

EHS Requirements

I. Project EHS Requirements

This document contains EHS requirements for the contractor for performing their Work in a safe and responsible manner to prevent damage, injury, or loss to individuals, the environment, and the Work, including materials and equipment incorporated into the Work or stored on-site or off-site.

The Contractor shall be responsible for all aspects of site safety within the project area. A proper standard of safety supervision and care shall be exercised by the Contractor during the construction works. As such **the Contractor must have an experienced HSE manager** at the Site dedicated to the management of HSE (Health Safety Environment) issues. This Contractor HSE Manager will be responsible for:

- (a) Acting as an HSE champion, helping to establish a positive HSE culture among workers,
- (b) Assessing the adequacy of existing operational controls for site-specific significant HSE aspects/impact and recommend improvements to better manage those aspects, as appropriate,
- (c) Carrying out HSE training for workers, maintaining emergency preparedness and response plans for HSE related events and conduct all drills or exercises necessary to support the plans,
- (d) Ensuring operational control and monitoring equipment is properly maintained and calibrated,
- (e) Prepare risk assessment for all the activities however small and address all mitigation measures or at least address ALARP,
- (f) Monitoring site HSE performance through regular inspection and providing routine and exception- based reports (in case of HSE incidents) to the Employer's HSE Officer on a weekly basis,
- (g) Implementing the control of HSE related data, information, documents, and records,
- (h) Participating in HSE audits.

Moreover, **the Contractor shall comply with all national and international guidelines for HSE issues**, such as International Finance Corporation "Environmental, Health, and Safety General Guidelines". The Contractor shall assume all the responsibilities and act in accordance with the requirements of the relevant legislation.

Table 1: Summary of EHS requirements

| Sl. No. | Topics | Requirements |
|---------|----------------------|---|
| 1. | Project Requirements | <p>Child workers (below 18 years of age) shall not be deployed directly/indirectly. Contractor shall take steps to ascertain age of workers in case of doubts.</p> |
| | | <p>Pre-Medical exam prior entering the site is mandatory for all workmen. Physical fitness of the person to certain jobs like working at height or other dangerous locations to be ensured before engaging the person on work. The final decision rests with the Arise site management to reject any person on the ground of physical fitness.</p> |
| | | <p>All workers shall be issued Identity Card by the Contractor with following information about worker- Name, date of birth, blood group, Company name and complete address. Workers will not be permitted entry in the work area without ID Card.</p> |
| | | <p>Authorised Identification document issued by Government authorities shall be submitted by each worker at site</p> |
| | | <p>The Contractor and subcontractors shall attend monthly Site Safety Meetings. The meetings will be attended by the Contractor's Health & Safety Co-ordinator and a representative of the Employer. The Contractor and all Sub-contractors shall be represented at senior management level and by their nominated Site Safety Officers.</p> |
| | | <p>The Contractor shall ensure that sufficient and appropriate safety signage (warning and information) is provided on site at prominent locations in a language(s) that is understood by the work force.</p> |
| | | <p>Risk Assessment shall be prepared by the Contractor for review and approval by ARISE. Work shall not commence without Risk Assessment</p> |
| | | <p>Contractors shall ensure adequate supervision at workplace. Supervisors shall ensure that all persons working under them shall not create any hazard to himself or to the co-workers</p> |
| | | <p>All the dangerous moving parts of the portable / fixed machinery being used shall be adequately guarded. Pull cord switch/ Emergency switch to be provided near rotating parts.</p> |
| | | <p>Mobile Phone in all form shall be prohibited while on work. However, mobile phone can be used in common areas designated for the purpose.</p> |

| Sl. No. | Topics | Requirements |
|---------|------------------------|--|
| 1 | Project Requirements | <p>Alcohol consumption and drug abuse are prohibited at workplace. Smoking may be allowed at a separate designated place marked as “smoking zone”</p> |
| | | <p>Accident victims shall be duly compensated by Contractor as per law of land and evidence shall be submitted to ARISE.</p> |
| | | <p>It is mandatory for the contractor to obtain Permit for each high-risk job as per project procedure before commencing the work everyday</p> |
| | | <p>Contractor shall ensure safe movement of man and materials as well as vehicles within site premises as per rules / regulations. All vehicles and equipment inside the site must comply with all minimum safety requirements such as working Head lights, taillights, break lights, horn, breaks including hand breaks, wind shield wipers good tyre condition. Speed limit inside the site is 30 KMPH. Preventive maintenance of All vehicles shall be carried out as per the OEM guidelines. All cranes and other lifting equipment shall have the test certificates as mandated by the local laws.</p> |
| 2. | Site Cleanliness | <p>The Contractor shall always be responsible for the proper upkeep and maintenance of the Site and the Works. Activities on Site shall not be permitted to create noise, dust, water pollution, etc. beyond the agreed limits, regulations, law, and other pre-existing restrictions.</p> |
| | | <p>The Site shall be kept free from all rubbish and offensive matter which shall be disposed of in a manner agreed by the Employer, as it accumulates. The Contractor shall not burn, nor permit to be burned, any material on Site.</p> |
| | | <p>The Site shall not be used for storage for materials other than those to be used in the execution of the Works. Materials and equipment shall be positioned, stored, and stacked in an orderly manner and shall be kept secure.</p> |
| | | <p>All equipment, materials and other goods shall be removed from the Site when no longer required for the purpose of the Works.</p> |
| 3. | Training and Awareness | <p>The Contractor shall ensure that the Contractor’s Personnel have been adequately trained and are competent for the work they are to undertake, such that they understand that what is required for the safe use of tools and equipment and the risks involved in overhead lines, cables, and underground services etc..</p> |

| Sl. No. | Topics | Requirements |
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| 3. | Training and Awareness | All staff, workers and other personnel entering the site shall be provided with site specific induction training. This training shall include information on specific site rules, emergency procedures and the use of PPE. Records to be maintained for all such trainings. Induction Sticker may be placed on helmet or indicated on the ID Card. |
| | | Daily toolbox talks to be conducted by the supervisors with each category of workers before start of work. |
| 4. | Personal Protective Equipment | The minimum personal protective equipment (PPE) to be worn by all personnel on site includes Hard hats, steel capped safety shoes and high visibility clothing |
| | | Special PPE (Safety Goggle, Nose Mask, Ear Plug, Hand Gloves & Shoulder Pad etc.) shall be used by workers as per the hazard/risk associated with their work. |
| | | The Contractor is responsible for the provision of PPE to his personnel including subcontractors. |
| | | Appropriate safety barriers and screens shall be provided where required to prevent accidents or health issues occurring due to: <ul style="list-style-type: none"> • Exposed edges or dangerous objects • The presence of traffic or machinery • Activities that generate excessive dust, noise, fumes, heat, or radiation. |
| 5. | Medical Facilities | The Contractor shall make adequate provisions for first aid equipment and facilities on the Site and ensure that qualified first aid personnel is available during the working hours. |
| | | All the Contractor's personnel shall be provided with regular medical check-ups to ensure that they are physical fit for their assigned tasks. Records to be submitted to the Employer. |
| | | The Contractor shall ensure and maintain records, that all staff are inoculated against infectious diseases that are common in the area. |
| | | Contractors shall provide and maintain Medical Care Centre (OHC) as per requirements. Maintain record of treatment and have tie up with Hospital for medical aid in the emergency. First Aid Boxes shall be provided and maintained . |

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| 6. | Reporting and Incident management | Contractor shall provide notification of all accidents and dangerous occurrences occurring on the project. Health & Safety statistics and commentaries shall be included in the periodic progress report. |
| | | All incidents at site shall be investigated and report shall be shared with Arise EHS team within 07 days of incident happening. |
| | | Corrective and preventive action plan to be prepared based on incident investigation and to be followed up for implementation. |
| | | Toolbox talk with all the workforce to be carried out after any incident explaining the incident, causes and preventive measures |
| 7. | Precautions against Fire | The Contractor shall take all reasonable precautions to prevent outbreaks of fire within the Works, and in all offices, stores, vehicles, other places and especially with respect to the safe storage of paints and all other dangerous or hazardous substances. |
| | | Permit to work to be obtained for all hot work activities before start of activity and controls to be placed accordingly. Appropriate PPE's such as face shield, Apron, welding gloves shall be provided to the person(s) involved in this activity. |
| | | All welding machines shall be fitted with flash back arrestor. |
| | | The Contractor shall provide and maintain appropriate and sufficient firefighting equipment together with personnel trained in its use. |
| 8. | Work at Height | Any activity performed above the height of 1.8 m to be considered as work at height. Permit to work to be obtained before starting any work at height activity and controls to be placed accordingly. |
| | | Double lanyard safety harness to be used for all work at height activities and provision to anchor the lanyard to firm support shall be made available. |
| | | All scaffoldings / work-platforms shall be strong enough to take the expected load and comply to IS: 3696 (part-1)-1987. |
| | | Ladders being used at site shall be adequately secured at bottom and top. Ladders shall not be used as work platforms. |

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| 9. | Labour Camp | Labour camp shall be erected on a non-water logging land. There must be sufficient gap (8-10 feet) between the rows of rooms. Rooms shall be ventilated and well-lit in the night. Asbestos sheet shall not be used in any form. |
| | | Camp amenities (toilet, urinal, washroom, bathroom, canteen & drinking water) shall conform to requirements stipulated under Govt Rule. The amenities shall be maintained in hygienic condition. |
| | | Maintain area lighting and sanitation in camp area. Appoint a Camp Boss as caretaker. Install adequate type and quantity of Fire Extinguisher. |
| | | Resort to regular pest control including snake repellent & fogging Provide and manage children's nursery. |
| | | Provide common cooking area. Cooking inside the room shall be prohibited. |
| | | Wastewater generated from labour camp shall be collected and treated before discharging. Proper arrangement shall be made for regular disposal of waste generated inside camp & dedicated housekeeping team shall be kept for maintaining health & hygiene in labour camp. |
| 10. | Welfare | Toilet and washing facilities (including shower units) shall be provided to workmen. |
| | | Canteen facility and rest room located away from the active works with Adequate shelter from wind, rain and sun shall be provided for workmen. |
| | | Drinking water facility shall be provided for workmen. |
| 11. | Excavation | Excavated pits by contractors shall be barricaded and the barricades and signages are to be maintained till the backfilling is done . Safe approach shall be ensured into every excavation. |
| | | Before the excavation starts it the responsibility of contractor to ensure there are no underground utilities such as water pipeline, electrical cables etc. |
| | | Appropriate PPEs such as Gum boots, goggles etc. to be provided to the workers involved in excavation activity. |
| | | Appropriate signages shall be placed at appropriate distance throughout the excavation activity. |

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| 12. | Illumination | Workplace illumination of minimum 50 lux shall be ensured before starting the job at night . |
| 13. | Electrical | Other than the certified electricians no one is allowed to carry out electrical connections, repairs on electrical equipment or other jobs related thereto. |
| | | Power supply shall be taken through RCCB of 30 mA sensitivity. |
| | | Insertion of bare wires for tapping power from electrical sockets is prohibited. |
| | | Proper earthing to be provided for all distribution boxes and electrical panels and inspection records to be maintained monthly. |
| 14. | Emergency Plan | Develop and deploy “ Emergency Preparedness & Response Plan - EPRP ”. Constitute a Joint Emergency Response Team for the site. Necessary resources towards prevention, response and mitigation of emergency shall be deployed by the Contractor. Example - Public Address System, Emergency Siren, Assembly Points, Stretchers, Ambulances etc. |
| | | EPRP shall be tested regularly through Mock Drill |
| | | Tie up with government & non-government organization for assistance during emergency. |
| 15. | Environment | The Contractor shall take precautions to minimize nuisance and pollution arising from noise, vibration, light, disposal and filling activities, dust (including that from cement and fly-ash), and the like. Nuisances and pollution generated by the construction works shall be strictly controlled and in accordance with National laws and regulations, as well as with all provisions of IFC’s General EHS Guidelines. |
| | | Air and noise monitoring and drinking water tests to be carried out as per the legal requirements. |
| | | Contractor shall implement controls to prevent any oil/other chemical spills to soil, drainage system or water bodies. All solid Waste and hazardous waste shall be collected at separate designated areas with proper signages and disposed of as per legal requirements. |
| | | The Contractor shall take all reasonable measures which shall include the provision and use of adequate water spraying equipment to minimize dust nuisance . |




| Sl. No. | Topics | Requirements |
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| 16. | Covid-19 and other infectious diseases measures | It is the responsibility of contractor to ensure the implementation of Covid-19 measures and other applicable guidelines issued by the govt. Risk Assessment with respect to Covid-19 to be prepared and made available at site. |
| | | Social distancing measures to be maintained during entry to site and while travelling inside the vehicles. Social distancing measures to be implemented for breaks, lunch hours etc. |
| | | Temperature scanning of workers and staff to be carried out during entry/exit of sites. |
| | | Use of face masks is mandatory for each and every person entering and working at site |
| | | Hand sanitization provisions to be made available at all entry points and work locations and labour camp. |
| | | Hand wash facility for workers to be provided at adequate locations at work site and labour camp. |
| | | All Site offices, buses/vehicles, shifting hands tools and tackles, common PPE's, labour colony need to be disinfected daily before start of work. |
| | | All workers to be made aware of Covid-19 measures during daily toolbox talks and during induction trainings. Awareness on social distancing, avoiding social gatherings and other hygiene measures at labour camps to be provided. Limit labour dormitory occupancy to ensure compliance with social distancing. |
| | | Any personnel showing symptoms of Fever or chills, Cough, Shortness of breath or difficulty in breathing shall be sent back home or to the hospital immediately. He shall be kept in a separate room at labor camp. Medical check-up of any such person to be carried out immediately. |
| | | Any person found Covid-19 positive to be handled as per the local govt. regulations. Return to work of all such persons shall also be under local govt. guidelines. |
| | | Consumption of tobacco and spitting in open is strictly prohibited at site. |
| | | Contractor to provide details of Covid-19 cases to the Arise management as soon as it is confirmed. Total no. of cases found among staff and workers shall also reflect in periodic reports |
| Contractors to follow all other local govt. guidelines w.r.t Covid-19 | | |

II. Penalty structure for noncompliance of safety requirements

Table 2: Penalty structure for noncompliance of safety requirements

| S No | Safety Parameters | Penalty for Non-compliance |
|------|---|----------------------------|
| 1 | Not deploying minimum No's of safety professional | USD 330 /- per violation |
| 2 | Workers found without Safety Training Working, without EHS Induction. Failure to provide ID Card to workers | USD 2.5/- per violation |
| 3 | Use of proper PPE & Tools, safe working condition and practices, absence of safety signages | USD 12.5/- per violation |
| 4 | Nonadherence to pre job briefing, JHA, Safety work permit & safe working procedure for Hazardous works, emergency response plan, Precaution against fire, illumination levels | USD 123/- per violation |
| 5 | Failure of vehicle and equipment fitness. Safe movement of men and material as per applicable rule at the site | USD 12.5/- per violation |
| 6 | Failure to provide welfare facilities at site, requisite amenities in the Labor Camp and medical/first aid facilities | USD 493/- per amenity |
| 7 | Smoking in the construction zone and/or working under influence of alcohol/prohibited drugs, use of mobile phones | USD 2.5/- per violation |
| 8 | Not attending EHS Meetings or any other EHS, Failure to submit report on incident, accidents and near misses and other reporting requirements | USD 123/- per instance |
| 9 | Noncompliance of Environmental related aspects, Poor Housekeeping, Site cleanliness and stacking of materials | USD 12.5/- per violation |
| 10 | Environmental incidence (major spillage/persistent high noise/unabated dust in work environment) | USD 330/- |
| 11 | Use of damaged or uncertified lifting tackles | USD 123/- |
| 12 | Failure of Covid-19 measures | USD 12.5/- per violation |

III. **PPE Matrix**

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| Staff/Supervisors/ Visitors | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mason | ✓ | | | ✓ | | | | ✓ | | | | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carpenter | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Barbender | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Welder | ✓ | ✓ | | ✓ | | | | | | | | | | | | | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fitter | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Painter | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Grinder | ✓ | | ✓ | ✓ | | | | ✓ | | | | | | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Electrician | ✓ | | | | | | | ✓ | | | | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mechanic | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Crane Operator | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rigger | ✓ | | | ✓ | | | | ✓ | | | | | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scaffolder | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Semi Skilled | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unskilled | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| House keeping | ✓ | | | ✓ | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Any one exposed to wet condition | | | | | | For Asphalt workers | | | | | | Any one exposed to dust/ flying materials | | | | | | Any one exposed to excess noise for longer duration | | | | | | Any one exposed to excess noise | | | | | | Any one exposed to dust/smoke/fumes of any kind | | | | | | Any one working above 1.8 meter | | | | | | All those handling the materials having rough edges | | | | | | All those carrying the materials on shoulder | | | | | |