(s) employer(s).

**ALCOHOL, DRUGS and SMOKING**

Anyone found under the influence of or in possession of alcohol or narcotics will be removed from the areas of work and may be subjected to appropriate disciplinary measures, which could include dismissal for serious offences. Anyone found smoking in an area other than the site designated "Smoking area" will be instructed to extinguish the cigarette immediately with repeat offences being subject to disciplinary measures for Bowmite Electrical & Mechanical Limited Employees and dismissal from site for Contractors and their employees.

Employee's labour only contractors and subcontractors are reminded that some prescription drugs may induce tiredness and lethargy etc. therefore it is the Policy of Bowmite Electrical & Mechanical Limited that any person who is taking medication, prescribed or not is to inform their Site Supervisor if those drugs could affect their performance while at work. Employees etc. are also requested to notify their Site Supervisor of any illness that may affect their ability to undertake work activities in a safe manner. Employees are required to submit this information pursuant to the Health and Safety at Work etc. Act 1974 Section 7.

## ASBESTOS.

Working with asbestos will be outside the normal parameters of the work undertaken by Bowmite Electrical & Mechanical Limited. However, if discovered, all work involving asbestos in any form will be carried out in accordance with The Control of Asbestos Regulations 2006.

Work involving the removal of asbestos materials covered will be carried out by Licensed Contractors in accordance with the current Approved Code of Practice for work with Asbestos Insulation and Asbestos Coatings (COP 3 - Health and safety Executive).

The supply for use at work of materials containing amosite, crocidolite or chrysotile asbestos is now prohibited. Any materials containing asbestos must be marked with a warning transfer or label.

## ASBESTOS - DEALING WITH UNIDENTIFIED ASBESTOS

The owners of buildings have a duty to investigate and make safe any areas where the presence of Asbestos is known or suspected. A Management plan is required to be kept by companies and persons in control of premises stating the exact location of known asbestos together with its type, state, and last inspection date. The Management Plan must be available for all persons undertaking work activities on the premises and for inspection by Enforcing Authorities. It is to be regularly reviewed and updated.

The presence of Asbestos is not always obvious. The HSE have advised that it is sensible to assume that any building constructed or refurbished before 2000 will contain asbestos materials. i.e. insulation boards, corrugated roof sheets, cement guttering and boilers and associated pipe work and lagging. No work should be carried out which is likely to expose employees to asbestos unless an adequate assessment of exposure has been made.

If asbestos, or what is suspected to be asbestos, which was not identified during the initial assessment of the building is discovered, **STOP WORK**, employees of Bowmite Electrical & Mechanical Limited are not permitted to handle asbestos products. The Client / CDM Co-ordinator must be informed and they must protect the area from any further damage and release of fibres. Then they must give an order or call in a competent person / specialist analyst to assess the material to confirm if it is asbestos.

If asbestos is confirmed then a Licensed Contractor will be employed to protect and remove the asbestos to a specified tip that is licensed by the local waste disposal authority. Once the asbestos has been made safe or removed other contractors will be advised and clearance certificates will be available and work can continue with caution, in case any further un-identified asbestos is found.

## BATTERY CHARGING

### **Disassembly**

Never disassemble a battery, as the materials inside may be toxic and may damage skin and clothes.

### **Short-circuiting**

Never attempt to short-circuit a battery. Doing so can damage the product and generate heat that can cause burns.

### **Throwing batteries into a fire or water**

Disposing of a battery in fire can cause the battery to rupture. Also avoid placing batteries in water, as this may cause the battery to fail.

### **Soldering**

Never solder anything directly to a battery. This can destroy the safety features of the battery by damaging the safety vent inside the cap. Permanent connections to an energy cell may be made by spot welding solder tags to the terminals. A soldered connection can subsequently be made to the tag.

### **Inserting the batteries with their polarities reversed**

Never insert a battery with the positive and negative poles reversed as this can cause permanent damage to the battery which may swell or rupture.

**Charging**

Never charge with an unspecified charger or specified charger that has been modified. This can cause breakdown of the battery or swelling and rupturing.

Never attempt to charge a battery which has been physically damaged.

**Overcharging at high currents and reverse charging**

Never reverse charge or overcharge with high currents (i.e. higher than rated). Doing so causes rapid gas generation and increased gas pressure, thus causing batteries to swell or rupture.

Don't leave the battery in the charger once it is fully charged.

**Installation in equipment (with an airtight battery compartment)**

Always avoid designing airtight battery compartments. In some cases, gases (oxygen, hydrogen) may be given off, and there is a danger of the batteries bursting or rupturing in the presence of a source of ignition (sparks generated by a motor switch, etc.).

**Use of batteries for other purposes**

Do not use a battery in an appliance or purpose for which it was not intended. Differences in specifications can damage the battery or appliance.

**Short-circuiting of battery packs**

Special caution is required to prevent short circuiting any battery since the consequences can be very dangerous. Care must be taken during the design of the battery pack shape to ensure batteries cannot be inserted in reverse. Also, caution must be given to prevent accidental short-circuiting of the battery.

**Using old and new batteries together**

Avoid using old and new batteries together. Also avoid mixing batteries using differing cell chemistries such as ordinary dry-cell batteries, Ni-Cd, Ni-MH batteries or with another manufacturer's batteries. Differences in various characteristic values, etc., can cause damage to the batteries or the product.

**Storage**

Store the batteries in a cool place and when in use don't allow them to remain in environments which may be subject to overheating. (e.g. direct sunlight in a locked car).

**ESD (Electrostatic Discharge) Bags**

Do not put batteries into plastic bags designed to protect components from electrostatic discharge. These bags are made from conductive material which could cause the battery to be short circuited.

**Other Precautions**

Batteries should always be charged prior to use. Be sure to charge correctly.

**Warning Notice**

Be sure to indicate this safety warning clearly in all operating instructions as a handling restriction for ensuring safety

**CARTRIDGE OPERATED FIXING TOOLS**

Operators of cartridge operating tools will be over the age of eighteen years and should not suffer from any form of colour blindness or other disability which will affect the safe use of such equipment.

All operators of cartridge operated fixing tools will be appointed by a Director or Supervisor only after evidence that the operative has received the appropriate training and has enough experience of operating cartridge operated tools.

Any operative being trained in the use of a cartridge operated fixing tool will be supervised by a competent person who himself has received training in the safe use of such equipment.

All Supervisors must ensure appropriate storage and disposal facilities will be available for the explosive cartridges.

## CONSTRUCTION (DESIGN & MANAGEMENT) REGULATIONS 2007

### **General**

Bowmite Electrical & Mechanical Limited will not undertake the role of Principal Contractor and produce a Construction Phase Plan as per the requirements of CDM. Where they are not the Principal Contractor, then, where required, method statements and risk assessments will be submitted to the Principal Contractor.

### **Management of the Works**

In the event that Bowmite Electrical & Mechanical Limited are not acting as the Principal Contractor, then they will ensure the following:

Plan, manage and monitor the work and the workers,

Check the competence of all of their appointees and workers,

Train their own employees,

Provide information to their workers,

Comply with the specific requirements set out in Part 4 of the Regulations,  
Ensure that there are adequate welfare facilities for their workers,

Ensure that every contractor who they appoint or engage to work on the project is informed of the minimum amount of time which they will be allowed for planning and preparation before they begin work on site,

Provide workers under their control (whether employed or self-employed) with any necessary information, including about relevant aspects of other contractors work, and site induction (where not undertaken by the Principal Contractor) which they need to work safely, to report problems or to respond appropriately in an emergency.

### **Site Accommodation and Welfare Facilities**

The principal Contractor will supply Bowmite Electrical & Mechanical Limited the necessary facilities to the standard required by The Construction (Design & Management) Regulations 2007 as a minimum requirement.

### **Emergency Procedures**

The Principal Contractor will be relied upon to provide Bowmite Electrical & Mechanical Limited with details of the following:

- The emergency procedures that will be applicable to the contract.
- Details of any arrangements made with the Emergency services.
- The arrangements of provisions of first aid on site.
- The arrangements of fire and fire fighting on site.
- The arrangements for reporting accidents and dangerous occurrences. RIDDOR 1995

### **Protection to the Public**

Bowmite Electrical & Mechanical Limited will ensure suitable arrangements are made to ensure the safety of all third parties during the works by communication, signage, barriers and controls.

### **Control of Substances Hazardous to Health**

The Principal Contractor will request information from Bowmite Electrical & Mechanical Limited and the other Contractors details of the following:

- Arrangements for controlling risks from substances hazardous to health.
- Risk assessments for all substances which may be hazardous to health.
- Safe methods to be adopted in their use.

### **Electricity and Small Power Tools**

The Principal Contractor shall provide Bowmite Electrical & Mechanical Limited details of the following;

- Arrangements for controlling equipment hazards in accordance with The Electricity at Work Regulations 1989.
- Arrangements for inspection of Portable electric tools and supply cables.

### **Manual Handling and Lifting Operations**

Bowmite Electrical & Mechanical Limited shall provide details of the following when applicable:

- Manual handling arrangements in accordance with the Manual Handling Operations Regulations 1992.
- In order to minimise the need for manual handling.
- Mechanical lifting arrangements will be made to reflect the requirements of the Lifting Operations & Lifting Equipment Regulations 1998.

### **Noise**

Bowmite Electrical & Mechanical Limited shall provide details of the following assessments on request:

- A noise assessment as required by the Control of Noise at Work Regulations 2005.
- Arrangements to control noise levels of plant and equipment.

### **Personal Protective Equipment**

Bowmite Electrical & Mechanical Limited will provide Personal Protective Equipment to all employees on site as required by the Regulations. An assessment will be carried out by Bowmite Electrical & Mechanical Limited to identify the level of Equipment required in accordance with The Personal Protective Equipment at Work Regulations 1992.

### **Risk Assessment**

The Management of Health and Safety at Work (Amendment) Regulations 2006 requires a risk assessment to be undertaken identifying the significant risks, to enable employees to identify and prioritise the hazards and state what precautions are required to minimise and control the risks identified.

### **Waste - Duty of Care**

Bowmite Electrical & Mechanical Limited recognises its Duty of Care under The Environmental Protection Act 1990, the Environmental Protection (Duty of Care) Regulations 1991, The Hazardous Waste (England and Wales) Regulations 2009 and other associated statutory provisions.

"Hazardous Waste" will only be released to a licensed "Registered Carrier" after proof (original only) has been produced by an "authorised person" has been seen and a copy retained. All parts of the "Waste Transfer" note will be suitably completed with a copy remaining with Bowmite Electrical & Mechanical Limited and records of the "Hazardous Waste" disposal are to be retained for 3 years after deposit of the waste.

Where over 500 kg of "Hazardous Waste" is produced over a 12 month period on our site/premises, Bowmite Electrical & Mechanical Limited will register that location with the Environment Agency, annually after the first notification.

All waste will be suitably packed to ensure the safety of others during storage and carriage, and have a unique consignment code consisting of letter, numbers or symbol. This packaging must also prevent spillage, leakage, waste blowing or falling or the pilfering of contents by third parties.

### **COMMUNICATION**

Bowmite Electrical & Mechanical Limited sees communications between all staff as an essential part of effective Health and Safety management and will endeavour to communicate to employees their commitment to Safety and to ensure that employees are familiar with the contents of the Company's Health and Safety Policy. Communication with employees will be in the form of meetings with representatives, in memo's, via toolbox talks, by example and by way of the Policy Statement. All communications will be undertaken in accordance with The Health and Safety (Consultation with Employees) Regulations 1996

Staff are encouraged to nominate a representative to attend meetings to ensure that there is input on behalf of the general employees with regards to Health and Safety matters.

Bowmite Electrical & Mechanical Limited embraces with enthusiasm all methods in which employees can participate in the discussion, planning and implementation of Health and Safety. The Directors in particular wishes to ensure that employee's Health and Safety views are adequately shared and considered with an aim of continuously improving the general Health and Safety culture in all areas of the companies operations.

Bowmite Electrical & Mechanical Limited aim to work with their Client's Health and Safety representatives and other contractors and employers to ensure that all information and documentation is shared regarding

Environmental, Health and Safety standards and is communicated to all relevant employees in order to ensure safe working practices and conditions.

Subcontractors when used are further required to ensure that all Health and Safety documentation requested by Bowmite Electrical & Mechanical Limited is available for inspection and approval before commencement on site. Documentation will be required before the commencement of the project to allow sufficient time for the submission of the documentation, when requested, to the Client or their CDM Co-ordinator.

### COMPLAINTS PROCEDURE

Work undertaken on construction sites is, by its very nature, an impact on the surrounding environment. Bowmite Electrical & Mechanical Limited will work pro-actively with the Client, Principal Contractor and Local Authority to ensure that generic site nuisances are restricted as far as is reasonably practicable. Consideration will be given to all reasonable recommendations to obviate the impact on the surrounding environment. Should a third party offer a complaint on site, this is to be recorded on the complaint procedure form and forwarded directly to the Directors.

Should an employee consider that they have a valid complaint on any issue while at work they are to speak directly to the Site Supervision. In circumstances where this action may not be appropriate or they consider that the situation has not been rectified adequately they are to outline their complaint in a letter and forward it directly to the Directors for their consideration whereby a meeting will be arranged to offer appropriate action and controls.

### COMPRESSORS / COMPRESSED AIR & PRESSURE SYSTEMS

The Company accepts in full the requirements of the Pressure Systems Safety Regulations 2000 and shall ensure that all Systems, pipelines and pipework are designed and installed in accordance with these regulations. Furthermore all systems, pipelines and pipework shall be assessed to determine any necessary controls to ensure the safety of those persons who may be affected by a release of stored energy within any of the systems.

Those systems that require inspection and examination shall be subjected to such inspections / examination by a competent person who shall ensure that all such systems are regularly examined in accordance with a written scheme of examination prepared by a competent person.

Results of such examinations shall be prepared within a report and submitted to the Managing Director of the Company for distribution amongst maintenance staff and / or specialist maintenance contractors who shall ensure that all repairs and modifications are undertaken as soon as is reasonably practicable. In situations whereby the compressors / pressure system is hired in a copy of the written scheme of examination will be requested from the hire company. The records of any such examinations and reports shall be retained by the Company.

Compressors must be operated in the manner outlined in instructions supplied with the / on the machine and machines must not be operated unless you are familiar with the system and the instructions are clear and understood. All hoses must be adequately and securely fastened by fittings specifically designed for the job with "whip check" fittings present. Hoses and fittings showing signs of wear, corrosion or damage must be returned to the hire company as unacceptable.

#### **Compressed Air**

Fatal injuries may be caused by accidental or deliberate injection of compressed air either through the skin or into body orifices therefore ensures that:

The clothes you are wearing or PPE prevent the penetration of compressed air into the body;  
Extra care is required in situations whereby accidental injections of compressed air may be a risk e.g. in awkward or confined situations; and horseplay is never undertaken and strictly forbidden.

Should it even be suspected that a penetration has occurred from compressed air, inform your supervisor and seek medical attention.

### CONFINED SPACES.

Confined spaces are any work area defined in The Confined Space Regulations 1997 i.e. any place, including any chamber, tank vat, silo, pit, trench, pipe, sewer, flue or well or other similar space in which, by virtue of its enclosed nature, there arises a reasonable foreseeable specified risk. Should entrance to a confined space be required training of relevant employees will be undertaken in accordance with the above Regulations to ensure their safety and competence.

A detailed method statement together with a permit will be required for all entries into confined spaces to ensure as a minimum that there is a rescue hoist line, harness together with escape procedure. The confined space must be tested for oxygen and flammability and if either the flammable or oxygen test equipment enters an alarm condition the chamber must not be entered. If necessary, forced ventilation should be used to clear the chamber.

Only when consistently satisfactory readings have been obtained, may the chamber be entered. Continuous monitoring of the confined space must take place throughout the work period. The second person must remain outside this chamber and be ready to operate the rescue winch should the need arise.

### CONSULTATION WITH EMPLOYEES

The Company will ensure that there is regular consultation with all employees to achieve and maintain an effective Health and Safety culture within the Company's operations. The Company will consult with the employees or their representatives, before the introduction of new procedures or technology that may affect the employees and their working practices. Consultation will also occur after the introduction of new statutory information, new or modified work equipment or systems of work and when new substances are to be used. The consultations will be undertaken on a formal and informal basis e.g. during meetings or toolbox talks, according to the matters being relayed. Where necessary the Company will keep records of the consultations.

Bowmite Electrical & Mechanical Limited will undertake to hold meetings with various contractors before the commencement on site plan and undertake to ensure that all eventualities with regards to Health and Safety are recognised and controlled with an emphasis being place on the smooth co-ordination of activities.

### CONTRACTORS

All contractors will be asked to satisfactorily complete a copy of Bowmite Electrical & Mechanical Limited pre-qualification safety questionnaire and be placed on the approved contractor list before tendering for any work.

A pre-commencement meeting may be required to discuss any unusual Health and Safety implications relating to a particular project.

All contractors will be asked submit a copy of their Health and Safety Policy, current certificate of Employers Liability Insurance and Method Statements/Risk Assessments in advance for verification before commencing to work for Bowmite Electrical & Mechanical Limited.

In addition all contractors will receive a copy of Bowmite Electrical & Mechanical Limited Health and Safety Policy Statement upon request and a list of Safety Rules and Requirements. The following paragraph may be inserted into contracts to Contractors.

**“Please note this copy of our Company Policy Statement for Health, Safety and Welfare and a list of Safety Rules and Requirements for contractors on this Company’s sites and Clients Premises. Your acceptance of the requirements of this Policy will be deemed to include acceptance of the requirements of our Company Policy. Please contact Bowmite Electrical & Mechanical Limited for any information on any matter in connection with Health, Safety or Welfare.”**

### CONTROL OF HAZARDOUS SUBSTANCES

Due to the type of operations undertaken by Bowmite Electrical & Mechanical Limited, some hazardous substances are used. However, we will endeavour through our **purchasing policy** to purchase only those substances that are not hazardous to health. Bowmite Electrical & Mechanical Limited recognises its duties in accordance with the Control of Substances Hazardous to Health (Amendment) Regulations 2004 and will endeavour to purchase substance that are not hazardous to health if they compare favourably in all characteristics i.e. cost, effectiveness and quality.

Should hazardous materials not have a suitable replacement the use of such materials will be assessed by the Supervisors in accordance with the Regulations and controls implemented to reduce the risk of injury to the lowest level reasonably practicable. Use of substances prior to the production of an assessment is prohibited by all staff. The use of those substances subject to the COSHH (Amendment) Regulations 2004, will be restricted and strictly controlled as outlined above together with adequate information, instruction, training and supervision afforded those using the materials.

Bowmite Electrical & Mechanical Limited will ensure that any employee who is or is liable to be exposed to a substance that may result in adverse ill effects is offered suitable medical surveillance by a doctor to ensure that all controls are adequate and PPE is being used correctly.

#### CO-OPERATION and CARE:

If we are to build and maintain a Clean, Healthy and Safe working environment it is essential that there is co-operation between all employees and contractors. Employees and contractors are expected to co-operate and accept their duties contained in this policy. Employees have a duty to take all reasonable steps to preserve and protect the Environment and the Health and Safety of themselves and all other people affected by the Company's undertakings.

#### CORPORATE MANSLAUGHTER AND CORPORATE HOMICIDE ACT 2007

An offence will be committed where failings by an organisations' senior management are a substantial element in any gross breach of the duty of care owed to the organisations' employees or members of the public, which results in death. The maximum penalty is an unlimited fine and the court can additionally make a publicity order requiring the organisation to publish details of its conviction and fine.

In considering the liability of an organisation under the Act, a jury must consider any breaches of health and safety legislation and may have regard to any health and safety guidance. In addition to other health and safety guidance, this guidance could be a relevant consideration for a jury depending on the circumstances of the particular case.

The new law:

- There are no new obligations under this Act; however, the Act does provide a new offence under existing common, civil and criminal law. Companies and organisations who comply with existing health and safety legislation are not likely to be in breach of the new provisions particularly if they can show due diligence to continual improvement in their companies health and safety culture.
- Makes it easier to prosecute companies and other large organisations when gross failures in the management of health and safety lead to death.
- Removes a key obstacle to successful prosecutions because, until now, a company could only be convicted of manslaughter if a "directing mind" (such as a director) at the top of the company was also personally liable.
- Means that both small and large companies can be held liable for manslaughter where gross failures in the management of health and safety cause death, not just health and safety violations.
- Does not apply to individual directors, senior managers or other individuals: it is concerned with the corporate liability of the organisation itself (but where there is sufficient evidence, individuals can already be prosecuted for gross negligence manslaughter and for health and safety offences and the Act does not change this position).

#### DATA PROTECTION AND RECORD KEEPING:

**Collection of data:** In order to maintain accurate and efficient records information regarding the planning and management of Health and Safety is stored as follows;

- By means of paper based records, manually retrievable; and
- By means of retrievable electronic systems.

In all circumstances, it is the policy of the company to maintain a record keeping system, regardless of description that provides protection for the privacy of all employees, where personal data is stored. N.B *personal data is defined as data, which relates to a living individual who can be identified.*

In all circumstances it is the policy of the company to maintain a record keeping system, regardless of description, that provides protection for the privacy of all employees where personal data is stored.

**Description of data:** Some Health and Safety data retained by the company will be classified as being sensitive personal data and may include;

- Records of physical injury suffered during the course of employment e.g. the accident book.
- Records of occupationally induced ill health e.g. sickness records.
- Records of safety awareness training.
- Records of safety management audits, safety sampling, safety encounters or safety inspections, where the employee is named in the reporting document

Other data may include:

- Safe working procedures, developed in support of this Policy document.
- Construction Phase Health and Safety Plans.
- Safety method statements.
- Records of assessments of significant risks.
- Permit to work controls.

Which may directly refer to named employees.

**Processing of data:** Data processing may comprise of any or all of the following:

- Collection or gathering of information.
- Subsequent retrieval of information.
- Disclosure of data to any source.

#### **Requests for information on data stored.**

Any employee may request information regarding Health and Safety relating to that individual, and information will be promptly released and explained. Should an employee consider that the data stored causes unwarranted substantial damage or distress. The employee may request that the processing of the data causing concern should cease.

#### **DISCIPLINARY PROCEDURE:**

When there are issues of non-compliance of Health and Safety Regulations or Company procedures the Company will investigate them. The Directors will collate any information and this will be reviewed and the appropriate corrective action taken to ensure that there are controls implemented and that the employees are made aware of the situations which are causing concern. If subsequently, the problems persists then the Company will apply further measures to ensure the Health, Safety and Welfare of all employees and others who may be affected by the actions of those who are not complying with the Health and Safety Regulations or Company procedures.

The employee's attention will be drawn to a situation, which is causing concern in order to give the employee the opportunity to explain and to improve a position. If subsequently, the problem persists then further, more stringent measures may be necessary.

Where the Company is dissatisfied with an employee or sub-contractors performance on Health and Safety grounds, they will arrange a formal interview. After considering the details an appropriate admonishment, oral warning, written warning, suspension or dismissal will be issued. Records of the disciplinary actions will be maintained by the Company and will be made available for any appeals or legal actions arising from the issues of non-compliance of Health and Safety legislation.

**The following contraventions will result in the offending individual being suspended from work pending an inquiry that will be supervised by one of the companies Directors.**

- Failure by Site Supervision or those in a managerial position to notify and explain to operatives over whom they have charge the controls in force for projects and associated hazards / risks and the procedures established for their protection and safety.
- Failure by Site Supervision or those in a managerial position to ensure that operatives over whom they have charge do not comply with the controls in force for projects and associated hazards / risks and the procedures established for their protection and safety.
- Failure to comply with the requirements of this Policy or any other Company Health and Safety procedure or working in a manner where safety management controls and requirements are disregarded to such an extent that the activity or action is considered life threatening to the individual or to others.
- Malicious misuse of or damage to any items which have been provided to assist in maintaining Health, Safety or Welfare standards, including
  - Personal Protective Equipment
  - First aid provisions and facilities
  - Welfare facilities
  - Safety notices, instructions or signs
- Consumption of or being under the influence of alcohol or other substances that may affect the individual's ability to safely undertake their duties during the course of employment.

#### DISPLAY SCREEN EQUIPMENT:

The use of display screen equipment is not generally considered a high risk activity, but failure to meet the minimum requirements may lead to serious psychological and physical problems e.g. eye strain, fatigue, stress and Musculoskeletal disorders over the long term.

The Company will undertake assessments to check that the DSE is properly installed in an acceptable environment. DSE users are to co-operate with the Company in the assessment and efficient use of their workstation and report any difficulties or defects that could potentially contribute to a health hazard, this includes the general environment i.e. light and noise.

Employees who are required to use DSE for substantial work will receive advice so that they are aware of the hazards and health risks and are able to arrange and adjust their equipment and workstation for safe and efficient working.

Employees who carry out substantial work at a display screen will be entitled to the following eye tests, before commencing work on DSE or as soon as is practical then at regular intervals afterwards or when visual difficulties are experienced.

Where tests show that eyesight correction is needed to carry out work on Display Screen Equipment corrective spectacles required solely for DSE will be obtained for the user by the Company free of charge to the employee. In such circumstances these spectacles must be worn by the employee at all times when carrying out work on Display Screen Equipment. The Directors of offices together with guidance and assistance given by our independent consultants will be responsible for ensuring that "users" are correctly assessed.

#### DOCUMENTATION

The office will ensure that a complete copy of, or where appropriate, relevant extracts from the Company Health and Safety Policy are made available to Clients, and Principal Contractors when requested for reference. A copy of the current Employers Liability Insurance Certificate will also be made available on request and displayed when practicable on site or held electronically and can be viewed at any time.

Each project shall be supplied with the following:

- All necessary inspection records, Method Statements and safety notices.
- Up to date safety signs and standards.
- Records of safety talks and meetings.
- A First Aid book.

### ELECTRICAL POWER TOOLS:

Power tools are used during the works of Bowmite Electrical & Mechanical Limited and to ensure their integrity they will be tested at 3 monthly intervals compliant to HSE guidance note HS(G) 107. Staff will be properly trained only to use equipment after they have given it a visual inspection to identify damage or defects, and to use it only for the purposes for which it is intended according to the safe systems of working. Where equipment is found to be faulty repairs and re-testing will be carried out before the equipment is re-issued. Damaged equipment will be taken to the site office or handed to a Manager and suitably marked so that it is not used prior to being fixed. Electrical tools are to be 110 volt centre tapped to earth as a minimum requirement and when it is reasonable, battery power tools are to be used in preference to electrical tools due to the associated hazards. Managers are to ensure that they are aware of HS(G)107 and what equipment makes up portable electrical equipment.

Bowmite Electrical & Mechanical Limited will ensure that Managers implement the requirements of HSE guidance note HS(G) 107 with regards to the maintenance of portable appliance testing of work equipment at places of work.

### ELECTRICITY AT WORK REGULATIONS:

The Regulations require management to take precautions against risk of death or personal injury from all use of electricity, including the mains electricity supply.

Company management is responsible for managing the use of electricity in its premises. All electrical work is to be undertaken by competent persons. Electrical equipment is to be 110V centre tapped and properly maintained and subject to periodic checks. Company management must ensure safety by specifying that electrical equipment is compliant with current standards for the electrical industry.

Site electrical equipment is to be tested at 3 monthly intervals compliant to HSE guidance note HS(G)107.

Staff must be properly trained only to use equipment after they have given it a visual inspection to identify damage or defects, and to use it only for the purposes for which it was intended according to the safe systems of working. Where equipment is found to be faulty repairs and re-testing will be carried out before the equipment is re-issued.

Company management will ensure that there is adequate supervision of the requirements of the electrical equipment and will keep records of maintenance and testing results.

### EMERGENCY PROCEDURES

The Company will establish and provide appropriate procedures to be followed in the event of serious and imminent danger to persons working for them in accordance with the Management of Health and Safety at Work (Amendment) Regulations 2006. The prime objective will be to ensure that no employee, sub-contractor or visitor can access any work area until appropriate pro-active plans with regards to emergency evacuation and actions in the event of serious and imminent danger have been taken.

This will involve the relating via induction of adequate Health and Safety instructions to those persons entering the areas.

The Company will inform operatives of potential dangers, the controls and the emergency procedures. The employees will also be instructed on how to identify conditions in these potentially dangerous areas where it may be necessary to stop work and go to a place of safety. The Emergency Procedures will then provide adequate safeguards to avoid a return to the work area until the risk of danger has been cleared.

### EMPLOYERS LIABILITY INSURANCE:

In recognition of its statutory and common law duties, the Company has taken out insurance with an approved insurer. The certificate of insurance will be prominently displayed so as to be available for inspection at all reasonable times by employees and regulatory authorities i.e. the Health and Safety Executive Inspectors, Environmental Health officers, within the office and on all sites where practicable. The certificate can be available on site electronically as long as it can be viewed at any time.

### ENVIRONMENTAL CONSIDERATIONS:

Bowmite Electrical & Mechanical Limited recognises its Duty of Care under The Environmental Protection Act 1990, the Environmental Protection (Duty of Care) Regulations 1991, The Hazardous Waste (England and Wales) Regulations 2009 and other associated statutory provisions.

“Hazardous Waste” will only be released to a “Registered Carrier” after proof (original only) has been produced by the “authorised person” all parts of the “Waste Transfer” note will be suitably completed with a copy remaining with Bowmite Electrical & Mechanical Limited for no less than 2 years. “Hazardous Waste” will only be moved by a “Registered Carrier”.

Where over 500kg of “Hazardous Waste” is produced Bowmite Electrical & Mechanical Limited will register that location with the Environment Agency. Records of all waste disposals will be kept by Bowmite Electrical & Mechanical Limited for no less than 3 years.

All waste will be suitably packed to ensure the safety of others during storage and carriage and also to prevent spillage, leakage, waste blowing or falling or the pilfering of contents by third parties.

### FIRE FIGHTING EQUIPMENT

Any fire fighting equipment that needs to be provided by Bowmite Electrical & Mechanical Limited or one of their contractors will be located at strategic points throughout the work areas. Employees are expected to tackle a fire themselves only if it would pose no threat to their personal safety to do so.

If the situation is dangerous or potentially dangerous the employee should activate / raise the alarm and evacuate the building immediately. In this situation employees are to meet at the pre-determined assembly point.

All equipment supplied by Bowmite Electrical & Mechanical Limited will be checked for its availability and worthiness weekly. Arrangements may be made with contractors in situations whereby Bowmite Electrical & Mechanical Limited may not have a permanent Site Supervision on site to ensure that suitable extinguishers and procedures are in place.

### FIRE SAFETY:

In accordance with the Regulatory Reform (Fire Safety) Order 2005 Bowmite Electrical & Mechanical Limited has appointed a ‘Responsible Person’ to undertake the following specific duties:

- Ensure that general precautions are in place to protect Employees from the risk of fire.
- Ensure that a fire risk assessment is prepared and regularly reviewed.
- Ensure the effective planning, organisation, control, monitoring and review of the preventive and protective measures.
- Ensure that specific arrangements are made for the safe handling, storage and transport of dangerous substances and waste containing dangerous substances.
- Ensure that appropriate steps are taken to reduce the risks of ignition or have taken steps to limit the spread, growth and impact of a fire and ensure that adequate and suitable means are provided, giving warning in the event of a fire, for the escape from a fire and for fire fighting.
- Any equipment, fixed or portable, used for fighting fires must always be kept in an operational condition.
- Ensure that identified risks and safety precaution information is passed onto Employees and others that may be affected.
- Ensure that Employees are adequately trained in relation to fire safety.

Employees of Bowmite Electrical & Mechanical Limited will be instructed in the procedure for evacuating the premises and the location of the Assembly Point at induction to the Company.

### FIRST AID

Bowmite Electrical & Mechanical Limited will undertake risk assessments and ensure that there are sufficient competent trained First Aiders to meet the risks of first aid requirements and also that there are well maintained First Aid facilities in accordance with The Health and Safety (First Aid) Regulations 1981.

Risk assessments in accordance with The Health and Safety (First Aid) Regulations 1981 will examine:

- The number of employees;
- The nature of the work in which they are involved;
- The size of the operation;
- How widely employees are distributed across the site;
- The location of the site and its proximity to medical treatment;

The first aid kit and its location in the office and on site shall be known by all Lawmens employees and contractors and its contents replaced as they are used or when an expiry date is exceeded. Regular check is to be made of the contents to ensure this. One person holding a current First Aid certificate or an "Appointed Person" certificate will be responsible for the proper use and maintenance of the first aid box.

### HOISTS

All hoists will be provided, maintained, operated and used in accordance with the Lifting Operations and Lifting Equipment Regulations. 1998. Assurance will be gained to ensure that hoists used will be inspected by the site supervisor at the commencement of each week and a report entered in the site register. Only a trained, authorised hoist operator will be permitted to operate hoists. Any person required to give signals to a hoist operator will be given instructions. Only persons over 18 years of age are permitted to operate hoists or give signals.

Only competent persons will ensure that hoist enclosures are maintained, gates are kept closed, no operative is permitted to ride on the platform of a goods hoist and materials are secured when being raised or lowered. Personnel hoists will not be used on site unless a six monthly certificate has been supplied and goods hoists will not be accepted or used on site unless they have been supplied with a yearly inspection test certificate.

### HOT WORKS

Hot work refers to work which involves or produces a naked flame, sparks or similar and which could be a source of ignition if petroleum vapours were present. It includes (but is not restricted to):

- The use of abrasive cutting discs (when used on either metal or concrete).
- Burning or grinding.
- Blowlamps.
- Hot air guns.
- Propane torches.
- Bitumen boilers.
- Welding.

While hot works are being undertaken in a hazardous area a fire extinguisher and fire watch may be posted, a fire extinguisher will be directly to hand throughout the operation as a minimum requirement.

### HOUSEKEEPING AND SITE TIDINESS:

Site tidiness will be considered at all stages of the work and co-operation is expected between Bowmite Electrical & Mechanical Limited and other contractors. Waste material, especially combustible material, will be controlled and either deposited in an agreed area, or removed from site. All contractors are required to remove their own debris and material at the end of the working shift or at any point that it becomes a fire risk, trip hazard or blocks an access and egress route.

### INSURANCE

In recognition of its statutory and common law duties, the Company has taken out insurance with an approved insurer. The certificate of insurance will be prominently displayed so as to be available for inspection at all reasonable times by employees and regulatory authorities i.e. the Health and Safety Executive Inspectors, within the office and on all sites. An electronic copy may be available on site as long it is available at all times.

### LADDERS, STEPLADDERS AND TRESTLES:

Ladders will only be used for very light work of a short duration and there will be three points of contact with the ladder at all times. Ladders over three metres in length will be tied or footed by a third person to ensure stability, alternatively proprietary "footing" equipment may be utilised. The use of ladders on uneven ground will not be permitted if they are not firmly tied by the stiles or the bottom of the ladder firmly footed or stabilised.

The Site Supervision will oversee all works on site to ensure compliance i.e. that the ladder remains footed at all times and that the ladder is not used incorrectly e.g. upside down etc. The Site Supervision will have adequate training and information to ensure their competence in the inspection and use of the equipment i.e. that ladders are not twisted or damaged in any way and that only one person climbs a ladder at one time with small tools carried in a belt. A scaffold tower will be used if bulky or heavy items are to be lifted, when necessary they will be lifted by winch or gin wheel.

Pole ladders must not have footholds blocked by ledgers or transoms and as with all ladders the angle needs to be 1 in 4. At the top of the ladder the overlap needs to be at least five rungs if a suitable handhold is not provided.

All ladders will be removed to storage once the task is complete to prevent their use for intrusion by trespassers etc. and it will prevent the hazard of leaning ladders being displaced.

**Stepladders and Trestles** will be either class 1 or BSEN 131 when used on site as class 3 are for domestic use only. Equipment will be checked before use to ensure that it isn't defective. Steps and trestles need to be solid when opened out and placed on a firm footing. They will not to be used on scaffolding or towers to gain extra height or where a fall may take a person over a leading edge i.e. a stairwell or roof. All working platforms will be at least 600mm wide or three scaffold boards and the span will not exceed 1.5 metres. Care will also be taken not to overload working platforms.

Edge protection will be provided on all working platforms where a person may fall a distance so as to injure themselves. **The 2 metre rule no longer applies.**

The common hazard of trestles is overloading. Supervision and competence of operatives will certify that they are not overloaded and are correctly used. All work undertaken from steps and ladders will be while facing the ladder / steps to ensure stability, while the waist must not be higher than the top tread.

Where ladders, stepladders or trestles are used for work activities Bowmite Electrical & Mechanical Limited will ensure that a risk assessment has been prepared and the hierarchy of the Work at Height (Amendment) Regulations 2007 has been followed.

### LIFTING OPERATIONS AND LIFTING EQUIPMENT (LOLER):

Bowmite Electrical & Mechanical Limited will ensure that it meets its obligations under the Lifting Operations and Lifting Equipment Regulations 1998

Lifting operations will be undertaken under the control of an appointed lifting co-ordinator. The lifting co-ordinator will have the responsibility of the following:

- Ensure that the lifting equipment is positioned and installed so as to minimise any risks e.g. from the equipment or the load falling or striking people.
- That lifting equipment is sufficiently strong, stable and suitable for the proposed use. Similarly the load and anything attached (e.g. timber pallets, lifting points, etc.) must be suitable.
- That lifting equipment is used safely.
- All lifting operations are planned, organised and undertaken by competent persons.
- Lifting equipment is marked with any appropriate information to be taken into account for its safe use, e.g. safe working loads.

- Lifting accessories, e.g. slings, clamps, strops, chains, hooks, etc., are similarly marked
- Ensure that lifting equipment and lifting accessories are subject to a periodic test of thorough examination – 12 monthly for general lifting equipment, 6 monthly for equipment used for lifting people and 6 monthly for lifting accessories or at intervals laid down in an examination scheme drawn up by a competent person
- Ensure that the appropriate action is undertaken as a result of the information contained within the test of thorough examination report.

In compliance with BS 7121-3 2000, the Lifting Co-ordinator will obtain information on wind conditions prior to any lifting operations commencing e.g. by obtaining local weather forecasts or by using an anemometer. This information will be collated with the crane manufacturers recommended wind speed operating limits. The lifting operation will be halted or the crane secured in an out of service condition as appropriate. The following other factors will be taken into consideration:

- The direction of the wind acting on the crane structure,
- The direction of the wind acting on the load,
- The shape, area and weight of the load, and
- The likelihood of wind gusts.

The factors above may entail stopping the lifting operation below the wind speed limits specified by the crane manufacturer. These factors will be taken into account in any instance where there is a requirement for accuracy of placement of the load.

All operatives are instructed to halt operations if there are any doubts concerning lifting operation during windy conditions.

#### MANUAL HANDLING OPERATIONS:

##### STANDARDS REQUIRED.

The Manual Handling Operations Regulations 1992 apply to the manual handling or lifting of materials by persons.

##### PLANNING.

A manual handling assessment will be undertaken in all situations in which a risk remains after the implementation of controls in accordance with The Manual Handling Operations Regulations 1992. The assessment will follow the format of Schedule 1 (task, individual, load, environment and other factors). All work will be tendered for or negotiated taking into account the above Regulations and the schedules of those regulations. Operatives will ensure that materials are landed as close as possible by machine or truck to the area of works. Where the use of a machine is available to handle any heavy or awkward loads, instructions must be issued to site on the handling of these loads.

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

##### SUPERVISION.

Operatives will be instructed in the correct handling and lifting of loads when mechanical means are not practical and staff will ensure that there is a supply of suitable gloves available for issue as required for the handling of materials, which may cause injury to hands through physical or biological means e.g. sharp edges or chemicals. Safety footwear will be worn at all times on site and supervisory staff will caution any employee or sub-contractor wearing unsuitable footwear. The supervisor will not require any operative, particularly a young person to lift without assistance, a load which is likely to cause injury. Bowmite Electrical & Mechanical Limited must reiterate that in the first instance mechanical means must be used to lift all materials and loads.

**SAFE SYSTEM AT WORK.**

The main injuries associated with manual handling and lifting are:

Back strain, slipped disc  
Hernias  
Musculoskeletal disorders  
Lacerations, crushing hands or fingers  
Tenosynovitis  
Bruised or broken toes or feet  
Various sprains and strains etc.

The selection of persons to carry out manual handling or lifting tasks will be based on the training given, age, physical build etc.

Where loads have to be manually handled, the need to ensure that access and egress are safe is especially important. The training provided should be based on the physical structure of the body and the effect of attempting to handle loads in various positions.

Manual handling operations will be avoided as far as is reasonably practicable i.e. by delivering work equipment, as close to the area of intended works and by the use of lifting devices, but where a risk of injury still exists it will be reduced to the lowest level possible.

Where an avoidance of a manual handling task is not possible an assessment of the operation will be made taking into account the task, the load, the working environment and the capability of the individual to perform the task in hand. An assessment will be reviewed if there is any reason to suspect that it is no longer valid. In the first instance all possible steps will be taken to reduce the risk of injury to the lowest level possible throughout the workplace.

**MOBILE PHONES:**

The Company shall bring to the attention of all employees, including Directors and Senior Management, of the requirement to ensure that those travelling on business in control of a motor vehicle are aware of a specific legal requirement not to operate mobile telephones when in control of a motor vehicle.

This requirement is set to come into force on the 27<sup>th</sup> February 2007.

The offence which also includes usage while stationary in traffic or waiting at traffic lights is also likely to include 3 penalty points each time you are caught holding a phone with a fixed penalty fine of £60.00 which will increase if the offence goes to court with a maximum penalty of £1000.00, £2,500.00 for the drivers of goods vehicles

The Company shall undertake not to encourage phone usage while employees may be driving.

The purchase of a hands free kit does not make this problem go away, you can still be prosecuted if you are you are involved in an accident while using a hands free kit.

Research has shown that people are still four times more likely to be involved in an accident using a hand free kit than normal drivers as this still causes a split in concentration.

Note: you can be prosecuted not only under health and safety laws but under the Road Traffic Act e.g. for dangerous driving for which there is an unlimited fine and possible prison sentence.

**NOISE:**

Where noise levels are suspected of being above the statutory level Bowmite Electrical & Mechanical Limited will inform its external Health and Safety Consultants and request that they carry out full noise surveys, the staff will then be informed of the results. When there is reason to suppose that the assessment is no longer valid, or when there has been a significant change in the work to which the assessment relates noise levels will be reviewed and changes made as recommended by the review.

**Noise, which is a nuisance to the general public around the site.** The Control of Pollution Act 1974 – requires contractors to use the best practical means of controlling construction and demolition noise.

British Standard Code of Practice BS: 5228 2009 Code of Practice for Noise Control on Construction and Demolition sites gives advice on methods of reducing noise nuisance on construction sites and also contains advice on the protection of workers from the health risk of noise.

#### PLANNING PROCEDURES

At tender or negotiation stage the above standards will be taken into account.

The Supervisor will ensure that information on the noise level of any plant, which it is intended for hire or purchase is obtained and taken into account before hiring or purchase takes place. Bowmite Electrical & Mechanical Limited will assess noise levels for operations and where guidelines are given by manufacturers these will be adhered to.

**GUIDELINE:** Can the person using the equipment talk to someone 2 metres away without having to raise their voice to be understood? If they have to raise their voice, the noise from the equipment or operation is probably loud enough to damage their hearing, so action must be taken, ear protection should be offered.

If there is any doubt, employ competent people and equipment to assess the noise levels.

#### ACTION LEVELS:

The lower exposure action values are:

A daily or weekly personal noise exposure of 80 dB (A); and

A peak sound pressure of 135 dB©

The upper exposure action values are:

A daily or weekly personal noise exposure of 85 dB (A); and

A peak sound pressure of 137 dB©

The exposure limit values are:

A daily or weekly personal noise exposure of 87 dB (A); and

A peak sound pressure of 140 dB©

Control Measures where the Action Value is likely to be reached:

If an Exposure Action Value is exceeded, Bowmite Electrical & Mechanical Limited shall:

Use other work methods which eliminate or reduce the exposure to noise

Selection appropriate work equipment taking into account the work to be done

Assess the design and layout of workplaces, workstations and rest facilities

Provide suitable and sufficient information, instruction, training and supervision for employees

Reduce the noise by technical means

Implement appropriate maintenance programmes for work equipment

Limit the duration and intensity of exposure to noise

Implement appropriate work schedules with adequate rest periods

Control Measures where the Limit Value is exceeded:

If an Exposure Limit Value is exceeded, Bowmite Electrical & Mechanical Limited shall forthwith:

Reduce exposure to noise below the limit value

Identify reasons for that exposure limit value being exceeded, and

Modify the organizational and technical measures that are in place or implement new control measures to prevent it being exceeded again

The Supervisor will ensure that any static plant to be installed on site or in the workshop is planned to be in a position, which takes accounts of effects of noise on the workers or the public.

Where personnel will be required to work in situations where high levels of noise are likely to be encountered the Supervisor will ensure that full information is obtained before work commences on the levels and frequencies of noise.

Any measures to reduce noise levels to below levels considered to be safe must be planned or, if this is not practicable, suitable hearing protection equipment must be selected for use by personnel.

Regular monitoring of noise levels and frequencies will be planned as required.

Instruction and training will be provided to supervisors and operatives required to work in premises or with plant which is likely to result in exposure to high noise levels.

#### SUPERVISION

The Supervisor will ensure that all plant provided is fitted with silencers, mufflers, doors, canopies, etc. and that all equipment and noise reducing doors etc. are used.

Supplies of ear defenders, or other hearing protection, will be made available on the site or for any operations where it is not practicable to reduce the noise level to a safe limit. These will be issued to operatives as required and must be worn at all times when operative is exposed to noise.

#### SAFE SYSTEM OF WORK

The Safety Consultants can provide the following services:

Carry out a noise survey to establish levels and frequencies of noise.

Regularly monitor noise levels and frequencies.

Give advice on noise control measures.

Arrange for Audiometric testing of operatives.

Arrange for individual monitoring of exposure.

Provide training and instruction for personnel.

Requests should be made via the Safety Director.

Where noise levels are suspected of being above the statutory level, Bowmite Electrical & mechanical Limited will inform its external Health and Safety Consultants and request that they carry out full noise surveys, the staff will then be informed of the results. Steps will be taken to reduce noise via engineering controls and, as a final defence, suitable and sufficient hearing protection will be provided, free of charge, to the operatives.

Hearing damage results from over exposure to noise. Bowmite Electrical & Mechanical Limited undertake to, as far as reasonably practicable to:

- Reduce noise at source
- Isolate the noise source
- Reduce the time that operatives are exposed to the noise
- Identify which employees are exposed
- Keep adequate records of such assessment until a further assessment is made
- As a long-term undertaking to reduce the noise levels to which employees are subjected:
- Provide the employee with such information as will enable him to carry out his statutory duties.
- To designate ear protection zones and post signage accordingly.

When there is reason to suspect that the assessment is no longer valid, or when there has been a significant change in the work to which the assessment relates, noise levels will be reviewed and changes made as recommended by the review.

## PERMITS TO WORK

Due to the nature of activities undertaken by Bowmite Electrical & Mechanical Limited on occasions it is a requisite that they be undertaken in accordance with a permit to work system. The Directors are to highlight during the tendering process to those preparing and considering Health and Safety requirements that a permit will be required to undertake the works.

Typically, permits to work will be required for all operations undertaken within confined spaces and those tasks requiring the working on live services (only undertaken if it is unreasonable in all the circumstances for it to be dead; and it is reasonable in all the circumstances for him to be at work on or near it while it is live).

Should a permit be required, it will be issued by a person nominated as being competent by a Director of Bowmite Electrical & Mechanical Limited. This person is to ensure that all requisites of the permit have been considered and controls implemented before works commence. Only then will he authorise the permit. Once works are complete the nominated person is to "sign off" the permit as confirmation that the area is safe.

## PERSONAL PROTECTIVE EQUIPMENT

PPE identified as necessary after an assessment of the various activities will be supplied free of charge by the Company to its employees. Staff will be outfitted with equipment, trained in its use and maintenance, advised of the possible results of non-use and the reporting procedures for faulty equipment. Bowmite Electrical & Mechanical Limited will operate an on-going policy of monitoring equipment use. It will be a disciplinary matter if staff do not adhere to the use of PPE and the associated controls that are to be implemented as part of the Risk Assessment. It will be **mandatory** that employees shall wear a safety helmet and safety boots or safety shoes at all times when required by Bowmite Electrical & Mechanical Limited. Other PPE may be required according to the Risk Assessment and in accordance with the site rules.

### **Personal Protective Equipment – Visitors to Site.**

Official visitors to sites (e.g. surveyors, engineers, inspectors etc.) will be required to wear a safety helmet and safety boots. Other PPE such as a high visibility waistcoat should be considered and used when required. Visiting managers, engineers or supervisors or contractors will be reminded that they should set a good example by wearing the appropriate protective clothing at all times whilst on site.

## PLANNING

At the planning stage the requirements of this Company Policy must be taken into account.

Any aspects of work not covered by this Policy must be identified and planned by the Site Supervisors and written procedures defined. Pre-contract meetings may be held and specific safety matters discussed. Representatives of persons undertaking everyday work duties on site while more hazardous work is undertaken will be informed of the hazards and controls in place. Bowmite Electrical & Mechanical Limited will also communicate this information directly to the operatives on site.

## PLANT AND EQUIPMENT MAINTENANCE

The company will ensure that all work equipment & plant is maintained in an efficient state, in working order and in good repair. Where the equipment has a maintenance log, the log is to be kept up to date. Compliance with the PUWER 98 Regulations will be the minimum standard required.

The Company has a statutory duty to maintain and inspect its plant and equipment and avoid risks to Health and Safety.

The Company will use maintenance schedules to control and manage the equipment. Various maintenance programmes may be required; these will need to take into account the operational needs as well as Health and Safety considerations and the possible impact of the environment. Also allowances must be made for the aptitude and skill of the operator.

Management may use:

- Unscheduled or breakdown maintenance
- Scheduled or routine maintenance
- Planned preventive maintenance
- Predictive maintenance

### Improvement maintenance.

The Company will provide adequate supervision, information, training and instruction to ensure that there is compliance with safety procedures.

The Company will develop safe systems of work, which identify risks and hazards and then eliminate or reduce the risk to a minimum.

Operatives using Company plant and equipment will be competent and trained. They must inspect the equipment before use and then at regular intervals, lifting plant is to be inspected weekly and a register kept of the inspections. Operatives must report all faults, damage, defects or malfunctions to their Supervisor and must not use defective equipment or plant. Defective equipment / plant will be immobilised and identified as awaiting repair.

### STANDARDS REQUIRED.

The following regulations contain requirements to be complied with in the provision, maintenance operation and use of plant on site:

- Provision and Use of Work Equipment Regulations 1998 (PUWER 98).
- Lifting Operations & Lifting Equipment Regulations 1998 – Lifting appliances in general.

### PLANNING PROCEDURES.

All work will be tendered for or negotiated in accordance with the above standards and the requirements of the Management of Health and Safety at Work (Amendment) Regulations 2006. The Director will take all aspects of the work into account to ensure that sufficient information is provided to Hire Company's to enable the correct type of plant to be provided.

The Director will ensure that competent operators and banksmen are provided or that where necessary full training and instruction is arranged. At the project planning stage it will be determined whether any preparatory work is required for the installation or use of plant on site and to ensure that any requirements are planned. E.g. plant and diesel storage areas, loading areas, solid base for mobile cranes, concrete crusher set up, road crossing etc.

### SUPERVISION.

The site supervisor will ensure that plant delivered to site is in good order and fitted with any necessary safety devices and guards. Any defects noted on hired equipment will be reported to the Hire Company immediately.

The site supervisor will ensure that only authorised operators are permitted to operate any item of plant, where any doubt of the competency of an operator exists, the site supervisor will report to the Director or Hire Company immediately. No young person, under 18 years of age will be permitted to operate any item of plant or act as banksman unless being trained under the direct supervision of a competent person. All plant will be properly secured and immobilised at the end of each day.

All necessary testing and THOROUGH EXAMINATION CERTIFICATES will be kept in the cabs of plant at all times and all items of plant requiring weekly inspections by the operator or other competent persons will have the inspection recorded in the site register or in the register kept by the operator of Plant.

The supervisor will ensure that any necessary preparatory work required to enable plant to be installed or used correctly is carried with specific requirements.

The site supervisor will ensure that any defect notified by the Plant Operator during operations on the site is reported immediately for repair and that where defects could affect safety on site, the item of plant is not used until the repairs are carried out.

The supervisor will not ask or permit the Plant Operator to carry out work with the machine for which it was not intended unless specific advice has been obtained from the manufacturers of the machine on the proposed use.

### SAFE SYSTEM AT WORK.

- Hazards with the use of plant arise out of:
- Unskilled operation;
- Incorrect use;
- Poor maintenance;
- Reversing unsupervised;
- Defect in machine unchecked;
- Noise (see separate section). All banksmen, supervisory staff and operatives required to enter earth moving areas will be provided with high visibility waistcoat or belts.
- Plant Operators must not drink alcohol during working day or shift.
- All personnel required to enter areas where lifting appliances are in use (e.g. Cranes, excavators, piling frames etc.) will be provided with safety helmets and will be required to wear them as directed by the site supervisor.

### PLANT ON SITE.

The Directors and Site Supervision will ensure that competent operators are provided or that where necessary full training and instruction is arranged. The Directors and Site Supervision will determine whether any preparatory work is required for the installation or use of plant on site and ensure that any requirements are planned. E.g. forklift trucks, storage areas etc.

### PRINCIPLES OF PREVENTION

Bowmite Electrical & Mechanical Limited recognizes its duty under regulation 4 of the Management of Health & Safety at Work (Amendment) Regulations 2006 to apply the above in its undertakings, these principles being;

- Avoiding risks;
- Evaluating the risk which cannot be avoided;,
- Combating the risks at source;
- Adapting work to the individual, especially as regards the design of workplaces, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work and working at a predetermined work-rate and to reducing their effect on health;
- Adapting to technical progress;
- Replacing the dangerous with the less dangerous;
- Developing a coherent overall prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors relating to the working environment;
- Giving collective protective measures over individual protective measures; and
- Giving appropriate instructions to employees.

### PROCEDURE FOR NEW EMPLOYEES ENGAGED BY THE COMPANY

The procedure is to be carried out by the Supervisor where the new employee will be required to work.

- 1) Explain to the new employee what he/she will be required to do and to whom he/she will be directly responsible.
- 2) Issue the new employee with a copy of the Company Statement of Safety Policy and details of their responsibilities for safety matters. Also show the new employee where the complete Company Policy for Health, Safety & Welfare is kept and explain its purpose.
- 3) Ascertain if the new employee has any disability or illness which could prevent him/her carrying out certain operations safely or require additional protective measure.
- 4) Show the new employee where copies of Regulations are kept.
- 5) Warn new employees of any potential dangerous areas of operations on jobs or in the workplace.
- 6) Warn the new employee of any prohibited actions, e.g. entering specific areas without a safety helmet, operating plant unless authorised etc.
- 7) Ascertain whether there is any training or instruction required and liaise with M.E.L. our Consultants as appropriate, to arrange, e.g. abrasive wheels, cartridge tools, scaffold inspections etc.
- 8) Issue to the employees any protective clothing or equipment necessary, e.g. safety helmet, eye protection, ear defenders/plugs, wet weather clothing etc., and obtain their signature for the items issued.
- 9) Where necessary, inform the new employee of vehicle servicing procedures etc.

#### ADDITIONAL PROCEDURE FOR NEW EMPLOYEES UNDER 18 YEARS OF AGE

Inform them that they must not operate any plant, give signals to any crane driver, and use any power tools or equipment unless being trained under the direct supervision of a competent person.

#### PROTECTION OF PERSONS IN WORK AREAS

All necessary measures required for the protection of others will be allowed for and planned, taking into account Section 3 of the Health and Safety at Work etc. Act 1974. Consideration will be given at the planning stage to ensure the protection of others and when necessary, signage, barriers, screens etc will be provided to prevent ingress and ensure their protection.

#### PUBLIC/THIRD PARTY SAFETY

Under Section 3 of the Health & Safety at Work etc. Act 1974 Bowmite Electrical & Mechanical Limited recognises its duty of care to the general Public/third parties and will take all necessary measures to safeguard the public during any work activity which may impinge upon them.

This will include signage, barriers, fully decked out and brick guard netted scaffolding and if necessary an operative on duty to control and guide movements of the Public.

Site/workplace security will be put in place to stop members of the public/third parties getting into a position where they are a danger to themselves or to operatives of Bowmite Electrical & Mechanical Limited. This will include working in residential properties where there may be children present. In occupied premises all persons that require information will be notified of the parameters of the works and will be notified accordingly of any changes to those work parameters.

## PURCHASING POLICY

Bowmite Electrical & Mechanical Limited recognises its duties in accordance with various Regulations with regard to the purchase of materials, substances, machines and equipment and will, before each purchase, consider how they may impinge on the Health, Safety and Welfare during their use, storage, handling and transportation. Bowmite Electrical & Mechanical Limited has a Purchasing Policy that not only takes into consideration the quality of an item in comparison to the cost but also considers the suitability of the item against a number of underlying criteria.

Examples:

Bowmite Electrical & Mechanical Limited will endeavour to purchase substances that are not hazardous to health if they compare favourably in all characteristics i.e. cost, effectiveness and quality with a more hazardous substance. Consideration will also be given to ensure that where practicable substances which are hazardous to the environment will also be replaced by less hazardous chemicals when available.

Equipment and machines will be compared not only by price but also on features including ergonomics, noise, vibration, usability, suitability for the task, adequate guarding and ease of maintenance and inherent hazards.

Choice of Personal Protective Equipment will not be limited to cost but assessed on quality and suitability for the protection it is to afford the wearer it will also be compatible with other PPE and comply with standards.

Office furniture and equipment will be purchased after consideration has been given to: Ergonomics, fire rating, sustainable resources etc.

## REFUSAL TO WORK ON SAFETY REASONS

Bowmite Electrical & Mechanical Limited are committed to providing safe systems of work for all our employees whilst carrying out their activities and undertakings and do not expect any member of staff to work in an unsafe manner. Full consideration will be given to the situation whereby a member of staff refuses to work on safety reasons.

Our staff have confidence in their ability to question the safety of working arrangements without fear of victimisation, in the knowledge that points they raise will be given serious consideration. If any member of staff has reason to believe that the task they are required to undertake or have already commenced, will endanger either themselves or others, they are required to cease work and report the matter to their immediate supervisor. The Supervisor after consulting with the Director and any relevant rules and instructions as necessary must decide whether grounds for refusal to work are justified. He will then consult with the working group and the system of work will either be confirmed or changes agreed after considering all circumstances.

All cases of refusal to work are logged at the relevant site office for inspection by management, and will be made available to the client if requested. The Supervisor and Director are responsible for reviewing all cases of refusal to work and instigating any follow up action. Follow up action may involve consultation with our Health and Safety Consultants.

## RISK ASSESSMENTS

The company will carry out on-going risk assessments for operations in accordance with The Management of Health and Safety at Work (Amendment) Regulations 2006 and other relevant Regulations. The risks and controls to be implemented will be communicated to all staff. This procedure will be continuous and assessments will be updated as required by situations or statutory requirements.

Hazard – Any thing or situation that has potential to cause damage or injury.

Risk – Likelihood that the particular hazard will result in damage or injury.

Severity – An estimation of how serious the potential problem might be in terms of harm to people and/or damage to property.

SEVERITY OF HARM x LIKELIHOOD OF OCCURRENCE = RISK RATING

## RISK MANAGEMENT

Risk management is the basis of the Company's objective of achieving safe working places. The risk management procedures the Company adopts are as follows: -

1. **Identification of the risks.**
2. **Assessments of the risks.**
3. **Identification of methods and practices of working to reduce the risks.**
4. **Assessment of the reduced risk levels.**
5. **Implementation of practices and procedures identified in Risk Assessments.**
6. **Monitoring and control of risk and risk reduction procedures.**

### SAFETY INSPECTIONS

Regular inspections of work sites are undertaken by Supervisors with results recorded to ascertain that all activities are undertaken in a controlled safe manner and with due regard for statutory obligations, Approved Codes of Practice and Company guidelines. Our independent safety consultants M.E.L. (Health and Safety) Consultants Limited will also undertake independent unannounced inspections to cross-reference with those undertaken by Bowmite Electrical & Mechanical Limited.

If at any time a Health and Safety Audit is deemed to be required this will be undertaken by M.E.L. (Health and Safety) Consultants Limited at the request of the Directors. The Directors will randomly undertake a formal inspection of offices to ascertain that all work equipment is suitably maintained and where applicable that guards are present and adequate. Electrical equipment will be checked for damage and wear in accordance with the Provision and Use of Work Equipment Regulations 1998 together with general office Health and Safety matters e.g. blocked access and egress routes, risk assessments and working practices.

### SAFETY RULES

In the interests of safety and in order to ensure that the safest systems of work are used at all work places rules will be outlined during induction. Safety rules at venues will be specific to individual projects in order to ensure that hazards are eliminated and risks reduced. Employees breaching health and safety rules will be disciplined in the first instance with further breaches resulting in dismissal. Safety rules will be displayed on the notice board or in a prominent position at all places of work.

### SAFETY SIGNS

Following a risk assessment and having adopted all appropriate techniques for collective protection, and measures, methods or processes used in the organisation of work, cannot avoid or adequately reduce the risks to employees and non-employees, appropriate safety signage will be used to warn and instruct on the nature of those risks and the measures to be taken to protect against them.

### SCAFFOLDS and MOBILE TOWER SCAFFOLDS.

#### STANDARDS REQUIRED.

The Work at Height (Amendment) Regulations 2007 gives requirements for construction and use of independent tied scaffolding and mobile tower scaffolds. All scaffolds constructed from tubular steel scaffolding will be erected in accordance with recommendations of BS EN 12811-1 2003.

Prefabricated aluminium mobile tower scaffolds will be erected and used in accordance with manufacturer's instructions. Prefabricated towers will be constructed to BSEN 12811-2:2003. Any other type of mobile tower scaffold will be erected and used in accordance with supplier's instructions.

Where necessary Bowmite Electrical & Mechanical Limited will ensure that a plan of the scaffolding is prepared and available at the location of the scaffolding.

#### PLANNING.

All work involving scaffolds will be tendered out and negotiated for taking into account the above standards and the requirements of the Management of Health and Safety at Work (Amendment) Regulations 2006. The Site Supervision will ensure that mobile towers are used safely and efficiently taking into account floors, ceiling heights, roof members, type of work etc. Training will be provided to Site Supervision required to carry out inspections and to operatives required to erect, alter, or dismantle mobile towers.

#### SUPERVISION.

Trained operatives will erect all mobile towers unless they are under the direct supervision of competent persons. No person is permitted to erect, alter or dismantle any mobile tower scaffold unless competent to do so. All mobile towers provided for Company employees will be checked by the Site Supervision or a competent person to ensure they are in accordance with the above standards. Operatives required to use mobile tower scaffolds will be instructed in safe use and movement of equipment. Mobile tower scaffolds will be inspected at 7-day intervals, if they remain in the same position, by Site Supervision and records of inspections entered into a register, which will remain on site.

#### SAFE SYSTEM AT WORK.

The following precautions will be complied with:

Towers will be vertical and will be tied to the structure where required.

Towers will not be used in adverse weather conditions.

Scaffold towers must not be used or moved on sloping, uneven or obstructed surfaces.

Towers will always be moved from ground level and no person will remain on the platform while it is being moved and materials and tools will be removed or secured. The safe working load of the platform will not be exceeded. When moving scaffold towers the height will be reduced to 1½ times the minimum base dimension to ensure stability.

The working area in which the scaffold will be used will be checked for openings, ducts, steps etc and for overhead obstructions particular overhead electricity cables. All bracing members and guard rails / toe boards will be fitted with wheels locked into position while the platform is in use and outriggers or stabilisers extended where applicable. Heights of the towers will not exceed the manufactures recommended height to effective minimum base dimension when used both internally and externally.

Operatives erecting, altering, dismantling or working around the base of mobile tower scaffolds will wear safety helmets.

#### SHARPS (NEEDLES /SYRINGES).

The Company is aware that operatives may be working in areas where Sharps (needles / syringes) may be present. These represent biological hazards at work and the Company will control these risks and provide the staff with safe systems of work and the appropriate training and equipment.

Sharps can cause needle stick injuries, which are skin punctures caused by a needle. If the needle has been used by a person infected with a blood borne disease (including hepatitis B hepatitis, C and HIV), these diseases could be transmitted to a worker subsequently injured by the same needle.

When operatives are working in areas where there have been Sharps found or are likely to be found, the Company will inform, instruct and train it's operatives in safe procedures, handling methods and provide suitable equipment: Disposable tongs, stout rubber gloves and a Sharps Box / Container. Sharps will not be placed in plastic bags, litter bins, toilets or left about for others to pick up.

If Sharps are found by operatives, they must inform their Supervisor and management must report the find to the Client / Principal Contractor. The removal of the Sharps must be properly supervised and undertaken by a competent person with the correct PPE. Any injuries to personnel must be recorded in the Accident Book and the Company will follow up these incidents, because any resulting infection will be reportable under RIDDOR Regulations and all situations of needle stick injury will need to be investigated to prevent further occurrence.

#### TEMPORARY POWER SUPPLY

Where there is a requirement for the installation of temporary electrics, these will be carefully planned. Temporary electrics include all electrical power supplies installed by Bowmite Electrical & Mechanical Limited and removed at or before the completion of a contract. All temporary electrical installations will be installed by a competent person and the equipment will comply with the Electricity at Work Regulations 1989. All temporary electrics which are to be in position for more than three months are subject to inspection and examination in accordance with the current edition of the IEE Regulations. Only authorised experienced personnel will work on or adjust electrical connections.

The use of long trailing leads should be avoided. The cable should be protected from accidental damage by other operatives and have safety trip devices and be of a type suitable for the duty required.

The Operatives will inspect the equipment and cables to check for damaged cables, bare wires, cracked plugs or damaged pins and connections. Suspect equipment will be disconnected and replaced by a competent person. Suspect equipment will be marked and removed from use. Faulty equipment that is overheating or sparking may be a source of ignition and cause a fire.

### TIREDFNESS

It is the Policy of Bowmite Electrical & Mechanical Limited that any person who is taking medication, prescribed or not is to inform the Management if those drugs could affect their performance while at work or if the medication is likely to result in drowsiness. Employees, labour only contractors and subcontractors are reminded that some prescription drugs may induce tiredness and lethargy etc. Employees etc. are also requested to notify their Supervisor if at any time due to work loads or personal matters they feel that their ability to undertake work activities in a safe manner has been affected. Employees are required to submit this information pursuant to the Health and Safety at Work etc. Act 1974. Section 7.

### TRAINING:

All employees are to be trained in accordance with the Management of Health and Safety at Work (Amendment) Regulations 2006. Where operatives are required to carry out key tasks they will be provided with the necessary training. The Company will ensure that all operatives and contractors are competent and trained to the recognised acceptable levels required to undertake their job in a safe manner, additional Health and Safety training will be provided for employees.

On recruitment and when exposed to new or changed risks refresher training will also be given as appropriate. On site Tool Box talks will cover all aspects of Safe Site Working Procedures and specific Contract requirements.

The Company undertakes to provide Induction Training for general education and additional training for specific jobs as they occur and any additional specialised courses or staff training as is appropriate and necessary for the requirements of their duties. All training deemed to be beneficial to employees will be provided and paid for by Bowmite Electrical & Mechanical Limited in the interests of Health and Safety, training will be mandatory with records of training being kept.

The Company has a firm commitment to the training of its employees in matters relating to Health, Safety and Welfare. The objective of the training is to raise competency, Health and Safety Awareness and to ensure that the obligations of the Company in these matters are fully complied with.

Training and improvement in the understanding and application of Health, Safety and Welfare matters is seen as a continuous process. There is no defined training agenda but rather a flexible approach whereby training is provided in whatever areas are required by individual employees. Training is provided in both a formal and informal manner and all employees are encouraged to positively identify to their supervisors any areas where they feel they require training or retraining in Health and Safety matters.

The on site induction will include familiarisation with the place of work e.g. welfare facilities, emergency procedures, provision of and explanation of any information contained in Risk Assessments or Method Statements and it will also deal with the use of any Personal Protective Equipment together with instructions on maintenance of the equipment. Toolbox talks will be undertaken on general topics or hazards that have been introduced to the site since induction.

### USE & STORAGE OF HFL's and LPG's

All cylinders will be carefully handled when used and will be returned to a storage cage at the end of the day. Cylinders will not be discarded, rolled, dropped or lifted by the valve while in the care of Bowmite Electrical & Mechanical Limited There will be a limit to the amount stored to reduce the hazard and all bottles will remain in an upright position, 3 metres from structures, heat sources and voids (propane and butane are heavier than air and a leak will collect in cellars, drains and underground car parks). Bottles will also be distanced from boundaries and structures and out of direct sunlight. Full cylinders will remain separate from those that are full and oxygen cylinders away from LPG's.

It is envisaged that only small quantities of LPG's i.e. less than 300 kilograms will be required on site for cutting purposes and they will be kept in a lockable wire cage with only one exit. A fire extinguisher point will be located close to the LPG & HFL stations. Dry powder or foam extinguishers provided. The area around the LPG's & HFL's will have signage posted indicating that there is a fire hazard and prohibition notices will forbid smoking or naked lights in the area. Small quantities of flammable materials such as solvents and adhesives may be stored in lockable steel chests.

During the use of HFL's or LPG's there will be co-operation and co-ordination with the Principal Contractor (when applicable) and permits submitted when required. When hot work is being undertaken within a hazardous area a firewatcher with an approved extinguisher will be at the job site throughout the hot work operation. Extinguishers will be to hand as a minimum requirement during all hot work operations.

**VIBRATION**

It is the buying policy of Bowmite Electrical & Mechanical Limited that the noise and vibration produced by work equipment is considered together with the price when new purchases are made with a view to lowering the risk when equipment is used. Bowmite Electrical & Mechanical Limited will endeavour to purchase equipment that is advanced in technology and equipped with vibration absorbing features.

It is recognised that a common cause of hand-arm vibration is the prolonged use of rotating hand tools for cutting and grinding together with percussive hand tools used for riveting, chipping hammering and drilling. In the first instance mechanical methods will be used not requiring the exposure of the operative e.g. using a plant mounted "pecker" but should the operative be exposed the task will be allocated to a number of individuals to ensure job rotation and a reduction in the exposure time.

To ensure that operatives are aware of the effects of hand arm vibration they will be provided with adequate information on the hazard and controls and given information in order to reduce the risk. Below are some examples of maximum usage for tools in order to prevent injury and ill health.

(Please note these values are indicative only, the following table is to be used for reference only).

<b>Tool</b>	<b>Hand Vibration (m/s<sup>2</sup>)</b>	<b>Maximum usage period in 8hrs (Minutes)</b>
2- stroke breaker	10	30
Electric breaker (7kg)	9	37
Rotary/hammer drill (4kg)	10	30
Rotary/hammer drill (9kg)	14	15
Rotary drill	2.5	480
7/9" Grinder	5.5	99
Circular saw 6" – 9"	2.5	480
Orbital sander	2.5	480

<b>Vibration values in m/s<sup>2</sup></b>	<b>Exposure time required to reach action level 2.5m/s<sup>2</sup> A (8)</b>	
	<b>In minutes</b>	<b>In hours</b>
2.5	480	8.00
3.0	333	5.55
3.5	245	4.08
4.0	188	3.13
4.5	148	2.47
5.0	120	2
5.5	99	1.65
6.0	83	1.38
6.5	71	1.18
7.0	61	1.02
7.5	53	0.88
8.0	47	0.78
8.5	42	0.7
9.0	37	0.62
9.5	33	0.55
10.0	30	0.5
10.5	27	0.45
11.0	25	0.42
11.5	23	0.38

## WELDING OPERATIONS

### Hazards

The main hazards likely to be encountered are:

- High temperature, causing burns and fires;
- Directly or indirectly evolved fumes, liable to cause injury to health;
- Radiation causing burns and “arc eye” can also produce noxious gases, and
- Lack of oxygen, causing asphyxia.

These hazards are likely to be encountered in the following processes.

1. MMA (Manual metal arc) using flux covered stick electrodes.
2. TIG (tungsten inert gas), a gas shielded non-consumable electrode process.
3. MIG (metal inert gas)
4. Flame brazing e.g. silver soldering.
5. Cutting processes such as air/arc and plasma (electric) and oxy/fuel gas burning.

The first **three** use an electric arc to provide the heat, and the fourth uses an oxygen/fuel gas flame.

## CARE OF EQUIPMENT

### Gas Flame Equipment:

The gases commonly used are:

- a. Oxygen enriched air is very dangerous, as in such an atmosphere materials are normally combustible and can ignite quickly and an instant fire can take place. Accordingly, confined spaces where oxygen enrichment may occur should be regularly checked. Where there is a risk, no work should be permitted in the area until it has been cleared as safe for work.
- b. Acetylene is dissolved in acetone and stored in cylinders containing absorbent materials. The pressure in any pipeline must not exceed 0.63 bar (9psig). Copper pipes must not be used for acetylene, since copper and acetylene together can form copper acetylides, which are sensitive explosives.
- c. Propane is subject to the Dangerous Substances and Explosive Atmosphere Regulations 2002, which contain strict rules for its use and storage e.g. all cylinders not in use must be kept in a suitable store with adequate ventilation. Propane is heavier than air and will collect in ducts and drains etc., causing a potential flame/explosion situation.
- d. All cylinders in use must be secured, either in a cylinder trolley or lashed to a suitable support. Cylinders should be readily removable in case of fire.
- e. Note; if a cylinder falls and its valve is broken, it can behave like a rocket and travel far and fast. Cylinder valves should be closed when the equipment is not being used.

## HANDLING CYLINDERS

1. Shut the valve before moving a cylinder. Make sure the cylinder is properly secured before moving by any form of transport including crane and sling.
- Never move cylinders with magnets or chain slings.
  - Never transport cylinders with the regulator and hose attached unless on a purpose designed trolley or carrier.
  - Never lubricate spindles or connection with oil or grease, as these will ignite violently in the presence of oxygen. If the latter is under pressure, an explosion may result.
- b. Cylinders and fittings must be kept well away from sources of contamination such as oil leads from overhead equipment.
  - c. Pressure regulators, gauges, hoses and torches must be maintained in good condition and connections checked regularly to ensure gas tightness. Spark lighters should be used in preference to matches, smouldering rags etc.

2. Flashback arrestors and hose check valves should be fitted to both oxygen and fuel gas regulators and manifolds. Acetylene manifolds must be fitted with an effective flashback arrestor.

Arrestor's will:

- Stop and extinguish a flashback.
  - Prevent reverse flow of gases.
  - Shut off the supply of gas following a flashback.
- e. Non-return valves are also fitted in the hose connectors at the torch end to resist flashback.
  - f. Manufactures of equipment provide booklets giving further details of safety in use. These will be made available to all concerned.

### ELECTRONIC ARC EQUIPMENT

1. Mobile generators are frequently used for site welding. Care must be taken that the exhaust is adequately vented. Fuel drums or bulk supply tanks must be kept in a suitable storage area. The power source should be switched off whilst refuelling is in operation.
2. Mobile generators should be sited with care to ensure that the cables do not constitute a trip hazard. Checks should be made during the progress of the work and, if appropriate, the mobile generators relocated rather than the cable runs extended.
  3. Welding transformers and rectifiers are connected to the mains supply, usually at 440Volts. Switching equipment and cables will conform to the Electricity Regulations and must be installed and maintained by a competent electrician usually supplied by the Client.

### GENERAL

- The welding transformers must be connected to the supply (at mains voltage) by heavy-duty cables, and an efficient isolating switch, together with protective fuses or circuit breaker should be located in an accessible position, usually on the transformer tank. Fixed transformers should be permanently wired in conduit or armoured cable, but moveable or transportable items require heavy duty flexible cables, preferably armoured.
- Insulated flexible cables will be provided for the welding cables to the electrode holder and care should be taken to provide an effective return lead from the work place to the transformer. The welding transformer will be efficiently earthed, this will automatically provide an earth connection for the welding return lead.
- The insulated handle will be so arranged that accidental contact with live parts cannot be made. The holder will be well balanced and easy to handle. Although the welder will be equipped with suitable clothing and gloves, the latter cannot, and should not, be relied upon as insulation.
- Provision should be made for accommodating the holder when not in use, and it is desirable that the operator should have means at hand for isolating the holder from the supply. Plugs and sockets are available for this purpose as specified in BS.638.
- Although electric arcs for welding do not normally exceed 100 volts AC or DC, all electrical equipment, auxiliary cables and connections should be checked frequently. Special low voltage devices are available and should be used in hazardous conditions e.g. where the welder is standing on or surrounded by earthed metal.

- Air cooled transformers and rectifiers should be protected from moisture (rain etc.) and dust. Regular maintenance will ensure that any accumulation of dirt will be removed. Short circuits and loose or dirty connections can start fires.
  
- MMA torches should be insulated to avoid accidental arcing. The other electric arc processes incorporate a conductor in the circuit to isolate the torch when it is not being used.

## WELDING & CUTTING HAZARDS

### Heat

- a. All welding will involve high temperatures. Components retain burning heat for long periods after welding. Such components should be chalk marked HOT if liable to be touched by unsuspecting people (wipe off chalk marks when cooled).
  
- b. Fires can be started by sparks, hot slag etc., at a distance from the point of welding or cutting. Remove flammable materials from the vicinity of, and below, the operations, or use protective sheeting as appropriate.
  4. Take particular care when penetrating bulkheads, etc., that the "blind" side is safe.

### Fumes & Lack of Oxygen

- a. All welding and cutting operations produce fumes. Adequate ventilation at all times is essential. When working in confined spaces extra precautions are required.
  
- b. General welding fume can easily be measured and if the Occupational Exposure levels of an 8 hour time weighted average is not exceeded (5mg/m<sup>3</sup>) the situation is considered relatively safe. However toxic fume hazards may arise in some cases and extra precautions will then be needed:
  - Coated (primed or plated) base metal,
  - Alloys containing toxic elements,
  - Radiated heat forming noxious gases,
  - Flame heating heavy sections forming nitrogen dioxide which has a "safe" ceiling OEL (short term) lower than 5ppm.
  - Flame processes burning atmosphere oxygen and adding large quantities of asphyxiating gas into the atmosphere.
  - Gas shielded processes adding inert gases to the atmosphere and displacing oxygen, which can also lead to asphyxia in confined spaces.

Operatives are to request specialist advice in these circumstances.

### INFRA-RED AND ULTRA VIOLET RAYS

5. Electric arcs radiate both infra-red (heat) and ultra-violet as well as light rays.
6. Ultra-violet radiation (UV) is invisible but can be hazardous in a number of ways, even when reflected.
  - a. UV can affect the skin like bad sunburn. The rays will also pass through some materials such as nylon, so the right kind of protective clothing etc., is necessary.
  - b. UV causes "arc eye" a painful but temporary form of conjunctivitis, even if exposure is very short.
  - c. UV decomposes some chlorinated hydrocarbon degreasing agents and may form the poison gas Phosgene, even at a distance from the arc. Make sure degreased items are thoroughly dried before welding and do not use such chemicals anywhere near welding operations.

### GRINDING, CHIPPING AND DE-SLAGGING

Preparation and repairing of welds usually involve grinding and chipping. Eye protection will be provided for these operations. Protection must also be worn when de-slagging arc welds. With some types of weld hot slag can fly

off because of contraction as the metal cools, so eye protection should also be used if it is necessary to inspect a weld before it is cold.

### WELFARE FACILITIES, SITE ACCOMMODATION

Projects undertaken differ in their duration from very short term to long duration the Principal Contractor supplying all welfare facilities. On larger projects any site accommodation and temporary buildings required by Bowmite Electrical & Mechanical Limited will be agreed with the Principal Contractor before being placed on site.

Welfare arrangements will be provided by the Principal Contractor or Bowmite Electrical & Mechanical Limited as agreed in the contract document, or as an absolute minimum, as required by the Construction (Design & Management) Regulations 2007. Facilities will include the provision of shelter, toilets and washing facilities. Fire extinguishers of an agreed type (i.e. AFFF, water, dry powder or carbon dioxide) will be provided and maintained. They will be positioned in an appropriate position and be kept free of obstruction and available for use at all times. At each site, there will be facilities readily available for summoning assistance from the emergency services (i.e. telephone or mobile phone) and for raising the alarm and applying First Aid.

### WORK EQUIPMENT

Bowmite Electrical & Mechanical Limited will ensure that all their work equipment is maintained in an efficient state, in working order and in good repair. Where the equipment has a maintenance log this log is to be kept up to date. Bowmite Electrical & Mechanical Limited will endeavour to provide work equipment that complies with the statutory provisions contained within the Provision and Use of Work Equipment Regulations 1998.

All work equipment within the workplace shall be visually inspected to ensure it is safe and suitable for the purpose for which it is to be used and will be maintained in good working order and the Company will provide adequate supervision, information, training and instruction to ensure that there is compliance with safety procedures.

Where work equipment is found to be faulty repairs will be carried out before the equipment is issued. All plant found to be faulty is to be given to the Site Supervision who is to ensure that:

1. Arrangements are made to ensure that it cannot be inadvertently or unscrupulously taken back into service.
2. The piece of equipment is returned to the main office with suitable warning that it requires repair.
3. The piece of equipment is returned to the Hire Company with suitable warning that it requires repair, or
4. Repaired on site, only by a qualified and competent persons.

All *office equipment* is to be tested yearly and a general visual inspection is to be undertaken by staff before work with a formal inspection being undertaken quarterly by the Director.

Operatives using Company Plant and Equipment will be competent and trained. They must inspect the equipment before use and then weekly entering the findings of the inspection in a register. Operatives must report all faults, damage, defects or malfunctions to the Site Supervision and are not to use it until the fault is rectified. Defective equipment must be immobilised and identified as awaiting repair. There is a strict code with regards to the misuse of work equipment that may result in the suspension of employment.

### WORK AT HEIGHT:

Operatives of Bowmite Electrical & Mechanical Limited will often be required to work at height therefore due to the hazardous nature of the activity i.e. in construction, 50% of all serious accidents are due to falls. A further 20% occur due to the fall of materials onto operatives any work at height is to be restricted to those employees who have been trained properly and are experienced in such work. Consideration will be given at all times to:

- Keeping third parties out of the identified danger zone.
- The displaying of appropriate signage.
- Preventing materials falling from the structure.
- Establishing controls for the placement of materials onto loading bays.
- Identifying other controls to ensure the safety of other personnel.

All work at height will be undertaken in accordance with The Work at Height Regulations 2007 as a minimum requirement.

#### SCAFFOLDING

Only personnel who are properly trained and competent shall be allowed to erect, alter or dismantle tower scaffolding. All scaffolding will conform to The Work at Height Regulations 2007 and schedules to those regulations.

## LADDERS STEPLADDERS AND TRESTLES

Ladders will only to be used for very light work of a short duration and there will be three points of contact with the ladder at all times. Ladders over three meters in length will be tied or footed by a third person to ensure stability. The use of ladders on uneven ground will not be permitted if they are not firmly tied by the stiles. Operatives will ensure all works on site to ensure compliance i.e. that the ladder remains footed at all times and that the ladder is not upside down etc.

Operatives will have adequate training and information to ensure their competence in the inspection and use of the equipment i.e. that ladders are not twisted or damaged in any way and that only one person climbs a ladder at one time with small tools carried in a belt. Bulky or heavy items will be lifted by winch or gin wheel.

Pole ladders must not have footholds blocked by ledgers or transoms and as with all ladders the angle needs to be 1 in 4. At the top of the ladder the overlap needs to be at least three rungs if a suitable handhold isn't provided.

All ladders will be removed to storage once the task is complete to prevent their use for intrusion by trespassers etc. it will also prevent the hazard of leaning ladders being displaced.

**Stepladders & Trestles** will be either class 1 or BSEN 131 when used on site as class 3 are for domestic use only. Equipment will be checked before use to ensure that it isn't defective. Steps and trestles need to be solid when opened out and placed on a firm footing. Stepladders must not be used on scaffolding or towers to gain extra height or where a fall would take you over a leading edge e.g. a stairwell or roof. All working platforms must be at least 600mm wide or three scaffold boards and the span must not exceed 1.5 metres. Care will also be taken not to overload the platform. Edge protection must be provided on all working platforms where a person may injure themselves if they fell (**the 2 Metre rule no longer applies**). The common hazard of trestles is overloading. Supervision and competence of operatives will certify that they are not overloaded and are correctly used. Work will be undertaken facing the ladder while the top two steps will not be used as a working platform.

All ladders and stepladders will conform to The Work at Height Regulations 2007 and schedules to those regulations and consideration will be given to all other forms of access prior to using this method of access.

## WORKING IN OCCUPIED PREMISES.

Where the Company is involved with work in occupied premises care will be taken for the Health and Safety of the Occupier whilst the work is in progress. Bowmite Electrical & Mechanical Limited will operate within the conditions of the Client's Contract and liaise with the Occupier and advise them on the work to be carried out and an approximate time scale for the contracted works. Company operatives will wear any security / ID card if required by the Client in addition to that required by Bowmite Electrical & Mechanical Limited. The operatives will be competent to undertake all tasks required in an occupied property and will adopt all emergency procedures put in place by the Client or Occupier.

During the work the operatives will not leave any materials or debris where it may become a trip hazard. All reasonable precautions will be taken to obviate the impact when carrying out dusty and noisy operations, at all times they will be carried out with care and consideration.

The operatives will ensure that the property is left tidy during the works, to reduce the risks of injury to the occupier and the general public. All barriers and screens will be utilised and occupants made aware of any changes to hazardous areas throughout the working day.

Particular emphasis will be placed upon:

- Fire evacuation routes
- The position and location of fire fighting equipment
- Emergency evacuation procedures
- Special circumstances relating to the personnel working within or visiting the premises.
- Safety plans specific to the building or any part of the building.
- Maintaining fire compartmentation standards.
- Permit to work conditions.

### WORKING WITH GAS

The Directors will ensure that only competent operatives undertake work activities with gas appliances and gas fittings, as required by The Gas Safety (Installation and Use) Regulations 1998. All operatives employed by Bowmite Electrical & Mechanical Limited are registered as members of the Gas Safety Register. Only suitable and appropriate materials of sound construction will be used.

Where appropriate, operatives of Bowmite Electrical & Mechanical Limited will test the soundness of gas installations to ensure the gas tightness of pipework and all ancillary equipment, including valves, emergency controls and appliances.

### WORKING WITH LEAD

All work will be undertaken in accordance with the Control of Lead at Work Regulations 2002. Where possible the exposure to lead by operatives will be prevented and in situations whereby this isn't reasonably practicable adequate controls will be put in place to reduce the exposure to the lead. All operatives will receive an induction and regular toolbox talks to raise awareness of the hazard. Old lead piping and flashing etc. will not be worked on in any way, which may produce poisonous dust and fumes. The aim will be to prevent the liberation of fumes and dust therefore operations will be performed using safe systems of work and PPE when necessary.

Where highlighted by the assessment protective clothing will be supplied and will be laundered by the company. Welfare facilities supplied will be appropriate for the work being completed and the amounts of contamination present. Hands must be washed before the toilet is used and before eating and smoking in order to prevent ingestion and absorption of lead.

Should employees be liable to be exposed to lead they will be placed under suitable medical surveillance by a doctor where the exposure of the employee to lead is, or is liable to be significant; or if the blood lead concentration or urinary lead concentration of the employee exceeds the amounts outlined in The Control of Lead at Work Regulations 2002: or if a relevant doctor certifies that the employee should be under such medical surveillance.

Any requirement for health surveillance will be identified in the Risk Assessment for the operation concerned. Where it has been identified that health surveillance is necessary information will be retained for use by Store Maintenance Limited only. *(Note: Such information would not include any medical information that could be identified as belonging to an individual)* Where it is considered necessary details of controls will be outlined in risk assessments.

### YOUNG PERSONS.

When the Company employs people under the age of 18, it will complete explicit risk assessments in respect of the young workers. The assessments will address the specific factors identified for the safety of the young persons and the other workers who may be affected by them while they are undertaking tasks.

Bowmite Electrical & Mechanical Limited recognises its statutory obligations in accordance with the Management of Health and Safety at Work (Amendment) Regulations 2006.

The Company will inform the parents or legal guardians of the risk assessments and the control measures to be used to provide a safe working environment as required by the Management of Health and Safety at Work (Amendment) Regulations 2006. The Company will provide the appropriate supervision to ensure that the young persons undertake their tasks safely. No young person, under 18 years of age will be permitted to undertake any work unless they are directly supervised by a fully competent person.

**MONITORING OF THE POLICY**

Employees are encouraged to bring to the attention of the Directors, areas, which in their opinion this policy appears inadequate. All such comments will be passed to our Independent Safety Advisors for their consideration and review.

This Policy and Arrangements will be reviewed on at least an annual basis, provision will also be made to undertake a review in the event of the introduction of new, or the amendment of existing legislation, codes of practice or guidance notes.

<b>HEALTH AND SAFETY POLICY DOCUMENTATION REVIEW</b>			
To ensure that we comply with the requirements imposed by the Health and Safety at Work etc. Act 1974, our Health and Safety Policy Statement and Documentation will be reviewed periodically and at least annually.			
<b>DATE OF REVIEW</b>	<b>REVIEWED BY</b>	<b>BRIEF DESCRIPTION OF CHANGES</b>	<b>NEXT REVIEW DATE</b>
January 2009	M.E.L (Health and Safety) Consultants Ltd	Initial Policy	January 2010
January 2010	M.E.L (Health and Safety) Consultants Ltd	Sections on Contractors, Electrical Power Tools, Manual Handling Operations, Noise, Personnel Protective Equipment, Risk Assessment, and Work at Height have been rewritten in line with best practice.	January 2011
February 2011	M.E.L (Health and Safety) Consultants Ltd	Section on hazardous waste and working at height have been amended to current legislation and best practices.	February 2012