

Safe Systems of Work

VERSION 12.1

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REVISION HISTORY

| Version | Changes | Owner | Date |
|---------|--------------------------------|--|------------|
| 1 | Initial Version | Created by Julian Cooper, checked by Ian Gilbert | 25/11/2016 |
| 1.1 | Pallet Safety Statements Added | Julian Cooper | 12/07/2017 |
| 1.2 | Incorporation of Staff Manual | Julian Cooper | 15/10/2020 |
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RISK MANAGEMENT

This policy sets out the procedures that should be followed when undertaking risk assessments. It is important that these procedures are followed. The procedures are in place to ensure that we remain consistent in meeting our legal obligations. Managers should ensure that risk assessments are carried out in accordance with these procedures.

WHY ARE RISK ASSESSMENTS NECESSARY?

Health and Safety law demands that risk assessments are carried out at all places of work, that the results are recorded for organisations employing more than five people, and that these assessments are regularly reviewed. The general provisions of the Health and Safety at Work Act (1974) and, more specifically, Section 3 of the Management of Health and Safety at Work Regulations 1999, detail the requirements for risk assessments. In addition to this, we are under a legal duty to carry out risk assessments in relation to any jobs done by women of child-bearing age, to establish what risk, if any, doing this job would pose to an expectant mother.

The object of the exercise is to prevent accidents and ill health caused by unsafe working practices and to create a healthy and safe environment for our employees and anyone else who might visit our premises or be involved in our work.

WHAT IS A RISK ASSESSMENT?

A risk assessment is a careful examination of any aspect of our work which could cause harm to people (hazards), so that we can decide whether enough precautions are in place to prevent harm or injury, or whether anything else should be done to reduce the risk.

COMPLETING THE RISK ASSESSMENT

Health and Safety legislation states that people who carry out risk assessments should be competent to do so. In this instance competency is defined as a combination of knowledge, skills, experience and personal qualities, including the ability to recognise the extent and limitation of a person's competence. The assessor should therefore have an understanding of their workplace, the ability to make sound judgments and knowledge of the best means to reduce any risks they identify.

Risk assessments should be completed by managers and employees locally, who will possess the above qualities, if necessary after obtaining training and expert advice provided by external consultants to support this process where it is needed. To ensure that the process is successful, it is essential that everyone participates, co-operates and contributes their skill and knowledge.

Initial risk assessments should be completed for all workplaces and "service delivery" activities, and thereafter for additional risks that are identified.

THERE ARE FIVE STEPS TO RISK ASSESSMENT:

- Step 1 – Look for the hazards
- Step 2 – Decide who might be harmed
- Step 3 – Assess the risks
- Step 4 – Record the Findings
- Step 5 – Monitor and Review

Two important definitions should be borne in mind during Risk Assessment, as they are fundamental to the whole process. They are “hazard” and “risk”.

LOOK FOR THE HAZARDS

A “hazard” is anything that could cause harm or injury to people, property or the environment.

Think about the different tasks that you carry out. You should look at what people do and how they do it and who might be affected. You should tour your workplace, house or project and talk to colleagues. Remember that employees who do the job day in, day out should know their own working environment better than anyone else, including the hazards which exist there. You should concentrate on the significant hazards, i.e. those that could result in serious harm or affect several people.

You must look through the Health and Safety Policy. The different sections will focus on hazardous areas and give guidance on how to control the risks. If *e.g.* the person carrying out the risk assessment is satisfied that the COSHH assessments are up to date and that all those affected are aware of how to store and use chemicals safely, then they do not have to repeat the assessment. However, if some of the workforce does store or handle potentially hazardous chemicals in the course of their employment, and no COSHH assessments have been carried out to date, then COSHH assessments should be carried out as soon as possible.

Manufacturer’s instructions and maintenance records can help in highlighting hazards and explaining the likely risks. Persons carrying out risk assessments should also look through the Accident Book and examine sickness records. For example, how many people have injured their backs at work and have had time off work because of it? However, no-one should assume that a hazard is immaterial simply because no accident of this kind has taken place yet.

You should not focus only on physical hazards, although such hazards may be easier to measure. A Hazard Checklist is attached at the end of this policy to help you identify the hazards that you might come across.

WHO MIGHT BE HARMED?

You should think about the different groups of people who might be harmed. This includes visitors and contractors as well as our own employees. You should think especially carefully about people who may be more vulnerable, *e.g.* those with disabilities, inexperienced or temporary staff and those working in isolation.

ASSESS THE RISKS

A “risk” is the chance (great or small) that someone will be harmed by a “hazard”. You should decide whether the risks from the hazards you have noted are high, medium, or low. You should then ask what can be done to control those risks and make the workplace even safer.

When assessing the risk, you should take into account:

- Severity – How serious could any injury be?
- Probability – How likely is such an accident to happen?

The assessment should then rate ‘severity’ and ‘probability’ on the scale of 1 – 5:

| How Serious? | How Likely? |
|--------------------------|-------------------------|
| 1 (Scratch) | 1 (Unlikely) |
| 2 (Minor injury) | 2 (May Happen) |
| 3 (More serious) | 3 (Likely one day) |
| 4 (Time off work needed) | 4 (Very likely one day) |
| 5 (Death) | 5 (Very likely soon) |

By multiplying the two rates, you will come up with a rating figure which can help to plan a programme of action for controlling the risks by breaking them down into **High, Medium, and Low** risks.

5.5.5 This simple computation enables you to prioritise your plan of action and review date (which should be determined by the risk rating that has been given for the hazard). For example a “high risk” hazard is likely to warrant urgent or immediate action with an early review date, whereas a low risk may require less urgent action, and a later review date. As a guide to risk rating:

- 16-25 **High Risk**
- 9-15 **Medium Risk**
- 1-8 **Low Risk**

DECIDE WHAT PRECAUTIONS CAN BE TAKEN TO CONTROL THESE RISKS

You should consider:

- Can you avoid the hazard completely? (*e.g.* use a safer cleaning chemical)?
- Can the job be broken down into smaller and more manageable parts? (i.e. carry only as much as you can safely manage if it means making more than one trip)?
- Can you treat the hazard? (perhaps a non-slip flooring)?
- Can you use warning signs or labels?
- What about the people involved:
- Are staff and others aware of potential risks?
- Is more information or training necessary?
- Should the job be carried out by someone with more training?
- It would therefore be acceptable for a worker to change a light bulb if:
 - The power was switched off;
 - There were no signs of damage to the light fitting;
 - The activity did not involve removal of anything other than a bulb;
 - The light fitting was within easy reach (from a stepladder for example);
- But, if replacement of the light fitting involved climbing a ladder, on an uneven surface and the removal of a heavy or unwieldy fitting, then this should be referred to a contractor who should have the correct equipment, and who should be trained in its use.

RECORD THE FINDINGS

The findings of a risk assessment should be recorded on a Risk Assessment Form. Blank forms may be photocopied and kept as spares. When completed, the forms should be filed along with all other health and safety records.

These assessments should then be discussed with all employees and who are exposed to the hazards noted. All new employees should be advised of the assessments as part of their induction training and have the risks and control measures explained to them by the appropriate Manager

MONITOR AND REVIEW

Risk management is an ongoing process. All risk assessments should therefore be reviewed as circumstances change and when new information and legislation are introduced, i.e. building works or alterations may require a review of emergency procedures or exit routes.

Assessments should always be reviewed when:

- There have been significant staff changes.
- There have been significant changes in working policies or practices.
- New legislation is introduced.
- There are any building works taking place.
- A new hazard is identified.

HAZARD CHECKLIST

The following hazard areas should act as a guide, but should not be considered a complete list. You will probably come across other hazards which are particular to your work area work as well:

- Biological— consider the possibility of catching diseases, blood borne infections. Are our infection control procedures adequate?
- Chemical – are COSHH assessments complete?
- Contractors – are they easily identified? Do they report on arrival and when leaving the premises? Are they working safely, without endangering themselves or others?
- Disabilities – identify those with physical or mental disabilities which might put them at risk. Remember – different people may have different perceptions of risk.
- Electricity – are appliances inspected or tested? Who changes the light bulbs and plugs? Are sockets overloaded?
- Emergencies – are you prepared for reacting to fires, bomb threats or loss of services (i.e. gas water and electricity)? Is there an emergency plan?
- Equipment (machinery, tools, garden equipment, ladders, computers, photocopiers, etc.): Is it being used safely?
- Fire – is enough done to prevent fire? Is the workplace tidy? Are fire extinguishers checked regularly? Are proper records maintained? When was the last fire drill?
- Floors – are floors and passageways (especially fire exit routes) free from obstruction? Are there any trailing electrical leads? Are there any slipping or tripping hazards?
- Furniture – is it in good condition? Does it meet fire retardant standards?
- Heights – does anyone need to climb a ladder or step ladder? Is there a possibility of someone falling from a height or of something falling from a height and causing harm?
- Lifting – have manual handling risk assessments been carried out on employees who are required to lift, move or carry heavy objects?
- Lighting – is the lighting adequate for the work undertaken there?
- Steps/stairs – are these well lit and free from obstructions? Are there sufficient handrails?
- Storage – is there sufficient storage space? Is storage creating a fire hazard, or a lifting hazard Are obsolete items disposed of?
- Stress at work – how is stress identified, managed and controlled?
- Waste – is all waste disposed of appropriately?
- Welfare – is there adequate first aid provision? Are there suitable and sufficient toilets, rest areas and supplies of drinking water? Is the temperature satisfactory? Is there enough space? Is the area clean and tidy?
- Windows – do they open safely? Do any open into a pathway? Is the glazing suitable? Is extra protection needed?

Fire extinguishers are positioned as follows:

- in the garage to the left of the tool room door
- in Green Home main entrance
- in T6 (west end) outside the First Aid Post
- in G7 (east end) near the main control panel
- in T9 (west end) by the door
- in G10 near the boiler area
- in T11 (West and East end) near the doorways
- in G14 opposite the oil burner
- in G14 on the main electricity board
- in G15 close to the boilers
- in G16 by the boiler close to the loading bay doorway
- in G16 near the packaging storage area
- in the Conservatory outside the Staff entrance to the Offices
- in Main Office corridor at the corner near the toilets
- in Main Office in the Kitchen
- in G19 outside the Cool Store
- in G19 outside the Boiler Room
- in G19 on the main electricity board
- in G20 along the main pathway (2)
- in G21 along the main pathway (2)
- In the Hub, next to each pedestrian door and on Mezzanine deck.

In case of fire occurring employees should:

Evacuate the area quickly and quietly.

- Inform management by quickest possible means; the responsible person at that time will decide if the Fire Brigade needs to be summoned.
- Inform other staff and visitors nearby and direct them to the assembly area at the apex of the reservoir.
- Supervisors are responsible to account for their people and then to report to **the IT Manager** or, in his absence, a member of the Management team or the duty person at that time.
- Tackle the fire using extinguishers if this can be done without risk of personal injury or harm.
- Follow any subsequent instructions given by the Management/Duty person or Fire Brigade officers.

Improper use of fire fighting equipment will be considered to be a serious disciplinary offence.

The cost(s) of repairing/re-charging fire-fighting equipment damaged due to improper use will be reclaimed from the employee(s) responsible for the misuse-use and damage.

MANAGING STRESS AT WORK

We are committed to protecting your health, safety and well-being and that of all those who work for us. We will endeavour to maintain a working environment in which everyone treats one another with dignity and respect and is able to co-operate with and trust their colleagues.

We recognise that, whatever its source, stress is a health and safety issue in the workplace. We acknowledge the importance of a supportive environment and working culture and of identifying and reducing workplace stressors. We are committed to a programme of action to make this policy effective and to bring it to everyone's attention. However, this policy can only be effective if everyone co-operates to achieve its aims.

WHAT IS STRESS?

Stress is the adverse reaction experienced in response to excessive pressures or demands. Stress is not an illness but, sustained over a period of time, it can lead to mental and/or physical illness.

There is an important distinction between working under pressure and experiencing stress. Certain levels of pressure are acceptable and normal in every job. They can improve performance, enable individuals to meet their full potential and provide a sense of achievement and job satisfaction. However, when pressure becomes excessive it produces stress.

Pressures outside the workplace, (whether the result of unexpected or traumatic events such as accidents, illness, bereavement, family breakdown or financial worries), can result in stress. They can also compound normal workplace pressures.

We recognise that what triggers stress and the capacity to deal with stress may vary from person to person. Individuals react to similar situations in different ways.

LEGAL OBLIGATIONS

We have a legal duty to take reasonable care to ensure that your health is not put at risk by excessive pressures or demands arising from the way work is organised. This policy takes account of our obligations under: the *Health and Safety at Work etc. Act 1974*; the *Management of Health and Safety at Work Regulations 1999*; the *Employment Rights Act 1996*; the *Protection from Harassment Act 1997*; the *Working Time Regulations 1998*; and the *Disability Discrimination Act 1995*

SCOPE AND PURPOSE OF THE POLICY

We are committed to identifying, tackling and preventing the causes of work-related stress and to providing appropriate support and consideration to staff suffering from stress, on a confidential basis where appropriate.

We are committed to:

- Promoting a culture of participation, open communication and encouragement;
- Through training, effective planning and allocation of workloads and ensuring feedback is provided on performance, we want staff to develop their skills and confidence and to feel able to raise any concerns they have about their work or working environment;
- Using staff development, staff support systems and policies reflecting current good practice to help staff understand and recognise the causes of stress and to address work-related stress and the impact of external stressors at work;
- Providing a workplace free from harassment, bullying and victimisation;
- Addressing violence, aggression and other forms of inappropriate behaviour through disciplinary action;
- Ensuring risk assessments include or specifically address workplace stress;
- Maintaining an appraisal process to ensure the suitability of workloads, supported by a capability procedure;
- Facilitating requests for flexible working where reasonably practicable in accordance with our Flexible Working Policy
- Following comprehensive change management procedures; and
- Providing support for staff affected by or absent by reason of stress

PERSONNEL RESPONSIBLE FOR IMPLEMENTATION OF THE POLICY

Recognition of stress as a genuine problem requires management support and action. Those working at management and supervisory level have a specific responsibility to:

Participate in the culture of open communication and encouragement, ensure that staff they manage receive training, effectively plan and allocate workloads and provide feedback on performance.

Monitor workloads and reallocate work where necessary.

Ensure that staff they manage understand the standards of behaviour expected of them and others and act on behaviour that falls below those standards.

To facilitate this process, managers and supervisors may be given training on best practice and are encouraged to seek advice from The Personnel Manager on how to recognise stress in the staff they manage.

However, all members of staff are responsible for the success of this policy and must ensure that they:

- Familiarise themselves with the policy and act in accordance with its aims and objectives.
- Plan and organise their work to meet personal and organisational objectives.
- Speak to their manager if they experience or are aware of a situation that may lead to a stress problem.
- Co-operate with support, advice and guidance they may be offered by their supervisor/Manager and/or the Personnel Manager.

The Personnel Manager will have responsibility for informing all staff of this policy and their role in its implementation. All new staff will be given a copy of the policy during their induction. Further copies are available upon request from the Personnel Manager.

SOURCES OF SUPPORT

We have measures in place to assist staff who may be suffering from stress:

Line management should work with the other Managers to provide support to staff suffering from stress.

RESOLVING CASES OF STRESS AT WORK

If you believe you are suffering from stress you should discuss this with your supervisor/Manager in the first instance. If you feel unable to do so, you should contact the Personnel Manager and/or any other senior KPP manager.

Once an issue affecting your health comes to the attention of your manager, supervisor or the Personnel Manager, steps should be taken to address that issue. Those steps may include any of the following:

A workload review: this may include the reallocation of work, the monitoring of your future workload and/or possible redeployment. Our *Capability Procedure* may be applied.

Where appropriate, investigation under our *Disciplinary* and/or *Grievance Procedures*.

Referral for medical advice and/or a medical report.

If you are absent from work due to illness, an appropriate return to work programme.

In appropriate cases KPP may also make use of external Occupational Health and/or Counselling services to help staff overcome problems associated with work-related stress as well as other stress and the impact that has on their ability to do their duties.

ABSENCE DUE TO STRESS

If you are absent due to stress you should follow the sickness absence reporting procedure contained in your contract and/or our *Sickness Absence Policy*. Our *Sickness Absence Policy* and/or *Capability Procedure* will apply.

CONFIDENTIALITY

Confidentiality is an important part of this policy. Every member of staff is responsible for observing the high level of confidentiality that is required, whether they are suffering from stress, supporting a colleague who is suffering from stress or because they are otherwise involved in the operation of a policy or procedure dealing with stress. Breach of confidentiality may give rise to disciplinary action.

However, there are occasions when matters reported by a member of staff suffering from stress may have to be put to third parties. For example, where duties need to be reallocated within a team or where, as the result of reported bullying or misconduct, a disciplinary investigation and/or proceedings take place. If this is the case, matters will be discussed with the member of staff concerned before any action is taken.

PROTECTION FOR THOSE REPORTING STRESS OR ASSISTING WITH AN INVESTIGATION

Staff who report that they are suffering from stress, or who support a colleague in making such a report or who participate in any investigation connected with this policy in good faith will be protected from any form of intimidation or victimisation.

Any member of staff who believes they have been subjected to any such intimidation or victimisation should seek support from their supervisor/Manager or the Personnel Manager. They may alternatively/additionally raise a complaint under our *Grievance Procedure*.

Any member of staff who is, after investigation, found to have acted in bad faith or to have provided false information will be subject to action under our *Disciplinary Procedure*.

PROVISIONS AND PROCEDURES IN CASE OF FIRE

In case of fire occurring employees should:

Evacuate the area quickly and quietly.

Inform the member of Management staff / appointed duty employee in charge of the site by the quickest possible means; the person in charge at that time will decide if the Fire Brigade needs to be summoned.

Inform other staff and visitors nearby and the occupants of “Kernock Park” – bungalow. Direct all persons present by the safest route to the assembly area on the grass area below the bungalow.

The person responsible for the roll call of evacuees is IT **Manager** or, in their absence, **the member of the Management team in charge of the site at the time.**

Tackle the fire using extinguishers if this can be done without risk of personal injury or harm.

Follow any subsequent instructions given by the employee responsible for the site or Fire Brigade Officers if present.

HAZARDOUS AREAS

MACHINERY AND EQUIPMENT

Be aware of the dangers associated with tractors and ancillary equipment. Tractors and ancillary equipment may not be driven or operated unless the employee has received the appropriate training.

Keep clear of the electricity shed and exhaust outlets especially when the emergency generator is running.

The pot and tray filling machines, compost mixers and fungicide applicator equipment must only be operated by authorised personnel.

These machines must only be operated in accordance with accepted procedure following instruction.

Clothing and other items should be kept clear of the machines at all times but especially when the machinery is operating.

Keep clothing and other items away from the immediate areas surrounding protected area heating equipment?

Do not touch boiler chimneys or surrounding pipework.

Heating, electrical or other control systems should not be operated without direct instructions from the management.

Ensure all appropriate guards are fitted before operating any machinery or equipment.

Do not unblock, lubricate or adjust machinery or tools while the item is working, in motion or switched on.

Adequate maintenance will be carried out according to the schedules and methods drawn up by the member of Management responsible for maintenance. Annual maintenance, periodic checks and installation checks will be carried out by the Company or its approved contractors as appropriate.

Any faults or defects occurring in usage must be reported according to procedures detailed in this

Instructions given by appropriate personnel concerning use of equipment should always be followed.

Read and obey safety warnings or warning notices as may be issued by the Management from time to time. Such notices should be kept with this policy.

Take special care when moving along paths or roadways which may be slippery when wet or icy.

When the weather is icy or wet, the decking, bridge and steps in the display garden area may be particularly hazardous. Please exercise great care in walking in these areas at all times to avoid slipping or falling.

If work is carried out in a sitting position, take care to see that your seat is situated in a secure, safe position. Do not attempt to lean to reach objects which are not within easy reach.

Propagators “bum rests” must only be used in the approved manner. They must only be used as a support and not as a stool. Both your feet should be kept on the ground while you are using this equipment.

DANISH TROLLEY AND BARROW OPERATION

Ensure Danish trolley shelves are firmly attached to the trolley before moving.

When pushing or pulling a trolley, position fingers so they cannot be trapped by a slipping shelf or caught between trolleys by the un-expected movement of the trolley you are manoeuvring.

Take care to avoid holes or un-evenness in paths and roadways especially when moving trolleys or barrows. Be aware of the possible danger of snagging and/ or toppling as you pass by fixed objects. Take great care to avoid any movements which may cause the trolley or barrow to tip over.

Barrows should always be loaded so the major part of the load is nearest the wheel(s).

Barrows should be pushed rather than pulled. This is the best way to avoid strain on the shoulders and prevent damage to plants being carried on the barrow or which are on the ground. This damage may occur when the barrow is behind the operator and shifting loads or contact with plants on the ground is not seen.

If a Danish trolley is loaded onto a transporter, the “steering” wheels should be at the end of the transporter which has the locking mechanism.

Keep feet clear of the wheels of trolleys, transporters and barrows to avoid the possibility of injuries to feet and toes.

All employees should ensure that footwear worn when working is sufficiently strong enough to prevent injuries occurring to toes, feet and ankles when operating trolleys and barrows, (See the **Dress Guidelines** for further advice on suitable footwear).

DRIVING ON COMPANY PROPERTY

While driving on Company Property, **the maximum speed permitted is 10 m.p.h.**

Beware of the steep slopes at the east end of G10 on the edge of the Car Park area, the sloping area around G7 the gullies around T9, alongside T11 and the slopes around the Upper car park area opposite G14. Take extreme care when passing these areas. Be aware of the steep slopes and changes in levels to the south of the drive around and near G14, G15, G16 and G19.

Take extreme care when entering or leaving the premises and while driving through the property en route to or from the Car Park especially when passing doorways and the area of the reservoir.

Do not ride on a tractor or other machinery in company with its driver.

Do not ride on a trailer draw-bar or sit on the sides of a trailer (loaded or unloaded) .However, it is permissible to ride inside an empty trailer if it is possible to sit down completely within the confines of the trailer sides and ends.

PERSONAL PROTECTIVE EQUIPMENT (“PPE”)

EYE PROTECTION: Goggles or face shields will be issued where there is any risk of splash or flying particles from the materials being worked with or where dust may be created. Goggles for use with grinding tools are kept in the workshop. Goggles for use as required with the plant ‘vacuum’ machines are available. Goggles should always be kept in the protective bag provided when they are not in use.

HEAD PROTECTION: Hard hats will be issued by the Maintenance Manager, when there is danger from falling objects or risk of collision with low obstacles.

HAND PROTECTION: This is needed where there is a risk of irritation or abrasions when handling certain plants or rough materials. Rubber or vinyl gloves for use in Cutting/Propagation operations will be issued if required by the appropriate supervisor/Manager and may be obtained via the IT Manager.

Protective gloves for other general purposes will be issued at Induction training for all new employees who will be working on the Nursery. These gloves will be replaced F.O.C. when damaged through fair wear and tear.

HEARING PROTECTION: Ear defenders will be issued as required in areas where noise of work processes or machinery operating nearby is a problem.

PESTICIDE AND CHEMICAL APPLICATION Overalls, gloves, face shields, masks respirators etc. are available as appropriate according to specific requirements and regulations (see C7 of the Health and Safety Policy)

REPLACEMENT OF PPE: All PPE will be replaced as required. Staff assigned to duties in T11 (Hub team) will be issued with individual PPE items appropriate for use during the work they will be doing.

CARE OF PPE: Employees must take all reasonable care of the PPE provided for their use. All PPE should be returned to the person who issued it or the place where it is kept, (as appropriate). Any loss or deterioration should be reported to either the person who issued the PPE or the Maintenance Manager, as appropriate.

DISEASE AND HEALTH PROBLEMS

It is imperative that employees have up-to-date protection against Tetanus. This should be done by having a booster injection every ten years after the primary course of immunisation. All staff are required to complete the Tetanus protection form and register the date of their last booster jab. These forms will normally be completed at the commencement of the period of employment.

Employees are also required to complete a brief Medical Record form on commencing employment with Kernock Plants. These details are kept on file for urgent access by a member of the Management team or appointed First Aider in an emergency situation.

Any changes to details included on the medical record form must be notified as soon as possible and a new form completed.

Employees must report any case of infectious or notifiable disease which affects themselves or those with whom they are living to the Personnel Manager **as soon as possible**. This is to enable medical advice to be sought (if it is required), and/or any necessary precautions to be taken.

It is essential that employees report any skin problems, rashes or other irritation that occurs on their skin as soon as the problem is noticed. This will enable appropriate measures to be taken to prevent the condition worsening or being aggravated by the work task being undertaken.

If such problems are reported, the condition will be monitored to ensure that recovery from the problem is as rapid as possible.

It is often extremely difficult to definitely identify the causative agent as reaction to contact with plant material can vary according to the weather, temperature, etc. However if it is possible to identify it, we shall endeavour to take appropriate measures to prevent the problem re-occurring, with the co-operation of our employees.

When the weather is hot, employees should ensure they drink plenty of fluids.

Due to the high risk of developing skin cancer with over-exposure of the skin to the effects of the sun, exposed areas of your body should be protected with plenty of sun cream or lotion (at least factor 15).

Your head, face and the back of your neck and shoulders are particularly vulnerable and it is not advisable to spend any length of time in the sun without adequate protection.

Remember that some of the harmful elements of the sun's rays can penetrate glass and polythene so your skin can still be affected even though you are working 'under cover'. It is also possible to become burnt on an overcast day or if only spending a brief time outside when moving from one area to another.

SNAKES

We do occasionally see snakes here. The snakes we do see are often Adders (Vipers), which are the only poisonous snakes resident in this country.

In warm weather, the snakes like to lie out on the warm ground but will generally beat a hasty retreat and wriggle away to hide if they sense you are nearby.

The risk of being bitten by an adder is very low unless you are unfortunate enough to tread on one or put the snake in the position of having to defend itself.

Staff **should never attempt to pick up or touch any snake-like creature**, even if you believe it is harmless.

If you should see a snake inside a tunnel or glass house, please observe it carefully so you are aware where it has gone and report the sighting to the IT Manager or the relevant supervisor/Manager so the snake can be removed to an area of safety outside.

CUTTING TOOLS, SAWING, GRINDING AND DRILLING OPERATIONS

Great care should be exercised in the handling of any cutting tools such as knives, chisels, saws, cutting discs, trimming shears and propagation tools.

Care is also needed when sharpening tools and this should only be done by a competent person who has received appropriate instruction from the Maintenance Manager.

Propagation tools must be kept guarded when not in use, particularly when being carried about the site.

Pieces of disposable knife blades should be disposed of in the approved holder kept at each propagation station and not mixed with other rubbish, compost, trimmings etc.

Tools should be kept sharp and well maintained. Bluntness will increase the risk of an accident occurring.

CHEMICALS

All usage of chemicals and pesticides must be in accordance with the current regulations and legislation and in accordance with the Company Health and Safety policy

Plant nutrients and other products must only be used in accordance with instructions from Management.

All chemicals and pesticides may only be used by certified operators under the direction of the IT Manager.

Hazard warning signs will be placed in areas where spraying or chemical application of hazardous substances has taken place. This sign is of the standard type (a yellow triangle with a black border, containing a black exclamation mark).

The 'safe to handle' date / 'safe to enter' date will be written on the hazard warning sign. Hazard warning signs will be used at all entrances to tunnels etc. if a complete area has been treated.

The hard-copy of the COSHH report is kept at KPP in the Managing Director's Office. The Master copy is kept on computer. Data sheet information is kept on computer and hard-copies are kept in the It Manager's and Director's office. The report will be updated as required and may be examined on request at a convenient time. Copies of Data sheet information are also held at Calstock Nursery.

The chemical and pesticide application records and the chemical stock lists are kept in the Pesticide Store at Kernock and the Pesticide storage area at Calstock as well as on Computer.

The maintenance record and fault report book for spraying and chemical application equipment is kept in the Manager's Office at KPP at Pillaton.

A set of protective clothing and a B.S. respirator are stored in the Manager's office in case of emergency in the chemical store. The Manager is responsible for seeing that this equipment is tested at regular intervals.

ELECTRICAL EQUIPMENT

Plugs, cables and leads should be checked for faults by the user before items of equipment are used. This should be done visually before connecting or switching on.

Employees should look for perished or damaged cable insulation, loose or taped joints or repairs, signs of overloading, loose cable and/or damaged plugs.

Secondary insulation (blue, brown and yellow/green) should never be exposed.

Any faults noticed should immediately be notified to the Maintenance manager or his deputy who will ascertain if the equipment is safe to use or, if necessary, repair it.

Space around equipment should be adequate for ventilation.

Equipment should not be placed where liquids or compost could spill onto or into it.

Extension leads, reels and cables may only be used for an authorised purpose with company equipment or for equipment which has been hired by KPP or which is provided specifically for employees' use.

An extension reel or cable must not be operated without the cable being unwound before equipment is plugged in and used.

An extension reel or cable should not be used as a socket for employees' private electrical equipment such as radios *etc.*

Cables should not be positioned where they may be trodden on or snagged by passing people or equipment.

Cables should not be kinked or snagged when laid out.

Employees may use electric sockets, which are part of tunnel or glasshouse equipment, as power points for a personal radio provided that the socket is not required for any official use.

Personal radios must only be operated at a level of volume which does not cause offence or discomfort to anybody else in the vicinity.

Personal cassette players / radios (Walkman-type) **may not** be used during work at any time.

Extra care is needed with ladders, pipes or other equipment or vehicles when passing under the power lines which cross the driveway near the garage and T2 and which pass across the fields to the south of the Directors' residence. Particular care must be exercised in the vicinity of the Loading Bay at the S.E. corner of G16 and when passing under the power lines near the reservoir.

Warning notices are displayed on either side of the lines near the bungalow / garage, on the southern side of the nursery where the lines cross the roadways and loading bay and outside the conservatory on the decking.

Long and unwieldy items should be carried with one person holding each end (i.e. horizontally) rather than vertically.

Trip switches for electrical circuits are sited as follows:

- Offices - G16 east side of steps to conservatory
- Garage - in garage above generator
- Green Home - in garage above generator
- Bridlington 1&2 G19 north side of entry into G20
- T1 & T2 T6 (east end)
- T6 T6 (east end)
- G7 G10 by boiler
- T9 T9 by boiler
- G10 G10 by boiler
- T11 T11 (S.E. corner)
- G14 G14 by control panel – north of 22Kernock
- G15 G15 by control panel

- G16 G16 east side of steps to conservatory
- G19 G19 in boiler room – NE corner
- G20 G19 north side of entry into G20
- G21 G21 inside south door on LHS

The stand-by generator is housed in the Electricity hut in the south-west corner of the Upper Car Park.

No trip switch should be re-set without instruction from the Maintenance manager or appointed duty person.

Great care should be taken when charging batteries as inflammable gas is given off during the process.

PRESSURISED SUBSTANCES

Staff should exercise caution when operating irrigation hoses and equipment.

Such equipment should always be directed away from any employees when it is being turned on or off and should not be used in a frivolous way. Due regard should always be given to the conservation of water supplies.

Hoses *etc.* should be kept off pathways and traffic areas as far as is practicable and should always be left in a neat and tidy state. Hose guides should be removed from fixed positions as soon as they are finished with in order to prevent accidents.

No hose should be operated if it is tangled or over-stretched.

The master controls for the pressure irrigation systems are on the main switchboard at the east end of T6 (S.E. corner), G15 (switchbox by the central pathway) and the switchboard in G19.

All equipment which has hydraulic hoses should be checked before the equipment is operated and any defects immediately reported to the Maintenance Manager. At very high pressure, oil leaking from hydraulic systems may penetrate the skin.

The air compressor may only be used when the use is authorised by the Maintenance Manager. The use of the compressor will only be authorised if the user has received instructions on the correct method of use.

Pressure washers may only be used following instruction from the Maintenance Manager.

INSECTS AND PLANT MATERIALS

Employees should be aware that the various plants on the nursery inevitably attract a lot of flying insects. If an employee is aware that he / she may have an allergic reaction to any type of bite or sting, the employee must inform the First Aider/Personnel Manager in order that any necessary treatment is available in case of emergency.

Some plants and certain plant material such as downy leaves, some sap and bulbous rooted plants, may cause an allergic reaction with a very small number of people.

If such a reaction does occur at any time, preventative action should be taken in order to limit the contact of any plant material with the skin. This includes the wearing of trousers, socks, a long sleeved garment and/or gloves.

Employees should be aware that irritant action on the skin is often emphasised particularly when the weather is warm and sunny and also when the body is perspiring.

Employees should be aware that the frequent wearing of gloves can also introduce skin problems on the hands and forearms due to the accumulation of moisture inside the gloves and the skin becoming soggy.

Employees should take note of requirements for sensible clothing for work (see **Dress Guidelines** section 2 of the Staff Manual) these simple measures can prevent almost all skin reactions occurring if plant material contact with skin is restricted or greatly limited.

Take care to avoid stakes and marker posts in pots and/or stock areas.

Take care to avoid shoots and branches on larger plants and bushes when bending over.

Take care to avoid thorns on trees, shrubs or pruning's/trimmings.

CLEANING AND MAINTENANCE OPERATIONS (INCLUDING BOILER AND BURNER OPERATIONS)

Heating, electrical or other control systems should not be operated without direct instructions from the Management.

Only competent, qualified personnel may maintain and service equipment.

Sweeping floors, benches prop. Beds and other surfaces should be done using the appropriate equipment provided.

Equipment such as brooms, brushes, shovels etc. should be returned to their correct places following use. Any deterioration in such equipment should be reported to the supervisor/Manager .

Areas to be swept can be damped down before brushing and sweeping to help prevent the creation of a lot of dust.

Protective masks can be used when handling or sweeping dusty materials.

Appropriate care should be taken when using detergents and de-greasers for cleaning operations. Label instructions should always be adhered to.

Toilets, washrooms and other communal areas will be cleaned as often as necessary to maintain the cleanliness and to maintain stock(s) of supplies.

Facilities will be checked several times a week Employees are asked to report any shortages or facilities that require cleaning to the IT Manager, so that the situation may be rectified.

Employees who clean communal and domestic areas are instructed to follow label instructions of all cleaning products and materials. When necessary, protective clothing, goggles and gloves will be provided.

GLASSHOUSE AND TUNNEL REPAIR AND CLEANING

Employees should not climb onto tunnel or glasshouse roofs and gutters without having received direct instructions from a member of the Management team. This is because the structure must first be checked to ensure is safe and able to support equipment and workers.

Employees **must** ensure that they are in good condition and safely positioned at the correct angle and height before use. (The ladder should be secured in position or footed and be at the correct 1 in 4 slope).

Always ask for assistance from another employee when climbing above head height in order that the ladder can be held steady or appropriately secured to stakes. Help must be requested for awkward jobs such as lifting glass up or adjusting the position of hoses when washing the glass or polythene.

Extension ladders should be fixed at the base before use.

Tops of ladders should be secured with lashings, straps or clips. If this is not possible the base should be secured.

Ladders should be rested against a solid surface. The top of the ladder should extend at least 1.5m above the platform or landing place.

When moving glass for glazing repairs, the glass should only be carried/moved by hand using protective gloves and rubber suction discs. Glass should be replaced from inside wherever possible.

Broken glass should be removed from the workplace as soon as possible and disposed of in the rubbish skip or other approved collecting place

Work on roofs and gutters should not be carried out in rainy or windy weather. Frosty, icy conditions should also be avoided as should conditions where there is excessive glare from the sun. Electricity supply to the vents should be isolated to prevent vents opening or closing when work on the roofs is taking place.

Use a hoist or rope to raise loads. Ask for assistance when necessary. Do not carry loads up a ladder by hand. Use of a tool belt is recommended for carrying hand tools.

Clothing should be a comfortable fit without being too loose as this may catch on fixtures or glazing bars.

Protective clothing should fit properly.

Boots or shoes should fit snugly and be flexible with slip-resistant soles. Such boots or shoes must be capable of fitting easily within the confines of gutters or other roof structures.

Employees who are asked to work on roofs and gutters should be confident they can perform the required task and have a "head" for heights. They should familiarise themselves with the recommendations for safe working on roofs and gutters.

They should also have a good sense of balance, be fit and agile.

A set of Risk Assessment Forms for Working at Height (Employee and Manager's agreement) must be completed by the manager in charge of the work and the relevant employee(s) **before** the work commences.

WELDING OPERATIONS

Welding operations must only be carried out by authorised, competent staff or when directly under the instruction of such a person.

When working in the vicinity of welding operation, employees should avoid getting too close as harmful fumes may be given off. The intense light will also damage the eyes of anyone watching the operation. ("arc eye")

Overalls, gloves, apron, faceshield, visor, mask and goggles are available as appropriate to protect the body and eyes during welding operations.

VDU USAGE AND OPERATION

A number of employees now use computers, VDUs, *etc.* during the course of their work for varying lengths of time. Very few employees are considered to fall within the category of "user" (as defined by the Health and Safety (Display Screen Equipment) Regulations 1992), but this will be re-assessed as frequently as is considered necessary.

All work stations and VDUs are carefully installed and are considered suitable for the health and safety of the operators.

When any change of staff, workloads or work-stations takes place, the members of staff responsible for re-checking the risk assessments are the Managing Director and the IT Manager.

Users should take breaks before fatigue sets in. (These will vary with the individual and the work.) Short frequent breaks are better than longer breaks

These breaks and changes in work activity should be included in the work time and, wherever possible, be taken away from the screen.

All staff who frequently use VDUs and who believe they may require an eyesight test, should contact the IT manager, who will provide a form to be used at an approved Optician/Optomtrist.

KPP will pay for the eye test and for any basic corrective appliances prescribed as specifically necessary for display screen work following an eye test.

Training of additional operators is the responsibility of the IT Systems and Network Administrator, as well as existing operators in the relevant department.

BUILDING AND REPAIR OPERATIONS

CEMENT

Take care to avoid the dust when mixing cement.

Wash hands and face thoroughly after mixing and/or using cement.

The cement mixer should be stored in a dry, covered area when not in use.

Before connecting the mixer to the power supply, ensure that the machine is dry. Hands and clothing coming into contact with the mixer must also be dry.

All tools and equipment used with or coming into contact with cement should be rinsed clean before the surplus cement dries and hardens.

PAINT, TREATED TIMBER AND GROWING MEDIA

Ensure that label instructions for the product usage are followed.

Line paint kettles and roller trays with foil before use to enable the equipment to be easily cleaned.

For short periods, brushes and rollers may be left in water, white spirit or thinners according to the product type.

All equipment, brushes etc. should be thoroughly cleaned after use and stored in appropriate conditions.

Care should be taken in handling newly painted or treated timber. The appropriate cleaning agent should be used and then the exposed skin should be thoroughly washed especially before eating or drinking.

Some growing media (e.g. bark and other similar substances may give off an unpleasant smell at times, particularly when wet. This is not usually harmful but may affect some people with a particularly sensitive sense of smell. Such people should avoid being in a confined area for any length of time with a quantity of the particular substance to avoid any possible reaction occurring.

FUELLING MACHINES, VEHICLES, PORTABLE AND FIXED HEATERS

Be aware of the dangers associated with the running of diesel or petrol motors particularly in enclosed spaces. An adequate supply of fresh air must be maintained at all times. This also applies where portable gas, oil or paraffin heaters are used.

The ignition circuit of any motor or engine must be switched off before re-fuelling takes place.

Take great care when re-fuelling any motor or engine and when re-filling fuel containers or canisters.

Fuel should only be carried in canisters or containers of suitably approved design and capacity.

Wash your hands after any re-fuelling operations, and avoid breathing in fumes from fuel.

Anti freeze liquid must be added to motors and engines with extreme care. Spillages should be cleaned up and excess liquid or mixture disposed of in an approved manner according to label instructions.

Ventilators and windows in the Offices and Staff Caravan should be kept free of obstructions to allow adequate ventilation when required.

Heaters must be switched off when leaving rooms or before opening windows unless contrary instructions are issued by the Management.

GOOD HOUSEKEEPING AND SENSIBLE PRACTICES

Always keep your working area clean and tidy especially pathways and access routes.

Employees using the various 'rest' areas are asked to see that these areas are left clean and tidy in order to assist the staff responsible for general cleaning duties. Worktops and drink preparation areas should be cleaned and tidied; ashtrays and food rubbish bins should be emptied as necessary and cleaned in the approved manner.

Rubbish should be sorted into categories and stacked for collection in the appointed place in each area.

Polystyrene and plastic scraps should be bagged. Larger pieces should be bundled and taped or tied.

Plant trimmings, weeds and disposable compost should be put skips provided before being collected and emptied into the composting area. Wherever possible, this type of rubbish should not be put directly into the bins as, once these are full, they then have to be emptied before they can be used again.

Re-usable compost should be bagged ready to stack in the store area to await sterilisation.

Batteries should only be discarded in the appropriate manner to a specialist dealer or to the rubbish collection. Such batteries must not be put with rubbish to be incinerated because of the risk of explosion.

Broken glass should be collected together and disposed of in separate containers or in the skip as appropriate.

Read and obey safety warnings.

Do not use equipment from which guards have been removed.

Always wash hands before eating and after using the toilet.

You are forbidden from smoking in any under cover areas **at any times**. Because of the risk of fire, smoking is also prohibited near the fuel tanks and in or near the chemical store and other storage areas. Employees may not smoke during work periods.

Employees should not smoke near batteries under charge as inflammable gas is given off during the charging process.

Goods and equipment should always be stacked and stored sensibly and safely without causing obstructions.

Do not stack heavy objects above head height

No one should attempt to lift a load without first checking that it is within their personal capabilities to do so. Strains and worse injuries may result from incorrect lifting procedure or attempting to lift too heavy a load. Assistance should always be sought if necessary. Be aware of the danger of injury to feet if an object is dropped.

Employees should be aware of the need to adjust working height and position according to personal requirements in order to reduce the risk of stress and possible strain. Vary work routines and take breaks from repetitive actions.

Employees should be aware of the possible hazard which may occur from repetitive operation of equipment such as shears and take care to always work in such a way as to reduce this risk to a minimum.

Arms and wrists should not be bent in such a way that an uncomfortable position is maintained for any length of time.

Employees should be aware of the potential hazards associated with prolonged use of mobile telephones and the possible harmful effect on the body and head whether making or receiving calls.

Employees should be aware of the potential hazards associated with prolonged use of mobile telephones for sending text messages or playing games. This can have a seriously harmful effect on the shoulders, arms, hands and fingers and lead to musculo-skeletal injuries of these areas.

Items such as paper towels, tissues, all sanitary items should be disposed of in the approved manner in the bins provided. Such items may cause blockages if disposed of in the toilet pans because drainage is to septic tanks.

Too much sunlight can be damaging to the skin especially to those with fair complexions. Excessive exposure can prematurely age the skin, leaving it wrinkled and leather-like. It can also increase the chance of skin cancer.

All employees are advised to protect their skin from undue exposure to the sun particularly during the three or four hours in the middle of the day.

Recommended precautions include the wearing of a long-sleeved top garment and a hat with a wide brim. This will shade the face, head and back of the neck. Use of a cream or lotion with a high protection factor on exposed skin is also recommended.

Employees should remember that the sun's harmful rays will not be prevented from damaging the skin while working under cover in polythene tunnels and glasshouses. In hot sunny weather, it is very easy to get sunburnt just moving about the site from one area to another.

FORKLIFT TRUCK

The forklift may only be driven or operated when the use is authorised by a member of the Management team or the Managing Director

Only certificated drivers may drive and operate the forklift.

Permitted users may undertake familiarisation training (without carrying or manoeuvring a load) before they undertake an approved training course and test if they have received the necessary authorisation as above and if they are under the supervision of the Maintenance Manager or another certificated, authorised driver.

The forklift must be checked before use in accordance with approved procedure. Any faults found must be reported immediately to the Maintenance Manager to enable any faults found to be rectified.

Direct permission must be granted by the Maintenance Manager before the forklift is driven or operated without a fault being rectified.

The forklift must be driven and operated in accordance with approved procedure and practices at all times.

When driving, the forks must be lowered to within approximately 6" of the ground and with the tips slightly elevated.

When unloading a loaded pallet from a trailer, lorry or similar vehicle, the operator should reverse off or away from the vehicle to gain clearance and then lower the load before further manoeuvring takes place.

Do not unload facing downhill or across a slope.

Unloading should always take place, as far as is possible, on level ground.

Where necessary, you should use the horn to give audible warnings to alert those people in the vicinity of the presence of the forklift. This is especially important when emerging from restricted accesses or areas where visibility is limited.

Passengers must never be carried on any part of the forklift.

Do not use the forklift truck as a working platform.

If the load falls or is partially dislodged, the driver must stay within the driving "cab". By remaining inside the cab, the protective roll bars can protect the driver from unnecessary injury.

To avoid accidents, all employees and visitors should remain out of the immediate vicinity when the forklift is being operated.

The forklift must be left parked in an approved place with the forks lowered and the fork tips pointed towards the ground.

The ignition key must be returned to the Office for safekeeping in the approved location immediately after use.

PALLET TRUCK

The pallet pump truck may only be operated with permission from a member of the Management team or the Managing Director or other approved operator.

The pallet pump truck must always be operated in accordance with approved procedure and according to instructions.

No operation of the pallet truck is permitted without an employee having received the appropriate instruction from their immediate superior or other approved person.

ELECTRIC VEHICLES AND TRANSPORTERS

These vehicles may only be used if permission has been obtained from a member of the Management team, the Managing Director or an approved operator.

The vehicles must always be operated in accordance with approved procedures and according to instructions.

Operation of any buggy or transporter is not permitted unless the operator has received the appropriate training.

Any faults occurring must be reported immediately in order that the fault can be investigated and corrected.

When not in use during the day, the site buggies should be parked safely outside the Offices (i.e. front facing forward at an angle to the building with steering wheels turned uphill.)

The keys should be removed from the ignition when the vehicle is parked at the end of the day and the keys returned to the Vehicle key drawer.

The vehicles must be re-charged at appropriate intervals. Batteries should not be allowed to become totally discharged.

SAFE WORKING AT HEIGHT

INTRODUCTION

Falls from height are one of the main causes of death and major injury at work. The Work at Height Regulations aim to protect those working at height where there is a risk of a fall liable to cause injury. Where working at height cannot be avoided, a suitable and sufficient risk assessment must be undertaken. The work must be properly planned, appropriately supervised, and carried out in as safe a way as is reasonably practicable.

AIM OF THE POLICY

This policy sets out the arrangements that all Managers/Supervisors should make to ensure work at height is carried out safely in areas under their control.

SCOPE OF THE POLICY

The Regulations do not specify any height limit; the legislation encourages a risk-based approach to work at any height where injury may result if suitable precautions are not taken.

This policy applies to all work under the control of Kernock Park Plants Ltd, indoor and outside and covers a range of circumstances including but not limited to:

- Design and construction of buildings and other structures
- Using work equipment (a work platform, scaffolding, or a ladder)
- Work on a roof or up a tree
- Work next to openings such as excavations
- Use of inappropriate means (standing on a table or chair) to change a light bulb.

Working at height in an office, or similar low risk environment, such as accessing top shelves, can be addressed through the general risk assessment process.

EXCEPTIONS TO THE POLICY

The Work at Height (Amendment) Regulations 2007 apply to those who work at height providing instruction or leadership to people engaged in caving or climbing by way of sport, recreation, team building or similar activities in Great Britain. These are not included in this policy.

Travelling up and down stairs.

Additionally, some common sense should be applied, i.e. falling off a roadside curb whilst working would not be considered 'working at height'.

DEFINITION OF COMPETENCY

There are requirements in this policy for competency. Competency is the combination of training, skills, experience and knowledge that a person has and their ability to apply them to perform a task safely.

POLICY

RESPONSIBILITIES

MANAGERS MUST MAKE ARRANGEMENTS IN AREAS UNDER THEIR CONTROL TO ENSURE:

- All work at height is avoided where possible.
- All work at height is properly planned and organised, ensuring this is proportionate to the risks involved in the work.
- The risks from work at height are assessed and the appropriate access equipment is selected and used.
- Those involved in work at height are suitably trained and competent for the task. At minimum, training for the safe use of ladders and stepladders must be provided and recorded for all staff working at height.
- Personal fall protection equipment provided for work at height is properly maintained and inspected before first use and then at least every six months or after circumstances which might jeopardize safety have occurred, of which records are kept. This includes checking that none has been in service for more than the manufacturers recommended time period.
- The risks from falling objects are properly controlled.
- A register is kept and maintained of all access equipment under their control, with a system to identify individual items.
- Permits to work are issued where access to roofs is required and there are risks associated to working there (e.g. falls from the roof or through fragile surfaces, or exposure to harmful substances discharged around roof level).

DIRECTORS MUST MAKE ARRANGEMENTS IN AREAS UNDER THEIR CONTROL TO ENSURE:

- Project managers question designers on their strategy for avoiding or minimising the risks from work at height. Those who design workplaces have an important role to play in preventing falls from height and there is a specific duty on designers in the Construction, Design and Management Regulations to consider risks to those who:
 - Clean any window, transparent or translucent wall, ceiling or roof in or on a structure, or maintain the permanent fixture and fittings.
 - Use a structure designed to access a place of work at height.
 - May be affected by such work (staff, students or members of the public).
- All roof areas (including internal structures such as mezzanines) are assessed for safety precautions, identifying fragile surfaces, areas where edge protection is required, or requirement to control unauthorised access.
- A register of all fragile surfaces and roof areas requiring a “permit to work” is maintained.
- All fixed fall protection systems, such as work restraint cable systems, fall arrest cable systems, anchorage points (eyebolts) and suspended access systems, are maintained and examined at intervals not exceeding 12 months, and for arranging repair, replacement, or full decommissioning; and provision of alternative systems where equipment is found to be sub-standard.
- Personal fall protection equipment is supplied correctly for each installation and inspected before first use and then at least every six months or after circumstances which might jeopardize safety have occurred, of which records are kept. This includes checking that none has been in service for more than the manufacturers recommended time period.

RISK ASSESSMENT

All work at height must be subject to appropriate risk assessment, the complexity of which will depend on the risk of injury that has been identified. The assessment should not just consider the height of a fall (the higher the fall, the more likely it is to cause injury, although injury may be sustained even in falls from lesser height, i.e. less than two metres), it should also take into account:

- Environmental conditions (especially slippery conditions or high winds).
- Materials onto, into, or through which, someone could fall (they may be hard, there may be sharp edges or impalement hazards, or they may be fragile and cannot support a person's weight).
- Risks from falling materials or objects (e.g. of materials stored at height, or dropped tools – barriers and warning signs may be needed to prevent access to danger areas).
- Hazards of using mobile elevated work platforms (MEWP) such as trapping, crushing or being struck and the presence of any overhead cables in the vicinity.
- Stability of the structure that the work equipment will be used close to or against.

The aim is to identify practical precautions that are proportionate to the risk i.e. kick stool, ladder, step ladder, mobile platform, fall protection equipment etc. Where it is not reasonably practicable to prevent falls or mitigate their effects then residual risks should be addressed by suitable instruction, training, and safe systems of work.

MANAGING WORK AT HEIGHT

Work must be planned, organised, supervised, and carried out by competent persons, using the following hierarchy of controls:

- Avoid work at height wherever possible where there is a risk of significant injury.
- Design or modify storage and display panels so that they can be accessed from ground level.
- Position lighting where it can be maintained without working at height or use banks of lighting that can be lowered to the ground.
- Use long life-light bulbs that do not need to be changed so often.
- Prevent falls where work at height cannot be avoided (by using suitable measures, e.g. guard rails or work platforms, that protect all workers).
- Mitigate falls: minimise the distance and consequences of a fall where the risk of a fall cannot be eliminated (by using personal protective equipment, e.g. fall arrest systems).
- Take additional measures if it is not reasonably practicable to avoid, prevent or mitigate falls (e.g. provide additional instruction and training, demarcate edges with painted lines).

SELECTING ACCESS EQUIPMENT

LADDERS

Ladders are only to be used as working platforms when it is NOT reasonably practicable to use any other safer method or equipment. There are different types of access equipment that are more suitable to use than a ladder, e.g. podium steps. Ladders are only to be used as a means of access for low risk work at relatively low heights where the task is of short duration.

- In line with the recommendation of the Health and Safety Executive, ALL ladders and stepladders should be Class 1 'Industrial' or the European Standard EN 131.
- Ladders not inspected or not displaying an inspection label must not be used.

All staff using a ladder (portable or fixed) must have been trained in the safe use of ladders and step ladders. Training given should follow HSE guidance (<http://www.hse.gov.uk/pubns/indg455.pdf>) and must be recorded.

Access to portable ladders must be controlled.

- All portable ladders must be physically secured to prevent unauthorised access.
- An inventory of portable ladders must be maintained and recorded.
- Portable ladders must be signed out when in use.
- All portable ladders must be returned to physical storage areas when jobs have been completed.
- Where jobs span more than one day, ladders must be returned at the end of each day and signed out again when next required.

MOBILE ELEVATING WORK PLATFORMS / CHERRY PICKERS

The use of mobile elevating work platforms (MEWPs) must follow HSE guidance and comply with the following:

- Only trained and certified operators may use MEWPs.
- A documented plan must be in place for the use of all MEWPs and is to include emergency and rescue procedures.
- The plan is to be reviewed before the work commences to allow for any changes in circumstances.
- A copy of the thorough examination report must be obtained, checked and kept before the equipment is allowed on site.

MOBILE TOWER SCAFFOLDS / SCAFFOLDING

It is essential that only trained competent staff have access to this type of equipment and that suitable supervision is in place.

The use of mobile tower scaffolds must follow HSE and PASMA guidance and consideration given to the following topics when planning and assessing their use.

- Erecting.
- Moving.
- Using.
- Dismantling.
- Inspecting.
- Protecting bystanders.

Scaffolding must only be assembled, dismantled, or significantly modified by appropriately trained and competent contractors under competent levels of supervision and must be subject to regular inspection. Where scaffolding is complex, it will be necessary for a competent person to draw up a plan for its assembly, use and dismantling which should be undertaken by an approved contractor.

KICK STOOLS

Kick stools should only be used sensibly for low risk tasks where a person would spend short periods of time on the equipment and where the equipment requires frequent movement.

User must be trained in the safe operation of kick stools as follows:

- The kick stool needs to be used in such a way that it is prevented from slipping on the surface.
- The surface must be level and clear to allow the kick stool to keep good contact with the floor.
- Any items that are carried should be relatively small and lightweight.
- Staff should know how to use kick stools safely (refer to manufacturer's instructions) and when not to use them.
- Check kick stools regularly to ensure they are in good condition:
 - Are all the wheels present and do they rotate freely?
 - Is there any material clogging the mechanism?
 - Are there any cracks or other signs of damage?
 - Is the surface of the platform free from contamination by dirt or fluids?
- Keep both feet on the kick stool at all times.
- Do not attempt to over-stretch when trying to reach up or out.

Note: If you cannot comfortably reach where you intend to lift, use a stepladder to reach the required height.

PERSONAL FALL PROTECTION EQUIPMENT

Personal fall protection systems such as lanyards and harnesses must only be used if the risk assessment indicates that the use of safer collective controls is not feasible.

All staff using fall protection systems must be adequately trained in their use and there must be an adequate rescue plan in place.

The Work at Height Safety Association (<http://www.wahsa.org.uk>) have a number of technical guidance documents on the safe use of personal fall protection equipment.

INSPECTION

Every item of equipment used for work at height should be subject to the following procedures:

- Each item of equipment for work at height should be individually identifiable.
- Each item of equipment should be tagged to show the identification marker and that it is in a safe condition for use, showing the date of the next formal inspection.
- Each item of equipment should be subject to periodic formal inspections (e.g. 6 monthly intervals, or more regularly dependent on use and environmental conditions).
- Each item of equipment must be subject to a thorough visual inspection before use.
- Equipment must be re-inspected should an incident occur that may have caused the equipment to become unsafe; and for external equipment should bad weather conditions be experienced.
- A full register of equipment must be maintained and the findings from each periodic inspection or re-inspection due to an incident or an occurrence be recorded, along with any actions taken to show rectification or disposal of unsafe equipment.
- Access to equipment for working at height should be controlled and only be available to and used by competent personnel who have received the required training.
- All ordinary and extension ladders over 3m long, including all step-ladders and trestles providing a working platform or tread height exceeding 2m, are to be inspected at intervals not exceeding six months.
- For tower scaffolds with working platforms less than 2m in height, the tower must be inspected:
 - After assembly in any position.
 - After any event liable to have affected its stability.
 - At suitable intervals depending on frequency and conditions of use.
- For tower scaffolds with working platform 2m or more in height, the tower must be inspected:
 - After assembly in any position.
 - After any event liable to have affected its stability.
 - At intervals not exceeding seven days.
- Mobile elevating work platforms (MEWPs), and any material handling attachments, must be thoroughly examined at least every six months
- The MEWP operator must carry out daily/pre-use inspection and function checks
- Inspection of scaffolding must be carried out by a competent person every 7 days and immediately after incident occurring or bad weather being experienced.
- Personal fall protection equipment must be inspected before first use and then at least every six months or after circumstances which might jeopardize safety have occurred.

ROOF ACCESS / FRAGILE SURFACES

Managers are responsible for ensuring that no unauthorised persons have access to roofs.

Doors, hatches etc. leading to roofs must be locked and access must be subject to a permit to work system.

Individuals must not be allowed to use roof safety systems unless they have received appropriate training. Those placing contracts for work on a roof must ensure that contractors provide a method statement, risk assessment and proof of training before commencing work on the roof.

Where work on or near fragile roofs cannot be avoided then all reasonably practicable control measures must be implemented to mitigate the possibility of falls of people or objects.

The control measures must include:

- The selection and use of suitable platforms, coverings, guard rails to minimise the risk of falls or falling objects.
- Where there is a residual risk remaining then minimise the distance and effect of a fall.
- Implement the use of suitable and sufficient barriers, warning notices and signage to clearly indicate and warn others of the danger zone.
- Access and egress should be restricted to authorised persons only and using the appropriate Personal Protective Equipment (PPE) at all times.

CONTRACTORS

Contractors who conduct work at height must have their own health and safety policies to ensure the risks to their staff, sub-contractors and Kernock Park Plants Ltd occupants are adequately managed. They must conduct a suitable and sufficient risk assessment and work to approved method statements with adequate control measures to mitigate the risk of injury to themselves or others.

Kernock Park Plants Ltd Managers who employ contractors will be responsible for the contractors and ensure that any work at height carried out during the activities is adequately managed and risks controlled.

FURTHER SOURCES OF INFORMATION

Further information on working at height and fall prevention can be found on the Health and Safety Executive's 'Working at Height' microsite <http://www.hse.gov.uk/work-at-height/index.htm>

Health and Safety Executive, The Work at Height Regulations 2005 A brief Guide. INDG401

<http://www.hse.gov.uk/pubns/indg401.pdf>

Health and Safety Executive, Safe use of ladders and stepladders. INDG 455

<http://www.hse.gov.uk/pubns/indg455.pdf>

Health and Safety Executive. Working at height FAQs (including ladders and scaffolding and tower scaffolding, roof work)

<http://www.hse.gov.uk/construction/faq-height.htm>

Health and Safety Executive. Mobile Elevated Work Platforms.

<http://www.hse.gov.uk/construction/safetytopics/mewp.htm>

Health and Safety Executive, inspecting fall arrest equipment made from webbing or rope, INDG 367

<http://www.hse.gov.uk/pubns/indg367.pdf>

ELECTRICAL SAFETY

INTRODUCTION

The prime purpose of this document is to detail Kernock Park Plants Ltd's policy to achieve safety in all its electrical activities, in compliance with its legal and statutory obligations.

The document also provides guidance and references to assist staff in implementing the safety policy.

SCOPE

This Electrical Safety Policy is issued under the authority of the Managing Director of Kernock Park Plants Ltd and will apply throughout the company, unless specific exemptions are approved by the Managing Director.

Any approved exemptions to this policy are listed in Appendix 1

This policy applies to all persons (staff and contractors) who may be affected by any and all electrical activity, including use of or contact with equipment, carried out on company property. It also applies to all electrical activities undertaken by company employees and/or contractors, when working for Kernock Park Plants Ltd at any location.

Kernock Park Plants Ltd staff shall only undertake electrical work upon Kernock Park Plants Ltd owned properties. Any electrical work on non-Kernock Park Plants Ltd properties requires electricians to be certified in accordance with relevant industry standards and Building Regulations, with the provision of supporting certification/documentation.

POLICY

It is Kernock Park Plants Ltd policy to comply fully with all legislative and statutory requirements, including Approved Codes of Practice (ACOPS).

Kernock Park Plants Ltd employees must make themselves fully conversant with their legal and statutory duties and responsibilities. Failure to comply with these legal requirements may lead to disciplinary action and possible dismissal.

RESPONSIBILITIES

FOR SPECIFIC PARTS OF AN INSTALLATION

The Maintenance Manager is responsible for the Kernock Park Plants Ltd's electrical infrastructure; i.e. the complete electrical installation, from the incoming supply up to and including the final accessory.

Department Managers are responsible for all equipment connected beyond the final accessory/connection point, including plugs and leads. Any equipment permanently wired into the mains supply shall be connected/disconnected by Maintenance staff or their authorised contractors.

If any person has concerns about the safety of connections or installations, the Maintenance Manager will give advice, if any doubt exists over the safety of a piece of equipment or installation, it must be suitably isolated (removed from service) and labelled to prevent reuse until remedial works have been effected.

FOR APPLICATION

The Site Manager is primarily responsible for the implementation of this policy document.

Individual Department Managers shall provide (or be responsible for ensuring) access at all reasonable times to properties and equipment, in order that staff and contractors can discharge their duties under this policy.

Co-operation of Departments is required as follows: -

- Reporting circuits or equipment in need of repair.
- Providing access to systems for the purpose of routine testing and inspection.

Whenever there is a division of responsibilities between the companies' management and others, the Maintenance Manager will issue instructions to others as necessary to prevent danger.

Where a specialist contractor has been appointed under contract by Kernock Park Plants Ltd, the contractor shall be required to comply with:

- The requirements of the Kernock Park Plants Ltd Electrical Policy;
- The Kernock Park Plants Ltd Electrical Safety Policy;
- Any instruction issued by Kernock Park Plants Ltd Authorised Persons in accordance with the Kernock Park Plants Ltd's Electrical Safety Rules for High or Low Voltage Systems.

GUIDANCE

SAFETY RULES

SAFE SYSTEM OF WORK

All work carried out on Kernock Park Plants Ltd premises, including work carried out by authorised contractors shall be subject to a suitable and sufficient risk assessment.

The results of the risk assessment shall be documented and shall include detailed method statements that record:

- The steps that will be taken to ensure and verify that there is adequate means of access/egress, lighting and safe working space, at all electrical equipment on which work is being performed.
- The means by which the electrical equipment to be worked upon shall be disconnected from every source of electrical energy.
- The steps that will be taken to ensure that equipment to be worked upon has been made dead.
- The measures that will be taken to prevent the equipment, which has been made dead, becoming electrically charged during work.
- The personal safety equipment and tools that are required to prevent injury and death.
- The steps that will be taken to ensure the safe restoration/bringing into service of equipment.

Specific rules apply to limit and control the increased hazards for live working and are detailed within the safety rules below.

ISSUE OF SAFETY RULES

Each electrical employee shall be issued with a copy of the Electrical Safety Policy, together with a copy of any other related documents appropriate to their duties.

Such employees and other persons shall sign a receipt for their copy of the Electrical Safety Rules (and any amendments thereto) and the Electrical Safety Policy, they shall keep them in good condition and have them available for reference as necessary.

Employees and others, who have not been issued with these documents, can view them by arrangement with the Site Manager.

SAFETY STANDARDS

All persons concerned with work to which the Electrical Safety Rules (HV or LV) apply, must make themselves conversant with the requirements of the rules. Ignorance of the requirements shall not be accepted as an excuse for negligence.

Electrical contractors, direct labour staff or other electrical persons shall work safely and not put themselves or others at risk, failure to do so will involve disciplinary procedures. Those whose work is considered to be unsatisfactory or unsafe, will be stopped from working and instructed to leave site, investigations shall then be undertaken to review the future suitability of the employee or contractor to continue working onsite.

OBJECTIONS

Any person may object on safety grounds to undertaking any electrical activity upon the Kernock Park Plants Ltd electrical system. Any such objection shall initially be investigated by the person who issued the instruction; if necessary the matter shall be referred to the Managing Director or Site Manager for final decision.

NOMINATED STAFF

The following personnel are appointed in writing for Low Voltage (LV) duties:

- Designated Person – Maintenance Manager
- Authorising Engineer (Low Voltage) - External Consultant
- Authorised Persons - As designated by the Maintenance Manager
- Competent Persons - As designated by the Maintenance Manager

The following personnel are appointed in writing for High Voltage (HV) duties:

- Designated Person – Maintenance Manager
- Authorising Engineer (Low Voltage) - External Consultant
- Authorised Persons - As designated by the Maintenance Manager
- Competent Persons - As designated by the Maintenance Manager

AUTHORISING ENGINEERS APPOINTMENT

The Authorising Engineer shall be appointed from an independent organisation (external consultant), being a suitably experienced and Chartered Electrical Engineer and having familiarity with the different types of equipment, systems and installations in use.

OPERATIONAL RESTRICTIONS

An operational restriction is a specific written instruction, typically issued via the Authorising Engineer, regional electricity company, manufacturer or other similar organisation in the form of a “Hazard Notice”, “Safety Action Bulletin” or similar official instruction, modifying the normal operating procedures associated with a particular type of equipment.

On receipt of an Operational Restriction the Authorised Person should;

- Acknowledge receipt, indicating whether the equipment is included in the local system(s) or installations.
- Record the receipt in the log book and the action taken.
- Notify all other Authorised Persons of the details and limitations applicable to the installation.
- Arrange for any inspection and remedial work required.
- Where considered necessary, fix warning signs on each item of equipment involved.
- Report the satisfactory completion of any remedial works to the Authorising Engineer.

WORK ON LV NETWORKS (DEAD OR LIVE)

All dead electrical work on LV circuits (other than final load sub circuits supplied from local distribution boards or on final equipment with suitable local isolation) shall only be carried out following the issue of a Permit to Work, following isolation from all possible voltage sources and proving dead at the point of work by an Authorised Person

Live work which does not require removal or replacement of energised fixed components (e.g. testing, fault finding or battery maintenance) may be undertaken by an authorised Competent Person following a risk assessment and the use of all necessary precautions to ensure no injury results.

Live working which does involve the removal/replacement of energised fixed components shall only be undertaken with the written authority of an LV Authorised Person. Such work shall be confined to removal or replacement of battery cells.

LOCKING OFF FOR SAFE ISOLATION

Where equipment is used to achieve electrical isolation, it shall be secured in the “open” or “off” position. In general, this will require the following three steps to be completed;

- Operate device to the “open” or “off” position and secure with a safety lock (unique key). In the case of MCB’s (or similar devices) this will require the use of a toggle and mini safety padlock.
- Display a caution sign.
- Obtain a visible break in air, for all equipment that is designed to be withdrawable e.g. rack out circuit breakers to the isolated position.

All equipment to be worked upon dead must be proved dead at the point of work, in a safe and approved manner prior to work commencing.

Note - Additional guidance for safe isolation of LV equipment is given in the Electrical Safety Council – Guidance on Safe Isolation Procedures for Low Voltage Installations. This document also includes guidance upon the selection and use of LV test equipment (GS38 compliant).

ADMITTANCE TO SWITCH ROOMS

All switch rooms shall be separate or segregated from other plant areas, all access doors shall be kept securely locked when unattended.

No person other than an Authorised or Competent Person may enter a switch room unless they are accompanied by an Authorised Person or are in receipt of an appropriate safety document issued by the Authorised Person.

SECURITY OF ELECTRICAL EQUIPMENT

All electrical equipment shall be secured against unauthorised operation. The equipment is to be located within a switch room or switch cupboard, unless otherwise agreed with the Authorised Person.

Operation of equipment located outside these areas shall only be possible by the use of a tool or key.

DISPLAY OF PERMANENT POSTERS AND SAFETY SIGNS

In each room containing main or sub-main electrical equipment, the following shall be displayed:

- A poster showing the approved method of treatment for electric shock.
- A single line drawing of the network (HV or LV) up to and including the final circuit distribution board where relevant.
- Other relevant health and safety information.

The design shall be to BS5499-5:2002 and colours shall be to BS 5252:1976, all signs shall be to approved sizes, being securely and permanently fixed in prominent and appropriate locations. Signs should be manufactured from laminated plastic or other similar non-metallic weather resistant (non-fading) material and of a thickness appropriate to the intended application.

Each electrical switch room is to have a sign on the external face of each entrance door, stating; "Electrical Switch Room, No Unauthorised Access, Keep This Door Locked"

Each switch panel shall be provided with appropriate warning signs on each cubical section or panel giving access to live parts.

Any installation containing wiring of differing ages/types shall have suitable warning notices placed in accordance with the recommendations made in BS7671.

WORK ON OR IN PROXIMITY TO EXTERNAL CABLES

Verification of service routes: All works of this nature shall be undertaken under the direction of an Authorised Person. To ensure correct cable identification, the following actions shall be taken:

- Reference shall be made to the relevant external cabling records/plans or public utility drawings. If drawings are not available, it shall be assumed that cables are present.
- Irrespective of drawings being available and prior to any excavations proceeding, the area shall be thoroughly scanned e.g. "Cat and Geny" and the location of cables (or other services) marked.
- Only personnel trained and competent to do so shall undertake cable location via such devices, certification of competency should be evidenced by relevant certification/training records being made available.

Where cables are uncovered they must be clearly marked "Danger Live Cables" and protected to prevent damage/danger.

All underground cables shall have a suitable marker tape installed above and along its length prior to backfilling.

PROVING DEAD AT THE POINT OF WORK

All HV cables shall be earthed (spiked) in accordance with HV safety rules prior to being worked upon. This will usually follow successful signal injection to identify the cable, where practical.

The spiking of cables shall only be carried out under the direct supervision of an Authorised Person and by a person who has been specifically trained in the safe operation of the equipment to be used.

LV cables shall be proved dead by one of the following methods:

- Cable spiking
- Opening cables using live working methods undertaken by an Authorised Cable Joints.
- Proving cable dead at origin and physically tracing cable by passing a solid loop from the origin to the point of work, where cable can now be cut using a remotely operated hydraulic cutter.
- Proving dead at cable termination, disconnecting at termination and physical removal of cable by pulling back.

Note – Cable Joints must be able to evidence:

- Appointment in writing by employer to undertake live LV cable work.
 - Familiarity with the type of cabling to be worked upon.
 - Adopting regular use of live working techniques/working methods.
-

RECORDS

All modifications or additions to cabling shall be recorded on the appropriate records and plans, all joint positions shall be clearly detailed and marked with the dates works were undertaken.

ACCESS EQUIPMENT

The provision and use of all access equipment shall be in accordance with the Working at Height Regulations 2005 (as amended).

Use of Kernock Park Plants Ltd access equipment shall be restricted to Kernock Park Plants Ltd personnel only. Only suitable and approved access equipment are to be used in relation to electrical tasks.

PERIODIC TESTING OF LV SYSTEM

All fixed LV electrical systems owned by Kernock Park Plants Ltd shall be periodically inspected and tested in accordance with the latest edition of BS 7671 (Wiring Regulations).

The following inspections shall apply in accordance with the periods recommended within the Guidance Notes to BS 7671, typically but not limited to:

- Annual – licensed areas, public entertainment areas, launderettes, leisure complexes, ATEX areas, petroleum installations.
- 3 Yearly – agricultural, horticultural and emergency lighting installations.
- 5 Yearly – general installations.
- 10 Yearly – domestic installations.

CIRCUIT IDENTIFICATION

All HV switchgear, plant and associated equipment shall be labelled to uniquely identify it. Accurate and up to date schematic diagrams shall be maintained to show the electrical configuration of the HV network. Additionally, details of all cable routes shall be maintained on site record plans.

Phase colours in a new installation or an alteration/addition to an existing installation should be coloured in accordance with BS 7671.

- Brown phase – L1.
- Black phase – L2.
- Grey phase – L3.
- Blue phase – N.

In two or three phase circuits, the circuit conductors may be of one of the permitted colours and either identified L1, L2, L3 or marked (over sleeved) Brown, Black, Grey at their terminations to show phase colours.

All LV switchgear and distribution boards shall be uniquely identified by securely attached and prominent labels. Each distribution board shall have an on-site circuit chart which allows accurate and easy identification of all circuits connected to the switchboard.

All final circuit outlets shall also be labelled to reference them to their controlling distribution board and individual fuse or MCB. The NICEIC (National Inspection Council for Electrical Installation Contractors) recommends that the circuit number comes first and then the phase identification;

- Circuit 6 Brown phase on distribution board LP6 is marked – LP6/6/L1.
- Circuit 8 Black on distribution board L4 is marked – L4/8/L2.
- Circuit 10 Grey on distribution board P2 is marked – P2/10/L3.

Note - Three phase circuits should be labelled in a similar manner, that is – LP6/6/L1L2L3.

LV schematic diagrams showing Kernock Park Plants Ltd's LV electrical system layout, circuit and switchgear references shall be provided at all main switch panels and updated as necessary.

LV INSTALLATIONS - NEW, ADAPTATION OR TEMPORARY INSTALLATIONS

All new, adaptations or temporary installation work, including minor additions, shall comply with the requirements of the latest edition of BS 7671 (wiring regulations).

Testing and records for such work shall be provided in a format similar to the specimen documentation available via the NICEIC.

LV SWITCHGEAR AND ASSOCIATED EQUIPMENT MAINTENANCE

All low voltage switchgear and equipment shall be regularly inspected, serviced and tested to ensure that it is maintained in a safe and serviceable condition. A record of maintenance of electrical equipment shall be kept by the Maintenance Department and will contain brief details of all inspections, routine servicing, repair and modification.

MAINTENANCE OF LV GENERATORS (INCLUDING ON LOAD TEST RUNS)

All generators shall be functionally tested, maintained (mechanically and electrically) and fuelled at appropriate intervals to ensure their availability under emergency conditions.

An on load test run of a minimum of 4hrs at 50% load rating or above shall generally be undertaken, at intervals not exceeding 3 months or otherwise in accordance with manufacturer's recommendations. The test shall also confirm the correct operation of the mains failure/auto start control of the generator.

REFUELLING

Regular inspection of day tanks fuel levels shall be undertaken at periods not exceeding 3 months. Topping up shall be undertaken when fuel levels reach 75% of day tank capacity where permanent fuel lines are not connected.

HV EQUIPMENT MAINTENANCE

All HV switchgear and plant shall be maintained to ensure its safety and operational capability.

Frequency of maintenance;

- All HV switchgear including protection systems shall be fully maintained and functionally checked at a maximum period of 6 years.
- HV circuit breakers should be operated on an annual basis to prevent "Sticktion".
- Oil filled transformers shall be oil sample tested every three years, annually if test results indicate the oil condition is suspect.

MAINTENANCE RECORDS

Contractors undertaking work upon HV network and switchgear, shall submit written record sheets detailing work undertaken e.g.;

- Protection relay - secondary injection timing tests.
- Switchgear and cabling Insulation inspection and tests.
- Partial discharge results (ultra TEV).
- Oil withstand, acidity, moisture content.

All records shall be submitted within two weeks of work completion.

NEW HV WORK

All new HV work shall be suitably commissioned and tested to ensure its capability and correct functioning, which shall be undertaken with the full consultation and agreement of Authorised Personnel over extents or limitations. Final acceptance will be subject to the satisfaction of the Authorised Person.

HV SWITCHGEAR SELECTION

The Maintenance Manager shall approve and oversee all additions to the Kernock Park Plants Ltd HV network. The office maintains a framework agreement for the supply of all HV equipment in support of this.

Note - all new HV switchgear shall have a minimum fault rating of at least 350MVA.

SUBSTATION HV AND LV EARTHING

Kernock Park Plants Ltd policy is to adopt a combined HV+LV earthing system at each substation with an overall combined resistance of less than 1 Ohm to true earth.

Adequate soil electrodes shall be provided to ensure system earth fault currents can be carried by the earthing system, without degradation under fault conditions.

Earth nests shall be configured to provide a minimum of two independent connections at either end of the main earth bar (with suitable test links). Individual earth nests shall not exceed 10 Ohms to true earth.

Substation earthing installations shall be inspected and tested annually.

FLAMMABLE/EXPLOSIVE ATMOSPHERES

Hazardous areas where flammable or explosive atmospheres may exist require specially selected electrical equipment to take account of the particular hazard, e.g. flameproof/explosion proof. Adequate earth protection is also essential. Any work within these defined areas must take account of the following;

- Installations shall be designed and constructed in accordance with BS EN60079-25:2004 Electrical Apparatus for Explosive Atmospheres. Intrinsically Safe Systems.
- Precautions must also be taken to prevent the ignition of flammable atmospheres by the discharge of static electricity.
- Selection of equipment for use in such areas must only be carried out by suitably trained and competent personnel.

SUPPLIES FOR FUNCTIONS

All installations shall comply with the guidance contained within the latest edition of BS7671 (section 711).

Each installation shall be visually inspected and functionally tested immediately prior to (and during any extended) use, by a suitably qualified and trained electrician. A suitable test/inspection certificate being completed in each instance.

Work on Battery Systems

Battery systems may include; UPS systems, generator starter batteries, substation tripping batteries, emergency lighting batteries etc. – generally ampere/hour rating of such equipment will exceed 100A/Hrs.

Work on these systems constitutes “live” working and precautions as detailed within LV safety rules must be implemented, which may include;

- Risk assessment
- Appropriate PPE e.g. Full face visor, rubber apron, acid resistant gauntlets.
- Use of insulated tools.
- Availability of eye wash bottles and associated sterile water.
- Battery installation to be well ventilated prior to work commencing.
- No naked flames or sources of ignition.
- Safety man required for cell changing.

Batteries shall be maintained at 6 monthly intervals to comprehensively assess the battery. It is essential that this maintenance includes a short period when load is applied to the battery (on load test) to confirm satisfactory battery conditions.

LIGHTNING PROTECTION

All buildings including chimneys and other prominent structures shall be assessed for and provided where necessary with suitable lightning protection systems, for the protection of life, property and business continuity, in conjunction with insurer’s recommendations.

Regular testing and inspection shall be undertaken to ensure the correct functioning of such systems on an annual basis.

FIBRE NETWORK SYSTEMS

All systems shall comply with the standards and practices as stated in BS6701, EN50174/1 and EN50174/2. Any work upon fibre optic systems shall only be undertaken by suitably trained and competent personnel.

POWER FACTOR CORRECTION

The general principle of provision of PFC at each substation main LV switchboard shall be followed, to achieve a target power factor of 0.98 Lag. Annual inspection/Maintenance to confirm correct operation shall be undertaken.

HARMONICS

Harmonic surveys shall be undertaken on all new or extensively refurbished buildings within the first 12 months of occupation, to determine if excessive neutral/earth currents are being generated by the high harmonic content of the connected loads.

RESIDUAL CURRENT DEVICES (INCLUDING RCBO'S)

Residual Current Devices shall be subject to regular functional tests via the integral test device incorporated within the unit.

Additional testing by suitable instrument shall be undertaken in conjunction with regular periodic inspection and testing regimes for installations.

The tests shall be undertaken by Competent Persons to the recommended intervals, generally as detailed within the latest edition of BS7671 and manufacturers guidelines. Tests shall be appropriately recorded.

PORTABLE ELECTRICAL EQUIPMENT

USER RESPONSIBILITIES

The primary responsibility for day to day safety of portable equipment when in service, lies with the user(s).

Any person using portable electrical equipment shall, before using it, check that the equipment, including the flexible cable and plug top is free from mechanical damage and that the in-date test label is attached. Defective equipment should not be used; it shall be removed from service until suitable repairs are undertaken or appropriately disposed of.

USER VISUAL CHECKS

Visual signs that the equipment is not in a sound condition may include:

- There is damage (apart from light scuffing) to the cable sheath.
- The plug is damaged, for example the casing is cracking or the pins are bent.
- There are inadequate joints, including taped joints in the cable.
- The outer sheath of the cable is not effectively secured where it enters the plug or the equipment. Obvious evidence would be if the coloured insulation of the internal cable cores were showing.
- The equipment has been subject to conditions for which it is not suitable, e.g. it is wet or excessively contaminated.
- There is damage to the external casing of the equipment or there are some loose parts or screws.
- There is evidence of overheating (burn marks or discoloration). These checks also apply to extension leads and associated plugs and sockets.

PORTABLE APPLIANCE TESTING (PAT)

Kernock Park Plants Ltd policy is to conduct and record PAT testing in accordance with insurance requirements and industry best practice guidelines.

PAT testing should be carried out by competent persons holding relevant certification and recorded.

PAT tested devices should be labelled as appropriate and removed from service where failures occur.

230V HAND HELD EQUIPMENT AND EXTENSION LEADS

All 230v supply operated hand held tools shall be protected by a 30mA RCD when in use. Use of plug-in RCD adapters or preferably RCD plugs attached to the tool shall be used. Alternatively, the tool may be supplied from an RCD protected circuit.

230v extension leads shall only be used to give supply on a temporary basis for a specific need. They shall not be connected in series (daisy chained), or remain in service over extended periods.

CONTRACTORS AND DIRECT LABOUR

CONTRACTORS

Contractors should not be appointed unless they have met a pre-qualifying level of health and safety competence in the first instance, either through CHAS (or equivalent schemes), or for smaller companies directly via the Site Health and Safety Advisor.

Only approved contractors and sub-contractors with a suitable level of competence are to be appointed. All contractors must ensure that their employees who work on Kernock Park Plants Ltd properties possess the appropriate level of technical knowledge and experience to enable them to discharge their duties appropriately.

The ability of a contractor to safely undertake the required work shall be the prime consideration when appointment is considered and should include the following as a minimum:

- Company safety policy.
- Insurance cover.
- Company accident record.
- Qualifications and training of employees.
- Adequate physical resources (tools, safety equipment, etc.).
- Quality assurance checks during the progress of works on site.
- Technical references from previous clients.

The Officer/Manager who approved the issue of the contract has a clear duty to ensure the capability and competence of the company and its employees, confirmation shall be given to the Authorised Person that the checks have been made to determine the satisfactory technical and safety competence of the company, by taking into consideration the above.

Contractors are to be supplied with sufficient information about Kernock Park Plants Ltd systems (e.g. wiring diagrams, safety systems) to enable them to plan and execute their work in a safe manner.

Contractors will liaise with the Kernock Park Plants Ltd HV or LV Authorised Person, who will agree isolation procedures for any and all work on the Kernock Park Plants Ltd electrical systems other than those restricted to final circuits.

Contractors employed by Kernock Park Plants Ltd for work on its LV system will comply with the requirements of the latest edition of BS 7671 (Wiring Regulations) and will complete all necessary minor works, installation or periodic test certificates in support of the work undertaken.

USE OF ELECTRICAL CONTRACTORS

All electrical contractors who undertake work upon Kernock Park Plants Ltd electrical network, shall be Members of an appropriate trade body e.g. ECA or NICEIC or equivalent.

The contractor's policies for safe working shall be assessed for compliance with Kernock Park Plants Ltd standards for isolation (safety locks/caution notices etc.) and proving dead at the point of work.

DIRECT LABOUR

New electrical personnel joining the Direct Labour workforce and those that are contracted in to support Direct Labour activities (i.e. contracted in labour), will be subject to an induction process for electrical safety prior to any work being undertaken.

The induction shall include, as a minimum, an understanding of:

- Kernock Park Plants Ltd electrical policy (uncontrolled copy to be issued).
- The range of work activities expected to be carried out.
- Job description.
- Work clothing requirements.
- Requirements for PPE.
- Work procedures.
- Tool box talks (including specific safety equipment).
- General health and safety induction.
- Site emergency procedures.
- Instruction on competencies and standards.

The induction will also include a technical and competency assessment. The extent of the assessment will depend upon the activities being undertaken. Records of assessment will be held in the employee's personnel file.

Before any new electrical worker is permitted to work alone, they shall be accompanied by an experienced electrical worker who will assess their competency over a number of jobs to determine whether they are capable and competent to carry out work. The number of jobs will be determined by the electrical Team Leader and will cover the various types of activities the worker is expected to complete. A written assessment will be completed and maintained in the employee's file.

INFORMATION AND INSTRUCTION

Arrangements shall be made by Kernock Park Plants Ltd to ensure:

- That all employees affected by particular work activities are adequately informed as to the systems, plant and apparatus involved and instructed in all necessary safety procedures.
- So far as is reasonably practicable, all other persons who are not employees but may be affected by the work activities shall also receive adequate information and/or instruction.
- Appropriate advice and guidance to building users in respect of the disruption of electrical services, dangers from electric shock, entanglement and any other dangers from electricity that building users may not normally be familiar with, when carrying out their normal duties.

SAFETY EQUIPMENT AND PROTECTIVE CLOTHING

When any work under the safety rules or related documents and procedures, takes place, appropriate safety equipment and clothing of an approved type shall be issued and used in accordance with management instructions. It should be readily available to those who need it, training provided in its use and to be worn or used whenever necessary to avoid danger or injury.

Protective equipment is to be inspected by the user for visible defects immediately prior to and after use, any suspect item is not to be used but appropriately disposed of to prevent further use.

Each item of safety or test equipment, unless otherwise specified shall be inspected by an Authorised Person on an annual basis for defects or wear and tear, with remedial action taken as necessary. Inspections shall be appropriately recorded.

At all times, employees are expected to wear sensible work related clothing and footwear, having regard to the work being carried out.

All necessary test equipment shall be made available when required. It shall be inspected by the user for visible defects on each occasion, immediately prior to and after use.

Test equipment is to be maintained in accordance with manufacturer's recommendations and where appropriate re-calibrated at specified intervals.

Only carbon dioxide or dry powder extinguishers may be used near live electrical equipment and a safety distance of 300mm should be maintained. After discharge of portable extinguishers in an enclosed space, personnel must withdraw from that space.

After any explosion or fire, or after release of extinguishant in an enclosed space, the space must be thoroughly ventilated before entry of personnel, unless suitable breathing apparatus is worn.

Suitable electrical safety matting (generally to BS921) shall be provided to the operating area of all main switch panels or work areas (i.e. electrical test benches).

LEGAL REQUIREMENTS

GENERAL

The two key pieces of legislation relating to electrical safety are: -

- The Health and Safety at Work etc Act 1974
- The Electricity at Work Regulations 1989

The Electricity at Work Regulations 1989 applies wherever the Health and Safety at Work Act 1974 applies and wherever electricity may be encountered.

There is also a requirement under the Management of Health and Safety at Work Regulations to carry out adequate and sufficient risk assessments to identify any risk from danger. The risks for staff working on electrical installations and equipment can be substantially reduced through the safe working practices set out in this policy.

HEALTH AND SAFETY AT WORK ETC ACT 1974

The HSAWA is very general in its approach and requires all those concerned with an undertaking to do all that is reasonable to ensure the health and safety of all who may be affected by work undertaken by a business. It imposes duties on employers and employees: -

The employer has a duty to provide:

- A safe system of work.
- All necessary tools and equipment.
- Training and adequate supervision.
- A safety policy statement.
- Ensure the health, safety and welfare of all those affected by their business.

The employees' duties are to:

- Work in accordance with company policy.
- Use equipment provided.
- Be responsible for their acts and omissions.
- Co-operate with employer to achieve safety.

Electricity at Work Regulations 1989

The regulations are primarily concerned with the prevention of danger from electric shock, electric burns, electrical explosion or arcing or from fire or explosion initiated by electrical energy. Indeed, if any person is injured due to an electrical cause (shock, fire, burns, radiation) then those involved both directly and managerially must show that they exercised all due diligence and took all reasonable precautions (defence regulation No 29), to prevent prosecution for breach of the regulations. The regulations do not distinguish between systems of different voltages; they apply equally to all voltages, including batteries and are constrained only by what may be appropriate to prevent danger.

The EAW Regulations are also applicable to the complete life of an electrical system i.e.: - design, construction, operation, maintenance, modification, records, dismantling and disposal.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

Kernock Park Plants Ltd shall comply with the requirements of the Waste electrical and Electronic Equipment Regulations including the use, storage, repair or disposal of electrical equipment.

REPORTING OF ACCIDENTS AND DANGEROUS OCCURRENCES

Staff and contractors employed by Kernock Park Plants Ltd must comply with the Kernock Park Plants Ltd policy on the reporting of accidents and dangerous occurrences.

The Accident Reporting Procedure meets Kernock Park Plants Ltd's legal obligations to report all accidents, injuries, dangerous occurrences and reportable diseases. Such events may involve Kernock Park Plants Ltd employees, contractors, visitors and other members of the public.

The Authorising Engineer is to investigate each dangerous occurrence related to Electrical Systems and issue a report to the Designated Person. The report is to be sufficiently detailed to enable the sequence of events leading to the occurrence to be determined.

To alleviate potential problems or criticism which may arise at any enquiry into a dangerous occurrence or incident, management should consider and question the conflict of interests and impartiality of any investigation carried out by those directly involved.

RECORDS

GENERAL

Adequate records shall be maintained for the following: -

Staff training and authorisation.

All records associated with portable appliances – recording formal visual inspections and tests as applicable.

Kernock Park Plants Ltd electrical distribution network including, cable routes, conductor sizes, switchgear and fuse ratings, test results, protection settings and control, isolation, final outlet positions.

RECORDS OF TRAINING AND QUALIFICATIONS

The office shall maintain individual training and qualification records, which shall include copies of all certificates gained by the individual, relevant to their job role.

Management shall provide all staff with the relevant training to maintain or update their knowledge of regulatory or working practices, particularly where changes occur. There is a corresponding duty upon individuals to take full advantage of this training to ensure continued competence within their role.

This is in support of Regulation 16 of the Electricity at Work Regulations 1989.

CERTIFICATION

All records and supporting certification for any work upon electrical installations at Kernock Park Plants Ltd shall be forwarded to the office for inclusion within the relevant building log book.

This shall include the following;

- Commissioning reports.
- Maintenance reports.
- Periodic inspection and test reports.
- Minor works certificates.
- New installation certificates.
- Portable appliance test records (Estates related items only).

MONITORING

REVIEW

The effectiveness of this Electrical Safety Policy shall be monitored by Departmental Managers. Any suggestion for modification to its content shall be made to the Site Manager who shall review this policy every 3 years from the date of ratification.

REFERENCE DOCUMENTATION

The following is a list of reference documents which give valuable guidance on various aspects of electrical safety.

Staff should familiarise themselves with the content of these reference documents as appropriate to their respective duties or appointments.

- Health and Safety at Work etc Act 1974
- The Electricity at Work Regulations 1989 (EAW Regulations)
- The Electricity Safety, Quality and Continuity Regulations 2006 (as amended)
- IEE - Code for in service inspection & testing of electrical equipment
- HTM 06-02 LV safety code HTM
- 06-03 HV safety code
- GS38 Electrical test equipment for use by electricians
- HS(G) 85 Electricity at Work – safe working practices
- HS(R) 25 memorandum of guidance on the electricity at work regulations
- HS(G) 141 Electrical safety on construction sites
- HS(G) 107 Maintaining potable and transportable electrical equipment
- GS50 Electrical safety at places of entertainment INDG247 Electrical safety for entertainers
- HSG47 Avoiding danger from underground services
- HSG230 Keeping electrical switchgear safe
- BS 6626: 1985 Code of Practice for maintenance of electrical switchgear and control gear for voltages above 1 kV and up to and including 36 kV
- BS 6423: 1983 Code of Practice for maintenance of electrical switchgear and control gear for voltages up to and including 1 kV
- INDG372 electrical switchgear and safety
- INDG401 Working at height regulations 2005 (as amended)
- Waste electrical and electronic equipment regulations (WEEE)
- Provision and Use of Work Equipment Regulations 1998 (PUWER)

PALLET SAFETY

INTRODUCTION

Pallets are heavy, so when accidents occur they tend to be serious. Falling pallets have caused a number of fatal accidents but the risks posed by falling pallets are often not fully appreciated.

Most accidents could be prevented by following safe working practices. Accidents directly attributable to pallets are usually caused by:

- poor design, construction or repair;
- using inferior materials;
- using a pallet which is unsuitable for a particular load, handling or storage method, eg pallets taken at random from a 'mixed bag' of used pallets for which the original specification is not known;
- unsafe stacking resulting in falling stacks or pallets;
- handling problems caused by mixing smaller Europallets (800 mm x 1200 mm) with larger UK pallets (1200 mm x 1000 mm) in racking systems. The smaller pallet may fall from the rack beams or be displaced by the larger pallet;
- continuing to use a damaged pallet;
- bad handling techniques;
- pallets being used in an unsuitable environment.

AIM OF THE POLICY

This policy sets out the basic arrangements that all Managers/Supervisors should make to ensure pallets are used and transported safely.

For more information see HSE Guidance Note PM15 on Pallet Safety. <http://www.hse.gov.uk/pubns/pm15.pdf>

SCOPE OF THE POLICY

The use of work equipment such as pallets is covered by the Provision and Use of Work Equipment Regulations 1998 (PUWER). This includes a requirement for work equipment to be 'constructed or adapted as to be suitable for the purpose for which it is used or provided', as well as meeting maintenance and inspection requirements.

A pallet is defined in BS ISO 445 as follows: 'a horizontal platform of minimum height compatible with handling by pallet trucks, and/or forklift trucks and other appropriate handling equipment, used as a base for assembling, storing, handling and transporting goods and loads in factories, warehouses etc'.² It may be constructed with, or fitted with, a superstructure.

DEFINITION OF COMPETENCY

There are requirements in this policy for competency. Competency is the combination of training, skills, experience and knowledge that a person has and their ability to apply them to perform a task safely.

DECIDING ON A SAFE STACKING HEIGHT

When deciding on a safe stacking height, the pallet user should take into account:

- information from the pallet manufacturer – this is particularly important for plastic pallets. All safe loading information should use the terminology defined in BS EN ISO 445;2
- the support characteristics of the pallets payload – get information from the payload supplier where necessary;
- local conditions/stacking pattern.

Stacks should be checked periodically, as stability depends on the type and shape of the load and on prevailing humidity and temperature conditions.

Stack height depends on the height, strength and stability of the unit loads, and the ability of the operator to see clearly. Only build taller stacks after detailed consultation with the manufacturer or other competent authority, and the maximum height should be no more than six times the narrowest dimension of the bottom pallet. This is provided that:

- you have carefully assessed the block stacking pattern and the compression characteristics of the payload;
- the pallet itself is designed to meet the stacking height required.

PALLET USE AND MAINTENANCE

Pallets should be examined for damage by the user on delivery. Damaged pallets should be marked accordingly, isolated and withdrawn for repair or disposal. Many pallets in the market belong to pallet pools and are marked with the trademark of the pallet owner or pallet organisation responsible for controlling their quality.

Such pallets needing repair should, in the first instance, be returned to the pallet owner or to the trademark owner's authorised representative. In the case where it is not possible to determine ownership or trademark responsibility, you can refer to BS EN ISO 18613 for general guidance.

All pallets should be inspected every time they are used to ensure they are in a safe condition and fit for their intended purpose.

Disposable pallets, i.e. pallets designed for one delivery only, should be clearly marked as such. Be extremely careful if you are thinking of reusing them.

Empty pallets should be handled carefully and not dragged or thrown down). They should not be handled by wedging the platform of a sack barrow between top and bottom deck boards.

Be careful when using strapping to secure loads to pallets, as you can cause damage if you use too much tension and/or incorrect strap positions.

If pallet trucks are used, make sure that the small finger wheels do not damage the base boards. Chamfered edges to the top of the base boards will assist entry of the pallet truck finger wheels. Use of pallets meeting base window requirements of BS ISO 67803 together with trucks meeting BS ISO 5099 will normally avoid such damage.

The forks of a handling device should extend into the pallet at least 75% of the dimension parallel to the forks. Only authorised and trained personnel should operate fork truck.

Forklift truck operators should receive instructions on the correct method of handling pallets. This should highlight that:

- the mast should be in the vertical position when entering and leaving a pallet;
- the forks should be spaced so that maximum support is given to the pallet when lifted;
- the pallet should be housed against the heel of the forks;
- the forks should enter the pallet squarely;
- pallets should not be pulled or pushed along the ground or stacks be squared up by pushing one corner;
- loads should be carefully and gently placed on the stack below;
- pallets must never be used with a forklift truck as an access platform

PALLET INSPECTION

The following checklist gives a guide for the basis of a periodic pallet inspection programme. This list should be extended to take account of any special local and environmental conditions. It is vital that everyone concerned understands that the proper repair of a pallet restores it to its original specification. This will require the use of compatible materials of suitable quality, correct dimensions and appropriate fastening techniques, eg timber pallet nails should be supplied in accordance with BS ISO 12777-1.

The following lists for timber, plastic, pressed wood, corrugated cardboard and metal pallets provide examples of things to consider. However, you should seek further guidance from the pallet manufacturers.

TIMBER PALLETS

Here are some general points to consider, but for detailed information please refer to BS EN ISO 18613, or quality standards

Check that:

- in four-way perimeter base pallets every base board is fastened at each end with two or more nails that appear to be of correct length and diameter with adequate edge distance;
- the stringer boards are made of sound timber and there aren't too many knots;
- the stringer boards are of equal thickness, as specified in the purchaser's specifications;
- the deck boards, stringer boards and base boards meet the required thickness and width of the purchaser's specifications;
- the deck boards are made of sound timber and there aren't too many knots
- the base boards are not split at their fastened end;
- there are no damaged bearers or blocks;
- there are no projecting nails or nails pulled through deck boards
- there are no edge splits in any board members;
- there are no loose joints permitting racking out of square (diamonding);
- the pallet is clean and free from contamination. published by the pallet owner or organisation responsible.

PLASTIC PALLETS

When used in cold temperatures and handled roughly, plastic pallets are susceptible to brittle fracture. Checks are therefore required to make sure they are free from cracks or other mechanical damage.

Check that:

- the deck is free from damage due to excessive heat/cold and chemical spillage;
- the deck or base is not defective;
- the deck supports or bearers are not worn, cracked or permanently deformed;
- if the supports are hollow, they are free from trapped debris and damage;
- there is no degradation that has occurred due to ultraviolet light (sunlight) – if the pallets have become faded, get advice from the manufacturers about continuing to use them;
- the pallet does not show signs of white, dusty surface deposits. If it does, you should reject it;
- the pallet has not permanently distorted during use.

PRESSED WOOD PALLETS

Check that:

- the pallet is free from cracking, flaking and/or wear;
- there are no signs of water absorption, indicated by local swelling or blistering;
- the pallet has no damage from excessive heat/cold or chemical spillage;
- if the base supports are hollow, they are free from debris and damage and any drainage holes (if provided) are clear.

Pressed wood or chipboard pallets for external use should meet the moisture resistance requirements detailed in BS EN ISO 8611-2.

CORRUGATED CARDBOARD PALLETS

Check that:

- the pallet has no indentations;
- the deck has no damage from excessive heat/cold and chemical spillage;
- the pallet has no moisture damage;
- the deck or base is not defective;
- the base supports/bearers are not worn, torn, cracked or permanently deformed;
- if the supports are hollow, they are free from debris and damage;
- the pallet has not lost its rigidity;
- there are no loose joints visible.

METAL PALLETS

Check that:

- the pallet is free from corrosion and weld cracking;
- the deck has no damage due to chemical spillage;
- the deck or base is not worn;
- the base supports/bearers are not worn, cracked or permanently deformed;
- if the supports are hollow, they are free from debris and damage;
- the paint/protective finish is in a satisfactory condition;
- the pallet is not distorted

PALLET TRUCK OPERATING PROCEDURES

PRE-OPERATIONAL SAFETY CHECKS

- Read Operators Manual and Risk assessment.
 - Never use or attempt to use a pallet truck without first receiving the necessary training.
 - When using pallet trucks, the user must ensure they are wearing appropriate safety footwear.
 - If you are unsure at any point when using this procedure, seek advice from your manager.
- Inspect the pallet jack in general to ensure it is in good working condition.
- Familiarise yourself with the controls before using the pallet jack and ensure they are undamaged and responsive
- Observe the wheels to ensure they are not worn out and no cracks are present. This will prevent poor handling and reduces the risk of the load becoming unstable mid journey.

- Faulty equipment must NOT be used. IMMEDIATELY report suspect equipment.

OPERATIONAL SAFETY CHECKS

- Ensure the equipment is used in accordance with the manufacturer's instructions to ensure your safety and the safety of the people around you.
- Prior to use, visually inspect the Pallet Truck for any damage.
 - To check the hydraulic pump is in working order, press the lever located on the handle downwards and pull the handle/towbar towards you. The forks of the truck should rise
 - Drop the forks of the truck back to the ground floor by pulling the lever, located on the handle, upwards as far as it goes.
 - Press the lever down once to the neutral position.
- Ensure all other personnel or bystanders are clear of the immediate work area.
- Check the route you are taking is clear and free from hazards and uneven surface before you begin to move your load.
- If you are carrying a large load that obstructs your view, ask a co-worker to guide you. Use proper lifting techniques when loading/unloading and operating the pallet jack.
- Keep the load level at all times and as low as possible to traverse ground.
- Make sure the load is evenly distributed.
- Never exceed the advised capacity.
- Never transport or load empty pallets in stacks of more than seven high.
- Check the load is securely stacked on the pallet and the pallet is not damaged.
- Move the load slowly to ensure safety in case your surroundings change.
 - When travelling with the Pallet Truck, always pull with one hand firmly gripping the handle/towbar at a safe speed and face the direction you are travelling, NEVER RIDE ON PALLET TRUCKS.
- Utilise two people for heavy loads - one person should push, while the other pulls.
- You should always push the load (never pull the load).
- When going down on an incline go in reverse.
 - If a load is to be pulled on a slope, always ensure the task ahead is assessed for potential hazards, i.e. would it be safer to handle the load, is the gradient of the slope too steep, is the load secure, will I need assistance and is the area clear of obstruction/people.
- Make sure the pallet jack is lowered fully before moving the jack out.
- Keep yours and others feet clear when lowering pallet or when reversing the pallet jack.
- Be wary of pinch points to avoid injuries to your hands

MANUAL PALLET JACK OPERATION

- Lower the pallet jack fully, using the release lever located on the handle.
- Roll the pallet jack through the two slots on the front of the back of the pallet. Moderate force will be needed, since the jack has to go over parts of the pallet.
- Raise the pallet jack by pumping the handle, until the pallet is clear of the floor underneath. The release needs to be off; the lever should stick out horizontal from the handle.
 - Ensure there is sufficient space between yourself and the handle/towbar – if difficulty is found when pumping, the load maybe too heavy.
- Once the pallet is clear of the floor, plan your route. Ensure there is enough clearance, be aware of overhead obstructions and width restrictions.
- Pull lever into the neutral position.
- Pull handle/towbar downwards/towards you, turn to face the direction you are going whilst leaving one hand firmly gripped on the handle.
- Move the pallet to the new location, pull the pallet using the handle of the pallet jack.
- Lower the pallet jack, using the release lever.
- Remove the pallet jack from beneath the pallet.
- Return pallet jack to where it is stored, so others can easily use it when they need it.

ELECTRIC PALLET JACK OPERATION

- ALWAYS travel in a rearwards direction, whether loaded or empty.
- Lower forks and position under load, and lift forks to raise load from ground.
- Move slowly; travelling at a steady speed to suit load size and other personnel working in your area.
- Sound the horn when approaching walkways, blind corners and keep an eye out for moving personnel.
- To brake, lower the tiller to horizontal, releasing the selector/speed control or rotating in the opposite direction of travel.
- To stop, lower the forks and reverse out slowly from the load.
- Release the operating arm, lower the forks fully to the floor and turn off. Remember, when you move the tiller in the vertical (or uppermost) position, the parking brake will be automatically activated.
- Return pallet jack to where it is stored, so others can easily use it when they need it.