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| | EHS Requirements for Critical Contractors | | | | |

EHS REQUIREMENTS FOR CRITICAL CONTRACTORS

*This Charter shall prevail on all contractual documents
signed between the Parties*



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1. REFERENCE DOCUMENTS

None

2. TERMINOLOGY, DEFINITIONS, ABBREVIATIONS

In this Document, the following words and phrases shall have the meaning assigned to them below:

“Contract” means the contract or subcontract entered between Alstom and the contractor for the performance of contract Works.

“Contractor”: a non-Alstom company who under a contract, subcontract or purchase order with the Ordering Party is engaged to undertake Contract Works.

“Contractor EHS Plan”: means an EHS plan provided to the Ordering Party by the Contractor relating to the performance of the Contract Works on Site.

“Contractor’s Personnel”: means the Contractor’s employees, agents, visitors, all persons employed or engaged on or in connection with the Contract Works or any part of them and any other person on the Site in connection with the Contract Works.

“Contract Works”: means all work and services to be performed by the Contractor under the Contract, including all activities ancillary thereto.

“ALSTOM EHS Plan”: means the Project Environmental, Health and Safety (EHS) Plan provided to the Contractor by the Ordering Party relating to the performance of the Works on Site.


“EHS”: means environment, health and safety.

“EHS Committee”: means the EHS committee, details of which are set out in the Contractor EHS Plan.

“EHS Requirements”: means collectively the requirements relating to EHS or the management of EHS set out in the applicable Law, the ALSTOM EHS Plan, the Site Requirements, the Contractor EHS Plan and the requirements of this Document.

“High-Risk Activities” shall include but not be limited to:

- Works for which Lockout Tagout must be performed
- Works involving a risk of interference with moving vehicles
- Lone working
- Work at height
- Lifting operations
- Hot works
- Works in explosive atmosphere

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- Work on live equipment
- Work in confined space
- Erection, modification and dismantling of scaffolds
- Excavation works
- Work with exposure to radiations (ionizing or non-ionizing)
- Aquatic works

“Law”: means the laws, regulations, orders, codes, standards or bylaws of any local or national authority having the force of law in the country where the contract Works are to be performed.

“Ordering Party”: ALSTOM or an incorporated or unincorporated consortium in which ALSTOM participates.

“Permit to Work”: means a permission to undertake relevant work issued by the Ordering Party to the Contractor in accordance with the permit to work procedure set out in the EHS Plan.

“Site”: means the place or places provided or made available by the Ordering Party to the Contractor to which plant, materials, tools and equipment are to be delivered, stored or at which Contract Works is to be performed, together with any other surrounding places as the Contractor may actually use in connection with the Contract Works, including access thereto.

“Site Requirements”: means the requirements relating to the safety of personnel on Site, the control of environmental aspects and the securing and safekeeping of plant, materials, tools and equipment, work areas, scaffolding, site establishments, installations and other matters.

“Site Specific EHS Induction”: means the site induction plan set out in the ALSTOM EHS Plan.

“Unsafe Act”: means any act or omission that is not in accordance with the EHS Requirements.


“Works”: means the work and services to be performed by the Ordering Party, of which the Contract Works form part.

3. EHS MANAGEMENT

3.1. General EHS Requirements

The Contract Works shall be undertaken in compliance with the EHS Requirements. In particular the Contractor shall comply at all times with the requirements established in the latest revision of the ALSTOM EHS Plan and in the associated specific procedure. Should there be any conflict between any of the EHS requirements, the requirement imposing the higher standard and obligation on the Contractor shall take precedence.

In any case, the Contractor shall respect applicable Law.

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The Contractor is responsible for ensuring that Contractor Personnel, personnel of its subcontractors and any visitor to site, are fully aware of and comply with the EHS Requirements at all times during performance of the Contract Work or whilst on Site, including the procedures to be followed in cases of emergency.

The Ordering Party reserves the right to verify that the Contractor and all Contractor Personnel meet the EHS Requirements. Contractor activities and performance shall be audited and evaluated through EHS audits and inspections to ensure ongoing compliance with these requirements.

The Contractor and Contractor Personnel admitted to Site must conduct themselves in an orderly and safe manner and conform at all times to the EHS Requirements. Fighting, engaging in horseplay, being under the influence of or possessing alcohol or drugs, gambling, soliciting, stealing, immoral or otherwise undesirable conduct is not permitted and shall not be tolerated. Upon knowledge of such conduct, the Ordering Party shall exclude the concerned person from the Site and take all other appropriate measures as deemed necessary by the Ordering Party. The Ordering Party reserves the right to perform random drug and alcohol tests.

A portion of the costs for such random tests will be borne by the Contractor, such portion to be determined on a pro rata basis by reference to how much the value of the Contract Works bears to the value of the Works.


The Contractor shall attend any EHS meeting arranged by the Ordering Party and hold meetings with their own Contractors to communicate and discuss EHS issues. The Contractor's Site Manager and, the Contractors EHS Manager shall attend as a minimum the Weekly EHS Committee Meeting as identified in the EHS Plan. If the Contractor Site Manager or Contractor EHS Manager are not be able to attend a suitable member of the Contractors personnel (as approved by the Ordering Party) shall attend on their behalf.

It is the Contractor's duty to identify all High-Risk Activities associated with the Contract Works. The Contractor shall ensure that all Contractor Personnel performing High-Risk Activities shall be subject to medical examination in accordance with the EHS Requirements.

3.2. Risk Assessment and Method Statements

The Contractor shall conduct suitable and sufficient risk assessments and prepare method statements for all activities to be carried out by the Contractor. The Contractor shall submit to the Ordering Party documentary evidence of all risk assessments conducted and method statements prepared within such times as identified in the ALSTOM EHS Plan, prior to the respective activity being undertaken. No activity shall proceed without authorization by the Ordering Party of the related risk assessment documentation and method statement. The Ordering Party shall not be held responsible for delays and additional costs due to late submission of any risk assessment documentation or method statement or submission of inappropriate or inadequate material, or for the time taken to review and approve such documentation.

All costs for conducting risk assessments and preparing method statements shall be borne by the Contractor. If any risk assessment documentation or a method statement is deficient, the Contractor shall rectify such deficiency immediately upon request at the Contractors cost.

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All risk assessments and method statements shall be explained by the Contractor to the Contractors Personnel carrying out the respective Contract Work in an appropriate and comprehensive manner. All Contractor Personnel so informed shall sign a “sign-off-sheet” to confirm that they have understood the risk assessment and/or method statement. A copy of all “sign-off-sheets” must be provided by the Contractor to Alstom. The documentary evidence of all risk assessments and method statements must be available at all times at the Site for purpose of reviewing and auditing by Alstom.

3.3. Contractor EHS Plan

Within the time period as identified in the EHS Plan and before the commencement of Contract Works on the Site, the Contractor shall submit to the Ordering Party for review and approval a Contractor EHS Plan. Such plan should comply with all respective EHS Requirements. The Ordering Party may reject the Contractor EHS Plan if the Ordering Party considers such plan to be deficient in any respect. In such case, the Contractor shall remedy the deficiency and re-submit the plan to the Ordering Party for further review and approval. The Contractor shall not be authorised to commence any activity on Site before having obtained formal approval of the Contractor EHS Plan by the Ordering Party.

The Ordering Party shall not be held responsible for any delays and additional costs due to late submission of the Contractor EHS Plan or submission of non compliant, deficient, incorrect, inappropriate or inadequate material, or for the time taken for the review and approval of the Contractors EHS Plan.

3.4. Security and Identification


The Contractor shall submit the full names, addresses and date of birth of all his personnel to be employed at Site as and when required by the Ordering Party in relation to site Security within the time period defined in the EHS Plan. The site mobilisation/ induction procedure must be adhered to for the mobilisation and induction of all Contractor personnel. Each member of Contractor Personnel must obtain the Ordering Party approval, security clearance, and a Site identification badge from the Ordering Party prior to their first day of work on the Site.

The Ordering Party reserves the right to refuse admission to the Site to any persons without giving any reason (including when individuals are unable to attend and, where relevant, pass the Site Specific EHS Induction, or when not complying with the site EHS requirements) and such refusal shall not form the basis of any claim from the Contractor for any delays or costs incurred thereby.

The Ordering Party has full authority regarding who can access the Site at any time, and has full authority to remove any person, at any time, for any reason, as deemed appropriate by the Ordering Party.

Contractor Personnel will wear their Site identification badge at all times whilst on Site. Visitor badges are to be returned to the Security office at the end of each day Badges are not transferable. The Contractor must report the loss of a badge immediately to the Ordering Party.

Any person who provides their ID badge to another person shall be removed from the Site.

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Any person found using another person's ID badge shall be removed from the Site.

The Contractor is accountable for all Contractor Personnel's badges. Contractor Personnel must be easily identifiable and clearly display at all times the Contractor's company identification. These badges shall be returned to the Ordering Party on demand and in any case at the completion of the Contract.

The Contractor must advise the Ordering Party immediately of any potential threat to security or health and safety that they become aware of at Site, including intruders, suspicious packages, danger to safety of persons, goods or property or risk of explosion or pollution. The Contractor shall co-operate with the Site Security Services with respect to reporting of security incidents, closing and locking of gates, visitors, vehicles and any other matters to be reasonably requested. Firearms and weapons are prohibited on Site at all times.

The use and control of portable radios, tape decks, television sets, video equipment (including cell phones with digital camera capability) at Site is prohibited. Cameras may only be used on site following formal written approval by the Ordering Party (camera permit). Contractor Personnel shall be restricted to the area in which they are working. This shall be defined by the Ordering Party and included in the Site Specific EHS Induction.

The Contractor is responsible for the security of all plant, materials, tools and equipment used for its activities, whether owned or rented by or on behalf of the Contractor. All packages, equipment and vehicles shall be subject to search and inspection by the Ordering Party.

The Ordering Party shall not be held responsible for any loss or theft affecting the Contractor Site, plant, material, tools or equipment. Should any plant, material, tools or equipment be issued by the Ordering Party to the Contractor for the execution of the Contract Works, the Contractor shall be solely responsible for care of such plant, material, tools and equipment. In the event of loss or theft, the Contractor shall bear the costs of recovery or replacement of the relevant plant, material, tools or equipment.


3.5. EHS Recognition Schemes to the workers

The Contractor shall be required by the Ordering Party to contribute to the costs of implementing the overall Works EHS recognition/ incentive scheme. The contribution is detailed in the EHS Plan.

3.6. Manpower

3.6.1. General Personnel

The Contractor shall provide competent and suitable personnel for the Contract Works to be carried out. All Contractor's and its Contractor's personnel shall be in possession of the necessary work permits, licenses and certificates that are required by the EHS Requirements for the execution of the Contract Works. The originals or certified copies of the originals shall be made available to the Ordering Party upon request. Copies of the certificates or qualifications shall be submitted to the Ordering Party as part of the site induction process. The originals or certified copies of the originals of such evidence of

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qualifications, permits, licences and certificates shall be made available to the Ordering Party immediately upon request.


3.6.2. EHS Personnel

The Contractor shall provide a sufficient number of qualified, suitable and experienced persons to manage all EHS matters on Site relating to the Contract Works, in accordance with the applicable Law and, as a minimum:

- for Contract Works where thirty (30) or more Contractor Personnel are on Site at any one time, the Contractor shall provide on Site one permanent qualified EHS Manager and, in addition, one further EHS Professional for each subsequent one hundred (100) Contractor Personnel present at Site.
- for Contract Works where less than thirty (30) Contractor Personnel are on Site at any one time, the Contractor's Site Manager may manage all EHS matters with the support of an off-site Contractor EHS Professional provided that such Site Manager is competent in implementing the Contractor EHS Plan and in complying with the EHS Requirements. Should such Site Manager fail to manage EHS matters to the satisfaction of the Ordering Party, the Ordering Party may reject a Site Manager or require the Contractor to provide a competent EHS Manager at the Contractors cost.

For the purposes of this paragraph, an EHS Manager shall be formally qualified and have more than 5 years site experience in EHS in related industry and other EHS Professionals shall be formally qualified with a minimum of 2 years' experience in EHS in related industry. The Contractor EHS Manager shall advise, supervise and coordinate all EHS matters for the Contractor on a full-time basis and shall ensure coordination with other contractors on such matters.

The Contractor's EHS Manager must be on Site at commencement of the Contract Works. The Contractor's EHS Manager shall advise, supervise and co-ordinate all EHS matters for the Contractor on a full-time basis and shall ensure co-ordination with other Contractors on such matters. The EHS Manager and all EHS Professionals must be formally approved by the Ordering Party. The Contractor must formally submit to the Ordering Party the Curriculum Vitae of all proposed Contractor EHS professional for review and approval by the Ordering Party. The Ordering Party shall make the final decision on the suitability of the proposed EHS professional. If the Ordering Party considers the respective Contractor EHS Manager and/or EHS Professionals not to be suitable the Ordering Party shall reject such EHS Manager and/or EHS Professionals and request to the Contractor an immediate replacement and further suspend access to the Site to all Contractor Personnel until such replacement is nominated, approved by the Ordering Party, and mobilised to the site. If the Contractor does not provide a suitable Site EHS Manager and EHS Professionals within a suitable time, the Ordering Party shall be entitled to recruit and employ any replacement personnel and charge all costs incurred to the Contractor with a 50 % surcharge. The Contractor shall remain fully responsible to fulfil their regulatory obligations and to ensure the appointed EHS resources are competent and adequate for the Contract Works.

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3.7. Training and Supervision

All Contractor's and its Contractor's employees working on Site shall attend the project specific environmental, health and safety induction prepared and presented by the Ordering Party and pass a test before starting work on the Site. The Contractor and all of its own contractors shall ensure that all their employees working on the Site have successfully completed the Ordering Party's Induction, and then also attend the Contractor's specific Induction. The Contractor shall provide an interpreter for inductions when required by the Ordering Party. In this case, the Ordering Party will provide the Contractor with the site induction presentation and the Contractor shall translate the presentation into the language of his own workforce, at no cost to the Ordering Party. A copy of the translated presentation shall be provided to the Ordering Party – at no cost to the Ordering Party.

In any case, the Contractor shall remain responsible for subcontracted Contract Works.

Attendance at the Site Specific EHS Induction does not relieve the Contractor of their responsibility to provide suitable and sufficient training for the Contractor Personnel. The Contractor shall also provide their own company Specific EHS Induction covering their specific work scope/activity.

The Contractor must ensure that all of the Contractor Personnel receive the necessary information, instruction, training and supervision for them to be able to undertake their tasks in a safe and environmentally sound manner. This shall include any training required by applicable Law.


The Contractor shall maintain records of all Contractor Personnel training. Upon request the Contractor shall provide the Ordering Party with documentation and certification of Contractor Personnel training.

Where requested by the Ordering Party, the Contractor shall submit an EHS training programme to the Ordering Party for approval. Such training programme shall include the specific activity induction provided by the Contractor. The cost for the attendance of any EHS training shall be borne by the Contractor. The Ordering Party reserves the right to request the Contractor to organise at the Contractor cost any additional and specific training required as a result of unsatisfactory Contractor EHS performance.

Furthermore the Contractor shall make full provision for the Contract Works and bear any costs associated to the mandatory participation of the Contractor personnel and any contracted personnel to a two-day EHS behavioural training programme facilitated by the Ordering Party.

3.8. Personal Protective Equipment (PPE)

The Contractor shall ensure at his own cost that each member of Contractor Personnel are provided with the correct personal protective equipment or clothing for the Contract Works to be carried out, including but not limited to safety shoes, safety helmets, long pants, long sleeved shirt, gloves, aprons, high visibility clothing, masks, safety glasses, goggles, ear plugs, double lanyard safety harnesses, etc, as may be required by the EHS Requirements. All PPE used shall at all times be in accordance with at least one of the following internationally recognised standards ANSI, ISO, BS, or EU and applicable Law. Where the Contractor proposes to use PPE compliant with a standard other than those specified in this paragraph, the use of such PPE shall be subject to the Ordering Party's approval. The Contractor shall ensure that all PPE has been properly assessed for suitability, is maintained and stored properly and is

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provided with instructions on safe use. The Contractor shall monitor correct use of PPE by Contractor Personnel.

3.9. EHS Disciplinary Scheme

The Ordering Party shall be entitled to request the Contractor to remove from Site any person and/or plant, materials, tools or equipment that the Ordering Party considers to be unsafe or not conforming to the EHS Requirements. Any such person and/or plant, materials, tools or equipment shall not be permitted to return or be brought back to Site (as the case may be) without the prior written approval of the Ordering Party.

Save where the Ordering Party considers it inappropriate to do so, the Ordering Party and the Contractor shall enforce a three-strike rule. Any person carrying out an Unsafe Act or allowing an Unsafe Act to be carried out by someone under his supervision shall receive a warning. The first warning shall be verbal and be confirmed in writing by the Ordering Party to the employer of the respective person. In case of further Unsafe Acts, the respective employee shall receive an additional warning in writing. Upon a third warning the person shall be removed from the Site and shall not be allowed to return to the Site for the remainder of the Contract Works.

For any serious breach of the applicable EHS Requirements, the Ordering Party and the Contractor shall be entitled to take the necessary and appropriate actions to ensure the full implementation of EHS Requirements, including immediate removal from Site of any person, plant, material tools or equipment of the Contractor.

The Contractor shall comply and cooperate all times with the disciplinary scheme defined in the EHS Plan and any relevant Work Instruction, particularly in relation to the Zero Tolerance Policy. Any cost resulting in the actions taken by the Ordering Party to enforce the established procedure in respect of any member of Contractor Personnel shall be borne by the Contractor.


3.10. Working in premises under the Ordering Party control

The Contractor shall not access, or perform any activities on or in the vicinity of manufacturing or operational equipment/areas unless specifically directed by the Ordering Party. The Contractor shall obtain a Permit to Work from the Ordering Party before any such work can commence. Once work is completed, the Contractor shall demonstrate to the Ordering Party that the relevant equipment/area is safe to recommence activity and to clear the Permit to Work.

Contractor Personnel who perform process and manufacturing operations shall be trained by the Contractor and/or the Ordering Party in the operation and maintenance of the machine they will use prior to starting work.

3.11. Audit and Inspection

The Ordering Party reserves the right to carry out or have carried out by a third party any audits and/or inspections it considers necessary during the contract duration. These audits may take place at the Site

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or, where relevant, on the premises of the Ordering Party or the Contractor. Any deficiencies found in the Contractor's management of EHS matters shall be immediately rectified by the Contractor at the Contractors cost.

The Contractor shall carry out workplace EHS inspections relevant to the Contract Works. The inspections shall be done with a minimum frequency of one per week. Any deficiencies shall be closed out in an expedient manner (maximum period of three (3) days) by the Contractor.

3.12. EHS Reporting


The Contractor shall immediately notify the Ordering Party of any environmental incident, injury, illness, near-miss, unsafe condition or practice and any loss or damage to the Ordering Party property, including incidents related to the Contractor Personnel. An investigation report assessing the root cause, corrective action, and preventative action shall be submitted by the Contractor to the Ordering Party within 24-hours of the incident's occurrence. This report shall be done using the Ordering Party forms unless otherwise agreed by the Ordering Party in writing.

Each week the Contractor shall forward to the Ordering Party any EHS information as required by the Ordering Party. This will include but not be limited to the number of "near misses", "lost time injuries", "Unsafe Acts/conditions", "environmental incidents", occupational diseases hazard identification, hazard identification closeout, Contractor Personnel inducted, weekly inspection conducted, hours worked. Such information shall be submitted by the Contractor to the Ordering Party in the form provided by the Ordering Party.

The Managing Director of the Contractor or equivalent shall be on site within twenty-four (24) hours of any severe accident occurrence related to the Contractor scope of works to introduce to the Ordering Party the required containment actions, corrective actions and preventive actions to prevent any reoccurrence of the event.

An EHS report shall be produced monthly by the Contractor and provided in due time to the Ordering Party. This should record cumulative monthly figures for staff and workforce on Site (as produced from daily reports) including safety statistics and trends relating to those of the following (not an exhaustive list can be completed by other figures as per site needs):

- Working hours;
- EHS events, including, but not limited to, lost time injuries, restricted work injuries, medical treatment injuries, first-aid injuries, occupational diseases, property damages, environmental impacts, near-misses and high-risk deviations;
- Training provided (including Site EHS Induction);
- Inspections, audits or toolbox talks given on Health & Safety;
- Environmental monitoring (e.g. water, fuel or electricity consumption, waste quantities) for the month;
- Potential ideas for on-going improvements;
- Status on risk assessments and method statements;

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3.13. Welfare and Sanitation and First Aid


The Contractor must ensure that there are sufficient welfare (including toilet, sanitation, lockers, eating facility, rest rooms, etc) facilities available for the number of Contractor Personnel that will be on Site. The use of the Ordering Party's facilities will not be allowed without prior agreement from the Ordering Party. The Division of Work will define who is responsible for the installation and maintenance of such facilities

The Ordering Party will provide a Common First Aid Facility for limited first aid treatment of minor injuries or sickness, posing imminent danger to a person on Site. This facility is not a medical workman's beneficiary treatment centre. In addition, the Contractor shall ensure that a suitable number of trained first aiders are on Site as required by applicable Law, to provide immediate first aid to Contractor Personnel. As a minimum, 1 first aider shall be on Site and one additional for every 50 employees. Consideration shall be made to ensure sufficient first aid coverage for works outside normal working hours. The Contractor shall make arrangements with nearby hospitals and doctors for treatment of its workforce. Such agreement shall include unconditional access to medical help for cases, which pose an imminent danger to the health of its employees.

3.14. Emergency Response Procedures

The Contractor shall ensure that all Contractor Personnel are made aware of the Site Specific Emergency Response Procedures and Evacuation Muster Points as identified in the EHS Plan. The Contractor shall contribute to the organisation of the overall emergency arrangements, to ensure suitable evacuation and roll call of Contractor Personnel in case of evacuation.

In any case, the Contractor remains fully responsible for the management of their personnel (and their Contractors personnel) and particularly during site emergencies and/or site evacuations. The Contractor must have a system in place to account for their personnel during a site emergency/site evacuation. The Ordering Party ID card system/turnstile system shall not be utilised by the Contractor to account for personnel during emergencies. In addition, the Ordering Party ID card system/turnstile system shall not be utilised by the Contractor for time keeping.

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4. EHS SPECIFIC REQUIREMENTS

4.1. Housekeeping

The Contractor shall ensure that their work area is kept clean, tidy and free from debris. The work areas must be cleaned on a daily basis and a full clean of each area shall be conducted on a weekly basis. The disposal of all waste shall be performed by the Contractor and be at the Contractors cost. In addition to the Contractors housekeeping team, the Contractor shall provide personnel for the overall Site housekeeping team, as set out in the Contract. When requested by the Ordering Party, the Contractor shall provide free of charge any plant or equipment to assist in the housekeeping activities. In case of failure of the Contractor to provide the required personnel or perform the obligations contained in this paragraph, the Ordering Party reserves the right to clean the area and charge the costs to the Contractor. Any disposal of waste shall be at the Contractor's costs.

All equipment, materials and vehicles shall be stored in an orderly manner. Access to emergency equipment, exits, telephones, safety showers, eye wash stations, fire extinguishers, pull boxes, fire hoses, etc. shall not be blocked or otherwise disturbed, restricted or delayed.

Each Contractor shall perform Contract Work in a manner that will minimize and control the production and migration of noise, dust and debris to adjacent work areas.

The Contractor shall supply, install and maintain sufficient task lighting for the safe execution of the Contract Work, suitable access lighting to areas under Contractor management and protective means for such access and the respective work area(s).


4.2. Confined Spaces

Before commencing Contract Work in a confined space the Contractor must obtain from the Ordering Party a Permit to Work. The Permit to Work will define the requirements to be followed. As a minimum the Contractor must ensure the following:

- Confined spaces are kept identified and marked by a sign at every the entrance.
- Adequate ventilation is provided.
- Adequate emergency provisions are in place.
- Appropriate air monitoring is performed.
- Persons entering or watching those confined spaces are provided (at every entrance) with Confined Space training.
- All necessary equipment and support personnel required to enter a Confined Space is provided.

All costs associated with the supply of the necessary plant and equipment (gas monitor, retrieval winch, breathing escape apparatus and requirements for a top man/standby man) shall be borne by the Contractor. Any training required by applicable Law shall be provided to the Contractor Personnel at the Contractor's cost.

The Contractor shall consider all cable pits as confined spaces.

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4.3. Machinery, Equipment and Tools

The Contractor must ensure that all machinery, equipment and tools provided for use in connection with the Contract Works are:

- suitable for its intended use;
- safe for use, maintained in a safe condition and where necessary inspected to ensure this remains the case (any inspection must be carried out by a competent person and records shall be available);
- used only by people who have received adequate information, instruction and training and, if required, permits; and also have been specifically authorised to perform that task;
- provided with earth fault circuit breakers (EFCBs) at all times when using electric power leads. Use of electrical tape for temporary repairs is prohibited.

Where relevant, Residual Current Devices (RCDs) shall be in place at the power supply (for 240 volts and above) of the Multiple Distribution Boards.

The Contractor shall ensure that the type of power supply and associated electrical tools are suitable and in compliance with the regulatory and the EHS Requirements.

4.4. Motor Vehicle Safety and Traffic Management

Contractor Personnel shall park their personal vehicles only in those areas designated by the Ordering Party. Personal vehicles shall not be provided access to the construction area. Vehicle access to the construction area shall only be provided following approval by the Ordering Party. Documentation shall be submitted to the Ordering Party (Vehicle Entry Request Forms) for any vehicle which the Contractor requires to utilise in the construction area. Limitations shall exist regarding the number of vehicles the Contractor may have in the construction area. All vehicles entering the construction area must be fitted with a flashing light and audible reversing beeper. Vehicles which do not have this equipment installed and functioning shall not be provided access to the construction Site.


The Ordering Party assumes no responsibility for vehicles, or articles in vehicles, parked in the premises under the Ordering Party's control. Vehicles and equipment shall not block or restrict exits, walkways, loading areas, fire hydrants or emergency equipment. the Ordering Party reserves the right to remove any vehicle or equipment that would block or restrict access to those areas.

Operators of vehicles with high overhead clearance must pre-plan travel routes on Site to ensure overhead utilities, obstructions and or personnel will not be at risk of impact.

Contractor diesel and gas powered vehicles are prohibited inside buildings unless prior approval and arrangements for ventilation have been made with the Ordering Party.

The Contractor will not perform extensive maintenance or repairs of vehicles on Site.

Drivers shall obey all traffic regulations and signs, and carry a valid driver's license for any vehicles they operate. Contractor personnel who fail to adhere to the site traffic rules (speed limits, etc) shall not be permitted to operate vehicles on site.

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Vehicle's engines shall be turned off when parked. The vehicle shall only be parked in authorised area and shall not block any general and emergency access.

The Contractor shall identify all equipment/vehicles brought on to the Site with the name of the Contractor utilizing the equipment/vehicles. The Contractors name shall be clearly visible at all times.

The Contractor shall ensure all vehicles, plant and equipment used by the Contractor and/or his Contractors for carrying out the Works comply in every respect with all applicable Laws, and EHS requirements. Any vehicle or item of plant or equipment that is not in possession of current valid documentation and certificates shall be immediately removed from Site.

Material shall be safely loaded and securely fixed onto the correct means of transport, before and during transportation from one location to another.

Areas not marked as traffic routes, such as general Site storage areas, laydown areas and Contractor's work areas are to be carefully inspected and checked in order to determine the location of any existing underground installations, before any loads are moved into these areas.

The Contractor is required to carry out these inspections and checks, to execute any works that may be necessary to protect existing installations from damage, and to repair and/or make good any damage done by the Contractor and/or his Contractors.


All vehicles reversing, conducting difficult manoeuvres or transporting abnormal loads are to be accompanied by a banksman.

Mud is not to be transported by the Contractor's vehicles on to public roads from the site.

The Contractor shall provide, erect and maintain traffic signs, lamps, barriers and traffic control signals and such other measures as may be required by the construction of the Works (on site and off site) in accordance with the pertaining local traffic laws, codes and recommendations.

The Contractor shall, after consultation with any statutory or other authority concerned, submit to the Ordering Party for his approval a proposal based on such consultation showing the scheme of traffic management he proposes for carrying out the Works before commencing any work which affects the use of the public highway and thereafter furnish such further details and information as necessitated by the Works or as the Ordering Party may require. The Contractor shall not commence any work which affects the public roadways until all traffic safety measures necessitated by the work are fully operational.

The traffic signs, lamps, barriers and traffic control signals shall be in accordance with the requirements of the Traffic Signs Regulations and General Directions current at the date of the execution of the work. Traffic signs and warning lamps shall comply with pertaining applicable Laws for public highway use. The Contractor shall keep clean and legible at all times all traffic signs, lamps, barriers and traffic control signals and he shall position, re-position, cover or remove them as necessitated by the progress of the Works.

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The Contractor shall construct temporary diversion ways wherever the Works will interfere with existing public or private roads or other ways over which there is a public or private right of way for any vehicular pedestrian.

The standard of construction and lighting shall be suitable in all respects for the class or classes of traffic using the existing way and the width of the diversion shall not be less than that of the existing way unless otherwise described in the Contract.

Diversion ways must be constructed in advance of any interference with the existing ways and shall be maintained to provide adequately for the traffic flows.

4.5. Working at Height

Applies to all work done by the Contractor where there is the risk of a fall and injury and specifically where there is a risk of fall from 500mm or over and where there is a risk of objects falling on people.

The Contractor must undertake a formal documented risk assessment for all work where there is a risk of falling from height. The risk assessment must consider any potential for doing the task in a way that does not expose workers to the risk of falling from height. The risk assessment must be reviewed and approved by the Ordering Party and formally communicated to the persons undertaking the work where there is risk of falling from height.

For all work at height where collective preventative measures are not possible, a Permit to Work must be issued by the competent operational supervisor. Specifically when removing any floor or walkway gratings a Permit to Work must be issued.


The Contractor must have a rescue plan that includes rescue of people working at height and this is tested as a minimum within seven (7) calendar days of commencing the work and then every 3 months. This has to be communicated to the Ordering Party for inclusion/reference in the site specific emergency response procedure.

All persons involved in designing fall prevention or fall protection measures must be subject to formal competence checks by the Contractor to ensure necessary training, experience and qualification prior to commencing work.

All persons involved in erecting fall prevention or fall protection measures (including as a minimum scaffolders & temporary platform erectors) must be subject to formal competence checks by the Contractor to ensure necessary training, experience and qualification prior to commencing work.

All persons working on or supervising activities using fall protection measures (including as a minimum scaffolders, elevated work platform operators, site erection supervisors, persons wearing harness) must be subject to formal competence checks by the Contractor to ensure necessary training, experience and qualification prior to commencing work.

The Ordering Party may at its discretion undertake competence checks in relation to the above requirements

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The Contractor must ensure that a formal training covering general Work at Height hazards and both preventative and protective measures is formally provided to its personnel on Site and this must be completed prior to commencing work and repeated (as a minimum) annually.

All Contractors employees exposed to the risk of falling from height shall be provided with (first priority) adequate fall prevention or (second priority) collective or individual fall protection measures by the Contractor.

When it is not possible to implement collective fall prevention measures, all persons exposed to a risk of falling from height (e.g. working from vertical ladders, erecting or dismantling scaffold, operating elevated work platforms) must use a harness that is at all times attached to a secure anchor point or life line. Double lanyards, shock absorbing lanyard and/or fall arrestor shall be used unless specifically determined (and approved by the Contractor) as not required by the risk assessment.

Where safe to do so all Items used for work at height including tools and equipment must be secured, where this is not possible alternative measures such as barriers must be in place to prevent people from being in an area where there is a risk of falling objects or equipment.

The Contractor must ensure that a competent operational supervisor is formally appointed to supervise each work activity where there is a risk of falling from height.

The Site Manager of the Contractor must, prior to the commencement of the work, attend a formal documented meeting held by the Ordering Party responsible supervisor to explain the Ordering Party requirements regarding fall prevention, where they will formally receive the Ordering Party general or site specific EHS documentation related to fall prevention.


All ladders, harnesses, mobile elevated work platforms and other relevant equipment used for work at height or for fall prevention or protection must be uniquely identified, listed in a register and subject to formal regular inspection by the Contractor

All defective or non-inspected equipment that is or could be used for work at height or for fall prevention or protection must be either removed from site or physically prevented from use by the Contractor.

All equipment (inc. ladders, harnesses, lanyards, lifelines, scaffolds, elevated work platforms etc) must be subject to a pre-use inspection by the Contractor.

All scaffolds, work platforms and walkways used to prevent fall from height must be designed and constructed using materials that are designed for scaffold and made from metal frames, mid rails and hand rails (height between 1 and 1.1m).

All scaffolds, work platforms and walkways used to prevent fall from height must be designed and constructed using floorboards & toe boards with no significant gaps.

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All scaffolds and work platforms must be designed, erected, altered, inspected (initially before use and then every seven (7) calendar days minimum) and dismantled by competent persons who have been formally authorised by the Ordering Party.

All anchor points, lifelines, fall arrestors and lanyards must be designed and used in a way to ensure maximum protection to the user if he/she fell.

Where lifelines are used each one must be individually validated by a competent person formally authorised by The Ordering Party and each must be restricted to a maximum load of 3 persons.

The Contractor must complete a documented weekly inspection program that is led by its site management, involving its Contractors and covers all activity where there is a risk of fall from height.

The Contractors site manager must include in the weekly operational meeting a detailed review of statistics, actions and management of change issues relating to compliance with fall prevention requirements.

The Contractor must have a scheme in place to ensure that its employees understand the site operates a "Zero Tolerance Policy" in relation to deviations from the Work at Height Requirements and that this includes where required, application of the applicable disciplinary process. Failure to adhere to the Ordering Party working at height requirements shall be considered a severe breach of the EHS Plan.


The Contractor will be subject to formal regular inspection covering fall prevention, where if significant or repetitive issues are raised contractual actions will be taken.

4.5.1. Scaffolding

The Contractor shall ensure that all scaffolds used in connection with the Contract Works shall comply with the following requirements.

All scaffolds shall be subject to a documented inspection by a competent person (employed by the Contractor) and clearly identified/marked prior to use and thereafter every seven (7) calendar days (minimum), immediately after any modification or immediately after any adverse weather conditions. Green/red scaff tag system shall be used to identify safe / unsafe scaffold for access. Each single access to the scaffold shall be signalled with such scaff tag. All costs associated with this system shall be borne by the Contractor. The Contractor shall submit a proposal to the Ordering Party regarding the type of scaffold to be used on the construction site for the Ordering Party approval. Scaffold material shall not enter the construction site until the scaffold material has been approved by the Ordering Party. The Contractor shall also submit to the Ordering Party (for approval by the Ordering Party) the proposed scaff tag system to be utilised. All scaffold material shall be painted HI-VIZ (high visibility) in colour to the approval of the Ordering Party. The Contractor shall propose a HI-VIZ system to the Ordering Party for review and approval.

Scaffold tube caps and scaffold joint covers shall be installed on all scaffolds. The footings or anchorage for scaffolds shall be sound, rigid and capable of carrying the maximum intended load without settling or displacement.

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All scaffolds shall be erected in according to a specific design developed by competent personnel (either generic design or specific design depending on the category of scaffold to be erected).

Guardrails and toe-boards shall be installed on all open sides and ends of scaffold platforms. Scaffolds shall be provided with an access ladder or equivalent safe access. Contractor Personnel shall not climb or work from scaffold handrails, mid-rails or brace members.

When freestanding, manually propelled scaffolds are used, the height shall not exceed four (4) times the minimum base dimension. Contractor Personnel shall not be present on mobile scaffolds when they are being moved.

Scaffold design information shall be submitted to the Ordering Party for review and approval. The Contractor shall not erect any scaffold before formal approval by the Ordering Party. The scaffold design documentation shall be submitted to the Ordering Party seven (7) working days before the scaffold erection is planned to commence.

4.5.2. Stairways and Ladders

Ladders are normally forbidden but should only be used for light duty, short-term work or access in line with the below and the Site Requirements.


- Fabricated ladders are prohibited.
- Conductive or metal ladders shall be prominently marked as conductive and not be used near energized lines or equipment.
- Ladders will be secured to keep them from shifting, slipping, being knocked or blown over.
- Ladders will never be tied to facility services piping, conduits, or ventilation ducting.
- Temporary ladders will be lowered and securely stored at the end of each workday.
- Ladders shall be maintained free of oil, grease and other slipping hazards
- Ladders will be visually inspected by a competent person and approved for use before being put into service. Each user shall inspect ladders visually before using
- Ladders with structural defects shall be tagged "Do Not Use," immediately taken out of service, and removed from the Site by the end of the day.
- Wooden ladders shall not be painted.

4.5.3. Roof Work/Access

Roof work and access to roofs must not be undertaken without prior authorization from the Ordering Party.

4.5.4. Mobile Elevated Work Platforms

Mobile Elevated Work Platforms ("MEWP") (boom, scissors, snorkel types, etc.) shall be used in accordance with the EHS Requirements. All Contractor Personnel operating MEWP's shall be properly trained. Contractor Personnel shall work from the floor of the MEWP lift only. Climbing on handrails, mid-rails, and brace members is prohibited.

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Inspection certificate of the MEWP shall be submitted to the Ordering Party prior to any use at Site. The Ordering Party shall not be held responsible for any delay associated to the interruption of MEWP use due to the absence of the mentioned documentation.

4.5.5. Overhead Work

A secure exclusion zone shall be maintained by Contractor below overhead work to prevent access and protect personnel from falling objects. Such exclusion zone shall be maintained until the end of the task. The exclusion zone shall be removed as soon as the risk of falling objects is removed.

Suitable signage shall be in place to inform about the reason of the exclusion zone. Plastic red and white chains or solid barriers shall be used. Warning tapes are not acceptable as a technical solution to establish a temporary exclusion zone.

4.6. Lifting Operations

Applies to all work done by the Contractor involving lifting operation, lifting equipment and lifting accessories.

The Contractor shall conduct a formal documented risk assessment and a formal lift plan for all lifting operations within its scope.

The risk assessment and lift plan must be reviewed and approved by the Ordering Party and formally communicated to all persons undertaking the work where there is a risk from lifting operations.

A Permit to Work must be issued by the Ordering Party supervisor responsible for the task for all non-routine lifting operations (see dedicated EHS guideline for definition of 'non-routine').


All persons preparing and issuing lifting plans must be subject to formal competence checks by the Contractor to ensure necessary training, experience and qualification prior to commencing work. The Contractor must submit the CV of their nominated Lifting Supervisor – to the Ordering Party – for review and approval. Lifting Plans shall only be reviewed by the Ordering Party following signature by the Contractors approved Lifting Supervisor.

All lifting plans must clearly define the specific roles and responsibilities for each person involved in the lifting operation.

All persons involved in lifting operations including as a minimum crane drivers, lifting coordinators and riggers must be subject to formal competence checks by the Contractor to ensure necessary training, experience and qualification prior to commencing work.

The Ordering Party may at its discretion undertake competence checks in relation to the above requirements.

In locations where a formal documented proof of competence from a regulated body is not available then all persons involved in lifting operations including as a minimum, crane drivers, lifting supervisors and

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riggers shall be as a minimum subject to a short practical assessment of competence by the Ordering Party.

The Contractor must ensure that a training covering general lifting operation hazards and preventative measures is formally provided to all its personnel on site and this must be repeated as a minimum at the commencement of the Contract works and then annually.

No employee of the Contractor shall be positioned under a suspended load or between a suspended load and fixed objects.

Clear communication channels must be formally established and maintained between everyone involved in a lift with only authorised persons giving instruction to the operator.

The Contractor must ensure that a competent operational supervisor is formally appointed to supervise each lifting operation.

The Contractors Site Manager must, prior to the commencement of the work, attend a formal documented meeting held by the Ordering Party responsible supervisor to explain the Ordering Party requirements regarding lifting operations, where they will formally receive the Ordering Party general or site specific EHS documentation related to lifting operations.

All lifting equipment and accessories must be uniquely identified, marked with the safe working load, listed in a register and subject to formal regular inspection.

All defective, non-inspected or unidentified (safe working load / identification number) lifting equipment or accessories must be either removed from site or physically prevented from use.

All equipment used in lifting operations shall be subject to a pre-use inspection by the operator

All lifting equipment and accessories must have valid test and thorough examination records.


Operating perimeters and times of use for mobile lifting equipment must be clearly defined and applied on site.

The Contractor shall operate and maintain cranes and hoisting equipment in accordance with manufacturers' specifications and limitations and the EHS Requirements.

Contractor Personnel are not permitted to use the Ordering Party lifting equipment unless prior approval has been received from the Ordering Party.

Only Contractor Personnel trained in the use of cranes and hoists are permitted to use them.

The Contractor must perform checks to verify the competency of 3rd Party lifting equipment testers and examiners

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The Contractor must have a documented weekly inspection program that is led by its site management, involving their Contractors and covers all activity involving lifting operations.

The Contractors site manager must include in the weekly operational meeting a detailed review of statistics, actions and management of change issues relating to compliance with lifting operations requirements.

The Contractor must have a scheme in place to ensure that its employees understand the site operates a "Zero Tolerance Policy" in relation to deviations from the lifting operation requirements and that this includes where required, application of the applicable disciplinary process. Failure to adhere to the Ordering Party Lifting Operation requirements shall be considered a severe breach of the Ordering Party EHS System.

The Contractor will be subject to formal regular inspection covering lifting operations, where if significant or repetitive issues are raised contractual actions will be taken.

4.7. Lockout Tagout ("LOTO")

Prior to performing work on machines or equipment, the Contractor shall ensure that it is familiar with and follows the Site-specific LOTO and Permit to Work procedures and that all of its affected Contractor Personnel receive the necessary training.

The Contractor shall restrict access to work areas by unauthorized personnel where energy sources have been de-energized. All affected Contractor Personnel shall be notified. The area shall be secured and signs erected.


Once an item of electrical equipment has been energised, an item of mechanical plant and/or System has been erected and released for Commissioning, no work will be allowed on such item of equipment or System unless a valid Permit to Work (PTW) has been obtained from the Ordering Party. Any personnel found to be ignoring the PTW requirement, or not fully adhering to the PTW System, will be immediately and unconditionally removed from Site.

4.8. Barricades

Floor openings, stairwells, platforms and walkways, and trenching where a person can fall any distance shall be adequately barricaded and where necessary, well lit. Rigid barriers ONLY must be used (e.g. scaffold structure). Plastic tape barriers/barricades are NOT acceptable. Safety webs are only authorised when fixed to a rigid structure and shall not be used for fall prevention and protection.

Rigid barricades must also be used to prevent personnel entering an area where risk of injury is high e.g., during overhead work activity or electrical testing etc. Such barricading must provide clear visual warning.

Barricades shall not restrict possibility of any person to exit the place where the barricades are installed or adjacent areas in case of danger.

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4.9. Hazardous Substances

All chemicals brought onto the Site by the Contractor (including fuels, oils, lubricants, chemicals, paints, coatings, coolants, cleaners, flooring materials, etc.) must have prior written approval from the Ordering Party. Chemicals must be properly labelled and segregated to prevent potential hazardous mixing.

All chemicals and substances must be registered in accordance with the applicable Law (such as REACH regulation in the European Union).

The Contractor shall ensure that all the Contractor Personnel are made aware of the hazards associated with the chemicals being used. Relevant and up-to-date Material Safety Data Sheets (MSDS) shall be submitted to the Ordering Party at the Site. All hazardous substances must be stored in compliance with the requirements stated on the MSDS. The provision of correct, compliant, and adequate storage facilities shall be performed by the Contractor and at the cost of the Contractor.

Upon completion of the Contract, all unused materials will be taken off the Site and correctly disposed by the Contractor at the cost of the Contractor.

Transfer and decanting of flammable liquids will be grounded and bonded where necessary.

4.10. Asbestos-Containing Materials

The Contractor shall not bring any Asbestos or material containing Asbestos onto the Site.

4.11. Compressed Gas Cylinders


Gas cylinders shall be securely stored and transported, and identified and used in line with legislation and EHS requirements. Hose lines shall be adequately protected, inspected and tested for leaks in line with EHS requirements.

4.12. Electrical Safety

Prior to undertaking any work on live electrical equipment the Contractor must obtain a Permit to Work from the Ordering Party. All electrical hazards will be identified by the Contractor and a risk assessment carried out by the Contractor. Where possible live work shall be avoided. Any control measures highlighted shall be implemented prior to work commencing.

The below measures will be taken:

- Work practices must protect against direct or indirect body contact by means of tools or materials and be suitable for work conditions and the exposed voltage level.
- Energized panels will be closed after normal working hours and whenever they are unattended. Temporary wiring will be de-energized when not in use.
- Only qualified electrical Contractor Personnel may enter substations and/or transformer vaults and only after being specifically authorized by the Ordering Party.

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4.13. Fire Protection and Prevention

Full and unrestricted access to emergency exits, fire-fighting equipment, fire control and emergency vehicles shall be maintained at all times. The Contractor shall provide, install and maintain their own temporary fire protection against hazards they introduce to the Site (work areas, storage areas, and temporary facilities under their responsibilities). This shall be in accordance with relevant National and Local Laws, Regulations, applicable standards or Fire Department's Officer Recommendations Contractor fire extinguishers shall be inspected at least annually by a certified person and visually inspected monthly and documented by the Contractor.

The Contractor shall not install or alter fire prevention/protection systems without the Ordering Party approval. The Contractor and Contractor Personnel may only work on fire systems where appropriately licensed/qualified.

The Contractor is fully responsible for the installation and maintenance of suitable fire detection and protection systems in their office and welfare areas.

4.14. Hot Works

A Permit to Work must be obtained from the Ordering Party prior to any hot works (welding, grinding, open flame work, heat treatments) being performed. Suitable fire extinguishing equipment shall be immediately available. Objects to be welded, cut or heated shall be moved to a designated safe location, or, if they cannot be readily moved, all movable fire hazards in the vicinity shall be taken to a safe place. Personnel working around or below the hot works shall be protected from falling or flying objects.


Any cost associated to the presence of necessary fire watchers as identified in the risk assessment / method statement for the activity shall be borne by the Contractor.

Prior to the use of temporary propane or resistance heating devices approval must be obtained from the Ordering Party.

4.15. Trenching, Excavating, Drilling and Concreting

A Permit to Work must be obtained from the Ordering Party for all excavation works. All underground lines, equipment and electrical cables shall be identified and located prior to commencing the work. The Contractor shall assign a competent Contractor Personnel for all trenching and excavation work.

Safe means of access and egress shall be located in all trench excavations. Daily inspections shall be conducted by a competent Contractor Personnel for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems or other hazardous conditions. The daily inspection shall be performed prior to works commencing on that work day, and shall be documented and signed by the respective Contractor personnel. The records of every inspection shall be maintained by the Contractor and made available to the Ordering Party when requested.

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Personnel shall be protected from cave-in and excavated spoil or other materials and equipment that could cause a hazard by falling or rolling into the excavation.

Physical barriers (hard barricades such as scaffold) shall be placed around (the excavation must be fully protected by the barrier) or over trenches and excavations. Flashing light barriers or reflective barriers shall be provided at night.

All protruding reinforcing steel will be capped to eliminate the hazard of impalement. Rebar caps shall be affixed on all exposed rebar. Formwork and shoring will be designed, erected, supported, braced and maintained so that it will safely support all vertical and lateral loads. Reinforcing steel for walls, piers, columns and similar vertical structures shall be adequately supported to prevent overturning or collapse. All formwork design calculations/shoring design calculations shall be formally submitted to the Ordering Party for review and approval prior to installation commencing.

Any fill material being brought onto the Site must be free from contaminants and requires approval by the Ordering Party.

4.16. Environmental Requirements

4.16.1. Waste Management


All rubbish, waste materials and items of plant, equipment or materials that are no longer required for the Works, shall be regularly cleared and removed from Site. The control and management of waste is the full responsibility of the Contractor. The collection, transport, storage and removal of waste from the site and disposal in approved disposal locations is the full responsibility of the Contractor and shall be performed at the Contractors cost. The Contractor shall take all necessary precautions to ensure the complete protection of ground and underground against pollution. The burning of surplus waste shall not be permitted.

The Contractor is responsible for the removal of any waste generated by the Contract Works being done on the Site. The Contractor must dispose of the waste in line with the applicable Law. The Contractor will create and maintain all documentation in respect of the management and disposal of waste as required by applicable Law and will provide copies to the Ordering Party on request. The Contractor shall comply with any direction regarding the disposal and management of waste made by the Ordering Party.

Wastes (includes rinse from washing of equipment, PPE, tools, etc) are not to be poured into improper sinks, drains, toilets, or storm sewers, or onto the ground. Solid or liquid wastes that are hazardous or regulated in any way are not to be disposed of in general site waste receptacles.

The Ordering Party will not provide centralised collection containers for office and domestic waste. The management and disposal of waste from all work areas, all laydown areas, all offices and welfare areas, is the full responsibility of the Contractor.

In the event that the Contractor fails to comply with the waste management requirements, the Ordering Party reserves the right to carry out the necessary work, and to recover the costs from the Contractor.

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The Contractor shall comply with the applicable Law in respect of waste disposal.

All requirements established in the Waste Management plan shall be complied with by the Contractor.

4.16.2. Spills prevention and control

The Contractor shall take all necessary precautions to ensure the complete protection of ground and underground against pollution.

The Contractor shall take all steps and precautions that are necessary to ensure that no liquid waste, contaminated surface water or other untreated effluent gains access to the surface water drainage system.

All liquid wastes resulting from the Contractor's activities on Site shall be collected separately with approved interceptors or similar, and disposed of, all by the Contractor, in accordance with the applicable Laws. It is the Contractor's responsibility to identify all such laws and regulations regarding waste disposal and act in full compliance with such laws and regulations. The Contractor shall hold the Ordering Party harmless from any such occurrences, whether they are accidental or otherwise.

The Contractor is responsible for the provision of adequate spill kits/protection and the clean up and disposal costs of spills arising from the Contract Works.

4.17. Emissions


The Contractor shall identify and quantify any emission sources associated with the Contract Works. The control measures associated with these emissions shall be subject to the approval of the Ordering Party. Emissions include but are not limited to noise, dust, fumes and vapours.

The commencement of the Works shall not take place until there has been submitted to, approved in writing by, and deposited with the Ordering Party a scheme for the provision of wheel cleaning facilities for heavy commercial vehicles and any mobile plant which has an operating weight exceeding three tonnes. Such approved facilities shall be installed in accordance with a timescale to be approved in writing by the Ordering Party and shall be maintained throughout the period of the construction of the Works unless any variation has been approved in writing by the Ordering Party.

All requirements established in the Dust Prevention Plan shall be complied with by the Contractor.

All open bodied heavy commercial vehicles carrying dry loose aggregate, cement or soil into and out of the Site shall be sheeted or sealed so as to prevent the release of such materials into the local environment.

Where practicable, screening shall be provided to prevent the ingress of dust and dirt to any part of the Works. The Contractor shall ensure adequate dust suppression methods are employed (e.g. wetting down by water truck etc) in his work areas at all times. Should adequate dust control measures not be

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implemented by the Contractor, the Ordering Party reserves the right to implement suitable measures (to the satisfaction of the Ordering Party) at the full cost of the Contractor.

The Contractor is to prevent the deposit of mud on public roads by his vehicles and shall act in accordance with the applicable Laws and the EHS Requirements. The Contractor is responsible for maintaining all public roads free from mud generated at site from whatever cause to the satisfaction of the Ordering Party.

The Contractor shall provide to the Ordering Party upon request, and whenever specified by the EHS requirements, any information, plan, measurement, analysis and control measures required to fulfil the EHS requirements

Authorised working hours defined in the Environmental permit shall be adhered to.

5. CONTRACTOR EHS MANAGEMENT PERFORMANCE REVIEW

The Contractor shall be available on a monthly basis to participate to a “Contractor EHS Management Performance Review” (form attached as Appendix No. 4 to ALSTOM-EHS-002 – Rev A Directive) covering the scope of the Contract Works. Depending on the result of the “Contractor EHS Management Performance Review” the Ordering Party will be entitled to apply the remedies defined in Volume 2 “Contract Particulars. The Contractor Site Manager and the Contractor EHS Manager shall participate in this monthly review. Failing to participate in the “Contractor EHS Management Performance Review” will result in the full application of the remedies for the concerned month.


6. REMEDIES FOR NON-COMPLIANCE WITH EHS REQUIREMENTS

In addition to all other rights that the Ordering Party may have under the Contract or the applicable Law, the Ordering Party shall notify the Contractor whenever it considers the Contractor to be in breach of any of the EHS Requirements. If the Contractor does not take appropriate corrective actions to rectify the breach within reasonable time or within the time period stipulated in the Ordering Party notice, the Ordering Party is entitled to rectify such breach itself or by a third party and to recover the associated costs from the Contractor. Whenever the Ordering Party consider that the breach of the EHS Requirements require an interruption of the Contract Works, the Contractor shall stop the work and shall remain liable for the cost and delay implication of such interruption, in addition to the additional rectify costs required to rectify the situation.


Without prejudice to any other remedies available to the Ordering Party under the Contract or the applicable Law, the Ordering Party shall be entitled to the remedies set out in the table below: These remedies set out herein are understood and agreed by the Contractor as being a genuine and pre-assessed damages which the Ordering Party is likely to incur in the event of Contractor defaulting its obligations for which they are said to be compensating. These remedies shall be deducted from the Contractor payment and reinvested by the Ordering Party in order to improve EHS performance at site or contribute to the EHS incentive scheme at the discretion of the Ordering Party. The compliance to the below requirements will be validated on a monthly basis by using the “Contractor EHS Management

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Performance Review” form. Any non-compliance to the established requirements will be justified by providing the details of such non-compliance.

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| Items | Requirements | Measurement | Record / Proof | Remedy |
|---|---|---|--|--|
| Monthly Site Contractor Inspection | | | | |
| A | Compliance with the Critical EHS Requirements observed during the Monthly Contractor EHS inspection. | 100% compliance on each of the topic (A1 to A10 of the Site Monthly Contractor Inspection) of the each months | Checklist completed | Deduction from any payment due by the Ordering Party to the Contractor under the Contract by (amount and currency to be specified) per inspection not achieving 100% compliance or for non attendance at the inspection. |
| Monthly Site Contractor Performance Assessment | | | | |
| B1 | No Contractor activities (including those of their own Contractor) were stopped due to the absence of approved Method Statement / Risk Assessment documentation by the Contractor as per section 3.2. | Site EHS Inspections "Contractor Performance Management Review" | No records of deviation / reported situation related to activities carried out without risk assessment/method statements | Works will be stopped and any payment withheld. Remedies relating to delays in the works will be applied as per the Contract conditions. In addition, deduction from any payment due by the Ordering Party to the Contractor under the Contract by (amount and currency to be specified) per activity stopped At each payment after down payment. |
| B2 | No Contractor Personnel were observed on Site without having been inducted to the Ordering Party and Contractor induction as per section 3.7. | Site EHS Inspections "Contractor Performance Management Review" | History of Non-inducted Contractor Personnel identified on the Site. | Deduction from any payment due by the Ordering Party to the Contractor under the Contract by (amount and currency to be specified) per person not inducted. At each payment after down payment. |

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| B3 | The EHS Manager and the appropriate number of EHS Professionals have been mobilised at Site as per the requirements of the section 3.6.2. | The EHS Manager and appropriate number of EHS Professionals to Contractor Personnel “Contractor Performance Management Review” | For 30 or more Contractor Personnel there is 1 EHS Manager on Site. For every further 100 personnel there is an additional EHS professional on site. For less than 30 personnel under Contractor scope, Site Manager performance is satisfactory and does not require the mobilisation of an EHS Manager. | The Ordering Party will provide the missing resource and charge it to the Contractor with a <i>(percentage surcharge to be specified)</i> surcharge. |
| B4 | The Contractor Site Manager and the EHS Manager attended the site EHS Committee Meeting. Any absence to the meeting was justified and notified to the Ordering Party Site Manager or the Ordering Party EHS Department as per section 3.1. | “Contractor Performance Management Review” | Attendance to the EHS Committee Meeting. MoM of EHS Committee Meeting | Deduction from any payment due by the Ordering Party to Contractor under the Contract by <i>(amount and currency to be specified)</i> per absence to the EHS Committee Meeting At each payment after down payment. |
| B5 | All accidents, near-misses and high-risk deviations were notified to the Ordering Party immediately and a preliminary report was submitted to the Ordering Party within 24 hours of the occurrence as per section 3.12. | “Contractor Performance Management Review” | Accident Statistics | Deduction from any payment due by the Ordering Party to Contractor under the Contract by <i>(amount and currency to be specified)</i> per event not notified and per preliminary reports submitted more than 24 hours after the event. At each payment after down payment. |

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| B6 | All confined space activities were carried out under a suitable Permit to Work issued by the Ordering Party and in compliance with the section 4.2. | "Contractor Performance Management Review" | Site Correspondences | Deduction from any payment due by the Ordering Party to Contractor under the Contract by <i>(amount and currency to be specified)</i> per unsafe confined space activities observed. At each payment after down payment. |
| B7 | Weekly EHS Inspections are carried out by the Contractor. | "Contractor Performance Management Review" | Record of Weekly EHS inspections | Deduction from any payment due by the Ordering Party to Contractor under the Contract by <i>(amount and currency to be specified)</i> per missing weekly EHS inspection. At each payment after down payment. |
| B8 | All workers working at height with individual fall protection were found clipped on at all times as per section 4.5. | "Contractor Performance Management Review" | Site Correspondences | Deduction from any payment due by the Ordering Party to Contractor under the Contract by <i>(amount and currency to be specified)</i> per individual found unclipped when individual fall protection is required to be used. At each payment after down payment. |
| B9 | The Contractor closed the findings of the Contractor audits as per the established and agreed deadline. | "Contractor Performance Management Review" | Audit Report response from the Contractor. | Deduction from any payment due by the Ordering Party to Contractor under the Contract by <i>(amount and currency to be specified)</i> per finding not closed in due time without reasonable grounds. At each payment after down payment. |

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| B10 | The Contractor closed the findings of the Site EHS inspections related to the Contract Work as per the established and agreed deadline. | “Contractor Performance Management Review” | Site EHS Inspections response from the Contractor | Deduction from any payment due by the Ordering Party to Contractor under the Contract by <i>(amount and currency to be specified)</i> per finding not closed in due time without reasonable grounds. If the finding is related to an unsafe situation with the potential to result in a severe accident, the Contractor will perform the necessary corrective action and charge it to the Contractor with a <i>(percentage surcharge to be specified)</i> surcharge. At each payment after down payment. |
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For any breach of the EHS Requirements that is not capable of being rectified (e.g. accident), the Contractor shall be liable for all losses, damages, fines, penalties and costs of responding to and participating in the investigations of any relevant authorities and defending any actions as a result of such breach and indemnify and hold harmless the Ordering Party in respect of the same.

If the respective breach constitutes a material breach, the Ordering Party shall be entitled to terminate the Contract under the conditions of the Contract. Such termination right shall be cumulative to any other remedy available for such breach. A material breach of the EHS Requirements shall include but not be limited to a breach:

- (i) that may result in legal action against the Ordering Party or the Contractor;
- (ii) that may result in fines, penalties or alike being levied on the Ordering Party or the Contractor;
- (iii) whereby the Ordering Party or Contractor may lose its license, permit, certificate or alike necessary to execute the Works or Contract Works (as the case may be);
- (iv) that may lead to termination of the main contract entered into by the Ordering Party and its customer;
- (v) where the Contractor persistently breaches EHS Requirements.