GRAND BAHAMA ENGINEERING PROCUREMENT CONSTRUCTION COMPANY

HEALTH AND SAFETY PROGRAM

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Grand Bahama Engineering Procurement Construction Company Safety Statement

It is the Policy of Grand Bahama Engineering Procurement Construction Company. (GBEPC) Management to provide a safe work place for all its employees, a safe project site to the general public and other contractor firms.

GBEPC will ensure that all provisions for Health and Safety will be compliant with the Government's requirements, Clients Policies and Industry best practices.

GBEPC will ensure the provisions of appropriate resources to meet all health and safety requirements.

At all times GBEPC will ensure the provision and maintenance of all premises, plant and equipment to a safe level in order to minimize any damage, injuries or impact to people, property, equipment or the environment.

To ensure effective Health and Safety Standards, Management will encourage discussion and consultation between coordinators and employees and on safety, health and environment matters. In addition GBEPC, will provide all necessary information, instruction, training and supervision, to ensure the health and safety of employees at work.

GBEPC Management will provide to its employees as appropriate and ensure the correct use of, approved safety equipment and protective clothing and to ensure no charge will be levied on any employee in respect of anything carried out or provided to ensure Safety is maintained.

All GBEPC employees will be responsible for Safety equipment and must not willingly damage or misuse the equipment provided.

It shall be the duty of every GBEPC employee to initiate and maintain a safe work place and a safe project site so that we can continue to maintain our corporate image of excellence in industrial safety with regard to our own Grand Bahama Engineering Procurement Construction Company. employees, the communities that surround our project sites and the National and International Clients we must interface with.

Only those operations/activities that create no harm to personnel, no losses to company resources and no ill-effect to work environment can be considered efficient and profitable.

Where there is an accident or incident then GBEPC Management will ensure immediate and accurate reporting and investigation of occupational ill health issues, accidents and incidents as part of the loss and prevention program.

To ensure success of implementation of this policy, all employees are compelled to exemplify expressive leadership and are empowered to promote maximum safety awareness and involvement in planning, decision making, and hazard recognition and elimination process.

In addition the strong safety posture GBEPC has taken the total acceptance of zero accident and incident concept and that every "accident is preventable" make GBEPC a benchmark of excellence with our insurance carrier with the effect through lower insurance rates makes us competitive in the open market place.

Derick King
President
Grand Bahama Engineering Procurement Construction Company.

Assignment of Responsibility

CEO / President Responsibilities

- Ensure Health & Safety is foremost in the Company's Operations.
- Promote an interest and enthusiasm for Health and Safety in the Bahamas and other Countries where work is to be undertaken.
- Set, promote and implement the Health, Safety & Welfare Culture within Grand Bahama Engineering Procurement Construction Company.
- Ensure that arrangements and resources for the operation of the Company, with regards to Health and Safety are in place and reviewed.
- Attend or support appropriate Safety meetings as necessary.
- Ensure trained and competent staff is available to maintain an effective H&S program and ensure continuous development.

Senior Project Coordinators / Project Coordinators

- Ensure Health & Safety is foremost in all aspects of the individual Projects
- Ensure that all workers have received the appropriate level of health and safety training and are trained and competent to undertake the work allocated to them.
- During planning and industrial activities sufficient allowance is made for ensuring effective safe systems of work at all times to protect workers, sub-contractors, visitors and public from any foreseeable hazards and associated risks.
- Ensure the Health and Safety requirements are communicated to all other contractors and implemented effectively.
- Attend Meetings and make Health and Safety the first topic.
- Ensure work is carried out as planned and within the guidelines of GBEPC Health and Safety Plans and Policies.
- Ensure that any accidents and dangerous occurrences are reported, investigated and the suitable corrective measures are taken to prevent recurrences.

Superintendent / Foreman

- Regularly emphasizing that accidents prevention is foremost and a integral part of employment.
- Participating in safety and health activities including routinely attending safety meetings, reviews of facility, and correcting employee behavior that can result in accidents and injuries.
- Ensure that all workers and associated work under their control is carried out without excessive risk or in an uncontrolled manner and within Grand Bahama Engineering Procurement Construction Company Guidelines.
- Never short-cutting safety to save time or allowing workers to do so.
- Enforcing safety rules consistently and following company's discipline and enforcement procedures.
- Conducting regular job-site safety inspections and correcting noted safety violations.
- Be familiar with, safe working practices, method statements, task sheets applicable to the work, and ensure they are enforced.
- Suitably brief men under their control so that work is carried out without excessive risk and in line with GBEPC requirements.
- Ensure as far as is reasonably practicable, that all operatives are trained and competent for work in which they are engaged.

- Ensure other workers, including the general public, are protected from the work under our control.
- Check plant & equipment, including power and hand tools are maintained in good condition and ensure defective items are taken out of use and repaired where necessary.
- Ensure that all operatives have access to and use, suitable and appropriate personal protective equipment.
- Ensure that the site is tidy, organized and has suitable safe work areas.
- Ensure all welfare facilities are maintained in a clean and safe condition with adequate supplies.

Person Responsible for Health and Safety

- Provide and advise on recommendations for the continuing development GBEPC Health and Safety Management as requested by the Directors, current legislation changes, business needs or Project Specific requirements.
- Introducing the safety program to new employees by means of a Safety Orientation, this shall also include Site Specific Details.
- Following up on all recommendations, suggestions, etc., made at the safety meetings or during normal working hours.
- Assisting personnel in the ensuring they understand and are following all GBEPC procedures.
- Conducting safety inspections on a regular basis and report findings and ensuring that suitable corrective actions are undertaken to remove hazards and risks where practicable or ensure suitable controls are in place to minimize risk accordingly.
- Addressing all hazards or potential hazards as needed.
- Ensure that accident and incident investigation is properly carried out to identify both immediate and underlying causes and ensuring that corrective actions are in place to prevent any further re-occurrence.
- Maintaining an adequate supply of safety equipment including first aid items and that they are readily available for all employees.
- Arrange for training for all GBEPC employees where required for specific skills pertaining to Health and Safety.

Employees

- It is the duty of each employee to know the safety rules, and ensure that they are at all times in compliance with these rules.
- Disregard of safety and health rules shall be grounds for disciplinary action, up to and including termination.

Employee responsibilities include the following:

- Reading, understanding and following safety and health rules and procedures from GBEPC and Project Specific Rules.
- Avoid intentionally interfering with, or misusing anything provided in the interests of health & safety.
- Wearing correctly Personal Protective Equipment (PPE) at all times when working in areas where there is a possible danger of injury and also maintaining PPE when required.
- Wearing suitable work clothes as determined by the superintendent / foreman and Project Specific Rules.
- Performing all tasks safely as directed by their Supervisors and Coordinators.

- Reporting ALL injuries no matter how slight to their superintendent / foreman immediately and seeking treatment promptly.

- Knowing the location of first aid, firefighting equipment and all other safety devices.

- Attending any and all required safety and health meetings.

- Not performing potentially hazardous tasks or using any hazardous material until properly trained and followed all safety procedures when performing those tasks.

- Stopping and asking questions if ever in doubt about the safety of any operation.

Communications

1. Purpose
Detailing the Communications of the Company for Health and Safety

2. Scope:
This Procedure is to define each Meeting and Communication Channels to be undertaken for addressing Health and Safety and maintaining GBEPC Standards.

3. Responsibilities:

3.1. President
- To ensure that this procedure is followed

3.2. H&S Coordinator
- To ensure that this procedure is reviewed for Content
- To Chair a Health and Safety Meeting Weekly / Monthly
- Ensure that issues raised are followed and suitable actions taken.
- To Maintain a record of Meetings and associated actions

3.3. Project Coordinators / Superintendants / Foreman
- To ensure that Toolbox talks are undertaken
- Ensure that a record of names of attendance are collected

3.4. Employees
- To attend all Safety Tool Box Talks
- To give input where required

4. Method
Grand Bahama Engineering Procurement Construction Company. Project Management will ensure that Health and Safety is communicated at all levels.
For GBEPC to achieve this, a series of Meetings will be held on the following timescales

4.1. Orientation
- All GBEPC Staff will have attended a GBEPC Safety Orientation

4.2. Monthly
- Management Monthly Meeting Specific for Health and Safety to include as a minimum
  - Senior Coordinator or President
  - Project Coordinator
  - Health and Safety Coordinator
  - Foreman / Superintendant
  - 2 Employees

4.3. Weekly
- Include a Section of Health and Safety in Weekly Progress Meetings for GBEPC

- All EAHIC Staff per project (less supervision on site)

4.4. At Least Weekly and after any Accident or Incident

- Tool Box Talks, Method Statement Briefings, Risk Assessments, Job Specific Requirements
  - All persons involved in on-going Activities. Can be office related topics
  - All Employees if required

4.5. Monthly Meetings

Monthly meetings will be chaired by the Health and Safety Coordinator to discuss all aspects for the Health and Safety / Loss Prevention Program. Items will include as a minimum: -

- Accidents and Incidents, including Corrective Actions and allocation of responsibilities
- Review of Site Inspection Findings (Trends)
- Review of the Current Health and Safety Documentation
- Purchasing of Health & Safety Equipment
- Review of Training Requirements
- Review of Client Reports or External Bodies
- Employees Recommendations or Issues
- New or Changed Legislation
- AOB

Minutes will be compiled and published on the Health and Safety Notice Boards in the Site Offices and also on Site. All Meeting Minutes will be retained at site for reference.

4.6. Weekly Meetings

A section of the Weekly Meeting will include a Safety Update. This will include: -

- Accidents and Incidents, including Corrective Actions and allocation of responsibilities
- Review of Weekly Site Safety Inspections
- Brief Summary to all Staff on Current Health and Safety Issues
- Opportunity for all Employees to input on Safety Concerns or Issues

Items will be recorded on the Site Weekly Meeting Minutes and will be issued to all attendees.
Weekly Meeting will be retained in the Site Offices

4.7. Toolbox Talks and Safety Alerts

Toolbox talks will be given by Site Superintendants, Foreman or Charge Hands, Health and Safety Coordinator or the Project Coordinator which will be: -

- Tool Box talks will be given in a set form which will bear relevance to current topics and work activities.
- On a regular basis Emergency Evacuation and Fire will be briefed.
- Tool Box talks will be held specific to any accident or incident and also the findings.

All Employees must sign the attendance Form to state that they have attended and that they understand the requirements of the brief. This will include all GBEPC Subcontractors. If Subcontractors undertake their own Tool Box Talks then a copy of the sign off sheet must be submitted to the Site Superintendant in charge for GBEPC.
All tool box talk records will be held in the Site Offices for future reference.

4.8. Safety Signs and Alerts

Posters, Safety Alerts and Site Signage will be produced and displayed at site. The Health and Safety Coordinator will ensure during inspection that Site Signage, Safety Communications and Promotion of Safety Culture is clearly displayed and relevant.

4.9. Format of Meetings

All meetings that involve Safety must allow the opportunity for feedback or questions and each subject allowed the attention it requires.
When holding meetings it is important to ensure that each meeting is not drawn out and does not include any other topics not relating to Health and Safety.
Each meeting must be conducted in a safe environment which allows all persons attending to be able to hear the person giving the meeting or brief.

4.10. Safety Improvements or Concerns

All employees have the opportunity to put forward any concerns or ideas for improvements forward for review. All employees raising the issue must be given direct feedback.
The issues may be raised verbally, in writing and without fear of repercussion.

5. Review

This document and forms shall be reviewed bi-annually unless changes occur during this period.

Health & Safety Inspections

1. Purpose

To ensure that there are detailed procedures and forms to ensure an active Health and Safety Monitoring Program.

2. Scope:

This Procedure provides guidance to the GBEPC as to weekly site Inspections and monthly inspections of Grand Bahama Engineering Procurement Construction Company activities.

3. Responsibilities:

The Health and Safety Coordinator will conduct a weekly inspection of Grand Bahama Engineering Procurement Construction Company Sites. Each Project Coordinator will conduct a Monthly Inspection of Works
The Health and Safety Coordinator will review all findings from the inspections and ensure that Corrective Actions are undertaken to address any non conformance.

4. Procedure:

GBEPC will undertake Health and Safety Inspections of their works, including sub contractors works.
Health and Safety Inspections form an important and integral part of hazard identification, loss prevention program and also ensuring that hazards are recorded and corrective actions.

In terms of Health and Safety inspections there are numerous that can be used. GBEPC will adopt various types of Inspections. The ones described in this procedure are a general inspection of the Worksite. Other inspections and checks such as daily vehicle checks, scaffold checks, harness and lanyard checks will be covered in their respective procedures.

The main inspections will be as follows: -

- A Weekly Inspection of the GBEPC Worksite by the Health and Safety Coordinator
- A Monthly Inspection of the Worksite by the Project Coordinator responsible and the Health and Safety Coordinator.

In addition to these inspections the client may undertake his own inspections.

Each of the above inspections will be documented and all sections must be completed. Items that are not applicable must still be recorded as such.

During the inspection, if an issue is found that is imminently dangerous then the inspector must stop the works and arrange with the superintendant charge hand to correct the issue. In such cases the issue will still be recorded.

Weekly Inspection

Each section of the weekly inspection will be allocated a score. This score will be measured of the performance of site. The reason that GBEPC will undertake a scoring system is to demonstrate continuous improvement of the site Health and Safety and to also highlight areas that require more attention. Low scores will be monitored for improvement. The results of the latest inspection will be raised at the Site Weekly Meeting.

Monthly Inspections

The monthly inspection will be undertaken by the Project Coordinator responsible for the works and the Health and Safety Coordinator.
The purpose of this inspection is to manage Heath and Safety Issues as part of the Hazard identification process, but to also demonstrate management commitment.
All aspects of the inspection will be recorded on the Weekly Inspection Form.

Corrective Actions

All corrective actions must be completed in a timely manner, depending on the Issue. Where possible and practicable GBEPC will ensure all actions are completed within 24hrs. Each section will be allocated a responsible person who must ensure the corrective actions are undertaken.

Review
All corrective actions will be subjected to a review to ensure that any issues have been corrected.

5. Employee / Supervisory / Management Involvement
Any of the above named persons can form part of the inspection and will be actively encouraged to participate.

6. Records
Details of all Inspections will be retained and filed for any future reference.

Accident Incident Reporting

1. Purpose
To ensure that there are detailed procedures to ensure that all accident/incident reporting and investigations are documented controlled and to ensure effective corrective actions are undertaken to prevent reoccurrence.

2. Scope:
This Procedure provides guidance to the GBEPC on the appropriate action to be taken to ensure that information concerning all incidents occurring are reported in order for records to be kept and allowing corrective measures to be instigated

3. Responsibilities:
The Project Coordinator in control of the Industrial works at site level will be responsible for ensuring procedures for accident and incident reporting are put in place and effectively communicated to appropriate personnel
The Health and Safety Coordinator will collate all accident/incident data. All accidents/incidents will be documented at site and records retained.

4. Definitions
Accident and incidents include all major and minor injuries, near misses / dangerous occurrences and Damage to Property or Equipment.

4.1. Near Miss:
Near misses are unplanned events which have the potential to cause harm but result in little or no damage to people or equipment.

4.2. Accident:
An accident is an unplanned event in a sequence of events that causes injury or damage to people or equipment.

4.3. Fatal Injury or Serious Incident:
A serious incident is one which will immediately bear on the reputation of the Company and/or potentially incur a significant liability (legal or commercial). Incidents which impact large numbers of the public, will attract press comment, or involve serious injury are obvious examples. A fatality or serious injury resulting in, or likely to result in, permanent disability

5. Procedure:

5.1. Reporting and Investigating Accidents/Incidents
The Project Coordinator and Health and Safety Coordinator or representative will conduct all accident investigations on the GBEPC Accident/Incident form and implement immediate corrective/preventative measures. The completed form will be sent to the Health and Safety Coordinator for Approval.

In addition where required reporting of all accidents / incidents shall be carried out in accordance with the client's site safety procedures manual.

All accidents / incidents of the following nature, which will occur at or in association with the project, will be thoroughly investigated.

- Occupational injuries, illnesses and first aid cases
- Vehicle or Equipment accidents
- Property damage
- All fires
- Injury to non-GBEPC persons visiting GBEPC sites or Offices.
- GBEPC employees injured at work.
- Near misses

6. Oral Report

Any accident / incident or any form of injuries including first aid, near-misses and fires must be reported as specified by the Client.

Oral reporting of any major accident / serious incident shall be made to the Health and Safety Coordinator and the MD or President as soon as possible after the occurrence. In the event of a Fatality the President or MD MUST be informed immediately and also 911 called.

7. **Injury Protocol**

When a person is injured on the project to the extent that first aid-treatment is needed, the supervisor / foreman concerned must ensure the following:

- That the injured / ill employee is taken to GBEPC first aid facility
- Adequate first aid has been rendered
- Upon completion of the first aid-treatment the injured / ill employee is returned to the work site
- All first aid injuries / illnesses are to be documented on the GBEPC Accident Incident Form
- When a person is injured to the extent that an ambulance or medical treatment is required, then 911 must be called

When an accident / incident has occurred then immediate action must be undertaken by the superintendant to prevent re-occurrence, correct any immediate hazards and or secure the are until a thorough investigation has taken place.

8. Initial Preliminary (Written) Report

The Superintendant / Project Coordinator must ensure that the accident/incident report form is completed in full with the Injured Party (if possible).

9. Investigation

There are three levels of Investigation to be undertaken and who is responsible for leading the Investigation: -

Category of Event	Level of Investigation	Investigation Responsibility
Major	Formal Investigation compulsory when a fatality occurs in line with Bahamas Government Legislation	GBEPC President, MD and Health and Safety Coordinator and Client (if required)
Medium	Formal investigation not generally required but may be considered desirable depending on the nature of the event. Local investigation required via Accident & Incident Report	GBEPC Health and Safety Coordinator / Project Coordinator and Client (if required)
Minor	Local investigation required via Accident & Incident Report / Investigation Form	Safety Representative / Project Coordinator

Investigation of any occurrence is a must to identify all possible contributing causes so that similar incidents are prevented in future. Investigation must be directed towards facts finding and not fault finding.

The objectives of an investigation are:

- To find causes(s) so that similar incidents can be prevented
- To determine the points of which the unplanned events took over from planned events
- To define permanent preventive measures to be taken to prevent recurrence.
- Investigation must begin as soon as possible after the notification had been accomplished.

9.1. Conducting the Investigation

The Superintendant or nominated person will discuss the accident with other employees who may have seen the accident / incident. Example of Details to be considered: -

- Date and Time of Incident
- Weather
- Lighting
- Has the employee had a Site Induction
- What was the employee doing prior to, and at the time of the accident
- Was the employee properly instructed as to the manner in which to perform his duties
- Did he do the work in accordance with the instruction?
- Did any other employee or contractor contribute to the accident
- Was equipment or machinery which the injured employee was using in good condition?
- Was it properly guarded?
- Was it suited for the purpose for which it was being use?
- Were proper housekeeping conditions maintained?
- Was the injured in good health when reporting for on the day of the accident

9.2 Witnesses

The Superintendant shall ensure that all personnel associated with the operation and other eyewitnesses to the accident be interviewed and written statement taken.
Each individual interview should be requested to sign a statement of his/her recorded sequence of event of that lead up to include the accident.
The following information should be obtained from individual interviewed:

- Name,
- employer,
- contractor,
- employee number,
- address and occupation or trade.
- Date, time and place of interview.
- Where the person being interviewed was at time of accident
- A complete narrative of what the witness knows of accident.
- What operational activity or events were taking place prior to and at the time of the accident.

9.2. Evidence

The Superintendant / Project Coordinator or Nominee shall ensure that the area of the accident is secured as soon as possible after the occurrence to prevent any alternation of the investigation.
The secured area shall be reopened only upon approval from the Health and Safety Coordinator, Senior GBEPC Management or the Client.
Photographs, videos recordings, drawings and diagrams can be obtained to aide the investigation.

10. National Insurance Regulations and Requirements

If a GBEPC employee needs to attend a hospital or doctor for further medical treatment, then the following must happen as per Bahamian Laws - http://www.nib-bahamas.com/wps/portal. All forms will be available at Head Office or in the Site Offices.

NIB Form B60 must be completed and accompany the Injured Person to the Doctor or Hospital. This must be authorized by the Project Coordinator, Superintendant or Person in Charge of the Works.
NIB Form B44 must be completed within 24hrs of the Accident by the Project Coordinator, Superintendant or Person in Charge of the Works and sent to the Executive Assistant at GBEPC Head Office or if applicable sent through to the Site

Office / Project Coordinator. Once this has been checked then it will be authorized by the Project Coordinator / Person In charge of Works and sent to NIB.

11. Post Accident / Injury Corrective Action

On conclusion of the investigation the Health and Safety Coordinator shall ensure that Corrective actions / permanent preventive measures recommended in the investigation report be disseminated to all responsible parties, site authorities, supervision and individuals for their appropriate management and action.

12. GBEPC Employee Return to Work

Only when a doctor has completed the NIB Med Form 1, then the employee may return. If the doctor allows the employee to return to work on "Light Duties", then the company may at discretion allow that employee back to work.

13. Near Miss and Property Damage and Reporting

All near misses shall be reported to Superintendant or Project Coordinator at the first opportunity. Details of the near miss will be recorded on the accident & incident form.

All near misses must be investigated and appropriate corrective actions / preventative measure shall be undertaken.

14. Road Traffic Collisions (RTC)

All RTC's involving company vehicles on the public highway must be immediately reported to the police and GBEPC Head Office.

15. Records

Details of all Accident & Incident Reports will be retained and filed for any future reference.

Personal Protective Equipment

1. Purpose

To ensure that the selection and issue of personal protective equipment (PPE) is appropriate, personnel are trained in its use and that adequate records are kept.

2. Scope

This procedure applies to all GBEPC in order to meet and maintain the required standards.

3. Roles & Responsibilities

The Superintendants and Charge Hands in control of the Industrial Works at site level will be responsible for ensuring this procedure is put in place and effectively communicated to appropriate personnel.

4. Procedure

PPE will be selected from the risk assessment process. The Health and Safety Coordinator in conjunction with Project coordinators will determine what PPE is required at Site Level, per task.

Any PPE that is selected for use at work must be compatible with other equipment, adjustable to fit the wearer and give maximum protection and comfort. All users will be trained in the correct use of PPE.

It is the responsibility of the user to ensure that PPE is worn correctly. The use of PPE will be monitored through inspections and any deficiencies or defects in respect of PPE, reported and corrective action taken.

All GBEPC staff must be given Instruction and training in the correct use and maintenance of PPE records kept, it is the responsibility of the Health and Safety Coordinator and the Superintendant

All GBEPC employees have a duty to wear the PPE correctly and not to misuse it or willingly damage it. Any employee caught misusing or damaging PPE may face disciplinary action.

The Superintendant on Site must ensure that the Store man responsible for issuing PPE ensures that Issue records are retained on site. Information should contain details of the PPE issued, the issue date and the individual's name.

All PPE provided to Grand Bahama Engineering Procurement Construction Company employees must be issued free of charge. There may be recourse to charge individuals who are found to be misusing PPE.

When sub contractors arrive on site they must have the necessary level of general PPE required for the tasks. GBEPC reserves the right to charge sub-contractors or other organizations for the provision of PPE, when they have failed to provide it for their employees.

PPE assessments must be reviewed by Superintendants, Health and Safety Coordinator or the Project Coordinators if no longer valid, following a change in the work or the employee.

The General Maintenance Requirements of PPE
All Personal Protective Equipment provided must be inspected and maintained by the user in an efficient state, in efficient working order and good repair, in accordance with any manufacturer's recommendations.
All users of PPE are responsible for cleaning and maintaining their PPE.

On all Grand Bahama Engineering Procurement Construction Company Sites, mandatory PPE will be as follows: -

- Head Protection – Safety Helmet
- Foot Protection – Sturdy Work Boots (preferably Steel Toe Caps)

5. Specific rules for PPE used in Fall Arrest/Protection specific to Harness and lanyards
As with all aspects off PPE, training, inspection, maintenance care is essential to PPE correct use.
All Safety Harnesses and Lanyards must have a traceable number for recording purposes. This shall be either the serial number on the item or a GBEPC unique number.
This will prevent any other harnesses and lanyards entering the Project with the same number, so there is no confusion.

The Storeman (Nominated Competent Person) will be responsible for the issue, monthly inspections and ensuring that records of Harness and Lanyards are maintained on site.

The scope of the inspections shall be as follows: -

5.1. Pre-use checks: –
By the User. Any defects MUST be reported immediately to the Superintendent or the Store man and MUST NOT be used.

5.2. Detailed inspections – (Monthly).
These should be carried out by the nominated competent person, to identify defects or damage that may affect safety.

5.3. Guidance to Defects and Damage
The following defects and damage have the potential to result in the degradation and/or weakening of the lanyard: -

- Cuts of 1mm or more at the edges of webbing lanyards (e.g. where the lanyard may have been choke-hitched around steelwork).
- Surface abrasion across the face of the webbing and at the webbing loops, particularly if localized.
- Abrasion at the edges, particularly if localized.
- Damage to stitching (e.g. cuts or abrasion).
- A knot in the lanyard, other than those intended by the manufacturer.
- Chemical attack which can result in local weakening and softening - often indicated by flaking of the surface. There may also be a change to the color of the fibers.
- Heat or friction damage indicated by fibers with a glazed appearance which may feel harder than surrounding fibers.
- UV-degradation which is difficult to identify, particularly visually, but there may be some loss of color (if dyed) and a powdery surface.
- Partially deployed energy absorber (e.g. short pull-out of tear webbing).
  Contamination (e.g. with dirt, grit, sand, etc.) which may result in internal or external abrasion.
- Damaged or deformed fittings (e.g. karabiners, screw link connectors, scaffold hooks).
- Damage to the sheath and core of a kern mantel rope (e.g. rucking of the core detected during tactile inspection).
- Internal damage to a cable-laid rope.

5.4. Withdrawing Lanyards from Use

Any defects or damage to the Lanyard or Harness MUST result in the immediate removal of the item from Site and disposed off. Good practice is to destroy the Harness or lanyard so that it is impossible to use. Records of scraped items must be entered on the Record Sheet.

6. Records

PPE Issue records will be retained at site. Monthly Harness and Lanyard checks will be retained for the duration of the project or when no longer suitable for use.

First Aid

1. Purpose

To ensure that the there are procedures to follow for First Aid.

2. Scope

This procedure applies to all GBEPC employees and subcontractors in order to meet and maintain the required standards.

3. Roles & Responsibilities

All GBEPC Management must ensure that the contents of this Procedure are maintained.

4. Procedure

GBEPC will ensure that all GBEPC offices and Projects have adequate First Aid Facilities.

4.1. First Aid Personnel: -

GBEPC will ensure that First aid personnel are employees who and have been trained in First Aid. GBEPC will also nominate a person to take charge if a first aider is unavailable in exceptional circumstances. The Appointed Person does not need to be a qualified first aider, but will be given a clear indication of the responsibilities and training required.

First aiders are qualified personnel who have received training and passed an examination. First aid personnel will be provided with refresher training at regular intervals to keep their skills up to date.
GBEPC will ensure there are sufficient first aid personnel within the workplace to adequately cover every shift. This includes night shifts and weekend working. Notices will be displayed in all workplaces, giving the location of first aid equipment and the names and locations of relevant personnel.

4.2. GBEPC Occupied Offices

As a guide each GBEPC occupied office will have a minimum of: -

- 1 appointed person and
- 1 Trained First Aid person for 50 employees

4.3. Industrial Sites

Where the Project has significant Risk, such as a large industrial site the following must be in place: -

1 First Aid trained person for the first 50 people.
1 Appointed Person.

Additional First Aider per extra 50 employees.
Additional Appointed Person per extra 50 employees.

5. First Aid Kits

First aid boxes will be provided within the workplace to ensure there are adequate supplies for the nature of the hazards involved. All first aid kits will be reviewed on a weekly basis.
The location of first aid boxes and the name of the person responsible for their upkeep will be clearly indicated on notice boards. First aid boxes will display the:

- Name of the person responsible for upkeep
- Contents of the box and replenishing arrangements
- Form to record minor injuries

6. First Aid Room
A first aid area will be provided to assist first aiders when giving treatment. All staff must be made aware of the location of the room. This room must only be used for giving first aid during or after illness.

7. Recording Minor Treatments
All accidents, however minor, must be recorded. Where the treatment requires only minor first aid such as a band aid, then details of the injury must be recorded which will include: -

- Name
- Date
- Injury Details
- First Aid Item used

These details shall be recorded on a sheet which must stay with the first aid kit and be sent through to the Health and Safety Coordinator Weekly.

8. Records
All Forms will be retained at the site Office for purpose of audit, or to be used for any National Insurance Claims.

Lifting operations

1. Purpose
To ensure that the there are procedures to follow for all lifting operations.

2. Scope
This procedure applies to all GBEPC in order to meet and maintain the required standards.

3. Roles & Responsibilities
All GBEPC Management must ensure that the contents of this Procedure are maintained.

4. Procedure

4.1. Introduction & Scope of Works
This Procedure has been written to outline the procedure to be used for all generic lifting operations.
The Generic Scope of works will be as follows but is not limited to :-
Lifting and Moving of

- Structural Components (Steel Work)
- Formwork/Falsework materials
- Ancillary Materials – Timber, blocks, Piping, etc.
- Concrete Skips
- (Man Baskets will be covered in a separate procedure)

Any lifting or moving which is deemed as a critical lift or that involves lifting person(s) will be undertaken as a separate activity and will be covered by a specific method statement.

All Works will conform to the Site Rules and Regulation for the Project.
All Staff undertaking work on this site will have attended a Safety Induction Process.

4.2. Responsibilities

Project Coordinator

- To ensure compliance with this methodology

Site Foreman / Superintendant

- To ensure Site Staff follow all aspects of this procedure

Safety Coordinator
- To monitor and review performance of this procedure

Competent Crane Operator
- To be trained and competent in all aspects of this procedure, ensuring safe operations at all times

Banksman / Rigger
- To be trained and competent in all aspects of this procedure, ensuring safe operations at all times

Trade Personnel as required
- To be aware of crane movements and overhead loads

Plant Maintenance as required
- To ensure that equipment is maintained and available for safe operations.

4.3. Plant Vehicles

The following equipment may be required to carry out lifting operations:
- Crawler Crane
- All Terrain Mobile Crane
- Boom Truck – telescopic forklift
- 360 degree excavators
- Crane trucks

4.4. Procedure

a. General

- All Personnel involved in lifting operations will be briefed on this procedure prior to commencing any works and sign the briefing confirmation sheets, that they fully understand the contents.
- All personnel will wear correct PPE as detailed in Risk Assessments.

All Terrain Mobile Crane(s) / Tracked Crane / Boom Truck (CRANES*)
the word "crane" will be applicable to items above used for lifting and moving materials and equipment.

All cranes/ lifting equipment will be selected on the criteria of the lifting capabilities and suitability for the task to be undertaken. All Cranes will hold a current valid inspection, and have this annually and all rigging will be inspected prior to use and on a 6 monthly basis. Prior to works the project coordinator will plan the works activities and establish the "generic" activities of the equipment ensuring that the equipment is capable of safely performing the operations.

b. Prior to Use

- Each crane will be inspected and a daily checklist (See Appendix 2) completed before use. Any defects found during this inspection must be reported immediately to the Foreman / Superintendant / Project Coordinator.

5. General Responsibilities

5.1. Crane Operators / Banksman

- Grand Bahama Engineering Procurement Construction Company will only use Operators and Banksman/riggers to undertake tasks that are deemed competent through certification, relevant training, experience or a combination of these.
- All personnel to establish communications and will utilize the standard ANSI crane and hoist hand signals. Radios may be used for this purpose.

5.2. Crane Operator

The crane operator will be: -
- Trained on the specific model of crane used;
- Able to assimilate and apply information contained in reports and duty charts relating to the range of duties and safe use of the crane;
- Familiar with the manufacturer's instructions for the rigging operation and for maintenance of the crane;

- Be competent at spotting hazards in the vicinity of the operation, overhead, ground conditions, adjacent works etc.
- Aware that the crane should be used on level ground or else set level on outriggers before any load is applied;
- Fully conversant with the correct use of outriggers and where outriggers should be fitted, and aware of how to properly support the outrigger feet (this requires regular monitoring to ensure that no movement occurs throughout the operation);
- Able to set and check the functioning of the rated capacity limiter and rated capacity indicator, if installed;
- Aware of the effects of wind and other climactic effects on the crane and load;
- Able to resist pressures from other persons to carry out unsafe operations;
- Able to take action to avoid dangerous situations, including stopping operations;
- Able to operate fire suppressant equipment.

5.3. Slinger / Banksman

The Slinger/Rigger/Banksman: -

- Must be able to recognize weights and loads
- Must be able to inspect all rigging equipment for damage and wear
- Must be able to undertake confidently ANSI recognized Crane and hand signals
- Be able to communicate giving clear and precise instructions.
- Able to take action to avoid dangerous situations, including stopping operations
- Assist in the Rigging and de-rigging of the crane
- Competent to ensure that all crane movements are controlled and do not present a danger to any persons or vehicles
- Be competent at spotting hazards in the vicinity of the operation, overhead, ground conditions, adjacent works etc
- Able to operate fire suppressant equipment.

5.4. Crane Set Up.

Each time the crane is set up or rigged in a location for works the following will be checked prior to setting up the crane by the Foreman/Superintendant in charge / Banksman.

5.5. Hazards

- No Obstructions affecting the crane set up – Outriggers, swing radius, excavations etc.
- No Hazards underground conditions
- No Hazardous adjacent activities
- No Overhead Hazards – Electric Cables Minimum Operating Distance 10 feet away from all Power Lines), Trees and Branches, Scaffolds, Protruding Building Extremities

5.6. Safe Operations

GBEPC will ensure that: -

- All Operations of the crane must be undertaken in line with the Manufacturers recommendations and guidance
- Any defects identified prior to use or during use will be reported immediately and the crane will be taken from service until the defect is corrected.
- All installed safety features of the crane MUST be in good working condition.
- A positive acting device shall be used which prevents contact between the load block for the overhaul ball and the boom tip (anti-two-blocking device); or a system shall be used which deactivates the hoisting action before damage occurs in the event of a two- blocking situation (two-block damage prevention feature). **This requirement applies to all cranes**. If a two-blocking device cannot be installed or creates a greater hazard, a spotter with direct contact to the operator may be utilized whose only responsibility is that of watching the boom tip and the overhaul ball.
- The load on the crane will not exceed the Safe Working Load (SWL) specified by the manufacturer of the crane.
- The crane should be positioned on level ground.
- Cranes outriggers must fully extended and heavy wooden mats or metal sheets shall be installed under outrigger floats to spread the load where ground condition is unstable or suspicious.
- Each Crane must display the standard Load crane lifting chart and the crane hand signal chart.
- The crane operator shall act on the signals or commands of the Banksman Only.

- The swing radius of all cranes will be barricaded to prevent persons entering the area
- Operator shall not leave the controls of the crane whilst load is suspended.
- Safety latches are required on all crane hooks.
- Loads shall be only be lifted vertically, never drag or pull the load sideways.
- In Weather conditions that affect the safe Operation of the crane, the operator must safely stop activities, lower the load if attached and if practical retract or lower the boom.
- The decision to stop operations will be as follows :-

    - Wind speeds that affects the safe operation of the crane as stipulated by the Manufacturer or when the Operator / Foreman deem so.
    - Lightning in the immediate area
    - Poor visibility due to rain, storms or darkness

- A crane shall not maneuver on site without an attendant whenever operator's vision is obstructed.
- Passengers shall not be carried on any equipment.
- All Cranes must have a Fire Extinguisher of at least 1KG ABC Dry Powder Type.
- Stop engine, remove keys and apply brakes or block the wheels before leaving the equipment unattended.

5.7. Rigging and Slinging

5.7.1. Alloy Steel Chains

- Hooks, rings, welded or mechanical coupling links and other attachments when used with alloy steel chains shall have rated capacity at least equal to that of chain.
- Job or shop hooks and links or make shift fasteners, formed from bolts, rods etc. or other such attachments, shall not be used. (It is strictly prohibited).
- Rated capacity (working load limit) for alloy steel chain slings (Single/multi-leg) shall not exceed the values given by the manufacturer.
- Whenever wear at any point of any chain link exceeds 10 percent reduction in diameter the chain shall not be used.

5.7.2. Wire rope

- The safe working load recommended by the manufacturer for various sizes and classifications for wire ropes shall be followed.
- Wire ropes shall not be secured by knots.
- Each wire rope used in hoisting or, lowering or in pulling loads shall consist of one continuous piece without knot or splice.
- Wire rope shall not be used if in any length of eight diameters, the total number of visible broken wires exceeds 10 percent of total number of wires, or if the rope shows other signs of excessive wear, corrosion, or defect.
- Wire ropes shall not be used in lifting operations with upper end and lower end (eyes) made with temporary clips or clamps.
- All the wire rope slings shall be examined and tested by competent person of third party and certificate shall be obtained.
- All splices in rope slings shall be made in accordance with manufacturer's recommendation.

    Abnormal wear.
    Powdered fiber between strands
    Broken or cut fibers.
    Variations in the size or roundness of strands.
    Distortion of hardware in the sling.

5.7.3. Natural rope and synthetic fiber

- Synthetic webbing shall be of uniform thickness and width and selvage edges shall not be split from the webbing width.
- Fittings shall be of a minimum breaking strength equal to that of the sling, and Free of all sharp edges that could in any way damage the webbing.
- Stitching shall be the only method used to attach end fittings to webbing and to form eyes.

- The thread shall be in an eyes pattern and contain a sufficient number of stitches to develop the full breaking strength of the sling.

5.7.4.Synthetic webbing

- When synthetic webbing slings are used the following precautions shall be taken Nylon web slings shall not be used where fumes, vapors, sprays, mists or liquid of acids are present.
- Polyester and polypropylene web slings shall not be used where fumes, vapors, sprays, mists or liquids of caustics are present.

5.8. Environmental Condition

- Synthetic web slings shall be immediately removed from service if any of the following conditions are present.
  Acid or caustic burns
  Melting or charging of any part of the sling surface.
  Snags, punctures, tears or cuts
  Broken or worn stitches
  Distortion of fittings

5.9. Rigging Equipment for material handling

- No chain, rope or lifting gear shall be used in raising or lowering or as a means of suspension unless it is safe.

5.9.1.Hooks

- Every hook used for raising or lowering or as means of suspension shall either
  Be provided with an efficient device to prevent the displacement of the sling or load from the hook, or
  Be of such shape as to reduce as far as possible the risk of such displacement.

5.10. Platforms for crane operators and signalers

- Where a platform is provided for the person or persons driving or operating a crane or for any signaler, it shall be
  Of sufficient area for the persons employed there on

5.11. Close planked or plated
Provided with safe means of access and every side of every such platform being a side thereof from which a person is liable to fall a distance of more than 6 feet shall be provided with a suitable guard rail (42”, 21” and toe board of 4”)

5.12. Cabins for drivers

- The driver of every power drivers lifting appliance shall be provided with a suitable cabin and the cabin shall
  Provide an unobstructed view for proper operation
  Give weather protection
  Allow access to the machinery for maintenance work.

5.13. Drums and Pulleys

- Every drum or pulley round which the chain or wire rope of any lifting appliance is carried shall be of suitable diameter and industrial for the chain or rope used.
- Every chain or rope shall be properly anchored to the drum of a lifting appliance, shall be properly secured and at least two turns shall remain on the drum in every operation position of the appliance.

5.14. Brakes, Controls, Safety Devices etc

- All cranes, crabs, and winches shall be fitted with brakes capable of holding and controlling their maximum loads.
- Control handles, levers, switches shall be designed so that they cannot be operated accidentally and shall be marked to show what they are for and how they should be operated.
- All cranes over one tone capacity shall be provided with automatic safe load indicator with a visual warning to the crane driver/operator and an audible warning to those in the vicinity.

5.15. Safe Means of Access

- Where any person engaged on the examination, repair or lubrication of any lifting appliance/ machine is liable to fall a distance of more than 6 feet, there shall be provided and maintained safe means of access to and egress from the place at which the person has to work with adequate hand holds and foot holds.

5.16. Stability of lifting appliances

- Appropriate precautions shall be taken to ensure the stability of lifting appliances used on soft or uneven surfaces or on a slope.

5.17. PPE

All GBEPC persons carrying out this work must be wearing the following:

- Safety helmet
- Safety footwear
- Gloves (Where Applicable)
- Hi Visibility Vest

6. Review and Ownership

All aspects of this lifting procedure will be periodically reviewed at least yearly or when any operations change.

Emergency Procedures

1. Purpose

To ensure that the there are procedures to follow for Grand Bahama Engineering Procurement Construction Company.

2. Scope

This procedure applies to all GBEPC employees in order to meet and maintain the required standards.

3. Roles & Responsibilities

All GBEPC Management must ensure that the contents of this Procedure are maintained.

6.1.

4. Procedure

In the event of an Emergency, such as Fire, Catastrophic Building Collapse, Temporary Works collapse or Large Chemical Spillage (e.g. diesel) or Airborne Hazards (Hurricanes and severe weather will be managed under a separate procedure), then GBEPC will ensure that the following is undertaken and that all staff is aware of the procedures to follow.

4.1. Indication of an Emergency

In the event of an emergency the signal will be a **LONG CONTINUOUS BLASTS OF A HORN/SIREN.** Upon hearing this all staff will immediately move to their allocated Emergency Muster Point.

4.2. Fire

In the event of a fire, the alarm must be raised immediately by the person discovering the fire. This can be done by verbally shouting Fire, Fire, Fire, calling 911/919 and by informing others.
Horns or Sirens will be placed at suitable locations across the project to raise the alarm.
The alarm can initially be undertaken by shouting fire, fire, fire to alert any employees working in the vicinity.
If safe to do so the person may attempt to extinguish the fire with the fire extinguishers provided.
At no point must the person who is attempting to extinguish the fire get the fire between them and the exit points.
If the fire becomes to large to fight then the person must leave the building immediately and move to the allocated Muster Point.
Any staff can call the emergency services whilst they are making their way to the muster point, if it is safe to do so.
Emergency Numbers will be displayed on Health and Safety Notice Boards.
All persons will move to their allocated Muster Point.
The Site Superintendant / Person in Charge of works will allocate somebody to meet the Fire Appliance / Engine at the main gate and direct them to area where the fire is.
Specific Fire Wardens will be appointed to ensure that all buildings and areas are clear of staff and to ensure that no persons enter the area unless instructed to do so by GBEPC Management or the Fire Officer.

4.3. Catastrophic Building Collapse

Where part of buildings, temporary works such as large Scaffolds, Falsework, and Falsework during pouring/pumping collapse then the following must be undertaken:

The alarm must be raised immediately by sounding a long continuous blast of horn/sire.
The following must be informed immediately:-

- GBEPC Health and Safety Coordinator
- Project Coordinator/Senior GBEPC Management Team (Directors / VP or President)
- Clients Health and Safety Coordinator
- Emergency Services (If people are located in or on the structure at the time of collapse).

The Superintendant will ensure that the area is immediately secured to prevent any persons entering the area of collapse.
All persons will safely move to their allocated Muster Point.
The Site Superintendant / Person in Charge of works will allocate some body to meet the emergency services at the main gate and direct them to area where the fire is.

4.4. Major Spillages or Airborne Hazards

Any spillage must be reported to the Superintendant, Health and Safety Coordinator and also to the Clients Environmental Representative.
If the spillage is large and or contains Hazardous Materials such as Diesel from a tanker or any product that is liable to create Harmful Airborne Particulates (See MSDS) then the following must take place.
In the event of such a spillage then the area must be secured, all staff must make their way **UPWIND** to the nearest Muster Point.
Where possible for any spillage, efforts shall be made to prevent any entering of the product entering ground water or water courses, drains or pipelines. This must only be undertaken when there is no risk to persons.

The following personnel must be contacted immediately

- **The GBEPC PM**
- **GBEPC H&S Coordinator**
- **Clients Environmental Coordinator**
- **Emergency services if required (to be determined by Clients Environmental Coordinator)**

5. Detailed Evacuation Procedure

6.2. The Maps will show all Muster points for the works associated with Grand Bahama Engineering Procurement Construction Company on the Project.

All Staff will be briefed and follow these basic steps

- **On hearing the Emergency Horn/Siren then Staff Must ensure the following: -**
- **They stop work safely and go directly to the nominated Muster Point**
- **That they walk quickly but safely to the muster point but not leave site**
- **That they must utilise safe walk routes rather than roads if possible.**
- **Be aware of other hazards on route such as excavations, material and equipment etc.**
- **To report as soon as possible if anyone is still in the area where evacuation was undertaken or if someone has left site.**
- **To remain in their nominated muster point and Not to return to work until the Superintendant, Project Coordinator or Health and Safety Coordinator give the all clear.**

- **Superintendants, Project Coordinator or Nominee MUST undertake a head count at each muster point to confirm that all staff is accounted for and that confirmation is given to the Heath and Safety Coordinator, Project Coordinator or Nominated Emergency Co-ordinator.**

6. Training

The GBEPC Health and Safety Coordinator will ensure that general awareness training on emergency response is delivered to all staff and site-based contractors. This may be by means of a toolbox talk or formal training for Persons in Charge of Muster Points and Work Areas..

7. Testing of Emergency Procedures

The Health and Safety Coordinator shall ensure that periodical testing of emergency response arrangements are suitable in relation to the site, duration of contract and risks involved. This testing shall at minimum allow the following to be evaluated;

- General staff awareness
- Training of response staff
- Correctness of contact numbers
- Condition of response equipment
- Access to response equipment

All testing requirements must be documented and any improve any areas that do not provide suitable response.

Following an emergency evacuation practice, the Person Conducting the evacuation drill must document the following from each area. (Assistance will be required from others responsible Project Coordinator/Office Coordinator):-

- the date and time of the emergency evacuation practice
- staff present at the emergency evacuation practice
- the time taken to evacuate the areas
- whether anyone did not leave the building
- evaluation of the practice drill with staff input
- raise any concerns, or identified hazards and risks with if necessary, in order to eliminate or minimise those risks in a real emergency
- Complete Emergency Test Result Form

8. Records

All tests must be documented and submitted at Management Review for effectiveness. Any changes to the Emergency Procedures of the methodology will be discussed at the meeting and corrective actions compiled and addressed.

Risk Management

1. Purpose

To establish the methodology for undertaking Hazard and Risk Assessments and to identify the tasks carried out by GBEPC, the hazards associated with the tasks undertaken, and to assess the level of risk associated with each task or workplace. The information obtained by the process is used to establish Safe Systems of work and Method Statements, Risk Assessments

2. Scope

This procedure will be used for all activities requiring hazard recognition and risk assessments within GBEPC Worksites.

3. Roles & Responsibilities

The Project Coordinator, Superintendants, Engineers and Health and Safety Coordinator will be responsible for undertaking the program of Hazard Identification and Risk Assessment for all major occupations or groups of staff. Teams of staff, Supervisors and Coordinators will carry out the actual work.

4. Procedure

A “suitable and sufficient Risk Assessment”:-

- Should identify the significant risks arising out of work activities or the workplace. This means focusing on those risks that are liable to arise because of work activity.
- Should enable the employer to identify and prioritise the control measures that need to be taken.
- Should be appropriate to the nature of the work and such that it remains valid for a reasonable period of time.

Assessing risks is necessary in order to identify their relative importance. The degree of risk associated with a particular hazard depends on the likelihood (or frequency) of an accident occurring because of the hazard and the probable consequences (severity) of that accident. Whilst there is no single universally accepted formula for rating risks, a number of techniques have been developed which involve classifying both the likelihood and consequence on a simple numerical scale and then multiplying them both together to give the risk rating.

The rating system adopted involves classifying Likelihood and Consequences each on a five-point scale as follow.

Risk (Hazard Rating) = Likelihood x Consequences

Likelihood of an Accident Occurring		Consequences	
1	Highly improbable	**1**	Minor injury, no time off
2	Remotely possible but known to occur	**2**	Injury resulting in up to 3 days off
3	Infrequent	**3**	Injury resulting in 3 or more days off (Lost time Accident)
4	Occasional	**4**	Major disabling injury (e.g. loss of limb, eye etc)
5	Frequent and regular	**5**	Fatality

This gives a matrix of possible rating values as follows:-

Likelihood \ Consequence	5	4	3	2	1
5	25	20	15	10	5
4	20	16	12	8	4
3	15	12	9	6	3
2	10	8	6	4	2
1	5	4	3	2	1

The rating values can be grouped into three broad classes of risk:-

CRITICAL RISKS **15-25**
SIGNIFICANT RISKS **8-12**
MINOR RISKS **1-6**

It should be noted that this method of ratings risks is very subjective, however, it does provide a practical method of prioritising or rating risks to separate out the critical risk from the less critical and minor risks.

4.1. Prior to Undertaking Works

Initial Assessments will be carried out to identify risks associated with the works.
The level of risk associated with each hazard must be identified using the methodology in this procedure.
For certain hazards there may be a requirement to carry out further assessments such as, Manual Handling of Loads, HAZCOM and Fire Safety Requirements.

The Assessment should identify the task, the hazards and degree of risk associated with the task and the control measures required.

Generic Risk Assessments will be available and can be used; however these must be reviewed for Site Specific Conditions and Hazards.

Risk Assessments should be reviewed by the Health and Safety Coordinator every two years or more frequently if there is a significant change in the way a tasks is undertaken, or as a result of accidents or injury.

4.2. Managing Risks for Change

In the event of any Changes to the existing working procedures, best practice or Bahamas Government, then a review of the Health and Safety Documentation must be undertaken to ensure that any changes are incorporated into operations for GBEPC. Any introduction of new equipment, new work techniques, changes in rules & regulations, organizational changes etc. may require a review of applicable risk assessment(s).

4.3. Communication

The assessments must then be approved and then communicated to the employees affected.

4.4. Review of Risk Assessment

The time between reviews is also dependant on the nature of the risks, the degree of changes likely in the work activity, and information derived from performance monitoring. This should be no longer than 2 years

Coordinators, Supervisors and their staff groups should continually monitor effectiveness of the risk assessments.

Hurricane Preparedness Procedure

1. Purpose

To ensure that the there are detailed Hurricane Preparedness Plans in place to follow for Grand Bahama Engineering Procurement Construction Company.

2. **Scope**

This procedure applies to all GBEPC employees in order to meet and maintain the required standards.

3. Roles & Responsibilities

All GBEPC Management must ensure that the contents of this Procedure are maintained.

4. Procedure

It is necessary to establish procedures prior to and during hurricane season in an effort to ensure personal safety and minimize property damage, accidents, and downtime of the project. Individual phases have been outlined below to assist in identifying the appropriate actions and responsibilities during various stages of a tropical storm/hurricane. It should be noted that exact times and conditions will vary for each potential storm/hurricane that the project may face. Therefore, this plan shall be reviewed with the entire project prior to the hurricane season and on a routine basis during the season.

Definitions:-

High Winds, Rains or lightning

Wind, rain or lightning causes hazards to employees. Wind speed will be approximately 30mph.

Tropical Depression

When wind speeds reach 39 mph at highest point.

Tropical Storm

A tropical Depression becomes a Tropical Storm when winds reach 39-73 mph. The storm has a distinct rotation of winds

Hurricane Watch

This indicates that there is a possible threat of a hurricane but not imminently.

Hurricane Warning

A hurricane is expected to strike in the next 24 hours, with expected winds of 74mph or more, high tides and waves.

Hurricane Categories and Potential Effects

Category	Winds	Storm Surge	Potential Effects
One	74 – 95 mph	4 – 5 ft.	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also, some coastal road flooding and minor pier damage.
Two	96-110 mph	6 – 8 ft.	Some roofing material, door, and window damage to buildings. Considerable damage to vegetation, mobile homes, and piers. Coastal and low-lying escape routes flood 2-4 hours before arrival of center. Small craft in unprotected anchorages break moorings.
Three	111-130 mph	9 – 12 ft.	Some structural damage to small residences and utility buildings with a minor amount of eyewall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by floating debris. Terrain continuously lower than 5 feet ASL may be flooded inland 8 miles or more.
Four	131-155 mph	13 – 18 ft.	More extensive eyewall failures with some complete roof structure failure on small residences. Major erosion of beach areas. Major damage to lower floors

			of structures near the shore. Terrains continuously lower than 10 feet ASL may be flooded requiring massive evacuation of residential areas inland as far as 6 miles.
Five	> 155 mph	> 18 ft.	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Major damage to lower floors of all structures located less than 15 feet ASL and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5 to 10 miles of the shoreline may be required.

Responsibilities
During any of the above situations specific actions must be evaluated and undertaken. Assignments of these roles and tasks to be performed are detailed in the following procedure. The areas that Grand Bahama Engineering Procurement Construction Company Employees and Coordinators are responsible for under our scope of works will be detailed as follows

NOTE:
Management of all Subcontractors for GBEPC will be incorporated in each section of this procedure.

High Winds, Rains or lightning

Responsible Person	Activities
Superintendant	• Monitor all work activities including Subcontractors • Stop Lifting Operations if required • Stop Working at Heights • Ensure no debris is blowing around • Stop works if lightning strikes are present - such as Lifting Operations, Working on Scaffolds or elevated platforms, Steelwork etc.
Crane Operator	• Stop Lifting Operations if there are perceived risks or imminent lightning • Retract and Lower Booms
Employees	• Ensure No materials being used can become Kites • Follow Instructions of Superintendants and Charge Hands

Tropical Depression

Responsible Person	Activities
Superintendants Charge Hands	• Monitor all work activities • Stop Lifting Operations if required • Stop Working at Heights • Ensure no debris is blowing around • Stop works if lightning strikes are present - such as Lifting Operations, Working on Scaffolds or elevated platforms, Steelwork etc..
Crane Operator	• Stop Lifting Operations if there are perceived risks or imminent lightning • Retract and Lower Booms
Employees	• Ensure No materials being used can become Kites • Follow Instructions of Superintendants and Charge Hands
Health & Safety Coordinator	• Assist Superintendants / Charge Hands Where needed and Inspections

Tropical Storm / Hurricane Watch

This will initiate the **72 hour** warning

Responsible Person	Activities
Project Coordinators	• Follow guidance from the Government of Bahamas and Hurricane Committees • Ensure no Materials are planned for delivery • Review Location for storage of Materials and Plant / Equipment • Record all activities and photograph industrial areas of responsibility • Ensure Subcontractors are managing Hurricane Plans Accordingly
Superintendants Charge Hands	• Ensure Scaffold planks are removed, stacked and banded • Ensure Scaffolds are Secured to the buildings • Ensure Rubbish skips are removed off site • All materials that may blow away must be secured or banded • Inspect all windows and doors and ensure they are protected • Inspect areas periodically to ensure any unsafe conditions are corrected • Inspect all industrial equipment and waterproof where needed • Ensure all tools and equipment are securely stored away • Ensure all temporary cabins are secured and tied down
Crane Operator	• Stop Lifting Operations if there are perceived risks or wind speeds surpass safe operation of crane • Retract and Lower Booms • Move Cranes to identified position on high ground • Disconnect Batteries
Plant Operators	• Ensure Machines and containers are fully fuelled • Move Equipment / Plant to identified position on high ground • Disconnect Batteries
Employees	• Follow Instructions of Superintendants, Charge Hands & Coordinators
Office Coordinators	• Ensure Cabins are tied down or buildings secure • Start to secure documents and identify contents • Arrange for Back up of electronic documents to be undertaken • Arrange a suitable Storage Location for Office equipment
Logistics / Storeman	• Ensure there is enough materials for banding, ropes, duct tape etc.. • Secure any Chemicals to prevent spillages etc
Health & Safety Coordinator	• Coordinate the activities and review all procedures and emergency contacts • Conduct Inspections

Hurricane Alert or Hurricane Warning

This will initiate the **48 hour** warning from Development

Responsible Person	Activities
Project Coordinators	• Follow guidance from the Government of Bahamas and Hurricane Committees • Review all Activities in Line with this Procedure • Record all activities and photograph industrial areas of responsibility • Allow employees reasonable time to attend to personal matters • Ensure Subcontractors are managing Hurricane Plans Accordingly
Superintendants Charge Hands	• Inspect and resolve any issues not already addressed in the 48 hour Notice Period.

Crane Operator	• Follow Instructions of Superintendants
Plant Operators	• Follow Instructions of Superintendants
Employees	• Follow Instructions of Superintendants, Charge Hands & Coordinators
Office Coordinators	• Ensure everything is completed as per 48 hour notice period • Ensure all Cabins/offices are locked and doors and windows secured.
Logistics / Storeman	• Follow Instructions of Superintendants, Charge Hands & Coordinators
Health & Safety Coordinator	• Coordinate the activities and review all procedures and emergency contacts • Conduct Final Inspection

Hurricane Alert or Hurricane Warning

This will initiate the **24 hour** warning from Development

Responsible Person	Activities
Hurricane Management Team	• Will check to ensure all Site Activities have ceased. • If still on Island provide a point of contact
ALL EMPLOYEES	• Evacuated site and attending to personal issues

After the Storm

Responsible Person	Activities
Management Team GBEPC	Management of Grand Bahama Engineering Procurement Construction Company will determine when to bring their workforce back to site. This will be undertaken in conjunction with the Client. Additionally the Emergency Services and Utility providers may be consulted The Management Team will establish the Hazards, Damage and issues that may need priority attention, such as downed electrical wires, localised flooding, condition of offices and buildings, environmental hazards (sanitary, sewerage, drinking water contamination)
Project Coordinators / Superintendants	• Establish Clean up Teams and return the site to operational standards
Crane Operator	• Inspect Crane and ensure it is functioning correctly
Plant Operators	• Inspect Plant and equipment to ensure it is functioning correctly
Employees	• Follow Instructions of Superintendants, Charge Hands & Coordinators
Office Coordinators	• Arrange for Cabins or buildings to be cleaned if required. • Arrange for office functions, documents and IT to be re-established
Logistics / Storeman	• Follow Instructions of Superintendants, Charge Hands & Coordinators
Health & Safety Coordinator	• Ensure all Hazards and Risks are effectively dealt with during operational start up.

Appendix 1
EMERGENCY CONTACT NUMBERS

NAME	TITLE	CONTACT NUMBER
Derick King	**President/CEO**	**1-242-727-1619**
Alden Austin	**Safety/Project Coordinator**	**1-242-439-6911**
Kyle King	**Project Coordinator**	
Levi Rolle	**Superintendant**	**1-242-359-9549**
Kirs Gate	**Office Coordinator**	**1-242-352-1164**
Emergency Services		**919 or 911**
Derick King Jr.	**Project Coordinator**	

Appendix 2

GENERAL HURRICANE PREPAREDNESS CHECKLIST

This checklist is by no means exhaustive, and is intended to be a guideline minimum standard only.

- Pick up anything that will blow away. Paint cans, ladders, boards, pipe and even concrete blocks. The biggest danger during a hurricane or tornado has been proven to be flying debris. It can destroy a building and kill people. If one person can move it, tie it down, cover it securely or take it indoors.
- Cover glass and unfinished openings, if possible, with plywood.
- Check anchors and tie downs on scaffolding. If it is not possible to take scaffolding down, remove and store wood planks.
- Secure cranes, consult specialist advice if necessary.
- Move all small vehicles to secure areas. Portable toilets must be secured or moved.
- Industrial trailers must be secured with tie downs.
- Survey the site for possible flood zones. Move equipment or materials out of targeted flood zones.
- Survey electrical or gas exposure to wind or flood damage. Turn off supply, if necessary, prior to site evacuation. Downed wires or broken gas lines cause explosions or fires.
- Review the emergency, mobile or home phone numbers for all contractors or suppliers on site. Share this list with everyone, so damage control can be coordinated following a disaster.
- Survey the site for unfinished applications (e.g., insulation, studs, tile or shingles). Secure it with adequate covering, if possible.
- Survey the site for entrance or egress. If your normal entrance is flooded or blocked by downed trees, have a plan to open up another entrance.
- Consider that staff members will be occupied with their personal homes and families when a storm is likely to strike. Do your site preparations early, and be prepared to assist others.

Hurricanes can be dangerous killers. Learning the hurricane warning messages and planning ahead can reduce the chances of injury or major property damage.

Appendix 3

HURRICANE SHELTERS

Site Traffic

1. **Purpose**

Ensuring GBEPC has a procedure to follow for Site Traffic Management.

2. Scope

This procedure applies to all Grand Bahama Engineering Procurement Construction Company sites in order to meet and maintain the required standards.

3. Roles & Responsibilities

All GBEPC Management must ensure that the contents of this Procedure are maintained.

4. Procedure

With the amount of Site Traffic that moves on Industrial Sites, GBEPC believes that all sites require procedures to follow to ensure safe operations on site. As with industrial sites this procedure must be reviewed due to the constant changes of the site.

Depending on the layout of the site, the Superintendant, Health and safety coordinator and the Project Coordinator shall establish safe traffic routes that will not cause conflict with men and machinery.

All sites must ensure that the following items are considered when planning for Site Traffic.

- Vehicles and pedestrians must be kept separated by using barriers and signage. In High risk areas such as narrow areas or heavy traffic areas then substantial barriers must be erected. Routes in low risk areas can be marked by fencing or netting.
- In all areas, GBEPC employees must wear Hi Visibility vests as a way of identifying themselves to Operators and drivers
- Site Speed Limits must be established and adhered to, anyone caught exceeding the site speed limit may face disciplinary action. The speed limit applies to all vehicles and plant whether they are road or industrial vehicles.
- The Superintendant / Project Coordinator must enforce restrictions on visiting vehicles, including cars, being allowed to enter site as this creates congestion. In addition GBEPC will not accept responsibility for private unauthorised vehicles on site.
- Where possible the site shall utilise a one way system to reduce the amount of reversing activities.
- The site must establish a material loading and unloading area that does not cause any hazards to employees or block any traffic routes, especially when delivery material arrives at site.
- Traffic routes on site must take into consideration such items as excavations, manhole covers, or soft ground areas.
- All drivers of plant and machinery must hold a valid licence to operate on site. This will be checked by the superintendant prior to allowing the vehicle to operate on site.
- All vehicles must have reversing alarms, working lights, working horns and be in a safe operable condition.
- All vehicles must have good unobstructed views from the cab.
- All vehicles that are required to reverse must have a flagman in attendance to prevent the machine from colliding with equipment, materials or persons.
- Where there are overhead hazards such as Electrical Cables, telephone lines, balconies or protruding building parts then Goal Posts must be erected. Goal Posts must be erected a minimum of 20 feet from the hazard (Note this will need erecting on both sides of the hazard).
- Where a vehicle is to leave the industrial site and enter the public highway must have access to a Vehicle wheel wash.
- Operators must not leave vehicles unattended whilst still running.
- Operators must not be operating plant or equipment whilst on a mobile phone, or use other distracting electrical equipment that may distract the operator, such as IPOD's, radios, MP3 players etc.
- Signs must be erected to warn others that heavy plant is in operation at the entrance to the site.
- Where vehicles have to access and egress site from a public highway, then flagmen must be in attendance to ensure that the vehicles can enter and exit safely. Stop signs must be used to warn public of vehicle movements.
- Project team to review industrial phase traffic management monthly or more frequently if necessary and changes communicated to relevant parties.

To assist in the planning of traffic routes a checklist is required to be completed. This checklist must be reviewed by the Site Superintendant on a regular basis.

Excavations

1. Purpose
To ensuring GBEPC follows suitable guidelines to allow for Safe Excavation procedures.

2. Scope
This procedure applies to all Grand Bahama Engineering Procurement Construction Company Sites where excavations and trenches* are undertaken in order to meet and maintain the required standards.
** for the purpose of this procedure Excavations and Trenches will be termed Excavation.*

3. Roles & Responsibilities
All GBEPC Management must ensure that the contents of this Procedure are maintained.
GBEPC Engineers must complete a permit to dig prior to excavations

4. Procedure
Prior to undertaking any excavations, GBEPC will ensure that all possible measure will be taken to ensure activities associated with excavations have been undertaken. The main areas of concern or Hazards for excavations and trenching are as follows: -

- Buried Service Strikes
- Collapse
- Undermining of existing or temporary structures
- Falling into Excavations by Persons or Vehicles
- Confined Space Works
- Hazardous Gases or fumes

4.1. Planning (Prior to Excavation)
The engineer must take into consideration the following: -

- Determine the Site Ground Conditions, water table levels etc.
- Consult the Drawings to establish location of excavation
- Consult Clients drawings for buried services
- Contact Bahamas utility Suppliers (if not virgin ground)
- Bahamas Electrical Company
- BTC
- Water and Sewerage

When the location of all service obstructions has been established the Engineer shall prepare a permit to dig. The permit shall clearly define the work area to which the permit refers and record known obstructions using either a line diagram or list. Hand digging may be necessary.
Obstructions listed on the permit schedule shall include above ground obstructions and any special restrictions to working

4.2. Start of the Excavation
The Engineer will mark or set out the position of the excavation on the ground.
Wherever the presence of underground pipe, cable, vessels or structure is known or suspected mechanical excavations shall not be used until such obstructions have been exposed to hand

4.3. Placing of Material and spoil
If the material excavated is not transported away from the excavation then the must be no spoil or materials within 2 ft. from the edges of the excavation.

4.4. Access and Egress
The Superintendant / Engineer will ensure that a stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are 4 feet or more in depth. A safe means of access / egress shall be provided at least every 25 feet.

4.5. Preventing Collapse of Excavations

GBEPC engineer will decide what type of shoring is required dependant on ground conditions. Shore up or batter back unstable or deep (4 feet or more) trenches as excavation proceeds in a systematic manner taking due account of the safety and protection of those installing the shoring.

4.6. Inspections

must be checked daily for evidence of Slides or cave ins. Additionally checks will be made for any other hazardous situation including hazardous atmospheres. Any indication of a hazardous situation will result in the engineer stopping work and the hazard corrected prior to commencing works. All inspections must be documented on the Inspection Form

4.7. Barricades / Guardrails

The Superintendant will ensure that all excavations have suitable barricades installed to prevent persons from falling into the excavation and also to prevent vehicles from falling into the excavation. If vehicles are required to dump materials into the excavation, the stop blocks must be provided to prevent vehicles from overrunning the edge. Walkways or bridges with standard guard rails must be provided where employees or equipment are required or permitted to cross over excavations

4.8. Plant and Persons

The Superintendant will ensure that all GBEPC employees will not be placed to work where they can be struck by any part of a mechanical excavator or come into contact with any other moving plant.

4.9. Hazardous Atmosphere

If any abnormal gas or odour is sensed in the pit come out at once and required test must be conducted before resuming the work. Test should be carried out on excavation 4 feet or deeper prior to work. GBEPC Superintendant or Charge Hands will ensure that no vehicular / Generator fumes are collecting in the excavations

4.10 Emergence Response Plan Aerial Lift Rescue

SECTION 1
INTRODUCTION:

Scope this document provides information that can be used in practicing a safe, simple, always-available method for rescuing a person from a elevated structure particularly a bucket truck.

General

Rescue of a conscious or unconscious person from a bucket truck may be required due to illness, severe injury or electric shock. In any of these situations, the victim may require help to reach the ground safely. Sometimes this may consist of minimal assistance while the individual comes down under his/her own power. Other times it may require lowering an unconscious or severely injured person.

It is important that all personnel practicing these types of rescues realize that only **journeymen linemen** and trained persons are trained to do these rescues. Local authorities are not trained in these types of procedures. They should stand back and wait for the victim to be cleared of electrical contact and lowered to the ground by qualified personal. In order to have the best chance of resuscitating an accident victim, it is essential that the rescue be effected in as short a time as possible. With this important fact in mind, it is imperative that crew personnel practice the procedures outlined in this document on a regularly scheduled basis (should be done annually). Success depends upon the people performing the rescue knowing exactly what to do and being prepared for an emergency.

The rescuer can be prepared by having all rescue equipment available as close to the work location as possible. This may include:

1) Pole climbing equipment,

2) Rubber gloves and sleeves,

3) Bolt cutters,

4) Knowing your exact work location,

5) Having portable radio or cellular communication if your work location is not in close proximity to your radio communication base. It is also advisable to have all personnel become familiar with aerial lifting devices, bucket dumping systems and the location of the bucket rescue equipment.

SECTION 2.
EMERGENCY COMMUNICATION

It's important that all GBEPC employees understand their employer's emergency communication procedures. When medical attention may be required, getting the local Emergency Medical Services (EMS) en-route as quickly as possible is a key factor to successfully rescue the victim. Rescue personnel must either contact the local 919 dispatch center directly or contact the emergency response personnel as laid out in company's HSE manual.

If the employer or the utility where the work is being performed has an established emergency response system, it is advisable to take advantage of this system. In the event of an emergency, the rescuer contacts the emergency response center by telephone or radio. The center's personnel will then contact the local 919 dispatch center. Any crew member also has the option to contact the local 919 dispatch center directly. It is imperative that the caller remain calm and have the appropriate information ready for the 919 operator.

Frequently asked questions by the 919 operator:

What is your emergency?
How many people are involved?
What time did the accident happen?
What is the address of the accident location?
What is your name?
What is your call back number?
What is being done for the victim now?
Will there be someone there to meet the ambulance?
Will the scene be safe for EMS to enter?
Are you able to stay on the line for further instructions?

NOTE: Only after the rescue and the necessary first aid has been given to the victim, and professional rescue personnel have taken over the treatment of the victim, may you begin dealing with the managing and coordinating of the accident scene.

SECTION 3.
EMERGENCY PROCEDURES

1.) Size up the situation/ Call to the victim
2.) Call for assistance (919 or response center)
3.) Provide for your own protection
4.) free him/her from any electrical contact
5.) Quickly evaluate condition of victim
6.) Lower victim to ground
7.) Administer CPR or First Aid

1. **SIZE UP THE SITUATION Call to the victim.**
   Is the person conscious or unconscious? Is time a critical factor? Identify hazards. Establish a course of action. Move quickly, but not to the extent that the rescuer could sustain an injury and be of little or no assistance to the victim.

2. **CALL FOR ASSISTANCE**
   Make use of available communications equipment (company radio or cell phone) or obtain assistance from a bystander.

3. **PROVIDE FOR YOU OWN PROTECTION**
   Have rubber gloves, sleeves, rescue, and safety equipment readily available.

4. **CLIMB TO THE VICTIM AND FREE HIM/HER FROM ANY ELECTRICAL CONTACT**
   Before climbing to a victim, make sure you are protected! Take the tools and equipment necessary to perform the rescue.

If necessary, cut or clear obstructions on way up the pole to provide a clear path for the victim's descent.

Always belt in before your head reaches the victim's feet. Both hands are then free to move the victim or to prevent the chance of being gaffed or accidentally knocked from the pole by the victim.

To free the victim from electrical contact use approved rubber protective equipment and take all precautions necessary to accomplish the rescue in a safe manner.

CAUTION: Do not attempt any first aid until victim is clear of all electrical contacts.

5. **QUICKLY EVALUATE CONDITION OF VICTIM**

1) Victim is conscious: If this is the case, time may not be a critical factor. Getting the victim to the ground immediately may not be necessary. Reassure the victim and administer the necessary first aid.

2) Victim is unconscious: Experts recommend to lower the victim quickly to the ground where effective CPR/First-Aid can take place.

NOTE: In a situation that a considerable amount of time has passed and the victim is not breathing, provide an open airway for victim by tilting head back and giving two slow full breaths. Do not attempt prolonged first aid, other than two slow full breaths, but lower victim quickly to the ground

6. **LOWER VICTIM TO GROUND**

The procedure for rigging a victim to be lowered to the ground does not require a special harness. The line used for rescue is a synthetic ½" hand line for line personnel. The approved synthetic hand line shall in all cases have a loop at one end of the line and a safety snap at the other. Because the hand line is also the person's lifeline, it shall always be carried aloft each time a pole or other elevated structure is climbed, or aerial basket device is used.

7. **ADMINISTER CPR OR FIRST-AID**

Determine the medical needs of the victim. Give appropriate care until EMS arrives.

NOTE: Aerial basket equipment should not be used to rescue a person from a pole. Some of the reasons for this recommendation are:

1. Basket could be overloaded with two persons.
2. Baskets move too slowly; it is faster to climb to a victim.
3. Depending on configuration of the structure, the basket may not be able to reach the victim.
4. If an error is made in placing (locating) equipment, too much time is required to reposition equipment and not all baskets can be lowered to the ground.

REVIEW QUESTION:

Number the following steps in the order for an emergency procedure.

a. _____Call for assistance
b. _____Lower victim to the ground
c. _____Size up the situation
d. _____Administer CPR or First Aid
e. _____Provide for your own protection
f. _____Quickly evaluate condition of victim
g. _____Climb to victim and free from any electrical contact

4.11. Emergency Rescue Equipment.

Dependant on the nature of the excavation GBEPC Supervisors / Coordinators will ensure that Emergency rescue equipment, such as breathing apparatus, a safety harness and line, or a basket stretcher, shall be readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation. This equipment shall be attended when in use.

5. Cancel of Permits

Once the excavation has been completed the Engineer will sign of the Permit to Dig.

Grand Bahama Engineering Procurement Construction Company General Site Rules

1. Purpose

To ensuring GBEPC subcontractors have information for responsibilities.

2. Scope

This procedure applies to all Grand Bahama Engineering Procurement Construction Company Sites and all employees, including Sub Contractors

3. Roles & Responsibilities

All GBEPC Management must ensure that the contents of this Procedure are maintained.
GBEPC Coordinators must ensure that a copy of these rules are given to each Subcontractor

4. Procedure

All Employees and Subcontractors have a Safety Responsibility to themselves and to fellow workers around them. These Safety Rules apply to all employees and Sub-contractors on Grand Bahama Engineering Procurement Construction Company projects or sites. As detailed in Appendix 1

APPENDIX 1

GRAND BAHAMA ENGINEERING PROCUREMENT CONSTRUCTION COMPANY EMPLOYEES

All Grand Bahama Engineering Procurement Construction Company Employees **MUST** understand and adhere to these basic rules as part of their terms and conditions of employment. There will be more specific detailed procedures and directions from GBEPC Supervision and Coordinators and the Companies Health and Safety Management System that will require all employees involved in the activities to adhere to.

The following must be read and understood by all employees. All employees are required to sign the declaration sheet attached. If there are any concerns by an individual prior to signing the declaration or they do not understand the content then they have the right to question the issue with a Supervisor or Coordinator prior to signing.

1. Report unsafe conditions or unsafe acts immediately to your supervisor for correction.

2. **Immediately report all injuries regardless of how slight to your supervisor.**

3. **Horseplay and harassment** of any kind is prohibited. **Sexual harassment will not be tolerated**!

4. **Hard Hats** shall be worn by **everyone** on the job at **all** times.

5. **Sturdy, heavy-duty work shoes** are required. Tennis style (sneakers), canvas and loafer type shoes are **not** permitted.

6. **Work gloves, that match the hazard,** shall be worn where the work subjects hands to lacerations, puncturing or burns such as; handling rebar, glass, steel, or when handling chemicals, etc.

7. **Safety glasses/goggles** shall be worn when sledging, hammering and sawing on metal or concrete, chipping, welding, cutting, grinding, working in dusty places, handling of acids and chemicals, or other operations where eye injuries may result. This includes hammering nails and using screw guns/drill motors.

8. **Ear protection** in the form of earmuffs or approved earplugs will be worn on all high-noise level jobs as directed. Cotton, paper or other materials other than that designed for the ear are not permitted.

9. **Use of gasoline is prohibited for cleaning** equipment or tools or for starting fires. Gasoline may be transported only in approved safety containers. Gasoline engines must be shut off when refuelling. Plastic fuel containers are prohibited. All fuel containers must be marked with the appropriate contents.

10. **All areas where "hot work"** is occurring shall have fire extinguishers immediately located in that area and at all refuelling areas.

11. **Welding operations** shall be screened to prevent exposure to surrounding employees and to the public.

12. **"No Smoking"** rules **must** be observed in posted areas. There will be no smoking inside enclosed buildings.

13. **Tampering** with or unauthorized removal of **fire extinguishers** from assigned locations is prohibited.

14. **Riding of any industrial equipment other than on a manufactured seat is prohibited. No riding on forks, buckets, etc. of equipment is prohibited.**

15. **Working with & around heavy equipment** Do not operate heavy equipment if you are not trained or familiar with it. If you are operating heavy equipment be aware of other workers around you.

16. **Seat Belts** shall be worn in all moving equipment when so equipped. This includes backhoes, loaders, rollers, etc.

17. **Cranes, backhoes or other equipment with booms must be operated with caution around power lines**. Equipment shall be maintained a minimum of 10 feet away from all power lines less than 50kv or 10 feet plus 0.4 inches for every 1kv above 50kv.

18. No employee shall work under lifted loads. **Equipment operators shall avoid carrying loads over employees**.

19. **No employee shall operate any machinery, equipment or tool unless he has been properly instructed in its use** and is thoroughly familiar with all details of its operation. This includes boom lifts, scissor lifts, etc.

20. **Do not go up or down a ladder without the free use of both hands.** If material or tools have to be handled, use a rope to lift or lower them. Always face the ladder at the landing. Never use a stepladder as a straight ladder. Buckets are not permissible as ladders.

21. **All Machine Guards** shall be kept in place while machinery is in operation. Tampering with machine guards is prohibited. All Guards are to be promptly replaced after any repair work that necessitated the removal of a guard is conducted. All wire brushes and grinding wheels shall be protected by guards.

22. **Hand Tools shall not be used for any other purpose than that intended.** All damaged tools or worn parts should be removed form service and repaired.

23. **Electric power operated tools shall be properly grounded** before being put into operation.

24. **Acetylene, oxygen or other gas cylinders** are to be stored in an upright position and secured by tying or blocking into position.

25. **No employee shall remove a cover or alter a temporary guardrail, handrail, floor opening cover or any scaffolding components** without specific permission.

26. Employees are not permitted to use or possess any intoxicants or drugs on GBEPC sites or to be under the influence of any intoxicants or drugs while on the job. **Any employee found intoxicated or under the influence of drugs while on duty shall be disciplined.**

27. **Tools, equipment, machinery and work areas are to be maintained in a clean and safe manner.**

28. **Nails are to be immediately removed from disassembled lumber** as the lumber is stripped.

29. **Fall protection** is required when an exposure of a fall to a lower level is six (6) feet or greater in height.
30. **No employee shall work on scaffolding higher than six feet without proper guardrails, toe boards and proper flooring** except when proper precautions, such as lifelines with harnesses, barricades, etc. have otherwise been made. Scaffold platforms should be at least forty-eight inches (48") wide when possible. All scaffolding is to be cross-braced on both sides at every stage. All scaffold structure and brace members shall be free of defects.

31. **Unstable objects** such as barrels, boxes, buckets, loose bricks or concrete blocks **shall not be used to support scaffolding or planks.**

32. Good Housekeeping practices are required of all employees. Continuous and daily clean-up is required at all times.

33. **Common sense, health and sanitation rules must be observed** for the welfare and consideration of other employees.

34. **Glass bottles are not permitted** on the Jobsite.

35. **Music radios** of any kind; "boom boxes, personal radios, headsets, MP3 Players, etc., are not permitted on site.

Wilful Violation of these or other rules of this project may be cause for Disciplinary Action.

I UNDERSTAND THESE SAFETY RULES AND UNDERTAKE TO WORK IN A SAFE MANNER AT ALL TIMES.

Name: _____ **Signed:** _____

Company: _____ **Date:** _____

APPENDIX 2

GRAND BAHAMA ENGINEERING PROCUREMENT CONSTRUCTION COMPANY SUBCONTRACTORS

All Grand Bahama Engineering Procurement Construction Company Sub Contractors **MUST** understand and adhere to these basic rules as part of their terms and conditions of employment. There will be more specific detailed procedures and directions from GBEPC Companies Health and Safety Management System that will require all sun contractors involved in the activities to adhere to.

The following must be read and understood by all subcontractors. All subcontractors are required to sign the declaration sheet attached. If there are any concerns by an individual prior to signing the declaration or they do not understand the content then they have the right to question the issue with a Supervisor or Coordinator prior to signing.

1. Report unsafe conditions or unsafe acts immediately to your supervisor for correction.

2. **Immediately report all injuries regardless of how slight to your supervisor.**

3. **Horseplay and harassment** of any kind is prohibited. **Sexual harassment will not be tolerated**!

4. **Hard Hats** shall be worn by **everyone** on the job at **all** times.

5. **Sturdy, heavy-duty work shoes** are required. Tennis style (sneakers), canvas and loafer type shoes are **not** permitted.

6. **Work gloves, that match the hazard,** shall be worn where the work subjects hands to lacerations, puncturing or burns such as; handling rebar, glass, steel, or when handling chemicals, etc.

7. **Safety glasses/goggles** shall be worn when sledging, hammering and sawing on metal or concrete, chipping, welding, cutting, grinding, working in dusty places, handling of acids and chemicals, or other operations where eye injuries may result. This includes hammering nails and using screw guns/drill motors.

8. **Ear protection** in the form of earmuffs or approved earplugs will be worn on all high-noise level jobs as directed. Cotton, paper or other materials other than that designed for the ear are not permitted.

9. **Use of gasoline is prohibited for cleaning** equipment or tools or for starting fires. Gasoline may be transported only in approved safety containers. Gasoline engines must be shut off when refuelling. Plastic fuel containers are prohibited. All fuel containers must be marked with the appropriate contents.

10. **All areas where "hot work"** is occurring shall have fire extinguishers immediately located in that area and at all refuelling areas.

11. **Welding operations** shall be screened to prevent exposure to surrounding employees and to the public.

12. **"No Smoking"** rules **must** be observed in posted areas. There will be no smoking inside enclosed buildings.

13. **Tampering** with or unauthorized removal of **fire extinguishers** from assigned locations is prohibited.

14. **Riding of any industrial equipment other than on a manufactured seat is prohibited. No riding on forks, buckets, etc. of equipment is prohibited.**

15. **Working with & around heavy equipment** Do not operate heavy equipment if you are not trained or familiar with it. If you are operating heavy equipment be aware of other workers around you.

16. **Seat Belts** shall be worn in all moving equipment when so equipped. This includes backhoes, loaders, rollers, etc.

17. **Cranes, backhoes or other equipment with booms must be operated with caution around power lines**. Equipment shall be maintained a minimum of 10 feet away from all power lines less than 50kv or 10 feet plus 0.4 inches for every 1kv above 50kv.

18. No employee shall work under lifted loads. **Equipment operators shall avoid carrying loads over employees**.

19. **No employee shall operate any machinery, equipment or tool unless he has been properly instructed in its use** and is thoroughly familiar with all details of its operation. This includes boom lifts, scissor lifts, etc.

20. **Do not go up or down a ladder without the free use of both hands.** If material or tools have to be handled, use a rope to lift or lower them. Always face the ladder at the landing. Never use a stepladder as a straight ladder. Buckets are not permissible as ladders.

21. **All Machine Guards** shall be kept in place while machinery is in operation. Tampering with machine guards is prohibited. All Guards are to be promptly replaced after any repair work that necessitated the removal of a guard is conducted. All wire brushes and grinding wheels shall be protected by guards.

22. **Hand Tools shall not be used for any other purpose than that intended.** All damaged tools or worn parts should be removed form service and repaired.

23. **Electric power operated tools shall be properly grounded** before being put into operation.

24. **Acetylene, oxygen or other gas cylinders** are to be stored in an upright position and secured by tying or blocking into position.

25. **No employee shall remove a cover or alter a temporary guardrail, handrail, floor opening cover or any scaffolding components** without specific permission.

26. Employees are not permitted to use or possess any intoxicants or drugs on GBEPC sites or to be under the influence of any intoxicants or drugs while on the job. **Any employee found intoxicated or under the influence of drugs while on duty shall be disciplined.**

27. Tools, equipment, machinery and work areas are to be maintained in a clean and safe manner.

28. **Nails are to be immediately removed from disassembled lumber** as the lumber is stripped.

29. **Fall protection** is required when an exposure of a fall to a lower level is six (6) feet or greater in height.

30. **No employee shall work on scaffolding higher than six feet without proper guardrails, toe boards and proper flooring** except when proper precautions, such as lifelines with harnesses, barricades, etc. have otherwise been made. Scaffold platforms should be at least forty-eight inches (48") wide when possible. All scaffolding is to be cross-braced on both sides at every stage. All scaffold structure and brace members shall be free of defects.

31. **Unstable objects** such as barrels, boxes, buckets, loose bricks or concrete blocks **shall not be used to support scaffolding or planks.**

32. Good Housekeeping practices are required of all employees. Continuous and daily clean-up is required at all times.

33. **Common sense, health and sanitation rules must be observed** for the welfare and consideration of other employees.

34. **Glass bottles are not permitted** on the Jobsite.

35. **Music radios** of any kind; “boom boxes, personal radios, headsets, MP3 Players, etc., are not permitted on site.

Wilful Violation of these or other rules of this project may be cause for Disciplinary Action.

I UNDERSTAND THESE SAFETY RULES AND UNDERTAKE TO WORK IN A SAFE MANNER AT ALL TIMES.

Name: _____ **Signed:** _____

Company: _____ **Date:** _____

Site Set Up Procedure

1. Purpose
Detailing the Site Set Up and Mobilization for Health and Safety

2. Scope:
This Procedure is to define each stage of Site Set Up and Mobilization to be undertaken for addressing Health and Safety and maintaining GBEPC Standards in line with current Bahamian Laws.

3. Responsibilities:

3.1. President
- To ensure that this procedure is followed and that suitable resources including financial are available to meet this procedures requirements.

3.2. H&S Coordinator
- To ensure that this procedure is reviewed for Content
- To Actively be involved in ensuring that the company meets the requirements for Health and Safety

3.3. Project Coordinators / Superintendants / Foreman
- To ensure adequate manpower, materials and equipment are available
- To Co-ordinate all working activities relating to this procedure

3.4. Employees
- To engage in work activities and follow all H&S directions as applicable
- To give input where required

4. Method – Site Set Up
When contracts have been awarded and signed then Grand Bahama Engineering Procurement Construction Company. Project Management will ensure that the Project is resourced correctly. This will also include accommodation, Welfare Facilities, Stores and Laydown areas. Additionally a manpower review will be undertaken by Management to ensure there are enough Supervisory staff and competent workers for the duration of the Project. GBEPC will also ensure that Health and Safety is paramount in all site activities during site set up as follows.

4.1. Site Set Up (Allocation of Manpower, Equipment, Plant and Materials)
- GBEPC Senior Management will ensure that the project is correctly resourced in terms of labour and ensure that staff is competent to perform the tasks that they are employed to undertake. Additionally GBEPC will ensure all workers have a legal right to work in the Bahamas and will comply with all Bahamian Laws.
- GBEPC will allocate suitable and competent supervision and management during the whole of the industrial phases.
- All workers will attend a Health and Safety Induction prior to starting work and will enforce PPE requirements.
- Equipment used to perform the works will meet or exceed the requirements where applicable.
- Suitable and approved materials will be used to provide safe access and construct any temporary works.
- All equipment will be selected and serviceable to be used for it's specific tasks.
- All vehicles, equipment and plant will comply with current legislation for the Bahamas.
- Where records of inspections or test are required then GBEPC will supply information on request.
- All Operators will hold a valid Bahamian driving license and have valid insurance
- Vehicles will be allocated appropriate parking areas and designated traffic routes to prevent interference with works..
- GBEPC will provide stores personnel to ensure that materials are controlled and deliveries can be accepted and unloaded safely.
- Only those materials and equipment specified for industrial will be used.
- Signage will be erected where appropriate.

4.2. Site Set Up (Offices)
- Management will agree with the client the site layout area, office accommodation, welfare and stores areas.

- The Site set up will be evaluated once agreed, to ensure that it does not conflict with working activities, public, and other contractors or cause unnecessary inconvenience to others.
- Site Office's will be supplied in suitable locations, such as existing office's available on site, close to the project, in temporary cabins or by the client.
- All office accommodation will have access to running water for hygiene, drinking water, rest areas, toilets, suitable lighting, telephone, electrics and ventilation.
- Only competent contractors such as BEC/Batelco or registered Bahamian Contractors will be allowed to install any temporary services.
- All Offices will be fitted out with suitable firefighting equipment, and those designated as First Aid stations will have fully equipped First Aid Boxes and equipment.
- A Site Plan will be displayed on site indicating site layout, traffic routes, emergency information and emergency contact details.

4.3. Site Set Up (Lay Down Areas and Stores)

- All laydown areas will be agreed with the client.
- The areas will be leveled and checked for any hazards, such as overhead hazards, underground hazards etc. to ensure there will be no problems in storing or moving equipment and materials safely
- All laydown areas will be of suitable size to accommodate materials and equipment and allow safe access for site plant.
- All Laydown areas will be secured by means of a fence, lockable gates and razor wire to prevent any unauthorized access or theft.
- Materials may be stored in lockable containers on site.
- Flammable Materials will be stored as per MSDS, or in bunded areas to prevent spillages etc.
- Materials that are too large to store, or are not of significant value can be stored on the worksite.

4.4. Site Set Up (Workers Welfare Facilities)

- GBEPC will supply suitable shaded areas with seats and benches suitable for workers to rest and eat and to take shelter in inclement weather.
- GBEPC will ensure there is adequate drinking water available at all times for all workers.
- Workers will be provided toilet facilities, that may be Portable toilets, Toilets connected to Septic Tanks or existing toilets that may be connected to the main sewerage system as follows: -
    - 1 to 15 workers 1
    - 16 to 35 2
    - 36 to 55 3
    - 56 to 80 4
    - 81 to 110 5
    - 111 to 150 6
- Separate Toilet facilities will be provided for Female and Male Workers, where there are more than 16 workers. Where 1 toilet is to be used then there must be means of locking the toilet.
- All toilets will be regularly cleaned by a nominated person and will be emptied by a certified waste handling company registered in the Bahamas.
- Workers will be provided water, soap and areas to wash for hygiene purposes.

4.5. Site Set Up (Site Security)

- The industrial site will have a suitable fence erected to prevent unauthorized access.
- Where required GBEPC will employ an approved security company to ensure that no unauthorized access to site is allowed and to ensure security of offices, plant, materials and equipment.
- Will erect suitable and appropriate signage indicating industrial site and no access in appropriate locations.
- Will supply lockable Job boxes on the site to store tools and equipment
- Will ensure all stores, vehicles, plant and equipment is locked and secured when not in use.

4.6. Site Set Up (Temporary Electrical Supplies / Water for Industrial)

- Al temporary electrical supplies will be installed by a recognized and competent electrical contractor.
- Water line or tanks will be available in suitable locations on site
- All temporary services will be protected from inadvertent damage and be detailed on an "As-Built" drawing.

5. Documentation

- Site Set Up Checklist

6. Review

This document and form shall be reviewed bi-annually unless changes occur during this period.

Approval of Health and Safety Documentation

1. Purpose

To establish the methodology for approval of all Health and Safety Documents, Forms, Risk Assessments, Job Safety Analysis / Methods.

2. Scope

This procedure will be used for GBEPC Health and Safety Management Systems.

3. Roles & Responsibilities

The Health and Safety Coordinator will be responsible ensuring all Health and Safety Documentation comply with Bahamian Laws, Best Practice sought from HSE, OSHA, OHS and Client Requirements.

4. Procedure

All Documents shall be raised through the Health and Safety Coordinator to ensure content is compliant with the scope detailed above.

4.1. Health and Safety Procedures – Management System.

- All documents created in the Health and Safety Management system will be jointly approved by the President of GBEPC and the Health and Safety Coordinator.
- Only those documents that have been approved will be released.
- All documents within the Health and Safety Management System will be available to all staff
- The Health and Safety Coordinator will review procedures at least once per year or if working practices, Laws or methodologies change.

4.2. Risk Assessments

- The Health and Safety Coordinator will ensure that Risk Assessments are compiled for Site activities.
- All Risk assessments will be made available for Staff to review
- Risk Assessments will be maintained in the Health and Safety Coordinators files and only those released will be accessible.
- Each Risk Assessment will be given a title and its own unique reference number.
- The Health and Safety Coordinator will review all risk assessments at least once per year or if working practices or methodologies change.

4.3. COSHH/MSDS

- Any documentation pertaining to COSHH/MSDS/Hazardous substances will be reviewed by the Health and Safety Coordinator.
- All materials ordered by GBEPC or used on the project will have a Coshh assessment undertaken and records of the assessments will be maintained.
- Coshh assessments will be available to all staff.
- The Health and Safety Coordinator will review all Coshh assessments at least once per year for validity.

4.4. Method Statements

- Project Coordinators and Site Engineers are responsible for writing Method Statements using the Method statement template to include resources, technical detail, equipment, materials, scope of works location and duration.
- Once this has been compiled the Health and safety Coordinator will ensure that all Hazards and associated risks are attached or included on the method statement. These will include reference to any Permit to Work (PTW), Coshh/hazardous substances.
- The Project Coordinator / Engineer and Safety Coordinator will jointly review the document for content and accuracy then will sign off the approved document with it's own reference number.

- The Method Statement will be issued to the relevant Supervisor or person responsible for work.
- All method statements will be briefed to the workers and records maintained on Site.

4.5. Safety Alerts – Tool Box Talks

All documents associated with Safety Alerts / Tool box talks or general uncontrolled safety documents will be compiled and issued by the Health and safety Coordinator when and where required.

5. General

All documents that are issued by GBEPC will contain GBEPC logos and formats.

6. Communication

All staff will be informed of any new procedures contained in the Safety Managements Systems, by means of briefings, formal correspondence, electronic media or in organized meetings.

Hazardous Substances

1. Purpose

To establish the methodology for approval of all Hazardous Substances, use and disposal requirements.

2. Scope

This procedure will be used for GBEPC Health and Safety Management Systems.

3. Roles & Responsibilities

The Health and Safety Coordinator will be responsible ensuring all Hazardous Substances comply with Bahamian Laws, Best Practice sought from HSE, OSHA, OHS and Client Requirements and that all risks and controls are established for Hazardous substance use.

4. Procedure

This procedure describes the requirements for the management of: -

- Approval for proposed new chemical substances. (excluding Contractor activities).
- Existing chemical substances that are classified as Hazardous Chemical Substances.
- Material Safety Data Sheets (MSDS).

4.1. Requirements for Purchasing Hazardous substances.

- Any item that is deemed as Hazardous (oils, lubricants, liquids, solids, paints and solvents, fuels and gasses etc.) will be reviewed to ensure that the safest, environmentally friendly and also within cost restraints.
- Any special PPE requirements, equipment and emergency spill kits will be purchased or made available when all Hazardous substances are purchased.
- GBEPC will ensure that all Hazardous substances purchased will be in line with current specifications as detailed by specialist, designers or as stipulated by Bahamian Laws and regulations.

4.2. Register of MSDS (Hazardous Substances)

- The Health and Safety Coordinator will ensure that Hazardous Substance registers and copies of MSDS sheets are compiled and available for Site activities.
- No Hazardous substance can be used until the MSDS sheets and any special arrangements are in place.
- All Hazardous Substance assessments will be made available for Staff to review at all times
- Master copies of Hazardous Substance registers and MSDS sheets will be maintained in the Health and Safety Coordinators files and only those released will be accessible.
- Each Hazardous Substance MSDS will be given a title and its own unique reference number.
- The Health and Safety Coordinator will review all Hazardous Substance assessments at least once per year or if working practices or methodologies change.

4.3. Disposing of Waste of Hazardous Waste Materials (Amended version.)

- Disposing of hazardous materials or Common hazardous material generated at industrial sites includes used oil, hydraulic fluid, diesel fuel, Soil contaminated with toxic or hazardous hydraulic fluid, diesel fuel, roofing cement, adhesives, machinery lubricants, and caulk, Cleanup materials (such as rags) contaminated with the items listed above Drums and containers that once contained the items listed above, varnish, sealers, thinners, Lead-based paint. These

items will be separately stored from non-hazardous waste inside a trash container or trash bin temporarily & clearly marked for transporting to the Island available dump site.

- Hazardous wastes will be stored in sealed containers constructed of suitable material with a label that clearly identifies the contents and accumulation date.

4.4. Disposing of Waste of Non Hazardous Materials (Amended version.)

- Disposing of non- hazardous materials or Common non-hazardous material generated at industrial sites includes Scrap wood (used or unused) plumbing fixtures, assorted piping, dry wall Insulation (non-asbestos), damaged concrete bricks, Roof coverings (e.g., shingles) Concrete blocks, metal scraps, plaster, Electrical wiring and components. All non-hazardous materials will be placed collectively inside a dumpster or open trash storage facility temporarily until trash is generated and readily available for transport to the Island available dump site.

5. General

All documents that are issued by GBEPC will contain GBEPC logos and formats.

6. Communication

All staff will be informed of any new procedures contained in the Safety Managements Systems, by means of briefings, formal correspondence, electronic media or in organized meetings. All staff involved in work using hazardous materials will be briefed on the findings of the assessments.

7. Emergency Procedures

As part of the process and as detailed in the MSDS, any spillages, fire, contamination, or personnel who are affected by inhalation, skin absorption or ingestion will be accounted for in the MSDS.

Fire Safety

1. Purpose

To ensure that the there are highlight fire hazards and the precautions and prevention facilities necessary to prevent fires from occurring or spreading on Grand Bahama Engineering Procurement Construction Company Projects to prevent loss of life, serious injuries and damage to properties.

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2. Scope

This procedure applies to be used by all members of the Grand Bahama Engineering Procurement Construction Company Project Management Team, Supervisors and Subcontractor's personnel. It is the responsibility of everyone to take all steps to plan their working activities by preventing fire risks, not only in their areas of control, but also to continually be vigilant to fire prevention in all other areas of the project.

3. Fire Hazards

- Fire Hazards include the following, but not limited to;
- Fires in office.
- Electrical faults.
- Vehicles and heavy equipments.
- Fuel Storage.
- Flammable gas storage.
- Storage of combustible materials
- Smoking.
- Hot work.
- Mechanical friction.

4. Roles & Responsibilities

HSE Coordinator has the following responsibilities:

- To ensure that the procedures on the plan are known and followed by personnel with specified duties;
- To ensure development of the written emergency plans. To regularly monitor the application of these procedures.
- To provide whatever training is required for fire wardens.
- To ensure that regular and routine maintenance schedules are being followed.
- To ensure that fire extinguishers are compliant and checked.
- That an appropriate number of staff is assigned with the responsibility to act as fire wardens, with the duties of marshalling and controlling the evacuation of premises.
- Daily checks of the site/office to ensure that walkways are not obstructed, that the means of escape are being maintained.

Site Supervision will ensure

- That waste oil, rags and other flammable materials are removed at the end of each shift or as necessary.
- Provision of adequate storage areas that are located in places where exits, gangways and stairways are not adversely affected.
- Any Battery recharging will be conducted in well ventilated areas, with no smoking signs and fire extinguishers in place.
- Particular care to be taken when carrying out hot work operations in locations where combustibles may be present. This will include precautions such as; inspection of the surrounding area, removal of any combustible materials and provision of fire extinguishers and fire wardens.
- That flammable liquids such as; gasoline, diesel etc. are not used for cleaning purpose.
- Hot work permit must be issued from before commencing any welding, cutting works and other related hot work.
- Compressed gas cylinders shall be closed when not in use, stored and used in an upright position, have their protective caps fitted when moving and transporting them(unless by cylinder trolleys) and suitable signage “No Smoking” erected.
- Compressed gas cylinders shall be kept clear of electrical equipment and cabling where they may become part of an electrical circuit.
- Gas cylinders shall not be taken into confined spaces, and feed hoses and nozzles when used in confined spaces shall be moved when not in use.
- Oxygen cylinders shall be kept free of oil and grease. Do not handle the cylinders with oily or gloves
- Valve keys shall be left in position on the valve stem at all times when the cylinder is in use.
- Fuel gas and oxygen hoses shall be clearly distinguishable in good condition and secured properly.
- Cylinders shall be fitted with flash back arrestors.

5. Procedures

The following general instructions shall be followed and adhered to:

- Materials and equipment shall be maintained in an orderly manner that in order to prevent the possibility of fire spread.
- Materials shall not be stored in a manner that obstructs fire points, sprinkler heads, alarms, emergency exits, electrical panels and walkways.
- Smoking is prohibited while refueling activities are taking place and equipment will not be running.
- Incompatible materials will not be stored in proximity to each other.
- ‘No smoking policy’ will be applied. Smoking areas away will be provided away from the work site
- Doors provided for emergency escape will open outwards in the direction of travel.

5.1. Portable Fire Fighting Equipment.

Training

Shall include but not limited to:

- Training must be arranged for an adequate number of personnel to be trained in the use of portable firefighting equipment. This should ensure that there are trained persons in every location where persons are working. The purpose and usage of fire extinguishers must be of high priority in training.
- Provision and location of extinguishers.
- Adequate numbers of portable fire extinguishers must be made available throughout the site.
- The fire extinguishers must be located in conspicuous positions close to exits on each floor and properly marked for immediate identification.
- It is recommended that extinguishers be mounted off the floor at a height of approximately 1.0 meter clearly signed fire point. (In the open, it is recommended that extinguishers be situated in red painted open fronted boxes. The boxes should also be positioned above ground level with a sign ‘fire point’ at a height easily seen above any intervening obstructions.
- Appropriate fire extinguishers, e.g. ABC; must be provided close to electrical distribution panels and other major items of electrical equipment.

6. Fire Procedures.

If a fire occurs, immediately carry out the actions listed below:

- Alert other personnel on site and remove any injured person(s) from immediate danger if safe to do so.

- If no personal risk is involved, an attempt should be made to extinguish the fire using nearest fire extinguisher or hoses.
- If in doubt, evacuate the premises and leave fire fighting to the experts.
- Evacuate building following the evacuation procedure.
- Go to designated Assembly Point
- Follow instructions.

Forklift Operations

1. Purpose
To Ensure that all Forklift Operations are controlled and detailed in a procedure to enable GBEPC to effectively manage operations.

2. Scope
This procedure applies to all Grand Bahama Engineering Procurement Construction Company Sites in order to meet and maintain the required standards.

3. Roles & Responsibilities
All GBEPC Management must ensure that the contents of this Procedure are maintained.

4. Procedure
All operators of Forklift will be certified as competent by Grand Bahama Engineering Procurement Construction Company. These operators are the ONLY persons allowed to operate such machines. Whereby a Subcontractor is required to use Forklifts on GBEPC sites, they will supply a competent person to operate the machines. The subcontractor must also demonstrate that the equipment and plant are fit for use prior to working on GBEPC sites.

The following sections provide basic guidelines for working with forklifts, front-end loaders, and backhoes.

4.1. Forklifts (FLT's)

Only authorized employees may operate forklifts. The following list provides general safety guidelines:

The term fork lift truck in this section applies to any rider operated vehicle which is designed to lift and maneuver loads, and it would include trucks with fork arms, lifting platforms attachments and other devices.

GBEPC will ensure on the project that all forklifts in operation have the following items are in place for additional safety control measures to reduce associated risks.

- Suitable vehicles are provided.
- Driver restraint systems – Seatbelts
- Trained and competent Operators.
- Provision of suitable refueling facilities and traffic routes.
- Loads carried shall be stable.
- Environmental conditions shall be suitable for use of FLT's; in most cases GBEPC will use all terrain equipment.
- All FLT operations will be effectively managed.
- No Persons to be carried on a machine specifically the cab and forks unless in an approved person lifting device (man basket).

4.2. Traffic Routes

Wherever possible the movement of vehicles and pedestrians will be kept separate. If pedestrians are allowed into FLT areas then pedestrian routes shall be marked out, with suitable crossing points and guard rails or suitable barricades erected at high risk points.

All traffic routes including direction, priority and speed rules will be established prior to the project start up and will reviewed on a regular basis.

4.3. Loading, Unloading and Stacking

GBEPC Supervision will ensure that all work carried out by FLT's including the use of attachments, has been subject to a risk assessment process. This shall result in procedures that minimize the possibility of any incident involving people or other vehicles.

The vehicles provided will at all times be operated within their safe operating limits as stipulated by the manufacturer/supplier and all Project Safety rules and regulations.

All vehicle shall be maintained in accordance with the manufacturers' maintenance recommendations or more frequently according to the conditions. In addition there a record of routine safety checks on the vehicle will be maintained.

All FLT's will have visual and audible warning systems shall be fitted to all vehicles to alert other personnel of their movements. This includes flashing lights that can be seen from all directions and an audible signal that it is automatically sounded when reverse is engaged.

4.4. Operators

GBEPC will ensure that all operators are competent and authorized to operate FLT's; this will be monitored and withdrawal of the operator will be undertaken if consistently high standards of operating are not achieved.

All GBEPC Operators will follow the specific rules detailed below.

- Local traffic rules shall be adhered to.
- Operators will wear restraint systems where supplied with the vehicle. Unless in an area designated by management as a no restraint system zone or they have special written permission from local management.
- Vehicles will not be left unattended with the engine running.
- The vehicle hand brake will always be applied when leaving the vehicle.
- The vehicle will be parked in a safe location with the forks on the ground.
- Unsafe vehicles shall be secured to prevent their use.
- Keys must not be left in an unattended vehicle.
- Unauthorized personnel shall not be able to access vehicle keys.
- Passengers must not be carried unless the truck was designed with additional seating.
- Operators shall not drive forward if the load obstructs their view.
- Loads must not be carried in an elevated position where possible.
- Trucks shall not exceed their safe lifting capacity.
- Controls shall not be operated from outside the truck.
- Operators shall sound their horn when approaching a blind corner, when approaching a doorway or other hazardous situation.
- Operators shall use any other warning device as appropriate i.e. bleeper or flashing lights.
- Refueling FLT's whether gas, diesel or batteries presents additional hazards. Operators shall follow local rules and wear the appropriate PPE.
- Particular care shall be taken whilst entering and leaving the FLT. Operators shall try to maintain three points of contact wherever possible.

Welding and Cutting

1. Purpose

To ensure that there are suitable controls and guidance to ensure Safe Use of Welding and Cutting Equipment.

2. Scope:

This Procedure provides guidance to the GBEPC for all operation associated with Welding and Cutting Equipment including the safe storage of compressed gas cylinders.

3. Responsibilities:

The project coordinator, superintendant and Safety Coordinator are responsible to ensure all aspects of this procedure are followed. Additionally when Sub Contract Labour or works are assigned it is the responsibility of the Superintendant and the Safety Coordinator to ensure that the Subcontractor complies with this procedure at all times.

4. Procedure:

4.1. Welding and Cutting Operations

All welding and cutting equipment should be of the approved type and maintained in good condition. All personnel working with welding equipment shall be trained, competent and be provided with personal protective equipment. The following precautions shall be taken during welding and cutting operations.

4.2. Basic Precautions

- Before starting to weld or cut, the work area shall be inspected to ensure that sparks or molten metal will not fall on combustible materials.
- Cylinders should be stored in a safe and designated location.
- All storage area should have no smoking signs posted.
- Cylinders shall be transported, stored and used securely fixed in the upright position. They must never be rolled on their sides, dropped or man-handled with the gauges fitted.
- When not in use, they shall be stored in a specially designated area with the safety caps on main valve.
- Ensure equipment is inspected at regular intervals.
- Precautions shall be taken to ensure employees are trained and required Personal Protective Equipments (PPE) must be worn (Welding Mask, face shield, goggles, leather gloves, leather apron, etc.).
- No welding or burning should be done in a hazardous area without obtaining written authorization from the Safety Coordinator / Project coordinator and using the Hot Work Permit system.
- A suitable fire extinguishing equipment is required in the work area.
- No welding or burning shall be carried out on barrels, tanks, piping or other system which have contained either combustible or unknown products without first obtaining approval from the Safety coordinator or Project Coordinator.

4.3. Welding and Cutting Operations

- The oxygen – acetylene bit, gauges and other accessories should not be lubricated or smudged with oil, grease and other flammable substances which can easily catch fire upon contact with compressed oxygen.
- Welding equipment should not be tampered.
- The oxygen and acetylene hose lines should be properly connected to the safety valves by means of a regulator and to the cutting torch by a hose clamps.
- All the Oxygen and acetylene gas cylinder regulators must be fitted with **Flash Back Arrestors** to prevent back fire in case of fire in hose pipe line system.
- High and low pressure gauges should be in good working condition.
- Regulators should be fitted to the cylinder valves by means of non inflammable packing able to guarantee perfect sealing.

4.4. Storage of Cylinders

- Cylinders shall be stored in a safe, dry, well ventilated place and reserved for that purpose. All cylinders must be chained or otherwise secured in upright position to prevent rusting.
- Cylinders stored in the open shall be protected from ground contact, extreme of weather and direct sun rays.
- 2) Cylinder storage must be planned so that cylinders shall be used in the order in which they are received from the supplier.
- Empty and full cylinders must be stored separately and empty cylinders plainly marked to avoid confusion.
- Empty cylinders must be kept separately according to the type of gas content.
- Cylinder storage rooms must be ventilated sufficiently so that explosive concentration of gas cannot accumulate.
- Smoking or any other source of ignition must be prohibited.
- When the job is finished the cylinders valves must be closed.
- Valves caps shall be in place when cylinders are not in use.
- Cylinders shall be transported securely and upright in trolleys. They shall never be rolled.
- Oxygen cylinders shall be stored separately from acetylene cylinders.

4.5. Electric Welding

- The following precautions against the various potential risks of an electric nature should be taken
- Machine should be protected from damp and water and from infiltration of foreign bodies.
- Machines with dented protective covers shall not be used until they have been inspected for safe operation or repaired.
- Ensure proper connection between cables and terminals.
- Provide an efficient earthing system and connect the welding set to it.
- The cables feeding the current to electric welding set

5. Review
All corrective actions will be subjected to a review to ensure that any issues have been corrected.

6. Records
Details of all Inspections will be retained and filed for any future reference.

Working at Heights

1. Purpose
Grand Bahama Engineering Procurement Construction Company (GBEPC) is committed to ensuring that all working at Height will conform to Bahamian Islands Government requirements and all Client requirements.

2. Scope:
This Procedure applies to all work at height on GBEPC projects, including subcontract labour.

3. Responsibilities:

ALL GBEPC personnel are responsible to ensure all aspects of this procedure are followed and that compliance is 100% mandatory.

4. Procedure:
Each job where people have to Work at Height must be assessed by the GBEPC Foreman/Superintendant to determine the Safest and most practical way to prevent people, tools, equipment and materials from falling to the ground.

There are various means of preventing falls when working at height, below is guidance to use to assist in ensuring that suitable measures are undertaken and put in place.

Working at Height can be defined as any height where a worker can be exposed to a fall of 6 feet or more to a lower level. However, working at any height can still carry risk and suitable control measures are encouraged to eliminate any workers being exposed to a fall at any height up to 6 feet.

Prior to undertaking any work where a worker may be exposed to a fall of 6 feet or more then GBEPC will ensure that adequate fall protection measures have been evaluated and hazards identified. Once this has been completed then the suitable Fall Protection must be utilized: -

- Addresses completely all the hazards of the exposure of workers
- that the fall protection system is the most practical for the works to be undertaken safely
- That basic questions have been answered to satisfy the requirements as detailed in this document
- All staff is fully aware of their responsibilities and what the safe working procedures are.

4.1. Leading edges:

Where Leading edges are identified by GBEPC personnel during works or prior to works commencing then sufficient measures will be taken to ensure GBEPC personnel will not be at risk of Falls.

Leading edges can such as an unprotected side and edge of a floor, roof, or formwork for a floor or other walking/working surface (such as deck) which changes location as additional floor, roof, decking or formwork sections are placed, formed or constructed, where it is not actively under industrial .**”**

4.2. Guardrail Systems

To address leading edge issues or areas where there is a potential for a fall, GBEPC recognize the need for a guardrail system to be installed, it will consists of a top rail, midrail, and intermediate vertical member. Guardrail systems can also be combined with toe boards that prevent materials from rolling off the walking/working surface. GBEPC will ensure that its Guardrail system complies with the following requirements: -

- Guardrail systems must be free of anything that might cut a worker or snag a worker's clothing.
- Top rails and midrails must be at least ¼-inch thick to reduce the risk of hand lacerations; steel or plastic banding cannot be used for top rails or midrails.
- If Wire rope is used for a top rail it will be marked at least every 6 feet with high-visibility material.
- The top rail of a guardrail will **be 42 inches** above the walking/working surface.
- Midrails will be installed midway between the top rail and the walking/working surface unless there is an existing wall or parapet of at least 21 inches high.
- Screens and mesh are required when material could fall between the top rail and midrail or between the midrail and the walking/working surface.
- If using Intermediate vertical members, instead of midrails between posts, they will be no more than 19 inches apart.
- The guardrail system will be capable of withstanding a 200-pound force applied within 2 inches of its top edge in any outward or downward direction.
- Midrails, screens, and intermediate structural members must withstand at least 150 pounds applied in any downward or outward direction.

4.3. Personal Fall-Restraint Systems:

Personal Fall Arrest System (PFAS) is designed to be used and or worn by an individual to prevent the user from falling more than 6 feet or to a lower level by arresting the fall rather than stopping the fall. GBEPC will assess the requirements of PFAS per task and may use a combination of items detailed below. In any event the use of Guardrails or permanent fall prevention will take priority over PFAS.

All GBEPC employees who are required to work at height where it is not reasonably practical for guardrails or edge protection to be installed or where guardrails and edge protection is being installed must wear PFAS. This can be a combination of: -

- Full Body Harness
- Lanyard – If an employee has to move location then a twin legged lanyard must be used to ensure 100% tie off at all times.

Other items that may be used by GBEPC employees are: -

- Lifelines – Either vertical or horizontal to connect PFAS to. GBEPC will ensure that all lifelines are connected to a suitable anchor point of sufficient strength to ensure the safety of all employees. Each lifeline will be capable of withstanding 5000lb.
- Deceleration Devices - any mechanism, such as a rope grab, ripstitch lanyard, specially woven lanyard, tearing or deforming lanyard, or automatic self-retracting lifeline/lanyard, which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on an employee during fall arrest.

To assist EAHIC employees in conducting "Hands Free" work then they may use Positioning Device Systems. This is a body belt or body harness rigged to allow a CCL Ltd employee to be supported on an elevated, vertical surface, such as a wall or column and work with both hands free while leaning.

NOTE: THIS IS NOT TO BE USED AS A FALL PROTECTION METHOD and must be used with other systems such as PFAS.

GBEPC will ensure that All items of PFAS be inspected prior to use by the user and any damages will be immediately reported to GBEPC Superintendents and equipment removed from the job site.

4.4. Correct Application of PFAS

EAHIC will train staff in the correct use of PFAS. All PFAS where possible will be attached above head eight to ensure that the most effective method of connection is attained. If overhead connections are not readily available then the system will be reviewed to achieve the best alternate method.

5. Scaffolds – Catch Platforms:

Where GBEPC will use Scaffolds that can be used as additional fall protection. GBEPC will only utilize this in conjunction with PFAS. Each scaffold must be correctly built by trained GBEPC operators or competent sub-contractors to allow safe access to the work area. Where GBEPC will use scaffold as a catch platform then the scaffold working level must be no more than 10 feet below the leading edge and as wide as 45" and no more than 14 inches away from the leading edge. Additionally the area between the top rail and toe board must be covered with material that will prevent any person, equipment or material passing through it and be capable of supporting at least 200 pounds of horizontal force.

5.1. Roof Work –

GBEPC recognizes that there are many variations for work on roofs. Therefore GBEPC Policy is that **All** work on Roofs shall be considered to be the same for the purpose of installing / utilizing Fall Protection. The Site Foreman / Superintendant shall ensure that adequate protection is selected for any roof works 6 feet or more above lower levels by: -

- A Standard Guardrail System with standard toeboard on all exposed sides that meet the requirements of Guardrails
- PFAS and approved anchorage systems, such as deceleration devices, rope grabs, life lines.
- Catch Platforms
- Where applicable suitable and approved roofing ladders can be used but must be accompanied by a PFAS.
- When constructing roofs (including trusses, tiles, standing seam etc.) all GBEPC workers MUST still have fall protection. This fall protection must be assessed on site due to the amount of variables in the process. The Superintendant must identify the safest method for fall protection in line with the company's procedures.

5.2. Floor Openings

GBEPC will ensure that every floor hole into which employees can accidentally walk shall be guarded by either: -

- A Standard Guardrail System with standard toeboard on all exposed sides that meet the requirements of Guardrails,
- Floor hole covers must be of standard strength and industrial to prevent a worker from falling through. It must also be identified as a Hole by signs or marking it clearly for workers to see. The covering must be secured firmly to prevent movement.
- While the cover is not in place, the floor hole shall be constantly attended by someone or shall be protected by a removable standard railing.

5.3. Staircases

GBEPC will ensure all Stairs which have 4 or more risers have suitable fall protection installed and shall be equipped with

- At least one handrail
- One stair rail system along each unprotected side or edge.

- All landings and open sides must be protected by suitable Guardrail systems.

5.4. Scaffolding

Where works require scaffolds then GBEPC will ensure that they are built correctly by trained and competent employees or sub contractors and will be regularly inspected. All scaffold inspections will be recorded using the Scaffold Inspection Form (Appendix 1).

GBEPC will maintain that any scaffold over 6 feet is deemed to be working at height. This means that employees will always require some fall protection. When Scaffolds have Guardrails installed, this is classed as fall protection. However, whilst the scaffold is being erected or dismantled, raised or is incomplete then all scaffold personnel must utilize effective PFAS.

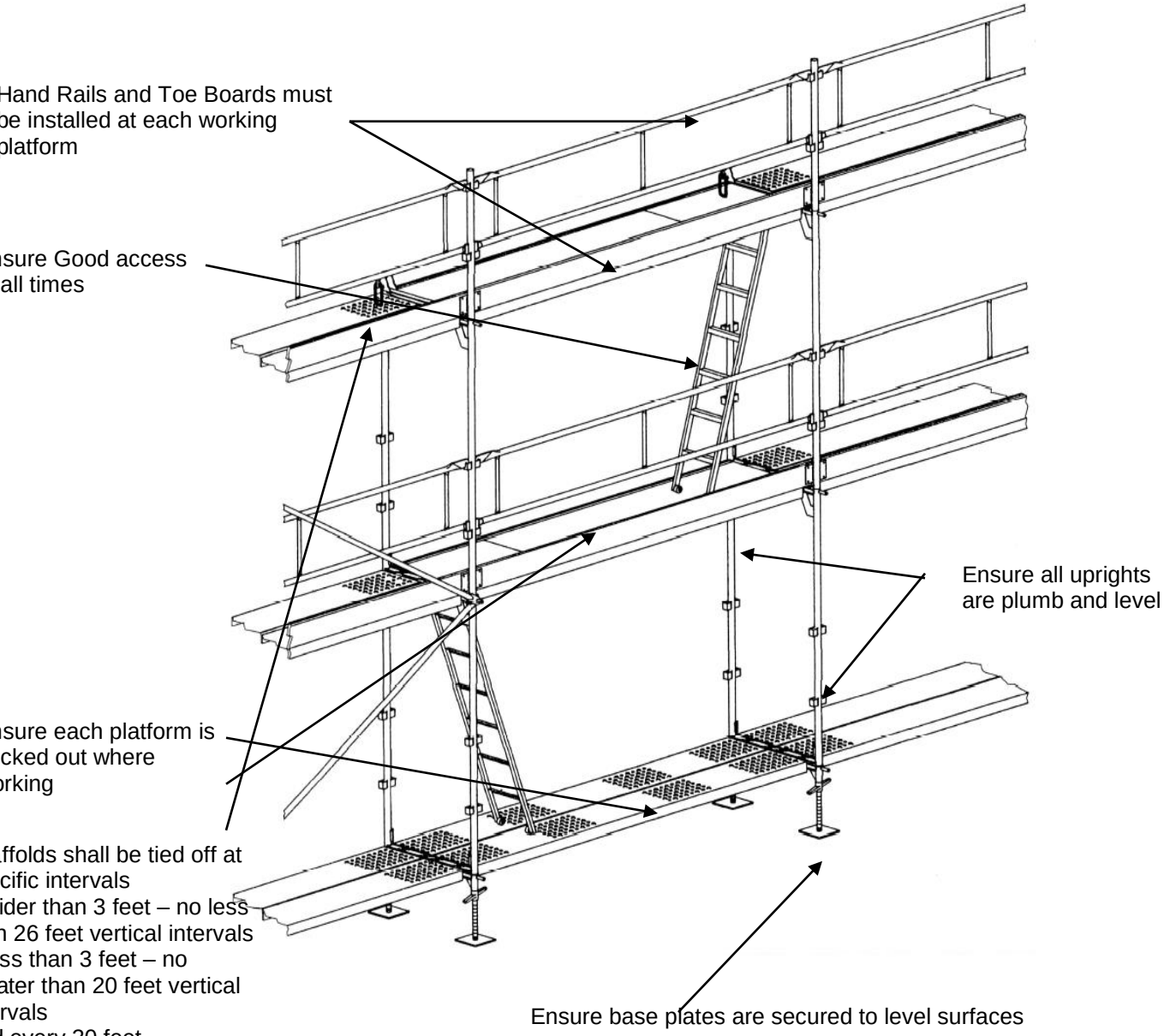
GBEPC Superintendants and Project Coordinators will determine when scaffolds shall be used. This will be where:-

- there is no solid industrial to stand on and
- the work cannot be done safely while standing on a ladder (See ladders section).

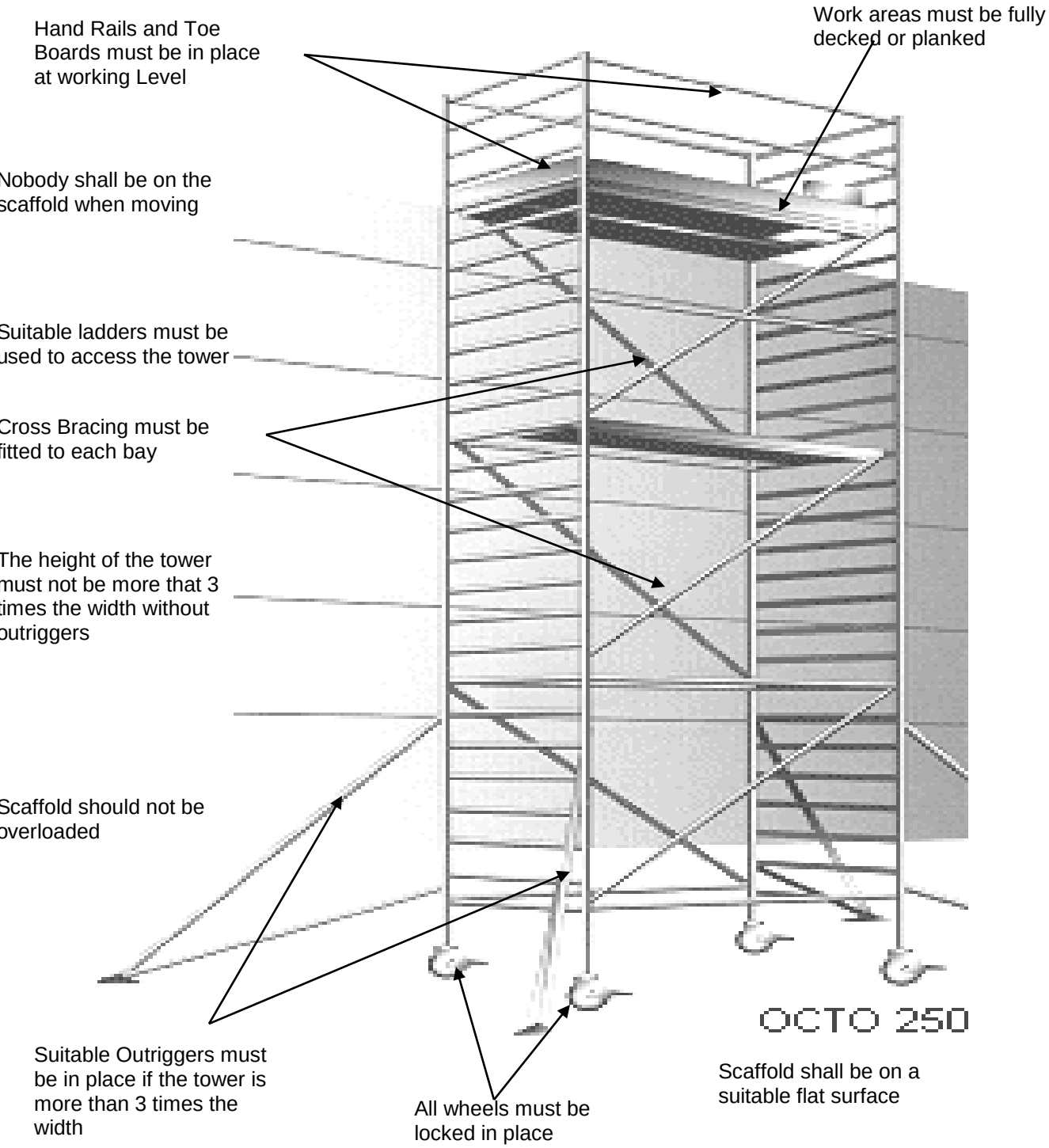
Planning
Prior to erecting any scaffolds GBEPC Management will review the requirements for scaffold and ensure that the most suitable scaffold is selected. Such Planning will involve some or all of the list below :-

- Height of the Job
- Load of the Job (Materials and Labour)
- Ground Conditions (Suitable and Stable to hold the load)
- Proximity of Electric Lines
- Determine whether ties are needed *(Guys, ties, and braces shall be installed according to the scaffold manufacturer's recommendations or at the closest horizontal member to the 4:1 height and be repeated every 20 feet (6.1 m) or less for scaffolds 3 feet (0.91 m) wide or less. Every 26 feet (7.9 m) for scaffolds greater than 3 feet (0.91 m) wide.*
- Access to and from the worksite
- Interference with other jobs or workers
- Openings, pits or trenches.
- Proper bracing that is rigid in all Directions
- Safe and easy access to the scaffold.
- Fall Protection for the persons using the scaffold
- Adequate decking and overhead protection
- Suitable protection for falling materials or tools on people passing or working near the scaffold.

TYPICAL ACCESS / SYSTEM SCAFFOLD



TYPICAL MOBILE TOWERS



As there many hazards associated with scaffolding. GBEPC Management will ensure all employees are aware and understand the following: -

- Follow Manufacturers Guidelines at all times
- GBEPC Scaffolds must only be erected by those staff who are trained.
- Scaffolds will not be used in severe weather – Strong winds, thunderstorms (lightning)
- GBEPC Scaffolds will only be used for their intended purpose.
- All GBEPC staff are instructed not to use unstable objects or makeshift devices to increase the working height of the scaffolds.
- No works can be undertaken where GBEPC employees straddle, stand on, or work outside of the guardrail.
- Use mobile scaffolds on firm, level surface. Lock the casters or wheels before using.
- No GBEPC employee will “ride” on a scaffold while it is being moved.
- Remove or secure any tools or materials before moving or relocating a scaffold.
- Use designed access means to descend or ascend a scaffold (stairs, attached ladder, or specially designed end frames).
- Do not use cross bracing or side rails for access.
- Keep only the tools and materials on the platform that are necessary to perform the task. Control all slipping and tripping hazards by removing or securing the tools/materials.
- Use fall protection systems (guardrail systems or personal fall arrest systems) when working six feet or more above a lower level.
- Notify supervision immediately if a scaffold is damaged, weakened, or otherwise deficient.
- Where Guardrails and handrails cannot be installed then GBEPC management will ensure employees utilise Personal Fall arrest Systems.

5.5. Steel Erection –

- When Structural Steel is erected by GBEPC employees or Sub Contractors then they must ensure that they are 100% tied off by use of Static lines where they can be installed correctly and PFAS where the exposed fall is 6 feet or greater.

- If steel erection is for temporary / permanent flooring then leading edge protection must be provided and all exposed open sides must have guardrails installed as per correct specification. Temporary Guardrails must be replaced by permanent guardrails when finished.

- If work is undertaken from rolling scaffolds/Tower scaffolds then the scaffold must be built correctly (as detailed in Scaffold Section previous).

5.6. Falsework/Formwork/Shoring

During erection of Horizontal Falsework/shoring 6 feet or over from the lower level, suitable fall protection will be utilized, as this type of work constantly creates a leading edge fall protection is essential at all times.

- As soon as possible Guardrails must be erected on each exposed edge where the fall is 6 feet or greater as this is the preferred method of protection to allow workers to continue work without PFAS.

- Life lines must be erected and or suitable anchorage points for PFAS for workers who are erecting falsework at the leading edge or moving edge. Care must be taken to prevent workers from striking Falsework equipment or the lower level should a fall occur.

- All workers who do not require PFAS must be at least 6 feet from any unprotected leading edge.

- Safe access must be erected by means of scaffold, ladder or existing surfaces.

- GBEPC employees or Sub Contractors – Will ensure safe means of access / egress at all times.

When erecting Vertical Formwork 6 feet or over from the lower level, suitable fall protection must be utilized. Suitable Fall Protection consists of

- Scaffold or work platforms that comply have suitable Guardrails in place.

- PFAS and Positioning Devices can be used to erect Formwork. Any climbing of formwork must utilize twin lanyards to ensure 100% tie off.

- Ladders - must comply with requirements and workers must utilize PFAS if work is undertaken from a ladder. Note that this type of work should only be for short duration.

5.7. Windows and Wall Openings

Where window and wall openings that exposes any worker to a fall of 4 feet or more suitable barriers in place must be in place.

- All barriers will be of such industrial and mounting that, when in place at the opening, the barrier is capable of withstanding a load of at least 200 pounds applied in any direction (except upward) at any point on the top rail or corresponding member.
- Windows and Openings that create a hazard due to their size and position (over 5 foot high and the opening less that 21" must be suitably barricaded off. This may require mid Rails and Top Rail as per guardrail section requirements.

Guide to assist in determining what Fall Protection is required

Questions to ask include:

Height

How high is the job from the ground?

(Working at heights that are in excess of 20 feet would require more permanent Fall Protection measures)

Surface

What surface will the access equipment rest on (e.g. a wall, cladding, a pitched roof)?

Is this surface strong enough to take the weight of the workers and their equipment?

Ground

What is the ground condition under the area where access equipment might need to be set up - for example, is it sloping, muddy or uneven? The access equipment you use must be suitable for the ground conditions - stable, level and not liable to fall or collapse.

If you fall, what will you fall on to?

(Protruding steel – Rebar for example would require to be protected to prevent any further hazards)

Weather

Is it raining hard, or very windy?

Task

What tools and equipment will you use?

Types of access available for the task

When looking at what you need to do the job, think about the following…

From the ground	*Can you do the work from the ground?*	*Yes/No*
From the roof	*Is the roof above the gutter accessible?*	*Yes/No*

	Is the roof strong enough to work from?	*Yes/No*
	Does the roof have guardrails or other equipment that will prevent a fall?	*Yes/No*
	If no, can this be installed?	*Yes/No*
From a Working platform	*Can you do the work safely from a cherry picker, scissor lift or tower scaffold?*	*Yes/No*
	Is it practical to use Working Platforms ?	*Yes/No*
Fall protection	*Do you need personal fall protection to allow safe access to the place of work?*	*Yes/No*
	Is Fall Protection going to hinder the activities or task in hand?	*Yes/No*
From a ladder	*Is the work low risk and short duration?*	*Yes/No*
	Do you have a ladder that will reach the area?	*Yes/No*
	Can you secure the ladder safely?	*Yes/No*
	Is the ladder suitable for the task in hand (roof ladder, Step Ladder, Job Built Ladder, Industrial grade) ?	*Yes/No*
	Can you or your workers use the ladder safely?	*Yes/No*

Use tool belts and or tool harnesses to carry tools and equipment to place of work.

Use hand lines to raise and lower tool, equipment and materials rather than carrying them,

Take frequent breaks, especially when working from a ladder - do not work from a ladder for longer than 30 minutes at a time.

If you are using a ladder keep three points of contact wherever possible.

Make sure the people who will be doing the job have the right skills, experience and training to use the equipment safely and have been trained and instructed about the right equipment to use.

6. Fall Protection - Methods

GBEPC will ensure its employees or sub contractors will wear Safety Harnesses and Lanyards at the following times: -

- On all scaffolds with incomplete decking or incomplete guardrails
- On sloping roofs

- Within six feet of the edge of floors or roofs where there is no edge protection
- In areas where there is protruding, unprotected reinforcing steel at any height.
- In any unprotected elevated position over 6 feet

6.1. Use of Harness

Lanyards and Safety Harnesses will be used in the following manner

- All GBEPC employees using harnesses and lanyards will be trained on how to wear them correctly and how to use it safely.
- The lanyard shall be fastened to the full body harness and secured to objects that will support a load. E.g. Steel work and Static Lines (See Static Line Section), that is capable of holding 5000lb's or three times the weight of a man.
- The lanyard shall not allow a fall of over 5 feet

6.2. Static Lines

GBEPC will ensure that static lines shall only be used where there are no other means of erecting fall protection, such as scaffold, handrails and barriers.

Use of Static Lines

- Static Lines shall be capable of withstanding a 5000lb drop.
- The static line must be secured to something capable of withstanding a 5000lb load. E.g. Steel work, eye bolts drilled in solid walls
- Each end of the static line must be secured with at least 2 bulldog clamps or wire rope clamps.
- Static lines must not be placed on sharp corners; if this is only available then softeners' must be used to protect the line.
- If a static line encounters a fall then the line must be replaced.
- The longest run for a static line must not exceed 200 feet.
- The line is ideally placed and should not hinder any other persons work.

Inspection of Harnesses

All harnesses and lanyards shall be inspected daily by the individual using the equipment.

Items to inspect are:-

- Stitching
- Buckles
- Rivets
- Lanyard
- Splices
- Metal Rivets
- D Rings
- Frayed or Broken Fabric
- Buckle Tabs

Examples of Damage

- cuts of 1 mm or more at the edges of webbing lanyards (eg where the lanyard may have been choke-hitched around steelwork)
- surface abrasion across the face of the webbing and at the webbing loops, particularly if localized
- abrasion at the edges, particularly if localised;
- damage to stitching (eg cuts or abrasion);
- a knot in the lanyard, other than those intended by the manufacturer;
- chemical attack which can result in local weakening and softening - often indicated by flaking of the surface. There may also be a change to
- the colour of the fibres;
- heat or friction damage indicated by fibres with a glazed appearance which may feel harder than surrounding fibres.
- UV-degradation which is difficult to identify, particularly visually, but there may be some loss of colour (if dyed) and a powdery surface
- partially deployed energy absorber (eg short pull-out of tear webbing);
- contamination (eg with dirt, grit, sand etc) which may result in internal or
- external abrasion;

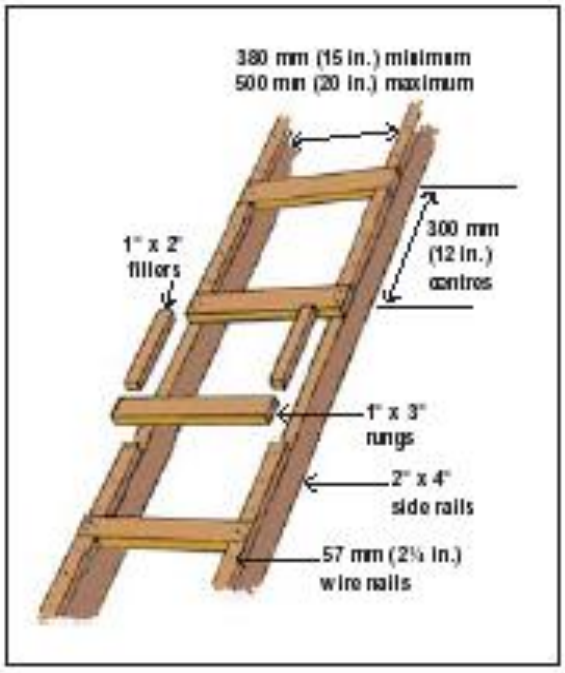
If any of the above have been identified then inform the supervisor to ensure the harness or lanyard must be destroyed.

7. SAFE USE OF LADDERS

All GBEPC employees will ensure that they follow the list below when utilising ladders on the job site: -

- Inspect each ladder before use.
- Ladders with loose, broken, or missing rungs, split or bent side rails, or other defects must be identified and removed from service.
- Use only approved heavy duty ladders or job-constructed wooden ladders built.
- Ladder tops must rest against a firm structure.
- Ladders (other than stepladders) must extend approximately 1 m (3 ft) above a safe landing or parapet wall.
- Ladders must be set up with a 4 vertical to 1 horizontal slope.
- Ladders must be tied, blocked, or otherwise secured to prevent them from slipping.
- The base of a ladder's side rails must rest on a firm, level foundation.
- Watch for overhead power lines before erecting a ladder. Metal, including wire-reinforced wooden ladders, must not be used near energized electrical conductors.

7.1. Job Built Ladders



A job-built ladder up to 5 m (16 ft.) long.

Safe Use of Ladders

7.2. Stepladders

- Always ensure Stepladders are inspected prior to use and report any damage to a supervisor.
- Do not use damaged stepladders – inspect the rungs, stiles, feet and spreaders for signs of any damage.
- Always ensure that the Spreaders are locked in place and that the legs are fully extended
- Always use stepladders on solid flat surfaces
- Never Stand on the Top two steps of a stepladder
- Do not overreach on stepladders
- Always use stepladders at 90 degrees to the work not adjacent to the work.
- Do not use metal stepladders for electrical work

Manual Handling Guidance

1. Purpose
To try to reduce the impact of Manual Handling Injuries across GBEPC Projects and it employees and subcontractors.

2. Scope:
This Procedure provides guidance to the GBEPC employees for Manual Handling Guidance.

3. Responsibilities:

The project coordinator, superintendant and Safety Coordinator are responsible to ensure all aspects of this procedure are followed. Additionally when Sub Contract Labour or works are assigned it is the responsibility of the Superintendant and the Safety Coordinator to ensure that the Subcontractor complies with this procedure at all times.

4. Procedure:

Manual Handling is also often referred as Musculoskeletal Injuries or repetitive strain disorders. All relate to ergonomics in the workplace. GBEPC recognize that there are potential injuries both short term and long term that are caused my poorly managed handling techniques

4.1. Factors Associated With Musculoskeletal Injuries. :

- Reaching while lifting.
- Poor posture--how one sits or stands.
- Stressful living and working activities--staying in one position for too long.
- Bad body mechanics--how one lifts, pushes, pulls, or carries objects.
- Poor physical condition-losing the strength and endurance to perform physical tasks without strain.
- Poor design of job or work station.
- Repetitive lifting of awkward items, equipment.
- Twisting while lifting.
- Bending while lifting.
- Maintaining bent postures.
- Heavy lifting.
- Fatigue.
- Poor footing such as slippery floors, uneven surfaces or constrained posture.
- Lifting with forceful movement.
- Vibration, such as with lift truck drivers, use of heavy compacting devices etc.

4.2. PREVENTION AND CONTROL.

4.2.1.Training

- GBEPC recognizes that there requirements to train staff in the correct techniques for Manually Handling Equipment. All employees will have a basic introduction to Manual Handling in the workplace during Orientation and will undergo formal training. Records will be kept from this training.

4.2.2.Control

- **NOTE – Mechanical Means is always the preferred method**
- Supervisors shall analyze tasks and physical demands and shall determine safe manual material handling work procedures with their employees.
- Where the weight, size, shape, toxicity, containment, or other characteristics of the load, or the nature of the lift may endanger an employee, the load shall be moved by a work team or by mechanical means.
- H&S Coordinator and Supervisors shall provide information to employees on proper lifting techniques, exercise conditioning, back care, and injury prevention.
- H&S Coordinator and Supervisors shall investigate reported incidents of repetitive strain, static or awkward postures, overhead work, vibration, etc. and shall intervene to reduce ergonomic hazards.

4.2.3.Risk Assessing Loads

- The Health and Safety Coordinator and Supervisors will assess risks where necessary for Manual Handling Operations.
- These will be completed as per HSE 008 and communicated through to relevant staff.
- Additionally Tool Box talks will be undertaken as a reminder to all staff on a regular basis as per company requirements and job specifics require.

4.3. Guidelines:

Practical tips, suitable for use in training people in safe manual handling taken from HSE UK Guidance Documents

- Think before lifting/handling. Plan the lift. Can handling aids be used? Where is the load going to be placed? Will help be needed with the load? Remove obstructions such as discarded wrapping materials. For a long lift, consider resting the load midway on a table or bench to change grip.
- Think before lifting/handling Keep the load close to the waist
- Keep the load close to the waist. Keep the load close to the body for as long as possible while lifting. Keep the heaviest side of the load next to the body. If a close approach to the load is not possible, try to slide it towards the body before attempting to lift it.
- Adopt a stable position. The feet should be apart with one leg slightly forward to maintain balance (alongside the load, if it is on the ground). The worker should be prepared to move their feet during the lift to maintain their stability.
- Adopt a stable position Avoid tight clothing or unsuitable footwear, which may make this difficult. with feet apart and one
- Get a good hold. Where possible the load should be hugged as close as leg slightly forward to possible to the body. This may be better than gripping it tightly with hands only.
- maintain balance
- Start in a good posture.
- At the start of the lift, slight bending of the back, hips and knees is preferable to fully flexing the back (stooping) or fully flexing the hips and knees (squatting).
- Don’t flex the back any further while lifting. This can happen if the legs begin to straighten before starting to raise the load.
- Avoid twisting the back or leaning sideways, especially while the back is bent. Shoulders should be kept level and facing in the same direction as the hips. Turning by moving the feet is better than twisting and lifting at the same time.
- Keep the head up when handling. Look ahead, not down at the load, once it has been held securely.

- Move smoothly. The load should not be jerked or snatched as this can make it harder to keep control and can increase the risk of injury.
- Start in a good posture
- Don't lift or handle more than can be easily managed. There is a difference between what people can lift and what they can safely lift. If in doubt, seek advice or get help.
- Put down, and then adjust. If precise positioning of the load is necessary, put it down first, and then slide it into the desired position.
- Keep the head up when handling Put down, then adjust
- Avoid twisting the back or leaning sideways, especially while the back is bent

Good handling technique for pushing and pulling

- Aids such as barrows and trolleys should have handle heights that are between the shoulder and waist.
- Devices should be well maintained with wheels that run smoothly with large diameter wheels made of suitable material and with castors, bearings etc which will last with minimum maintenance.
- The operator should try to push rather than pull when moving a load, provided they can see over it and control steering and stopping.
- Employees should enlist help from another worker whenever necessary if they have to negotiate a slope or ramp, as pushing and pulling forces can be very high
- Moving an object over soft or uneven surfaces requires higher forces. On an uneven surface, the force needed to start the load moving could increase Soft ground may be even worse.
- To make it easier to push or pull, employees should keep their feet well away from the load and go no faster than walking speed. This will stop them becoming too tired too quickly.

USE THE TERM LITE TO ASSESS LOADS AS A BASIC GUIDANCE

L load – What is the load, size, shape dimensions etc..

I individual – Each Individual is different in ways that they can lift, move, age, size, height, etc

T task – What is the task, is it repetitive, uphill, involves crouching, use of equipment etc

E environment – Lighting, surface, weather – such as sun, heat, rain, Muddy or uneven etc.

Electrical

1. **Purpose**

To ensure that all Electrical Hazards are effectively managed and controlled to prevent injury, loss, fire or fatalities.

2. **Scope:**

This Procedure provides guidance to the GBEPC employees and encompasses GBEPC sites and projects for both permanent and temporary electrical services.

3. **Responsibilities:**

The Project Coordinator, Superintendant and Safety Coordinator are responsible to ensure all aspects of this procedure are followed. For permanent electrical supplies, the Office Coordinator will arrange for all electrical works. Additionally GBEPC will ONLY employ those persons who are deemed competent and hold valid certification in line with Bahamian Law's to perform any electrical works

4. **Procedure:**

4.3.1.Competent Electrical Contractor where applicable will ensure: -

- All electrical work, installation and wire capacities shall be in accordance with the Bahamas Electrical Codes, in order to reduce the possibility or electrocutions, fires, injuries or loss.
- All temporary wires will need to be mechanically protected where there is a risk of damage. If the cables are buried then an as-built must be submitted to the specific GBEPC Project Coordinator or Coordinator in Charge. This will assist in any works where excavations are to be undertaken or heavy works such as craneage or vehicular movements.

- Energized transformers and other related energized equipment shall be protected against accidental contact by providing individual housing or by an enclosure.
- Access to such energized equipment shall be secured and can be locked, and signs indicating danger and prohibiting unauthorized access shall be displayed on the housing or enclosure. Alternatively the electrical panels will be secured in a lockable room.
- All Electrical panels will contain circuit breakers / fuses that must be clearly identified; Outlet covers will be maintained on all energized electrical panels and any unused breaker / Switch openings will be protected by blanking plates..
- All switches, circuit breakers, receptacles, and fuse boxes, which may be exposed to water, shall be protected so that water does not enter.
- All temporary Electrical supplies must be installed by a qualified Electrical contractor.
- All temporary wiring and outlet power boxes will be mounted to walls or portable stands unless they are the free standing spider box type.
- Any splices or joints in wiring systems will be performed accordingly in an approved electrical junction box.
- In poorly lit areas, temporary lights will be installed in staircases, aisles or escape routes. Task lighting will be provided as and when required by individual contractors.
- All works undertaken on temporary / permanent electrical systems shall be controlled by a Lock out Tag out program (LOTO), including Permit to work. The Competent Electrical Contractor will discuss the process with GBEPC Safety Coordinator prior to works commencing.
- All electrical supplies for temporary accommodation will be installed by a competent electrical contractor.
- All testing, commissioning, inspection and repairs to electrical systems will be undertaken by the nominated competent electrical contractor only and on a regular basis.
- All permanent electrical supplies will be installed, commissioned and tested as per contractual requirements.
- Adequate signs shall be erected and the responsible persons details including contact phone number.

4.3.2. General Electrical Safety for Employees and Subcontractors

Electrical risks are risks of death, electric shock or other injury caused directly or indirectly by electricity. The most common electrical risks and causes of injury associated with working near overhead or underground electric lines are:

- Electric shock causing injury or death. The electric shock may be received by direct or indirect contact, tracking through or across a medium, or by arcing
- Arcing, explosion or fire causing burns. The injuries are often suffered because arcing or explosion or both occur when high fault currents are present
- electric shock from ‘step-and-touch’ potentials
- Fire resulting from an electrical fault.

Contact with overhead or underground electric lines can be fatal, whether the lines are carrying a voltage as high as 330,000 volts or as low as 230 volts. Contact with overhead electric lines is not necessary to result in electric shock. A close approach to the line conductors may allow a ‘flashover’ or arc to take place. The risk of flashover increases as the line voltage increases.

2.1 Identify the hazards

Identifying hazards involves finding all of the tasks, situations and sequences of events that could potentially cause harm. Before carrying out work near overhead or underground electric lines, a worksite inspection should be conducted to identify potential hazards including energized overhead electric lines or associated electrical equipment and the whereabouts of any underground electric lines. Hazards from overhead or underground electric lines may arise from:

 a person or something the person is holding, or is in contact with, coming closer than the relevant exclusion zone distance to an overhead electric line
 operating plant coming closer than the relevant exclusion zone distance to an overhead electric line
 damage to overhead electric lines or related equipment
 damage to underground electric lines exposing live parts.

Exposure to high electromagnetic fields may also present a potential hazard for workers with some medical conditions, for example pace makers. You must inform workers and other persons at the workplace of any potential electromagnetic hazards at the workplace that may affect a medical condition. You must also manage risks to health and safety arising out of electromagnetic hazards, including eliminating the risk so far as is reasonably practicable. If that is not reasonably practicable you must minimise the risk so far as is

reasonably practicable. Potential electrical hazards may be identified in a number of different ways including:
 talking to workers and observing where overhead electric lines are located
 getting advice regarding the location of any underground electric lines
 talking to electricity entities regarding electric lines the entity is responsible for
 reviewing incident reports. Electric lines must be treated as live until they have been:
 proven to be de-energized;
 isolated so that they cannot be inadvertently re-energized; and
 if a high voltage line, effectively earthed. The person conducting a business or undertaking should obtain written confirmation from the person with management or control of the electric line that the line is de-energized before commencing work.

2.2 Assess the risks

Risk assessment involves considering what could happen if someone is exposed to a hazard (consequence) and the likelihood of it happening. For work near overhead or underground electric lines, this determines the risk of:
 injury to a worker;
 damage to property, plant or equipment; and
 coming within an unsafe distance for an electric line.

This step will help to determine the level of associated risk for each task and in selecting control measures based on that risk level. A copy of the assessment should be kept for future reference.

The risk assessment should consider:

- The location, height, arrangement and visibility of overhead electric lines and supporting structures like poles, towers and stay wires
- The voltage of electric lines and exposed energized parts and whether electric lines and parts are insulated or bare
- possible sway or sag of the electric line caused by wind or temperature changes
- environmental conditions like storm activity, heavy rain or lightning in the area
- site conditions including
    - prevailing or unexpected winds their strength and direction
    - the terrain and possibility of unexpected ground surface movement under plant
    - vehicular traffic, pedestrians or livestock that could interfere with the work
- the type of plant and machinery required including
    - their design envelope, inherent stability and that of a suspended load
    - their dimensions and their operating characteristics, ease of maneuverability and conductivity if they are earthed
    - the minimum clearance distances from the closest part of the plant to electric lines o the possibility they may become energized by proximity to high voltage lines
- nature, size and shape of loads to be moved
    - load stability, dimensions and surface area facing the wind
    - whether loads are conductive—all materials should be treated as such unless a competent person can confirm otherwise
    - non-conductive material may become conductive when in contact with high voltage material
    - how loads are secured and if any part of the load may move and enter within an unsafe distance
- the type of work activities required and the frequency of the work tasks
- qualifications, competency, skill and experience of the people doing the work
- setting up and packing up processes
- work practices and procedures.

2.3 Control the risks

The hierarchy of control measures Once hazards have been identified and the risks assessed, appropriate control measures must be put in place. The ways of controlling risks are ranked from the highest level of protection and reliability to the lowest. This ranking is known as the hierarchy of risk control. You must work through this hierarchy to choose the control that most effectively eliminates or minimises the risk in the

circumstances, so far as is reasonably practicable. This may involve a single control measure or a combination of two or more different controls.
Elimination The most effective control measure is to remove the hazard or hazardous work practice. By designing-in or designing-out certain features, hazards may be eliminated.

This is the most effective control measure and must always be considered before anything else. The best way of eliminating these hazards is to prevent people, plant, equipment and materials from coming close enough to energised overhead electric lines for direct contact or flash over to occur. This may include:
 de-energising the electric line for the duration of the work
 isolating and earthing the line (or equivalent for low voltage or rail) so it is not live for the duration of the work
 re-routing the electric line away from the work area, or
 replacing existing overhead electric lines with underground electric cables. Note: de-energising or moving electric lines should be arranged with the electricity entity as soon as possible because, depending on the circumstances, it may take some time to arrange. If eliminating the risk is not reasonably practicable, you must consider using substitution, isolation or engineering controls, or a combination of these control measures, to minimise the risk.
Substitution Minimise the risk by substituting or replacing a hazard or hazardous work practice with a safer one. This may include performing the work another way for example: using alternative plant which cannot enter an exclusion zone using non-conductive tools designed to reduce the possibility of direct contact with the overhead electric line using ultrasonic measuring devices instead of the mechanical types for measuring heights of overhead lines
Isolation Minimise the risk by isolating or separating the hazard or hazardous work practice from people. For example, erecting a physical barrier to prevent any part of the plant or equipment or a person or anything held by a person, or attached to a person entering an unsafe distance. A physical barrier should consist of non-conductive material like wood or plastic. The barrier should be erected safely which may entail isolating the electricity supply while the barrier is installed.
Engineering controls Engineering controls are physical control measures to minimise risk, for example: limiting movement of plant with mechanical stops fitting plant with programmable zone limiting devices mechanically limiting slew speed of a crane to slow using electrically insulated plant and equipment If a risk then remains, the duty holder must minimise the remaining risk, so far as is reasonably practicable, by using:
Administrative controls Administrative controls should only be considered when other higher order control measures are not reasonably practicable, or to increase protection from the hazard. These are work methods or procedures designed to minimise the exposure to a hazard, for example: fitting proximity sensors and a warning device to plant to alert operators when they are about to enter an unsafe distance. making hazards more visible by: o using warning signs to indicate the location of overhead electric lines and defined work areas

o arranging for the electricity entity to identify exposed energised low voltage conductors, up to and including 1000 volts and fitting them with approved visual indicators like sheeting or sleeves e.g. tiger tails a competent person should inspect visual indicators each day before starting plant operations if visual indicators have moved or been damaged the electricity entity should be contacted so they are replaced or located in the correct position managing and supervising the work to ensure o safe work practices and procedures are followed o safe work method statements (SWMS) are developed where required o appropriately trained and qualified people are authorised to carry out the work o emergency equipment is provided and readily accessible on site, including first aid kits and fire-fighting equipment suitable for electrical fire o emergency plan and rescue procedures are followed if there is contact with overhead electric lines o an emergency plan including contact with energised electric lines is developed and documented o it is done very carefully and in an un-hurried considered manner, haste can be dangerous o a safety observer is used to warn people and plant operators when they are likely to come closer within an unsafe distance of an electric line o exclusion zone distances are strictly maintained. Any remaining risk must be minimised, as far as is reasonably practicable, by providing and ensuring the use of:
Personal protective equipment

- All electrical equipment whether portable or fixed shall be grounded, with the exception of Portable tools, that are double insulated.
- All portable electrical equipment must be protected by a Ground Fault Circuit Interrupter.

- All drop cords and cords on plug-connected equipment shall be of three wire type, equipped with three pronged plugs or double-insulated which meet OSHA requirements.
- No flat cords may be used.
- All drop cords must be kept clear of wet surfaces and standing water.
- Any drop cords that cross traffic routes, routes where pallet trucks and wheel barrows are used, through doors and or window openings must mechanically protected to prevent damage.
- Multi way connectors may be used but only when is not practicable to use a single drop cord per tool. If a multi way connector has to be used then they must be of the approved type.
- All Cords and power tool cords must be inspected daily any damage must be reported and the tool or cord removed from service.
- Cords with worn, frayed or broken insulation or with loose plugs (caps) shall be removed from the site until repaired.
- The use of Romex type cable is prohibited to be used as a drop cord.
- Do not overload any circuits – generally one outlet per tool or drop cord.
- Temporary lights shall be equipped with guards to prevent accidental contact with the bulb to prevent electrocution, burns or damage to the lamps.
- Aluminum ladders are prohibited from use in electrical rooms and/or where there is a risk of coming into contact with live electrical systems.
- Any incident or accident involving electricity shall be reported to the Project Coordinator / Health and Safety Coordinator immediately.

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