

Contractor: _____

To follow the guideline of putting prevention first and meeting the requirements in national Environment, Health and Safety (EHS) laws, and with the aim to achieve zero harm. Johnson Controls (hereinafter referred to as JCI) and Contractor agreed to implement EHS practices in addition to performing their duties in the agreement based on the following agreement contents:

1. Contractor shall strictly observe and implement national and local laws, regulations and rules on Environment, Health and Safety (EHS) and fire protection, and accept supervisions and inspections from regulatory bodies at all level of local Authorities as well as supervisions and inspections from JCI, and shall voluntarily undertake all the consequences arising from violating any above laws and regulations.
2. Contractor shall possess the registration capital, professional technicians, technical equipment and other conditions related to safe production required by national laws, and obtain relevant qualification certificates pursuant to the laws and undertake any project within the scope of its qualification; provide copies to JCI. Before implementing the job, authentic, lawful and valid proof materials such as worker name list, work- related injury insurance, qualification of safety management personnel and Certificates for Special Operations shall be provided if applicable.
3. Contractor shall establish a safety organization in accordance with laws and regulations, assign safety-in-charge person and safety management person responsible for safety management of specific project, and assign at least one eligible safety management person. It shall also provide JCI with copies of the certificates for reference check;
4. Contractor shall establish a sound and safe accountability system, education and training system, procedures and operation instructions to address Environment, health, safety and fire protection issues. It shall also conduct regular and special safety inspection in the project (service site) it undertook and keep proper records;
5. Contractor shall set up a specific expense inventory for EHS and fire protection issues, and make sure the fund is used for its specific purpose only.
6. Contractor shall observe national and local laws, regulations and rules on labor safety and employment, ensure legal employment and avoid using child labor or arranging women workers to undertake prohibited tasks;
7. Before construction, Contractor shall obtain relevant education and training on EHS and fire protection issues, to make sure on-site personnel are equipped with necessary safe production knowledge and familiar with relevant production regulations and procedures as well as possess safe work skills required by their jobs.

8. Contractor shall develop a specific work safety plan according to the features of the project it undertook; it shall conduct an EHS induction to all construction personnel before construction, and implement the safety practices properly and completely, any untrained worker is not allowed to work in the site.
9. Contractor shall make sure to provide necessary safety tools and equipment for work of high risk or in dangerous locations. No work shall be allowed before protective measures were in place. A safe construction plan shall be provided to JCI for future reference. High risk job includes but not limited to working at heights or in confined spaces, dealing with inflammable and explosive articles or poisonous and harmful articles, operating pressurized vessel, hot work, lifting, and pipeline disconnection.
10. During construction, Contractor shall provide on-site personnel with personal protective equipment complying with national safety requirements and instruct them how to wear and use these items. On-site personnel must use personal protective equipment correctly. Person in charge of construction and safety person shall inspect the usage of personal protective equipment to prevent any nonconformity.
11. When conducting hot work, Contractor must observe the management requirement as provided in national laws and regulations or by the premise owner, including apply permit to work and equip firefighting resource.
12. Contractor shall conduct observation and measurement of surrounding buildings and structures that might be affected by the construction, and set up guardrail or warning signs around the construction site. Any work beyond the construction boundary is prohibited.
13. The construction machinery, tools and instrument and protective equipment to be used in this project must be supplied according to the need of construction both in quantity and quality, and shall be tested by qualified testing institution to guarantee their compliance with the safety requirements. The construction machinery, tools and instrument and protective equipment shall be regularly inspected to make sure they are in compliance with safety regulations and within inspection period. Use of substandard protective equipment, machines, tools and materials is prohibited. Contractor shall be responsible for any injury or equipment damage due to improper use of tools and equipment.
14. Contractor shall not use any on-site equipment, facility and instrument of JCI and premise owner without authorization of JCI. Upon the consent of JCI or premise owner in writing, Contractor shall be responsible for the safe use and protective measures of such equipment, facility and instrument. Without authorization of JCI or premise owner, Contractor shall not use on-site energy resources like water, electricity and gas nor run or connect any cable or wire. Contractor shall immediately disconnect corresponding switches in case of interruption or failure. Contractor shall not dismantle or modify any protective facilities and signs set up by JCI

- or premise owner, otherwise it shall be responsible for any accident arising therefrom.
15. Contractor shall dispose the construction wastes in accordance with national and local environmental laws and regulations. Hazardous substances, oils, chemicals, waste water and other pollutants shall be stored in a designated area instead of any area near sewer, pit or collecting basin to prevent them from dumping or discharging into ground water or environment accidentally and causing pollution. It is prohibited to dump solid or liquid wastes such as chemicals, waste oil and waste paintings into soil or sewer.
 16. Contractor shall assign sufficient on-site cleaning personnel to do housekeeping so as to clean the waste daily. Materials shall be gathered and stored in an orderly manner. Contractor shall clear and transport the solid wastes generated during construction or collect and put them in a designated vessel or location and make registration.
 17. Contractor shall handle materials with care during any operation, reduce flying dust. Contractor shall carry out proper management on daily use of water and electricity to save energy resources.
 18. Contractor shall use machines with low noise level provided that such machines meet the requirements of production and process. New machines with noise pollution source, where the noise emission of machine fails to comply with the standard, shall be improved as required prior to use.
 19. Contractor shall not subcontract the project to other companies without approval from JCI's project manager. Contractor shall manage subcontractors with the same standard. Any third-party personnel entrusted by Contractor shall be deemed as personnel of Contractor, and Contractor shall be accountable for their safety and responsible their safety management.
 20. Contractor shall report any personal injury or death, chemical leakage, fire and equipment accident or any other situation threatening personal safety to JCI immediately and coordinate with corresponding investigations. Contractor shall first guarantee the safety of the staff before taking active emergency measures, and notify JCI's project manager and safety management staff of the situation in a timely manner.
 21. Contractor shall report any personal injury or death occurred during construction to management department and investigate and handle such accident as required by local government; in case of major accident, Contractor shall notify local government immediately and preserve the scene undisturbed. Contractor shall submit the accident investigation report and handling opinions to JCI for filing.
 22. Contractor shall accept supervision and guidance from JCI's safety department and eliminate any safety risks identified by JCI in a timely manner. During cooperation, Contractor shall not violate JCI's Environment, Health and Safety Requirements Specific to Johnson Controls Contractors, otherwise, JCI has the right to warn

Contractor or charge Contractor a penalty (See Appendix I for Penalty Notification).

23. Contractor shall be responsible for the breach liability of any shutdown caused by following reasons, and JCI has the right to terminate the contract under such situation:
- (1) Personal injury or death accident
 - (2) Serious damage of construction machinery or production equipment
 - (3) Fire accident
 - (4) Work against rules or work at risk despite of dissuasions
 - (5) Poor on-site conditions which does not meet the requirement of safe and civilized construction
24. In case Contractor fails to assign safety management personnel or fails to carry out technical safety measures and construction planning in a proper and comprehensive way; construction personnel fails to fully understand the features and construction safety measures of this project; or the construction machinery, tools and instrument and protective supplies do not meet the requirement of this project, JCI has the right to request Contractor to shut down and make rectifications, and Contractor shall be responsible for any consequences or losses arising therefrom. In case Contractor fails to complete the rectifications within a time period specified by JCI, JCI has the right to terminate the contract, and Contractor shall be responsible for all the losses suffered by JCI or third party arising therefrom.
25. Contractor shall be responsible for any personal injury/ equipment damage/ financial loss suffered by JCI or third party due to Contractor's fault and negligence, and compensate the damaged party or third party for such losses. During the performance of the contract, JCI has the right to terminate the contract if the qualification materials provided by Contractor are found to be invalid, and Contractor shall be responsible for all the losses arising therefrom.

Name of JCI
Representative (Seal):

Title of Representative:

Signature of Representative:

Date:

Name of Contractor
Representative (Seal):

Title of representative:

Signature of representative:

Date:

Environment, Health and Safety Requirements

Specific to Johnson Controls Contractors

Contract name:

Job reference:

Contractor/ subcontractor Company

Contact Person:

Date:

Introduction

This Environmental, Health & Safety Requirements (EHSR) outlines the requirements and responsibilities of the Contractor/ Sub-contractor when performing equipment installation works, construction works or services for Johnson Controls. The Contractor/ Sub-contractor may use their own in-house program to meet the minimum Environmental, Health & Safety requirements set out in this document.

The Objective of the Environmental, Health & Safety Requirements is to create a standard EHS approach that enables all equipment installation works, all construction works and projects to be executed in the same manner in Johnson Controls, with diligence, minimal impact on the environment and without any accidents and incidents.

The Environmental, Health & Safety Requirements shall apply to all personnel on the project/ worksite including the Client (if there are no specifications), Contractor/ Sub-contractors and persons under the direct or indirect control of the aforementioned.

Definitions

EHS	Environment, Health and Safety
Health and Safety	Occupational conditions and factors that affect the health of employees, temporary workers, agency workers , contractor's staff, visitors and any other people in the workplace.
Environment	Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, human and their interrelation.
Hazard	Sources or situations with a potential harm in terms of human injury or illness, damage to property, damage to workplace environment or a combination of these.
Risk	Combination of the likelihood and consequence(s) of a specified hazardous event occurring.
Risk assessment	Overall process of estimating the magnitude of risk and deciding whether or not the risk is tolerable; this process should consider normal and abnormal operating conditions, shut-down and start-up conditions, as well as reasonably foreseeable emergency situations.
Work safety analysis/ safe method introduction/ safe working practices	Method of control that is used after a risk assessment of an operation has been carried out. It is used to control the operation and to ensure that all concerned are aware of the hazards associated with the work and the safety precautions to be taken. It should contain the boundaries, materials and plant requirements and temporary works designs. This is normally written in a step wise manner.
Environment impact	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services.
Customer	Major project Client
Contract	The agreement between the client or Johnson Controls and the Contractor/ Sub-contractor.
Subcontract	Any agreement relating to any subsequent or lower tier within the contract hierarchy.
Contractor/ subcontractor	Any person, firm, company, contractor, vendor, supplier or combination thereof (including any employee, servant or agent thereof), that enters into a contract with the client or Johnson Controls.
Subcontractor	Any person, firm, company, or combination thereof (including any employee, servant or agent thereof), that enters into a sub-contract with the Contractor or Johnson Controls.
Construction site/ site	Any site or premises owned, occupied or controlled by the client as referred to or defined within the contract.

I. Standard requirements imposed on contractors/ subcontractors

1. General rules
<ul style="list-style-type: none"> ○ Comply with applicable legislation, standards, codes of practice, etc. ○ Comply with specific Client and Johnson Controls site procedures or rules. If differences exist between local, client and Johnson Controls EHS standards, the higher or more stringent requirement should apply. ○ The Johnson Controls reserves the right to stop any work creating a potential risk to the health and safety of people, to the environment or that could cause damages to materials, services, equipment or impact production. The Contractor/ Sub-contractor is responsible for remedial measures and associated costs. ○ Co-operate with Johnson Controls and other contractors on co-ordination/ interface issues.
2. Security
<ul style="list-style-type: none"> ○ Comply with the Johnson Controls security rules and procedures. ○ Be responsible for the Security of its equipment, tools and any other items owned or hired. <ul style="list-style-type: none"> - Shall not take photographs without written approval of Johnson Controls and/ or the client (equipment, process, buildings, etc.).
3. EHS Introduction
<ul style="list-style-type: none"> ○ All personnel shall attend an EHS Induction/ Orientation before starting work on site. The training should be recorded as per the Environmental, Health & Safety Requirements. ○ The contents of the EHS Induction/ Orientation shall be specific to the type and area of work. It should provide information about the main risks associated with the work, the site rules, the emergency and working procedures and any other relevant local requirements.
4. EHS training and instruction
<ul style="list-style-type: none"> ○ People operating tools and equipment shall be trained and certified as required by local legislation and the Client and/ or Johnson Controls. Evidence of training shall be provided to Johnson Controls. ○ As the need arises, special training/ instruction sessions may be delivered to workers when particularly severe or unusual hazards arise during the project. ○ Personnel shall be trained/ instructed in the use of emergency equipment and procedures.
5. Enter to site

- Comply with site access badge requirements.
- Written approval/ authorization is required to park vehicles inside Johnson Controls premises.
- The Johnson Controls reserve the right to check the hazardous contents of vehicles both on entry to and exit from Johnson Controls project premises and if necessary to search vehicles and occupants.

6. Authorization for site access

- The Contractor/ Sub-contractor can only enter site areas in connection with the execution of the Work or Services but not to other parts of the premises without prior authorization from the Client and/ or Johnson Controls.
- The Contractor/ Sub-contractor shall obtain the necessary approval from the Client and/ or Johnson Controls for all contractor/ sub-contractor coming to the worksite. Visitors should always be accompanied by a person familiar with the site EHS rules.

7. Control of subcontractors

- The Contractor/ Sub-contractor is responsible for its sub-contractors and all personnel working on its behalf.
- All sub-contractors and personnel working for the Contractor/ Sub-contractor shall comply with the Environmental, Health & Safety Requirements and all other project requirements.
- The Contractor/ Sub-contractor shall provide sufficient competent personnel to supervise the work safely.

8. Implementation of the Environment, Health and Safety Requirements

- Comply with and implement Environment, Health and Safety Requirements.
- Provide Risk Assessments and Safe Method Statements associated with the works/ services before commencement on site.
- Request associated Permit to Work before starting works on site.
- The Safe Method Statements approval does not relieve the Contractor/ Sub-contractor from his duties to comply with the local statutory legislation, regarding the health and safety of his employees and all other persons who may be affected by his acts or omissions while undertaking the works.

9. First aid and welfare facilities

- Provide appropriate first aid facility, equipment, materials and medicines. The provision of personnel trained in first aid treatment should be as per local legislation.
- Provide appropriate welfare facilities (canteen, toilets, locker room, etc.) as per local legislation and the Environmental, Health & Safety Requirements.
- In certain cases, some or all of these facilities may be provided by the Client and/ or Johnson Controls.

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- In certain cases, some or all of these facilities may be provided by the Client and/ or Johnson Controls.

10. EHS representative/ meeting

- Formally appoint an EHS Coordinator, as per the Environmental, Health & Safety Requirements to monitor and coordinate safety on site and to perform safety inspections (The level of training/ competence of this person should be agreed with the Johnson Controls and is dependent on the size/ complexity of the project and associated hazards).
- The EHS Coordinator shall send copies of site inspection reports to Johnson Controls and participate in EHS Meeting with Johnson Controls.
- The EHS coordinator of contractor shall provide monthly EHS report to corresponding project manager according to the requirement of site EHS.

11. Personal protective equipment (PPE)

- Provide appropriate PPE to their personnel and visitors. (e.g. Safety Helmets/ Safety Footwear/ High Visibility Waist Coats/ Eye Protection, etc.).
- Johnson Controls reserves the right to remove employees/ visitors from the site if PPE are not being used.
- The PPE used at construction site must comply with national standard and within the period of validity, special protective equipment must be labeled with safety certificate such as LA, CE; any damaged or defective PPE must be replaced immediately.
- Operation personnel shall choose appropriate PPE based on operation risk and use them correctly in accordance with national regulations.

12. Temporary works

- All Temporary Works should be covered by a Safe Method Statement indicating how calculations, designs, pre and post loading checks, and etc, have been established/ verified.
- Temporary Works shall be under the direct supervision of a competent person as defined by the regulations.
- Temporary works supporting systems or equipment should be in good condition and fit for purpose.

13. Environmental protection plan

- Prepare an applicable Environmental Impact Protection Plan to address potential risks/ hazards (noise, air emissions, fuel/ oil/ chemical storage, waste skips, traffic) to the surrounding environment.

14. Services and operating processes

- Work likely to affect operating process, machinery, or service shall not be starting without appropriate Permit to Work. This is also applicable for coupling in or connection to compressed air line, steam line, water line, oxygen line, vacuum, fuel line, electrical circuit or other similar service.
- Any operation requiring permit to work must be equipped with a dedicated supervisor to take charge of the report, protection, shutdown of preliminary work, the supervision, direction, and alerting during work process, and the recovery, cleaning and communication upon completion.

15. Equipment, facilities, tools and systems

- All the equipment, facilities, tools and systems provided by contractor/ subcontractor shall be in good form, in working order and be fit for the purpose intended by design. Before carrying out any work, suitable tools or equipment must be chosen and grounded properly.
- All the equipment, facilities, tools and systems provided by contractor/ subcontractor shall be inspected, tested and certified as per local legislation requirements. Certificates should be provided to Johnson Controls when requested.
- Johnson Controls reserves the right to refuse the use on site of any plant or equipment considered not good, not safe or not in an environmentally acceptable condition.
- Tools like grinders, cutters, wrenches, screwdrivers must comply with national standards and shall be used in accordance with corresponding requirements.

16. Noise at work

- The Contractor/ Sub-contractor will provide appropriate PPE for all works generating excessive noise over 85 dB (A) or having a peak sound pressure of 200 pa (140 dB). Precautions should also be taken for others at work (*Note: the threshold levels for action may be lower in some countries*).

17. Housekeeping

- The Contractor/ Sub-contractor shall always carry out works/ services in a clean and orderly manner:
 - Materials and substances should be safely staked and stored, not obstructing accesses;
 - Timbers (packing cases, shuttering etc.) should be systematically de-nailed or the nails bent-over;
 - Avoid accumulation of combustible materials/ debris within or close to any building;
 - When practical, waste should be segregated for recycling;
 - Waste, rubbish and debris should not be stored on site without formal approval from Johnson Controls, who should then designate the area and stipulate the storage conditions;
 - Food waste should be placed in covered containers that are emptied daily (food may only be prepared/ consumed in an agreed designated area); and it is not permitted to burn waste on site.
- If the Contractor/ Sub-contractor is not maintaining good housekeeping standards, Johnson Controls reserves the right to organize collection and disposal of the rubbish by a third party at the Contractor/ Sub-contractor cost.

18. Safe means of access/ working at heights

- Provide and maintain safe means of access to all work areas.
- Elevated work places (4 feet/ 1.2m or more) shall be provided with adequate barriers to prevent the fall of people, tools or materials. If not possible, safety nets or other approved methods should be utilized.
- Working at heights must be carried out on a secured and solid platform without defects/ bulges/ debris; and provide worker safe means of access to different work levels.
- In the event of the aforementioned not being practical, workers shall wear safety harness, which must be attached to a solid fixing point (i.e. steel member, anchor bolt or running line). For work to be carried out below 5.6m, a safety harness without buffer must be used; for work to be carried out above 5.6m, a safety harness with buffer must be used.
- Where the workers need to move from point to point during work, a two-lanyard system shall be used to ensure the workers are always latched on. At no point in time should the worker be disconnected from the lanyard system.
- Personnel working from Mobile Elevating Work Platforms or any similar equipment/ devices, shall be attached with a safety harness. (Conduct additional risk assessment for Static/ Mobile Scaffold Towers).
- Openings through which people, tools or materials could fall shall be either securely barrier or provided with securely fixed and marked covers that are fit for purpose and clearly identifiable.
- Provide specified tool bags for working at heights. Throwing objects from height is prohibited.

19. Scaffold

- Pay particular attention to the strength and stability of all types of scaffolding, as well as the provision for safety guard rails, toe boards, timber scaffold boards etc.
- Only proprietary scaffold systems and ladders shall be used, unless agreed otherwise by the Johnson Controls.
- Control that the scaffolding provided, or that has been substantially adapted or altered, shall not be used until it has been inspected by a competent person as defined by the regulations.
- Provide a scaffold status identification system (e.g. Scaffolding Tag (SCAFFTAG) SYSTEM or similar) and control that it is correctly implemented.
- Scaffold systems must not be mixed and shall be fit for the intended purpose.
- Ladders/ access ways shall be kept in good condition, placed at the correct angle and firmly secured when in use.

- Scaffolds must be inspected by a competent person after bad weather and at least once per week (or as defined by local regulations or Project specification) and results recorded.
- Scaffold must be built by competent unit/ person, and meet the following requirements:
 - The ratio between the vertical height and horizontal width of scaffold should be 3.5:1 for indoor operation and 3:1 for outdoor operation, otherwise bracing shall be adopted;
 - The work platform must be installed with guardrail system with height more than 1.06m;
 - the height of mobile scaffold shall not exceed 7m;
 - It is prohibited to move scaffold with people on working platform; when a scaffold is being moved, no irrelevant person shall be allowed to enter its range of collapse.
- Requirements on ladders:
 - The maximum loading capacity shall be limited at 113Kg;
 - The use of self-made ladders is prohibited;
 - Ladders shall be used in accordance with the requirements specified in Working at Heights in Safety Management System of Johnson Controls.

20. Lighting

- Unless agreed otherwise, the Contractor/ Sub-contractor shall provide sufficient safety lighting to and at the workplaces. In all cases, Contractor/ Sub-contractors are responsible for task lights at the work place, the lights shall comply with national standards.
- Lighting levels shall comply with local requirements for the type of work being undertaken.
- The use of halogen lamps is prohibited due to high operating temperature and high potential risks of fire/ injury associated with **halogen lights**.
- Lighting elements shall be guarded against contact by persons or materials.

21. Isolation of hazardous energy

- All hazardous energy shall be identified and isolated before starting work.
- Hazardous energy shall include (but not limited to) electrical, mechanical, thermal, pneumatic, chemical, moving parts, potential energy, springs, hydraulic and cutting operations.
- A Lock Out/ Tag Out/ Test Out system must be employed before starting work.

22. Confined spaces

- A Permit to Work is required for confined space works (including duration and emergency procedures).
- All personnel entering a confined space shall be trained for the type of work, be fully aware of the safe working procedures, the risks involved and the proper use of the equipment.
- All personnel shall be certified to perform the work in accordance with local regulations.
- Always check, maintain and monitor that the atmosphere is safe to work by an Authorized Gas Tester in accordance with local regulations.
- Always provide adequate means of access and egress.
- When there are people working in a confined space, always have a well-trained person to stand by and monitor the conditions.
- A trained standby man shall always be in attendance while personnel are in the confined space. Shall develop a rescue plan and train personnel in the use of safety equipment and rescue methods.
- Safety equipment shall always be at the workplace or readily available as defined in Permit to Work

23. Hot work & fire precautions

- A Permit to Work is required for Hot Work (any process that produces heat, sparks or flames).
- Implement the necessary fire precautions as defined in the Permit to Work for welding, flame/ arc cutting of metals, burning of paint, grinding or other processes involving heat or naked flames.
- Comply with the Johnson Controls requirements for Fire Prevention and all their personnel shall be trained/ be aware of fire alarms, means of escape and emergency evacuation procedures.
- Before leaving the workplace, the Contractor/ Sub-contractor will ensure that naked lights and other ignition sources have been extinguished, fuel supplies isolated and electrical apparatus switched off.
- Where Hot Work has taken place, arrangements shall be made to re-check the work place(s) at least one (1) hour after work completion or in accordance with Client requirements.
- Provider will provide suitable and sufficient firefighting equipment, signs, emergency lighting, etc. to deal with the perceived fire risk at each stage of the project and in compliance with the emergency plan.
- Management requirements on hot work:
 - People who conduct special work shall possess corresponding work license;
 - Prepare firefighting equipment at site of hot work
 - Acetylene cylinder and oxygen cylinder should be placed 5 meters away from each other and 10 meters away from flame, standing upright and properly secured;

- Clean the flammable and explosive materials within 15 meters of hot work area, or enforce firefighting and anti-explosive protection measures;

24. Lifting operations

- Provide appropriate statutory inspection reports/ certificates before carrying out any lifting operation with lifting equipment (e.g. a crane).
- Provide evidence that the lifting equipment operator has the appropriate licenses (e.g. a valid crane license).
- Provide a Safe Method Statement and Lifting Plan detailing the lifting operation process, the EHS measures, how the lifting equipment will be used and who will be the lifting equipment coordinator.
- The Lifting Equipment Coordinator will check out all EHS measures before allowing work to start.
- The ground or place where the lifting equipment is standing shall be suitable to withstand the loads imposed (spreader plates shall **always** be used to support outrigger legs).
- No part of a lifting equipment/ crane should encroach dangerously close to personnel, buildings or services. Where necessary, protective and warning barriers shall be erected and there should always be at least 1 meter clearance to avoid damage or trapping.

25. Electric work/ hand

- A Permit to Work is required for Electrical Works.
- Agree with the Johnson Controls (through the Safe Method Statements) the EHS procedures and the necessary permits to work before working on live electrical apparatus.
- Only qualified electricians may carry out works on electrical installations, machines and tools.
- Electrical cables and connectors shall be of industrial quality and waterproof if exposed to outdoor/ wet conditions.
- Electrical distribution systems and cables shall not create trip hazards, will be protected from mechanical damage, should not be immersed in water and shall have adequate insulation to prevent the discharge of current to any person, metallic structure, equipment or fitting.
- Ground Fault Circuit Interrupter (GFCI)/ Earth Leakage Circuit Breaker (ELCB) is to be used and complied to requirement of workplace for the Johnson Controls jobs where employees use portable electrical equipment.
- Portable electrical apparatus and electric lighting shall be supplied by means of mains isolation transformers with the secondary winding center tapped to earth. If for any reasons this is not practicable, safe working procedures should be agreed with Johnson Controls.
- Whenever a further reduction in voltage is required due to special circumstances (confined space, flammable atmospheres) the Contractor/ Sub-contractor should agree the requirements with Johnson Controls.

- All temporary electrical systems and portable electric hand tools shall be maintained in good working order, regularly tested/ inspected by a competent person and results should be recorded.
- Lock Out / Tag Out / Test Out shall be applied to de-energize the system before starting work.

26. Explosives and sources of ionizing radiation

- The Contractor/ Sub-contractor shall not bring onto the site, explosives, explosive devices including cartridge operated tools, materials or devices that can emit an ionizing radiation without the formal approval from Johnson Controls and where appropriate, approval from local authorities (including permit).
- Provide Johnson Controls with a Safe Method Statement covering storage and usage and with certificates of training provided to its employees.

27. Hazardous substances

- Contractor/ Sub-contractor shall provide Manufacturers' Safety Data Sheets (SDS) and risk assessments detailing the hazardous properties of products according to site EHS team's requirement and precautions to be taken (including monitoring and health surveillance as necessary) during use and storage.

28. Asbestos

- The Contractor/ Sub-contractor shall not bring asbestos or any materials containing asbestos on the project.
- Whenever the Contractor/ Sub-contractor discovers asbestos or any material potentially containing asbestos, he will **stop work immediately** and notify Johnson Controls who shall instruct on further actions.

29. Waste disposal

- The Contractor/ Sub-contractor shall specify in writing to Johnson Controls the means of disposal and obtain any necessary statutory approvals or certificates in accordance with local legislation.
- Inform Johnson Controls of any waste removal from the site and should provide clear description and quantities being removed.

30. Testing and commissioning

- A Permit to Work is required for these types of work and should be managed by a qualified person.
- The Contractor/ Sub-contractor shall develop specific Testing, Start-up and Commissioning procedures including methods, EHS precautions and a plan of any activities.
- Where appropriate or as required by the Client, a Lock Out/ Tag Out/ Test Out (LOTOTO) system will be used. The system and personnel involved will be under the control of a competent person.

- Where practical, guards, interlock systems shall remain intact and operable, otherwise people must be protected and informed; (safety signs, barriers to prevent access to unauthorized persons)
- Before handing over the equipment, plant or premises to Johnson Controls, the Contractor/ Sub-contractor shall make certain/ demonstrate that all items are in good, safe condition and co-operate to ensure smooth and safe transition of the Project to Johnson Controls.
- Provide all the EHS related information to Johnson Controls before or as soon as practicable after handover (training, systems operating manuals, operational specifications, maintenance, cleaning, etc).

31. Alcohol and drugs

- Alcohol and drugs are not allowed on Johnson Controls and/ or the Client premises.
- Persons under the influence of alcohol or drugs will be removed/ not be permitted access to site.
- The Johnson Controls reserves the right to carry out, or to have the Contractor/ Sub-contractor carrying out (at their own cost) alcohol and/ or drugs testing on the project personnel.
- It is advised that personnel required to take regular medication to control a specific health condition should be registered at the medical center (where available) in order to react quickly in case of emergency situations (*Note: All such cases will be dealt with in the strictest confidence*).

32. Report of accidents and dangerous events

- The Contractor/ Sub-contractor shall maintain a record of man hours worked on the project as well as information on injuries, illnesses and incidents during the course of the project.
- Report immediately to Johnson Controls serious cases of near misses, first aids, medical treatments, lost time and incidents (including fires) resulting directly from its Work or Services and that could have resulted in injury or damage to persons, property or the environment.
- All medical treatment cases (recordable) and lost-time accidents (one day off work or more, not including the day of the accident) shall be investigated by the Contractor/ Sub-contractor and the reported to Johnson Controls.
- In the case of a serious accident/ incident or an environmental matter, the Contractor/ Sub-contractor will immediately verbally notify Johnson Controls and submit a notification within 24 hours. Johnson Controls require the Contractor/ Sub-contractor to carry out/ co-operate in an investigation.

33. Crisis management

- A Crisis Management Plan that consists of an Emergency Response Plan and the Business Continuity Plan shall be prepared by the Contractor/ Sub-contractor for their own area of work where the Main Contractor does not have a site wide plan.
- The Emergency Response Plan shall cover foreseeable emergencies in the scope of work.
- A Business Continuity Plan shall be prepared to ensure job continuity after the Emergency Response phase.
- A dedicated Person in Charge and an alternate shall be nominated by the Contractor/ Sub-contractor to Johnson Controls.

34. Disciplinary procedures

- All personnel working on the Project shall comply with the Environmental, Health & Safety and Security rules and procedures and to the local legislation in force for the Project. Individuals failing or ignoring such rules shall be subjected to following disciplinary procedure:
 - First event - Verbal Warning (but incident and persons details will be recorded)
 - Second event - Written Warning;
 - Third event - Penalty
 - Fourth event - Removal from the Project
- One serious infringement or incident related to Immediate Danger to Life and Health (IDLH) shall result in the immediate removal of the person(s) involved. IDLH cases related to:
 1. Lock Out/ Tag Out/ Try Out (LOTO);
 2. Electrical safety;
 3. Fall protection;
 4. Confined space;
 5. Rigging;
 6. Tampering with EHS equipment;
 7. Discharging, releasing or discarding wastes and pollutants into the environment.

35. Statutory improvement, prohibition and other notices

- If the local authorities issue an improvement/ prohibition notice or any other statutory notice impacting the legal requirement on the project, the Contractor/ Sub-contractor shall inform Johnson Controls immediately and comply with the new requirements.

Penalty Notification to Johnson Controls Contractor

All contractors who carry out works at Johnson Controls site have the obligation to comply with Environment, Health and Safety Requirements Specific to Johnson Controls Contractor (hereinafter referred to as the Requirements), Johnson Controls will conduct review or inspection on contractors from time to time.

Contractor or individual who violates the Requirements will be punished accordingly by Johnson Controls:

1. **Warning:** Johnson Controls will give written warning to contractor or individual who violated the Requirements;
2. **Penalty:** Johnson Controls will impose penalty on contractor or individual who violated the Requirements repeatedly, refused to make correction, committed serious violation act, caused major risks, covered up accidents/ risks or engaged in other serious violation act described in the contract.
3. **Termination of cooperation:** Johnson Controls will terminate its cooperation with contractor or individual who violated the Requirements repeatedly and caused serious threats to the safety of Johnson Controls and its employees or caused over 2000 SGD financial loss to Johnson Controls due to safety violation behavior.

This list provides the minimum safety standard that must be observed in Johnson Controls working area. It also classifies level of standards according to risk level. Contractor will be punished according to Environment, Health and Safety Agreement Specific to Johnson Controls Contractors if it violates any standard. The classification of standards is as follows:

- First level standard (zero tolerance behaviors)
- Second level standard (high risks)
- Third level standard (medium risks)

The following penalty amount is a reference if the local site EHS team provide an applicable penalty amount to contractor.

No.	Description of Violation Behaviors	Penalty (SGD/ each violation)
1	Third level standards (requirements)	
1.1	Blocked emergency exit/ failed to provide emergency contact method.	100
1.2	Failed to provide qualification certificates for electric equipment/ tools.	100
1.3	Misused tools/ used unmatched tools.	100
1.4	Failed to provide and use certified rigging, such as harness and shackle.	100
1.5	Conducted hot work without fire-fighting equipment.	100
1.6	Violated other third level standards (requirements) specified in Environment, Health and Safety Requirements Specific to Johnson Controls Contractor.	100
2	Second level standards (requirements)	
2.1	Failed/ refused to eliminate dangerous hazards timely upon detection.	300
2.2	Used non-conforming electric equipment/ tools.	300
2.3	On-site operators failed to wear/ use protective supplies correctly.	300
2.4	Areas with high fire risks, such as warehouse/ office area, are not equipped with fire-fighting equipment.	300
2.5	Used chemicals or hazardous articles without authorization, or failed to provide Chemical Safety Data Sheet.	300
2.6	Used non-conforming assessing equipment/ used ladders incorrectly.	300
2.7	Violated other second level standards (requirements) specified in Environment, Health and Safety Requirements Specific to Johnson Controls Contractor.	300
3	First level standards (requirements)	
3.1	Failed to provide registration certificate/ work license of technicians or failed to assign safety personnel.	500
3.2	Failed to participate in on-site safety training (safety induction training) and provide record before carrying out any work.	500
3.3	Failed to apply for work permit (job slip) for dangerous operations, or used invalid or expired work permit.	500
3.4	Failed to take fall protections for work at heights.	500
3.5	Failed to launch LOTO procedure for electric work.	500
3.6	Failed to provide work safety plan for work in confined space, or failed to conduct work in accordance with the plan.	500

3.7	Covered up accidents/ failed to report accidents/ made false report.	Terminate cooperation and pursue legal responsibilities
3.8	Came to work drunk/ engaged in fighting/ stealing/ other illegal actions.	Dismiss immediately and charge personnel involved 1000 SGD as penalty
3.9	Violated other first level standards (requirements) in Environment, Health and Safety Requirements Specific to Johnson Controls Contractor.	500

Note: The Violation Behaviors list is not exhaustive and any direct infringements to the local legal requirements shall be classified as First level standards (requirements). Please refer to Environment, Health and Safety Requirements Specific to Johnson Controls Contractor for the EHS requirements corresponding to the violation behaviors stated in penalty rule.