HEALTH, SAFETY AND ENVIRONMENT MANAGEMENT PLAN (HSEMP)

NEOEN INTERNATIONAL OPERATIONS
SEPTEMBER 2016

PURPOSE	NEOEN HSE Management Plan (HSEMP)	
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REVISION LOG		
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1.4	Revision for Mount Hopeful Wind Farm, Australia	December 20, 2021

MT HOPEFUL WIND FARM

AUSTRALIA

Principal's Health, Safety and Environment Management Plan

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1. INTRODUCTION

1.1. PURPOSE

The purpose of this Health, Safety & Environment Management Plan (HSEMP) is to detail the general requirements all contractors working on the project shall comply with to meet or exceed Jurisdictional, legislative and regulatory requirements.

The intent of this plan is to achieve the goal of zero harm to people and no damage to the Environment by outlining minimum requirements that all project personnel must meet.

1.2. SCOPE AND PRESENTATION OF THE PROJECT

Neoen is a French IPP specialized in development, financing, construction and operation of renewable energies electricity production assets (solar, wind, biomass).

The Moutn Hopeful Wind Farm Project (the Project) shall deliver electricity to the NEM with a nameplate capacity of [696MW], and connection capacity at the Point of Connection of [690MW].

The Project is located approximately 45 kilometres (km) south of Rockhampton and 65 km west of Gladstone within the Central Queensland Region. Land coordinates are as follows:

Feature	Coordinates
Point of Connection	-23.797930°, 150.617536°
Main Site Entry	-23.906969°, 150.522602°

Figure 1: Project Locality

1.3. **GENERAL REQUIREMENTS:**

Project activities must comply at all times with at least the provisions of the present HSEMP, the specifications of the Electrical Safety Act 2002 (Electrical Safety Code of Queensland), and the latest guidelines issued by the World Bank (IFC) related to Performance Standards on Environmental and Social Sustainability.

1.3.1 Occupational Health and Safety

All projects activities shall aim at avoiding any harm to workers involved in the Construction, Operation and Maintenance phases of the project. Appropriate Safety in Design studies (HAZOP studies) should be conducted during the project design, construction and commissioning by all contractors. Such studies shall provide ad hoc risk assessment and mitigation measures for the Construction, Operation and Maintenance phases of the project.

All project activities shall ensure compliance with the relevant laws, regulation, construction and operation permits and licenses applicable for the project.

1.3.2 Pollution prevention and control:

All projects activities shall aim at minimizing adverse impact to the Environment (land, water and air). Environmental Impact Studies shall provide ad hoc risk assessment and mitigation measures to be applied during the Construction, Operation and Maintenance phases of the project. Appropriate Project procedures shall cover pollution prevention, Hazardous materials management, and Waste management. All project activities shall ensure compliance with the relevant laws, regulation, Environmental permits and licenses applicable for the project.

1.3.3 Local community and Social Impact:

All projects activities shall aim at minimizing adverse social impact to the Community surrounding the Project. Community impact studies shall provide ad hoc risk assessment, preventive and control measures to be applied during the Construction, Operation and Maintenance phases of the project. Appropriate procedures shall cover the potential impacts to the local community Health Safety and Security, land or natural resources usage restriction, displacement or resettlement, as a result of land acquisition, Project activities and built infrastructure. All project activities shall ensure compliance with the relevant laws, regulation, Community relations plan, land rights, resettlement protocols, and all other permits and licenses applicable for the project.

1.3.4 Ecosystem and cultural Heritage Conservation:

All projects activities shall aim at minimizing adverse impact to the ecosystem and preserve the cultural heritage of the area where the project Is implemented. Environmental impact studies shall provide ad hoc risk assessment and mitigation measures to be applied during the Construction, Operation and Maintenance phases of the project. All project activities shall ensure compliance with the relevant laws, regulation, Ecosystem and cultural Heritage conservation Plan, and all other permits and licenses applicable for the project.

1.3.5 Other Specific Construction Site Measures

Site security monitoring during the construction phase:

To ensure security for all personnel on site, the presence of guards 24 hours a day, seven days a week is required, as well as the organization of appropriate shifts surveillance.

Access to the site:

Access to site and circulation shall be granted and enforced according to the Site Traffic Management Plan. Access to Installations where contact with live parts is possible, must be restricted to authorized personnel.

"No unauthorized entry" signage shall be posted near the main entrance to site

Communication and Signaling:

Warning signs of danger or risk to public safety or the Environment should be installed. Such Warning signs that provide information about the risks must be installed on site where needed: electrical contacts (especially for children), potential step and touch, increased traffic, chemical spills, explosions, fire and other required communication to workers and signaling deemed necessary.

Communication and Signaling for workers shall be organized onsite and located in visible places, and include:

- An emergency assembly point to be identified and marked clear
- Signage for wearing Respiratory and hearing protection devices shall be posted on entry to such designated dust and noise areas
- Instructions for first aid to be given to victims of accidents caused by electric current
- Instructions for pollution prevention, waste and hazardous material management
- Emergency response plan
- Plant layout and Single-line diagrams, signposts with the characteristic of equipment
- Instructions on special conditions including work permits required during construction activities
- An alarm (or gong) audible by all to be installed on site at suitable location for sounding during an emergency as call Bell

Fire protection:

Subcontractors shall implement a system to identify and control flammable and combustible materials and ignition sources and to provide adequate levels of fire protection. The greatest exposure on this project are for Class A/B fires, therefore the Project has standardized an approved brand of Dry Chemical Powder fire extinguishers for this site. (4.5 kg and 9 kg units are recommended). There should be an extinguisher outside every crib room, office, store and workshop location, on every piece of mobile plant, including every location where hot work is to be carried out, and other designated equipment wherever combustibles or petroleum products are stored or decanted. Foam extinguishers may be required at chemical storage facilities. Subcontractors are to provide instruction to their workers on safe working practices in relation to fire prevention and protection. Work areas must be kept clean and free of combustible waste and scrap materials at all times. Particular care must be taken when welding and cutting in locations where combustibles are exposed. Combustible material shall be removed or protected with fire resistant blankets, and an adequate number of approved fire extinguishers must be immediately available. All flammable and combustible materials shall be stored and handled with due regard to their fire characteristics. Flammable liquids must be stored in an approved manner, and dispensed only in acceptable safety containers. Oxygen and combustible gas cylinders must be stored at least 5 meters apart or separated by a vertical, solid and fire resistant wall of height 5 meters. Inspection and maintenance of firefighting equipment and fire control measures shall be in accordance with statutory regulations plus Subcontractors must inspect and maintain extinguishers every quarter. At least one 50kg DCP extinguisher will be made available on site. Fire mock drill shall be conducted every quarter to ascertain team preparedness in an event of real emergency and record of such shall be kept on site. A fire break around the fence premises shall be established by clearing two metres of the bush along the fence.

Depending on the accessibility and availability of Fire fighting services at the location, standby mobile water storage containers with appropriate capacity and spraying systems shall be made available at all times.

1.4. STAKEHOLDERS AND STRUCTURE

The main stakeholders involved in the Project are as follows:

Bank [TBC]	Bank who finances the project; Requires reporting updates on the safety statistics and any issues related to safety on the project.
The EPC Contractor [TBC]	Are responsible for the delivery of construction, personnel and equipment on site. Works shall be undertaken under the EPC's site specific Health & Safety Management Plan, supporting documentation and under the EPC's Safety Commission (SC) accreditation as per this project HSEMP.
HSE Advisor, [TBC]	HSE Advisor is engaged to provide HSE advice and select auditing for the Principal.
Local Community	Rockhampton Regional Council area and Banana Shire Council area
Ministry of Labor	Dianne Farmer – QLD Minister for Employment and Small Business and Minister for Training and Skills
Ministry of Environment	Meaghan Scanlon – QLD Minister for the Environment and the Great Barrier Reef and Minister for Science and Youth Affairs
Grid Operator of Queensland and Australia	Powerlink and the Australian Energy Market Operator (AEMO)
Other relevant Authorities/ bodies	

The construction site will be completely fenced with a >2m high fence and three barbed wires on top of it (40cm), and will ensure seclusion and minimal visibility of inside activities from any nearby activity.

The "Ministry of Public Works" is also entitled to approve the Works for the underground lines, and has an approval function regarding the Principal's HSEMP and the EPC Contractor's HSEMP (particularly in regards to access to site, traffic management and interface points).

2. LEGAL AND OTHER REQUIREMENTS

2.1 Contractors' obligations

All Contractors shall:

- Comply with applicable Acts of Parliament, regulations, by-laws, orders, standards, codes, contract documents and specifications, all applicable Management Plans during the Design, construction and Operation of the Project, and will strive towards higher standards;
- All engineers and other professionals on site to be fully registered with Engineers of Australia or/ and relevant professional bodies in Australia.
- Apply responsible standards where laws and regulations do not exist;
- Comply with NEOEN's Health Safety and Environment Management Plan (this plan);
- Comply with the Project's Environmental Management Plan
- Comply with the Project's Social and Community Management Plan (when applicable)
- Comply with the Project's Ecosystem and cultural Heritage Conservation Plan (when applicable)
- Review and update its Health, Safety and Environment standards in the light of developments in technology, legislation, industry practices and changing community expectations;
- EPC contractor shall ensure that supervion of all related HSES maters is performed by EPC employees, with a minimnum ratio of 1 SHE supervisor per 100 on site workers

In case of HSE non compliance, the Contractor shall pay the following fines :

(i) Serious violation per Labour law (a substantial probability that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use, in such place of employment unless the employer did not, and could not with the exercise of reasonable diligence, know of the presence of the violation, etc.), Serious violation : 7,000 $ / instance/ employee

(ii) False Statement: non declaration of Safety event or wrong reporting of the number of serious incident/LTI/First aid/ medical treatment or Environmental damage in one or more monthly HSE report: 10,000 $ / instance

(iii) Failure to correct a violation to local laws or regulations : 7,000 $ per day of continued violation

(iv) Failure to communicate HSE procedures: including lack of Job Hazard analysis on any given job after such job has started, failure to produce Root Cause Analysis less than one week after the occurrence of serious incident/LTI/First aid/ medical treatment or Environmental damage: a 7,000$ per day per procedure

(v) Willful or repeated violation : 70,000 $ per instance (repeated Labour Law violation for more than a week, repeated HSE KPI reporting on 2 consecutive reporting periods, as listed in (ii), repeated violation of (iv) for more than one additional week)

1.2 Operations Shut Down

At any time during the construction or operation of the project, the Principal may order operations to stop by mean of:

- a **Stop Work Order** (during the construction phase)
- an **Operation Shut Down Order** (during the operation phase)

In both cases the order may include complete site evacuation and lock down.
In case such Order is the consequence of a breach of the Contractor's Obligation as defined in 2.1 , the consequences of such order shall be entirely born by the Contractor, consisting in direct or indirect damages to the Principal. Such damages include, but are not limited to, delay in the execution of the project, property damage, additional project costs, revenue losses (operation phase), or liability arising from the Order.

3. HSE CULTURE

3.1. HSE GOAL

Health, Safety and Environmental (HSE) excellence is a primary management objective and the responsibility of every team member.

Excellence shall be demonstrated through:

- Occupational Health
- Zero injuries/Zero Harm – no ill health (physical or mental) is caused as a result of an individual's work or work place
- Zero environmental incidents

3.2. LEADERSHIP AND COMMITMENT

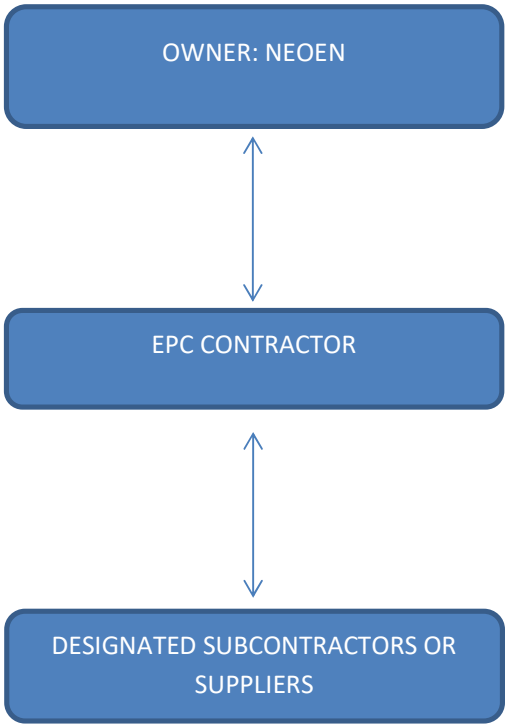
The Project Management Team shall demonstrate their commitment to managing health and safety risk through:

- Allocating resources to manage HSE risks associated with the project;
- Setting a personal example and encouraging HSE initiatives;
- Being actively involved in HSE activities and driving the leading indicator program;
- Conduct visible felt leadership by conducting inspection as maybe scheduled (monthly, quarterly, etc.)
- Ensuring that business decisions and practices conform to the requirements of the Principal and the EPC Contractor HSEMP and policies;
- Recognition of performance when objectives are achieved

4. HSE STRUCTURE

4.1. PROJECT HSE MANAGEMENT

The figure below outlines the HSE Management structure for the project.



All contractors carrying out work on this project shall work under the EPC Contractor's site specific HSEMP.

The EPC Contractor's site specific HSEMP will be in accordance with jurisdictional requirements and the requirements of this plan and any requirements of local authorities regarding HSE matters.

5. RESPONSIBILITIES

5.1. PRINCIPAL (NEOEN) PROJECT MANAGER – [TBD]

General duties, responsibilities and authorities:

- Demonstrate visible leadership and proactive commitment to safety, Health and Environment protection by promoting safety initiatives and innovation within people, systems and processes;
- Be familiar with the contents of this plan and all associated documentation;
- Review, approve and monitor the implementation of this plan and related HSE material. This includes the completion of regular scheduled reviews;
- Ensure that the EPC Contractor develops and implements an effective HSE Management Plan;
- Monitor project HSE performance against identified targets and identify trends or areas for improvement in project HSE performance;
- Assist with the resolution of HSE issues.

5.2. EPC CONTRACTOR [TBD]

In addition to the responsibilities outlined in the EPC Contractor Health, Safety and Environment Management Plan, the EPC Contractor also has the following general duties, responsibilities and authorities:

- Develop, implement, monitor and review a site specific Health, Safety and Environment management plan for the project;
- Monitor and manage subcontractor activities on site to ensure compliance with the above;
- Report any HSE issues, incidents or non-conformances to the Principal or its representative;
- Work with the Principal or its representative to actively manage any HSE issues that arise.

5.3. HEALTH, SAFETY AND ENVIRONMENT ADVISOR

An HSE advisor will be appointed by the EPC Contractor, for the whole duration of the construction.

He will be given access to the site, in order to complete his mission that consists in the general following duties:

General duties, responsibilities and authorities:

- Support of the Principal in regards to HSE related matters;
- Review and provide comment on HSE documentation where requested by the Principal; and
- Conduct site safety audits, and reviews on behalf of the Principal where requested by the Principal.

6. OBJECTIVES

6.1. PROJECT HSE INDICATORS AND TARGETS

The Principal in collaboration with the EPC Contractor aims to prevent the occurrence of injury or harm to workers and local community members and to the environment and achieve objectives as outlined in the Health Safety and Environment Policy's and throughout this HSEMP and the EPC Contractor HSEMP.

The EPC shall provide HSE performance indicators to the Principal, including lagging indicators (indicators showing the past performance of the plant) as well as leading indicators (indicators related to proactive actions).

Key lagging performance indicators are indicated in Table 1:

Table 1 Project Lagging Indicators

Indicator	Definition
Fatalities	A work-related incident that results in immediate or subsequent death of any person working at or visiting NEOEN locations and offsite fatalities of any persons involving NEOEN personnel or contractors working on behalf of NEOEN.
Lost Time Injuries	Total number of cases during the month when duties were not able to be performed by employees due to workplace injury or accident. Includes all NEOEN employees, contracted employees and temporary employees, contractor's employees.
Medical Treatments	An occupational injury or illness to an employee, contracted employee or temporary worker , contractors employees, that requires medical treatment beyond simple first aid.
First aid Injuries	Incident that led to the use of non-prescription medication at non-prescription strength;
Near Miss	An event that had the potential to result in injury, facility or equipment damage but did not; and is reported by the individual that experienced the near miss or a witness to the event .
Property Dammage Incident	Damage to facilities, as a result of operation, perils such as fire, lightning, wind, or hail, earthquakes, floods or any other natural disasters , theft, terrorism or political violence.
Environmental Dammage Incident	Incidents that cause liquids, gases, vapors, or toxic substances to leak, be spilled or otherwise released to the environment, affecting the internal and/or external environment and requiring notification of external authorities.
Communitiy issue	Incident impacting communities or more generaly creating liability towards third parties.

Compliance Issue	Violations of law or regulation identified internally or by external parties requiring notification of authorities, or having the potential to shut down the operations, damage company reputation or result in media attention, Incidents that create media attention or have reasonable potential to create media attention.

Key leading performance indicators and targets are indicated in Table 2.a (definitions) and 2.b (targets):

Table 2.a Project Leading Indicators definitions

Indicator	Definition
Induction	Safety training describing the site risks and safety requirements to be observed by any employee or visitors prior to entering the construction site.
Inspection	Proactive site inspection to perform routine inspection protocols as defined in HSE Plan
Incident Investigation	Analysis of the causes that led to an incident, including root Cause nalaysis and recommentations to avoid occurence
Pre-start Meeting	Short Safety breafing for the construction team every morning /shift on work day/shift start
Tool Box Meeting	Short ad hoc meeting to allow exchange of information and ideas on Health, Safety and Environment matters.
Safety Observation	Event that has been observed and corrected on the spot, that doesn't represent risk any longer and doesn't require further action
Safety Audit	HSE audit to be performed by an independent entity as required by applicable local regulations

Table 2.b Project Leading Indicators Targets

Indicator	Target
Inductions (Site and Construction)	100% on first day
Daily HSE Inspections	1 per day by supervisor 1 per day by the EPC Contractor's site HSE Representative
Weekly HSE Inspections	1 per week by the EPC Contractor's site HSE Representative
Incident investigation	90% closed out within timeframe allocated
Reported Hazards Closed Out	100%

Corrective Actions Closed Out	100%
JHA, THA, SWMS completed for each task	100%
Pre-Start Meetings	1 per day/shift , 100% attendance
Toolbox Meetings	1 per week, 100% attendance
Safety observation	At least 1 per day
Safety audit	1 per month
Pre-start inspections of mobile plant/equipment	Daily, whenever the plant/equipment is used

6.2. HSE PERFORMANCE REPORTING

The EPC Contractor shall supply the following HSE performance data to the Principle on a monthly basis or within 5 business day upon request by the Principal:

- Updated monthly project risk assessments;
- All incident data (this includes all injuries, near misses, property damage and environmental, cultural/heritage discoveries) from all project personnel and subcontractors;
- Number of hazards reported (EPC Contractor Hazard Observations system);
- Reporting of work place injury and disease statistics to be done in accordance with provisions of the Queensland Work Health and Safety Regulation 2011.
- Reporting of work place injury and disease statistics in accordance with the Workmen's compensation standard – Work place injury and Disease Recording Standard;
- Updated Site Corrective Action Register (CAR)
- Number of inspections conducted against schedule;
- Man hours worked on site;
- Random samples of the following completed documents for review:
    - Daily pre-start meeting records;
    - Job Hazard Analysis (JHA), Job Safety and Environmental Analysis (JSEA), Task Hazard Analysis (THA) and Safe Work Method Statement (SWMS)
    - Toolbox meeting records;
    - Daily and weekly HSE inspections.

The Principal shall review and supply the HSE data to relevant industry bodies in accordance with legislative and contractual arrangements.

The Principal shall record workplace injury and disease statistics in accordance with the Australian Standard – Workplace Injury and Disease Recording Standard AS 1885.1-1990.

7. CONSULTATION AND COMMUNICATION

The EPC Contractor shall communicate to the Principal via regular project meetings, at least once a week, and where necessary and appropriate, via formal written communications. He will also provide a weekly HSE report as per the annex of the EPC Contract.

7.1. HSE MEETINGS

Regular structured HSE meetings will provide a base for communication of potential issues, safety hazards, safety initiatives and programs between the Principal, EPC Contractor and Subcontractors.

The EPC Contractor shall schedule and participate in all nominated contractor HSE meeting as required in addition to the scheduled Project Safety Tool Box Meetings and daily Pre Start Meetings.

Note: "Issue Specific" HSE Meetings may be initiated on an as needs basis. Records of these meetings will be maintained.

The minimum schedule for specific HSE communication processes identified for employees is identified in Table 2 below.

Table 2 Workplace Communication Schedule

Communication Process	Schedule	Participants	Facilitator
Project Kick Off Meetings	Prior to start of each new project	All	EPC Project Manager
Pre Start Meeting	Prior to shift start	Work Crew(s) supervisor	Supervisor
Toolbox Meeting	Weekly	Supervisor/Contractors	Project Manager/Site Manager/Supervisor/HSE Coordinator
HSE Meetings	Monthly	All	HSE Committee
EPC Induction	On Commencement	All	EPC HSE Manager
Critical Lift	As required	All involved in the lift	Lift Supervisor

7.2. PROJECT KICK OFF MEETING

Project Kick off Meetings shall be conducted prior to commencement of any Project to conduct an Assessment of Risks, to review the Scope of Work and planned Work Procedures, to review the EPC Contractor HSEMP requirements and raise any general safety and environmental issues. These meetings may be run by the Principal or EPC Project manager.

Table 3 – Project Kick Off Meeting Structure

Project Kick off Meeting Structure	
Coordinators	Principal or EPC Project Manager
Attendees	All contractors involved in the Project
Agenda	The Coordinators shall consider the following when formulating the meeting agenda: • Project scope • Emergency response and Neoen and EPC Contractor HSEMP requirements • Site PPE Requirements • Environmental or local Community Concerns or Issues • Incident Reporting Protocols
Frequency	Prior to start of each new Project
Minutes	Project Kick off Meetings shall be considered a formal communication process and the minutes recorded and filed. The minutes must include signed attendance records

7.3. PRE START MEETING

Pre Start Meetings shall be conducted prior to commencement of each shift to raise the safety and environmental awareness of shift personnel. Pre Start Meetings shall comprise information discussions concerning any inherent risks and hazards associated with planned work as well as precautions that will be initiated using JSEA and SWMS to control them.

Table 4 – Pre Start meeting Structure

Pre Start Meeting Structure	
Coordinator	Contractor Supervisor
Attendees	Crew for the work and EPC Contractor representatives
Agenda	Contractor Supervisors shall consider the following when formulating the daily agenda: • JSA, JSEA, THA, SWMS review for the day's activities • Permit to Work Activities and Conditions • PPE Requirements • Equipment Condition • Environmental Concerns or Issues

	• Emergency Exit Routes • Dissemination of Safety Alerts or Bulletins • Significant Incidents/Near Misses/Preventative Actions
Frequency	Prior to start of each shift
Minutes	Pre Start Meetings shall be considered a formal communication process and the minutes recorded and filed. The minutes must include signed attendance records.

7.4. TOOL BOX MEETING

The purpose of the Tool Box Meeting is to achieve an exchange of information and ideas on Health, Safety and Environment matters.

The subject matter for Tool Box Meetings shall be determined after consultation between the EPC Project Manager, EPC Site Manager, HSE Manager, Contractor Supervisors and employee personnel. Topics that are raised or presented shall take into consideration the current work activities.

Supervisors shall be responsible for conducting Tool Box Meetings for all employees in their respective work areas.

Supervisors shall ensure that a record of Tool Box Meetings is completed for each HSE talk given, including topics and names of employees attending. A copy of the Tool Box Talk and relevant paperwork will be forwarded to the HSE Manager on completion for review.

The HSE Manager will provide assistance to Supervisors in the preparation and delivery of HSE talks and other relevant matters.

Table 5 – Tool Box Meeting Structure

Safety Tool Box Meeting Structure	
Coordinator	Contractor Supervisor/EPC Project Manager/ Site Manager/Supervisor
Chair	Contractor Supervisor or HSE Manager
Attendees	Work Crews
Agenda	• Previous minutes review • Incident reports, safety trends & findings of incident investigations • Dissemination of Safety Bulletins • Safety topic and or discussion
Frequency	Weekly or as per contract
Minutes	Contractor Supervisors or nominated person e.g. Leading Hand, shall record minutes of the meeting for distribution to relevant project management personnel.

7.5. CRITICAL/MAJOR/HEAVY LIFT MEETING

The purpose of the Critical/Major/Heavy Meeting is to ensure that a critical lift plan (or similar) had been developed and all parties engage in or near the lift have been consulted in the plan.

The objective of the meeting is to;

- Ensure that the objectives of Critical Lifts are achieved
- Ensure the proper reviews are conducted to minimize the occurrence of incidents during a Critical Lift operation
- Protect lives and property during Critical Lift operations
- Conduct review of register containing particulars of all chains, ropes, or lifting tackle (excluding fibre rope slings)

Table 6 – Critical Lift meeting Structure

Critical Lift Meeting Structure	
Coordinator	HSE Manager/ Site Manager/Lift Supervisor
Chair	Lift Supervisor
Attendees	Work Crews
Agenda	• The lift plan will be followed as approved • Roles and responsibilities of those involved in the lift plan is understood • Ensure all involved in the lift are appropriately trained • Maintenance and Inspection requirements on the crane and associated lifting equipment are current • The lift area is secure, traffic is re-routed and unauthorized people are not allowed to enter the area during the lift • Lift item have tag lines at both ends for controlling the load • Personnel shall not under any circumstances, be located under a suspended or moving load.
Frequency	As required
Minutes	Lift Supervisors or nominated person e.g. Leading Hand, shall record minutes of the meeting on the crane lift notification.

7.6. HSE ISSUE RESOLUTION

A consultative approach shall be used to rapidly resolve HSE issues that may arise in the workplace whilst, wherever possible, maintaining productive work. It is emphasized that at all times employees must accept responsibility for their own safety and work within the legislative and project requirements.

Where an employee encounters what they believe to be a Safety, Health or Environmental hazard, or are allocated work to perform that they consider constitutes an unsafe situation, they shall immediately stop work and advise their Supervisor. The work process in question shall not be carried out until such time as the matter has been determined as safe by all parties.

7.7. HSE PROMOTION

HSE promotion and awareness of employees engaged on the project begins up front during the induction process.

Further promotion and communication shall be achieved by:

- Continuous improvement feedback
- Pre Start /Tool Box Meetings
- Safety alerts and Safety Newsletters
- Posters
- Safety Awards
- Memorandums and Incident Reports
- HSE Notice Boards
- Key responsibilities, including names of E&HSE representatives and their respective contact numbers being displayed
- Days/weekly Safety slogan posted on Safety notice board for all to see
- Accident free shifts indicating days gone without injury posted on notice board

Note: HSE alerts issued by the Principal, EPC Contractor or sub-contractors shall be posted in all prominent places and discussed at the next scheduled meeting.

8. RISK MANAGEMENT

8.1. RISK CONTROL GENERAL

The project will develop and implement risk assessment and risk control processes. The process shall include a Project Risk Assessment and a task based Risk Assessment such as a JSEA, JHA, JRA or similar acceptable tool.

The EPC Contractor must manage and maintain a risk management process for their employees and subcontractors when working on the project. This system and process shall be spelt out clearly and without ambiguity within the EPC Contractor's HSEMP.

8.2. PROJECT RISK ASSESSMENT

- A risk assessment shall be conducted for each package of work with consideration of the scope of work and shall be developed by the relevant members of the EPC Contractor Team. The risk assessment shall involve key personnel and stakeholders for the project, for the purpose of identifying and controlling hazards and risks prior to the commencement of mobilization and construction. A Site/Project Risk Assessment document will be developed as a result. Risk assessment conducted for each work package to include Team leaders, all crew members, and signed off by each and every member including EPC Lead Contractor. Copies of the signed risk assessment to be retained by both the EPC Lead and HSE Representative of sub-contractor(s)

The EPC Contractor will update and provide the Principal with the risk assessment on a monthly basis.

It is the responsibility of the EPC Contractor to undertake a risk assessment for their scope of work.

8.3. SAFETY IN DESIGN

Where a design element is included within a project scope then safety in design processes will be executed to assist in the identification and control of hazards within the design phase.

As guidance to the completion of Safety in Design (SiD), the following is to be completed:

- A HAZID & HAZOP workshop is to be held during the Concept Design Phase;
- Attendance will normally include the EPC Contractor's Workshop Facilitator, Project Manager, HSE Specialist/s, and Lead Engineers (Architect, Structural Engineer, Electrical Engineer, local authority, key community representatives, etc. as applicable);
- The workshop should focus on issues that are at risk of being overlooked in the detailed design process and not at issues that are routinely covered by construction and design codes or Australian Standards;
- A pre-work pack including relevant concept drawings and the design brief should be distributed or available to attendees prior to the workshop. Where appropriate, the facilitator should prepare a detailed checklist/agenda for the workshop;
- The prime purpose for the workshop is to identify issues. Solutions may be determined at the workshop, but it will be more common to decide on an action of further investigation;
- The design of all elements of the project should be reviewed assessing HSE issues during construction, operation/use and repair/maintenance; and
- Inclusion of the HAZID & HAZOP Workshop findings into the EPC contractor's project

HSEMP and Project Risk Assessment shall occur as required.

A Design Risk Register which is a "live document" shall be updated when any changes to the design that occurs throughout the design process.

Design meetings shall have SiD as a standing agenda item.

8.4. CONTRACTOR HSE REVIEW

Prior to work commencing on the project, the HSE Advisor on behalf of the Principal will undertake a review of the Approved and Issued EPC Contractors' HSE documentation specific to the project. This will include but not be limited to a review of:

- Project Specific Health, Safety and Environment Management Plan;
- Emergency Management Plans; and
- Project Specific Risk Assessment
- Review EPC contractors HSE policy as evidence of safety commitment

The HSE Advisor will notify the EPC Contractor of any deficiencies that require attention prior to commencement of work.

8.5. SUBCONTRACTOR MANAGEMENT

The EPC Contractor shall assess potential subcontractors to verify their ability to perform the requested services in a safe manner and keep records of that assessment. The EPC Contractor's plans shall also indicate how they will manage subcontractors (includes supervision, inspection and monitoring practices e.g. compliance to this plan and the EPC contractors plan) to verify they meet HSE requirements.

8.6. CHANGE MANAGEMENT

Changes that may impact upon health and safety on the project shall be risk assessed, planned for and documented within the project risk register. Approval for changes and subsequent controls shall be in accordance with the project risk register and after consultation with the Principal and EPC Contractor.

Such changes may include the introduction of new plant and equipment, change in scope of work, procedures, or work methodology, amendments to legislation or Australian Standards. Personnel shall be advised of changes through relevant meetings, notices, and revision to this and the EPC Contractor's HSEMP.

8.7. FITNESS FOR WORK

All employees and subcontractors are required to be fit for work at all times. That is, they are in a physical, mental, and emotional state to perform work in a manner that does not threaten their own or others safety or well-being. The EPC Contractor and Supervisors are responsible to monitor employee fitness for work through observations and testing as applicable.

Workers are encouraged to refer themselves or other to their Supervisor, HSE, or HR personnel to assist or manage issues which may impact fitness for work.

8.8. DRUGS AND ALCOHOL

Personnel are responsible to ensure that they are not under the influence of drugs or alcohol whilst at work or engaged in work activities. The possession, distribution or selling of alcohol or illicit substances on the work site is strictly prohibited.

When applicable, and in compliance with local rules and regulations, The EPC Contractor shall implement a drug and alcohol testing regime which shall be conducted inclusive of pre-employment, for cause, random and blanket testing, where required.

Non negative test results shall be confirmed by laboratory analysis for drugs and a breath test for alcohol. Alcohol tolerance is 0.00, drug tolerance is as per NEOEN Standard.

Personnel returning a non-negative sample are to be stood down pending laboratory analysis.

8.9. FATIGUE

The EPC Contractor shall develop and implement a fatigue management policy and hours of work standard consistent with the requirements of this HSEMP for the project.

A standard working day will comprise of 8- 12 hour shifts. Approval must be obtained from the EPC Site Manager to extend working hours beyond 12 hours.

Personnel shall work no longer than 14 hours on any day with the gross shift length (i.e. inclusive of travel to/from site) not exceeding 15 hours.

A maximum of 5 sequential day shifts (followed by 24-hour break) and 4 sequential night shifts (followed by 36 hours break) shall be provided.

A minimum of a 10-hour break shall be provided between subsequent shifts.

A journey plan shall be implemented for personnel required to drive greater than 2 consecutive hours before or after their shift.

8.10. FIRST AID

Suitably qualified First Aid Personnel shall promptly attend to all injuries in accordance with their level of training. Only qualified medical personnel shall attend to all serious injuries, eye injuries (foreign bodies) or any injury requiring diagnosis. The EPC Contractor shall provide First Aid room and sick bay which will be established. This sick bay shall be available for use by the subcontractor's qualified first aider. Subcontractors are required to provide sufficient qualified Senior First Aid personnel and to provide a comprehensive Occupational First Aid Kit. At least one Subcontractor person shall be qualified to Senior First Aid level or above. Emergency First Aid assistance will be made available by the EPC Contractor to all personnel on-site as required. This will include arrangements for access to evacuation to the nearest medical center.

The EPC Contractor is to provide for any additional medical evacuation requirements (such as Europe Assist or similar) over and above evacuation to the nearest medical center provide by the EPC Contractor. All first aid injuries are to be documented on the "First Aid Injury Register" and an incident report generated to identify the cause of injury and control measures required to prevent a reoccurrence.

A ratio of 1:20 personnel shall hold current first aid qualifications

8.11. HEALTH SURVEILLANCE AND MONITORING

Should the project risk register identify potential occupational exposures to site personnel or as prescribed by legislation, the EPC Contractor shall implement health surveillance and monitoring to actively monitor the health of personnel.

The program should consider the duration of the project, period of exposure and the time on site of the potentially impacted personnel.

The program may consist of baseline, task specific and job completion monitoring.

The EPC shall ensure all personnel records remain confidential.

8.12. SMOKING

Smoking is prohibited in all buildings, crib rooms & lunch areas, confined spaces, cabins of multiple occupant vehicles, hazardous substance and lubricant storage areas, designated restricted areas and in any location where

passive smoke is a nuisance to other employees. EPC Contractor will clearly mark smoking areas and ensure that their employees observe the smoke free status of other areas.

8.13. WORKPLACE AMENITIES

Suitable and adequate on-site amenities shall be supplied and maintained regularly, in a clean hygienic manner, by each company on site. EPC Contractor shall maintain a high standard of hygiene at all times. The standard will be such as to prevent an environment conducive to bacteria, disease, and infection. EPC Contractor is required to provide for the general health and hygiene needs of their employees. Subcontractors shall provide an adequate supply of personal cleaning products, barrier creams and sunscreen protection for their employees. Crib rooms and eating areas shall be provided by EPC Contractor and shall be kept clean and free of all food scraps, wrappers, paper cups, and other disposable items by all subcontractors. EPC facilities provided shall include but not limited to the following:

- Adequate shaded areas during rest breaks.
- Ablution facilities including toilets and hand wash basins,
- Sufficient seating and facilities for all personnel during their allocated eating and rest breaks.
- Space for locker rooms for subcontractors
- Power points for any subcontractor supplied food storage equipment
- Service water for basic cleaning facilities in the eating areas as well as for the ablutions.
- EPC Contractor to guide subcontractors on procedure for waste segregation and disposal at site, including discharge of waste water from amenities (as stipulated in the Environmental and Pollution Control and Local Government Acts)
- EPC Contractor to ensure adequate lighting is provided on site

Subcontractors shall provide but not limited to the following;

- Suitable drinking water for all their employees.
- Any refrigeration, cooking and or heating equipment for their employees.

8.14. WORKING IN EXTREME TEMPERATURE

EPC Contractor will protect people who work in extreme temperatures. EPC Contractor are to identify extreme temperature sources and implement appropriate hazard control measures. Where an environment of extreme temperature exists EPC Contractor will use means of control that include, but are not limited to:

- Ensuring that people who have to work in such conditions are in good physical condition.
- Providing shelter and cool drinking water.
- Using power tools, lifting aids and/or other devices to reduce physical exertion.
- Planning of work to minimize personnel exposure to extremes of temperature

8.15. NOISE CONTROL/HEARING CONSERVATION

EPC Contractor shall be required to reduce and/or control exposure to noise hazards by using the Hierarchy of Control Method:

- Reduce the noise level at the source.
- Change the process or procedure to eliminate the noise.
- Isolate the noise source.
- Reduce exposure by reducing the amount of time the worker is exposed to the noise.
- Place clear signage to indicate a noise hazard and PPE requirement.
- Provide suitable PPE

8.16. EMERGENCY RESPONSE/EVACUATION

The Project site Emergency Response/Evacuation procedures shall be used except where it is identified by the Risk Assessment and/or EPC Project Manager that a specific Emergency Plan needs to be generated by EPC or its Subcontractors. When conducting the site induction briefing the Project HSE Advisor will advise all personnel of the emergency evacuation procedure and muster point locations. A site visitor register shall be maintained at all times. Company sponsors must ensure their visitor accompanies the sponsor to the muster point.

8.17. ENVIRONEMENTAL MANAGEMENT PLAN

EPC or O&M contarctor shall ensure that all required plans and controls are implemented to guarantee that site conditions are being kept in full compliance with all required environmental permits, licences and applicable laws or regulations during the construction or operation of the facility. Such palns include but are not limited to :

- Bushfire Protection Plan
- Stormwater Management Plan
- Soil and Water Management Plan
- Erosion Prevention and Sediment Control Plan
- Waste Management Plan
- Dust Management Plan
- Hazarduous material management
- Housekeeping

EPC Contractor shall ensure that their area of responsibility is kept in a neat and tidy manner and that tools, equipment and materials are stored away when not in use. Housekeeping is the responsibility of every employee working on the Project. The supervision of housekeeping is the responsibility of the EPC Contractor. Work areas, passageways, stairways, and all other areas shall be kept free of debris and materials and trip hazards. All subcontractors to ensure their areas of operation are cleaned up at the end of every shift

EPC Contractor shall ensure that all waste or rubbish is controlled and disposed of in accordance with the site environmental requirements. Storage areas shall be kept clean, and materials neatly stacked or placed.

- Waste disposal bins to be colour coded as follows:
    - Green Bins - General waste
    - Black bins - Plastic Waste
    - Red bins - Chemical waste
    - Orange bins - Wood waste
    - Blue bins - Glass
    - Brown - Steel
    - Yellow - Clinic waste

Adopt the principle of 'Polluter cleans up, pays and takes responsibility' as best practice. The principle requires that the cost of pollution be borne by the person or persons for causing it.

Walkways and other areas where personnel move through shall be maintained free of trip hazards equipment, obstructions, and other materials, which may cause an accident or injury. Construction materials shall be stored or placed in an orderly manner. Hazardous materials, including Solvents, paints, oils, greases, and other such material and containers such as tins, which have contained chemicals, shall be stored, handled and disposed of in a manner approved by NEOEN, in compliance with laws, regulations, Environmental Permit or licenses and the project pollution prevention and control measures.

8.18. CONFINED SPACE ENTRY

Confined Space Entry (CSE) shall proceed only after alternative methods of performing work are unable to be identified.

The EPC Contractor shall implement a CSE procedure and ensure all CSE entry conforms to Work Health and Safety legislation and Code of Practice requirements.

Only persons who have completed Confined Space Entry training shall undertake confined space entry (this includes the standby).

EPC Contractor will as far as practical ensure that employees do not work alone in isolated areas. Where practicality requires an employee to work alone, the employees' supervisor shall provide means of communication and establish a means of contacting the employee regularly to ensure their well-being.

8.19. CRANES AND LIFTING EQUIPMENT

Only persons with appropriate qualifications/license and who have successfully completed the VOC shall sling loads and operate cranes. All cranes will be inspected prior to use, maintained in accordance with a preventative maintenance program and comply with the following minimum features:

- Overload protection;
- Protective cabins with clear signage warning against Operator disturbance;
- Load cells clearly displayed to Operator, external rated capacity lighting and load moment indicators;
- Free fall capability lock-out

Slings and lifting gear shall be selected, inspected and maintained in accordance with the appropriate Australian Standards.

A color code shall be adopted per quarter for all slings

Slings and lifting gear shall be inspected and tagged quarterly by a competent person and examined for defects prior to each use. Where a defect is identified, the equipment shall be immediately withdrawn from use, tagged out of service and destroyed.

Safe working load shall be clearly marked on every sling, lifting chain and shackle.

The EPC Contractor shall ensure a register of lifting equipment is maintained for the project.

8.20. ELECTRICAL WORK

THE EPC contractor shall ensure that only suitably qualified electrical trade employees undertake electrical work.

All electrical work will comply with the requirements of Electrical Installations Australian Standard and Electrical Installations-Construction and Demolition or any other project specific standards.

At all times it is the preferred option to isolation equipment prior to conducting work. Work will only be conducted with voltage applied (i.e. live) when there is no reasonable alternative and a risk assessment has been completed and approved by the EPC Project Manager.

The following practices shall be complied with:

- Electrical isolation work shall be performed by a qualified electrician only;
- Test for Dead procedures shall be complied with prior to working on any equipment that may have the potential to become live;
- Metal ladders shall not be used in substations or electrical installation works where live conductors are present

- It is recommended to use lock out tagging system of electrical sources i.e. "Isolated"/"Danger Live

8.21. EXCAVATIONS AND TRENCHING

The EPC contractor shall ensure that prior to conducting excavations and trenching work, a risk assessment shall be conducted and an excavation clearance permit approved, including inspection and documenting of ground assessment by relevant officials prior to commencement of excavation works and a further requirement to have such areas barricaded. Any excavation or penetration of the ground to a depth in excess of 150mm must be assessed to ensure there is no potential to contact underground services.

All open excavations and trenches to be barricaded off with a safety net or red and white barricade tape which ever may be suitable with a signage reading 'Danger open excavation 'around the said areas throughout the duration of such works.

The EPC contractor shall ensure that access to and from excavation or trench is appropriate and that measures to prevent collapse by the use of one of the following;

- Geotechnical report allowing access to the excavation or trench
- Benching
- Battering
- Shoring

8.22. HOT WORKS

The EPC contractor shall ensure that hot works are performed by qualified personnel only. Where hot work is to be performed in an area that is not normally a designated hot work area (workshop), a hot work permit shall be completed.

All gas cutting and heating equipment shall comply with relevant Standards. Oxy welding shall be performed in compliance with the national Code - The safe use of portable and mobile oxy-fuel gas systems for welding, cutting, heating and allied processes.

Minimum PPE shall include wrap around safety glasses worn under a welding helmet or face shield, gloves, spats and appropriate footwear.

Hand held grinders shall have handles attached (these may only be removed upon completion of a JHA, THA).

Nine inch grinders are prohibited from use on site.

All grinders to be used on site should have suitable guards to protect any broken piece of disc to fly high and cause injury

The correct disc is to be used for the task (e.g. cutting or grinding); with chipped or cracked discs disposed of in rubbish bins.

8.23. INCLEMENT WEATHER

The EPC contractor shall ensure risks associated with inclement weather be considered within the site emergency response plan. Plans shall be in place and communicated to all personnel on a regular basis.

8.24. ISOLATION AND TAGGING (LOTO)

The EPC contractor shall have a documented process to conduct isolation and tag out of plant and equipment on site.

Before being worked on, all plant and equipment shall be systematically isolated from all energy sources and tested for dead.

8.25. MANUAL HANDLING

The EPC contractor shall ensure that manual handling of materials is reduced as far as possible.

Material shall only be handled manually when all other options of control (i.e. Mechanical means) have been deemed unsuitable through a risk assessment.

8.26. PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING (PPEC)

The EPC contractor shall ensure that appropriate PPEC is supplied and maintained for the project.

PPEC shall not be used as the only means to control a hazard. A risk assessment shall be conducted on tasks to ensure that more effective controls are in place.

All PPE shall be compliant to the applicable Australian Standard.

Employees shall be trained in the selection, application and maintenance of all **PPEC** that they may be expected to use at induction and toolbox meetings.

All persons entering the site, including senior personnel and visitors shall be required to wear the following minimum PPEC:

- High visibility Long sleeve cotton shirt (as per IEC Standard)
- Long cotton trousers (as per IEC Standard)
- Steel capped safety boots (as per IEC Standard)
- Approved Safety Glasses
- Safety Helmet
- Gloves to be on person at all times and worn when on task (except where a risk assessment identifies gloves shall not be worn)
- Approved hearing protection (where sign-posted).

8.27. FIXED PLANT

Fixed plant is inclusive of croppers, guillotines, and fixed rotating equipment such as lathes, radial arm drills, pedestal grinders etc.

The EPC contractor shall ensure that personnel are competent prior to operation with pre-start checks completed prior to each use, and personnel will only be allowed to operate equipment for which they have been trained.

Plant shall be maintained and serviced as per manufacturer requirements. Guards shall only be removed for maintenance and repair after equipment has been adequately isolated.

8.28. PORTABLE HAND TOOLS

All tools/equipment are to be maintained in a safe and operable condition with pre-start checks prior to use. Tools and equipment shall only be used for their intended purpose.

Fail to safe devices shall be fitted to all power hand tools and shall meet the requirements of IPL Site Standards.

All electrical equipment shall be tested and tagged by a qualified electrician prior to initial connection and thereafter every month or as per the relevant Standard.

All portable or mobile electrical equipment shall be fitted with an earth leakage protection device between the power source and equipment. Guards shall only be removed for maintenance and repair after equipment has been adequately isolated.

THE EPC contractor shall ensure that electrical equipment registers are maintained and available on request for the project.

8.29. TRAFFIC MANAGEMENT

The EPC contactor shall ensure that a traffic management plan is developed and communicated for the site.

All persons entering the site shall comply with the Site Traffic Management plan, signage, and applicable state legislation at all times. The following minimum requirements shall be adhered to:

- Emphasis to be placed on authorized Drivers of light vehicles to conduct pre-drive checks (checklist to be developed)
- Drivers shall hold an appropriate current class driver's license;
- Drivers and passengers shall wear seat-belts at all times;
- Signposted speed limits shall be obeyed and adjusted down to suit the road conditions;
- All light vehicles will be parked in a safe location, handbrake applied and in gear;
- Mobile phones shall not be used unless the vehicle is stationary and the engine disengaged;

Vehicles and mobile equipment shall be washed down prior to entering site and when leaving to drive on public roads as required to prevent environmental damage.

8.29.1. *Light Vehicles*

Light vehicles will be maintained in a clean state and good mechanical condition.

Valid insurance, road tax and fitness discs to be displayed on the front windscreen

Only authorized& fully licensed personnel shall operate light vehicles. All light vehicles shall comply with the site traffic management plan.

8.29.2. *Mobile Plant*

The operation of mobile equipment shall be in accordance with any prevailing statutory requirements. Persons will only operate equipment for which they are confirmed competent and authorized by the EPC contractor to operate.

Operators shall complete a pre-start inspection prior to commencing work and maintain log-books.

Mobile equipment will be correctly maintained in good mechanical condition as per a preventative maintenance program.

8.30. PERMIT TO WORK (PTW)

A number of project activities by their very nature present a greater risk to individuals involved. To appropriately manage these activities, the EPC contractor shall implement a PTW system to address these risks.

- Activities that may require a PTW include;
- Hot Works
- Confined Space Entry (legislative requirement)
- Excavation/Penetration
- Work at heights
- Work box permit
- Live testing/commissioning

The EPC contractor shall ensure that a relevant PTW or similar control mechanism is in place and monitored for effectiveness through the project.

8.31. WORKING AT HEIGHTS (WAH)

The EPC contractor shall ensure that all work at heights comply with the legislative requirements and applicable standards.

A risk assessment shall be completed for activities that present a risk of a person(s) falling or being struck by falling objects.

Emergency procedures for retrieval of personnel in the event of a fall from height shall be established prior to commencing work activity.

Systems will be established to prevent objects from falling and appropriate barricading/ signage established on lower levels.

Where reasonably practicable, the risk of falling shall be mitigated through the use of scaffold or other suitable working platform and/or fall arrest/restraint equipment. Only persons, who have completed recognized WAH training, shall perform work at height and utilize fall arrest systems. Fall restraint devices shall comply with the Australian Standard. Industrial Fall-Arrest Systems and Devices - Selection Use and Maintenance) and be used in accordance with statutory requirements.

8.31.1. *Elevated Work Platforms (EWP)*

The EPC contractor shall ensure that only authorized personnel shall operate EWP's. All authorized EWP operators shall have:

- Current high risk license for operation of EWP's
- Current working at heights certificate (nationally accredited or equivalent)

Spotters shall be in place during all movements of and work from a EWP. Barricading shall be used to prevent pedestrians walking below a EWP.

Third party hire equipment shall be inspected prior to use, and then daily prior to operation.

8.31.2. *Ladders*

The EPC shall ensure that the use of ladders on the project is as a last resort when all other access methods are unsuitable.

All portable ladders must comply with National regulation Portable Ladders.

8.31.3. *Scaffolding*

The EPC contractor shall ensure that scaffolding be erected and dismantled by licensed and competent scaffolders and meet as a minimum, (Scaffolding-General Requirements and Guidelines for Scaffolding.

A Scaffolding tag shall be displayed at the entrance to the scaffold indicating the scaffolding is in s safe condition to use.

8.31.4. *Fire Management*

The EPC contractor shall ensure that procedures in the event of a fire shall be documented within the Emergency Response Plan. The EPC contractor shall ensure that:

- Sufficient number and type of fire extinguishers and persons trained to use are available
- Buildings erected for purposes of facilitating construction/site administration activities to have a Fire certificate from the local authority
- Fire drill to be conducted at pre-determined intervals and identify and sign post and emergency assembly point for the site
- Employees to have basic knowledge of how to manage a fire
- Fire extinguishers are tested as per statutory requirements
- Vehicles and large items of mobile equipment are fitted with a fire extinguisher

9. TRAINING AND COMPETENCY

9.1. SKILLS AND TRAINING

The EPC Contractor shall identify HSE training needs and requirements prior to mobilization and shall ensure that all employees and contractors retained for the project possess qualifications and are competent to safely fulfil their role and responsibilities.

The minimum training for personnel shall include;

- Site induction
- Trade qualifications
- Regulatory (White card)
- Mobile plant/Operator training
- Working at Height
- Confined Space

During high risk activities, the EPC Contractor shall consider performing Verification of Competency (VOC) to validate individual's competency to operate site specific equipment or models.

A skills/training matrix shall be maintained by the EPC Contractor for all personnel engaged on the project.

9.2. INDUCTION

The EPC Contractor shall develop and implement a project site specific induction.

All personnel shall successfully complete the project induction and sign the acknowledgement form prior to commencing work.

9.3. VISITOR INDUCTION

A visitor may be a person who may be an Principal of EPC Contactor employee who is not at their normal workplace and who cannot be classified as a contractor.

Visitors intending to visit the site must obtain permission prior to arrival. Once permission is granted, the visitor, date, duration and purpose of the visit are to be communicated to site via Pre Start or Tool Box meetings.

Where practical all visitors should be complete the site specific induction.

All visitors shall be met prior to entering the site and shall be escorted by a fully inducted person at all times whilst onsite.

10. INSPECTION AND MONITORING

10.1. WORKPLACE INSPECTIONS

Workplace Inspections are a method by which the EPC Contractor:

- Measure the effectiveness of the HSEMP; and
- Detect and eliminate unsafe acts, behaviors and conditions.

Inspections shall consist of the following:

- General workplace inspections;
- Specific system or plant inspections (e.g. housekeeping, plant, fire equipment, first aid management, emergency management, etc.); and
- Risk assessment reviews

The EPC Contractors will maintain a schedule and records of workplace inspections undertaken which shall be reported on via monthly reporting.

Inspections shall be conducted as per the EPC Contractor's HSEMP inspection schedule.

Any corrective actions arising from inspections will be implemented by the EPC Contractor and monitored by both the EPC Contractor as well as the HSE Advisor.

Table 2 shows inspection requirements and frequencies:

Table 1 HSE Inspection Requirements

Inspection Type	Frequency	Responsibility
Works Area Inspection	Weekly	EPC Contractor Site Managers
General Site Inspection	Monthly	EPC Contractor Site Managers
Hazard Observation Forms	Weekly	EPC Contractor Site Managers
Inspection of Certified Equipment i.e. lifting equipment, electrical etc.	3 monthly or as required by legislation	EPC Contractor Site Managers
Inspection of First Aid Boxes	Monthly	EPC Contractor Site Managers

10.2. PROJECT AUDITS

10.2.1. *Project Commencement Audit*

Within thirty (30) days of project commencement, the Principal or Principal's Representative or the HSE Advisor will conduct a project commencement audit. The audit tool to be utilized will be formulated against this HSEMP and the EPC Contractors HSEMP.

Non-conformances will be outlined in the Audit Report and issued to the EPC Contractor for any necessary actions.

10.2.2. *Progress Audits*

The purpose of a progress audit is to ensure that compliance to this HSEMP and the EPC

Contractor's HSEMP is met and that continual monitoring by the Principal is maintained.

Progress Audits shall be undertaken every 3 months after the project commencement audit or as deemed necessary by the Principal.After the occurrence of a serious incident, an automatic WORK STOP shall be ordered by th eOanwer, and an HSE Progress audit shall be performed systematicaclly. Progress Audits shall be completed by the Principal or Principal's Representative.

Non-conformances will be outlined in the Audit Report and issued to the EPC Contractor for any necessary actions.

10.3. **CORRECTIVE AND PREVENTATIVE ACTIONS**

Corrective Actions arising from workplace inspections, interactions and audits will be recorded and monitored by the EPC Contractor.

All corrective actions shall be monitored for close out and effectiveness of control.

The EPC Contractor is responsible for monitoring the progress of corrective actions to ensure they are implemented effectively and closed out in a timely manner. All corrective and preventative actions will be entered onto a corrective actions register, with an action date and a responsible person to ensure it is closed out in a timely manner.

11. INCIDENT AND HAZARD MANAGEMENT

11.1. HAZARD REPORTING

All unsafe or potentially unsafe conditions and behaviors shall be reported regardless of whether the condition or behavior has been corrected.

Any hazards being reported in relation to project activity must be reported utilizing the EPC Contractor's hazard/incident reporting process. This process will be recorded and managed by the EPC Contractor and the records shall be readily available to the Principle as required. The EPC Contractor is required to provide the Principle with monthly reports highlighting the incidents and hazards that have occurred on the project for the specific reporting period.

11.2. INCIDENT REPORTING

An incident is defined as an event, which involves a near miss, damage, loss, injury or illness that occurs to a person, the environment (natural and workplace), the local community or assets. In the event of an incident, the immediate Supervisor shall ensure that:

- Hazards at the incident site is controlled
- The emergency response plan has been initiated as appropriate and
- The incident site is preserved (not disturbed) for the investigation.

The EPC contractor shall ensure that an incident and investigation procedure and recording process is implemented and communicated through the induction process.

The EPC Contractor shall ensure that the incident is investigated as per their HSEMP and provide the investigation reports to the Principle

11.2.1. *Internal Notification*

Employees and subcontractors are required to report all incidents, including near misses, immediately to their Supervisor, who shall inform the Site/Area Manager.

The EPC contractor shall verbally report to the Principal with two (2) hours of the incident occurring.

11.2.2. *Principal Notification*

The EPC contractor shall verbally report the details surrounding the incident to the Principal with two (2) hours of the incident.

11.2.3. *External Notification*

External notification of an incident to the relevant regulatory body shall be performed by the EPC Project Manager, after consultation with the Principal.

The EPC contractor is to ensure that external notifications are completed within regulatory timeframes.

11.3. INCIDENT INVESTIGATION

All incidents, including near misses, shall be promptly investigated to accurately identify root cause and ensure that timely and effective corrective actions are implemented.

Depending on the nature on the incident the EPC contractor shall conduct a basic or more detailed root cause investigation.

The EPC contractor will ensure that personnel responsible for conducting incident investigations are competent and/or have sufficient guidance. The findings of incident investigations shall be discussed with employees via toolbox meetings.

Corrective actions shall be developed in consideration of the hierarchy of control, documented and tracked to completion.

A preliminary report shall be completed within 24hours and the full investigation to be completed within 72 hours. Significant incidents may require additional investigation time and this should be communicated to the Principal.

11.4. REHABILITATION AND RETURN TO WORK

The EPC contractor shall ensure that Workers Compensation and Rehabilitation be managed in accordance with legislative requirements. Where required the EPC contractor shall appoint a Rehabilitation and Return to Work Coordinator to facilitate the program.

Early intervention and a return to suitable duties are supported by the Principal and EPC contractor.