APPENDIX 'E'

(Revision 3.0 dated 11th November 2023)

SAFETY GUIDELINES TO BE ADOPTED BY THE CONTRACTORS AT GRSE PREMISES

- 1. General. The GRSE has started adopting the outsourcing route for meeting requirements construction production. maintenance and involvement of outside agencies /contractors firms having their own employees and set-up. These contractor firms besides other obligations like PF, ESI, Minimum Wages are bound to be adopting and implementing safety norms, fire precautions and also become liable for facing legal consequences arising out of non-compliance of provisions contained under The Factories Act, 1948 and Rules framed thereunder. As such, the contractors will be governed by all the statutory requirements. Accordingly, the contractor shall ensure fulfillment of safety guidelines laid down by Safety Department of GRSE. The contractor shall provide proper Personal Protective Equipment (PPEs) and tools & tackles to their workmen. In case of non-compliance, the GRSE reserves the right to impose penalty for any of the following reasons:
 - a) Unsafe acts being adopted by the individual workman and/ or the contractor.
 - b) Non-compliance to safety norms and contract terms.
 - c) Creating unsafe conditions at place of work.
 - d) Serious accidents due to the reasons mentioned under (a), (b) & (c) above.

Safety Rules.

2. The Contractor firm shall abide by the safety rules framed under "The Factories Act, 1948" and shall take all safety precautions, provide adequate supervision & control for his workmen in order to carry out the job safely. The Contractor shall report to the concerned Officer of executing Department as well as the Chief Safety Officer of Safety Department immediately on award of contract along with contract documents & job instructions from the contract awarding Department and shall obtain brief for the job and the safety rules & procedures to be followed. The Contractor shall obtain clearance from Safety Department before starting the job. The contractor shall engage workers to do the contract job only when he is satisfied that the unsafe conditions, if any, of gas / electricity / moving machinery etc are removed from the area of work. The Contractor shall supply required PPEs like safety-shoes, helmets, hand gloves, safety goggles etc. depending upon working condition(s). Further, the contractor shall be liable for adopting any other PPE recommended by Safety Department.

- 3. The necessary safety precautions, proper tools and equipment including personal protective equipment for contractors' men are to be arranged by the contractors for safety of the personnel employed by them. The Site In-charge of the firm shall be accountable to the respective Officer of the executing Department in all matters related to safety of their personnel at work including all activities carried out by them.
- 4. The Contractor shall take all reasonable precautions to prevent fire of any nature arising out of his operations and shall be held accountable for all damages from fire resulting due to adopting unsafe practices by any one on behalf of the contractor's firm.
- 5. Prior to taking part in the subject tender, the contractor firm has to assess all the safety hazards by visiting GRSE at site and **Safety Assurance Plan** must be submitted along with the technical bid.
- 6. The Contractor shall ensure attendance of their workmen and other personnel deployed by them, in the scheduled safety-briefings before starting of job, appropriate use of required PPEs and adoption of various safety measures in their respective workplaces.
- 7. The Contractor shall provide adequate and appropriate PPEs conforming to IS / EN standards, as mentioned at PPE table section, at their own cost and ensure that their workmen mandatorily use those PPEs as specified PPE table section or as advised by Safety Department from time to time, according to the job requirement.
- 8. The Contractor shall ensure submission of PPE Issue Matrix Register to the user department before commencement of work. Such Register should comprise of the name of the contractor, P.O No., name of the workmen being deployed, allotment of PPEs and signature of contractors' workmen substantiating allotment of PPEs to them as per the IS parameter laid down in PPE table.
- 9. Every contractor should ensure that their workmen have undergone safety training programme, as per their nature of work, prior to commencement of work. Contractor has to submit a report to the engaging / user department after completion of safety training program for obtaining permission to commence work under the particular P.O. A copy of that report has to be forwarded to Safety Department for information and record.
- 10. In the event of any accident, the concerned contractor / their site In-charges / supervisors must immediately inform the respective dealing officer of user department regarding occurrence of such accident, who in turn will inform Works Manager of the respective unit and Officer from Safety Department for initiation of further necessary action.

- 11. The Contractor shall ensure that no workman or other personnel deployed by them should loiter or work in shop floor, onboard ship or in the yard without wearing basic PPEs like Safety Helmet, Safety Shoes etc.
- 12. The indicative standard safety precautions are enumerated below to be adopted by the contractor firms:-
 - (a) Personal Protective Equipment (PPEs). The contractor shall provide & ensure use of ISI marked Industrial Safety Shoes, Safety Helmets, Retractable type Full Body Harness (Double Lanyard), Welding Fume Respirator, Safety Goggles, Hand Gloves, Boiler Suits & other necessary Personal Protective Equipment (PPEs) depending upon the nature of job while at work. The area of applicability of PPE w.r.t. personal protection is PPE table section.

(b) Hot Work Safety (Gas Cutting, Welding etc.).

- (i) Prior to commencement of hot work, surrounding areas (including other side of the bulkhead & deck) shall be inspected for the presence of any inflammable materials and no Hot Work shall be carried out without obtaining *Hot Work Permit* from Fire Fighting Department of GRSE with fill-up of respective checklist and manpower list.
- (ii) Adequate ventilation must be arranged while working in confined spaces throughout the period of carrying hot work.
- (iii) Damaged gas hoses & welding cables should not be used for gas cutting & welding job. Gas cutting hoses & copper welding cables must be ISI marked of reputed make. Use of Aluminum Welding Cable is prohibited during construction activities from fire safety point of view.
- (iv) The gas cutting hose should be separated from welding cables & electric cables.
- (v) The welding holders, if energized, should not be left unattended.
- (vi) All gas cutting torches shall be ISI marked of reputed make and gas cutting torches, cylinders, portable manifold must be fitted with standardized FLASH BACK ARRESTOR.
- (vii) Full insulated welding holders (ISI marked) shall be used in construction jobs.

- (viii) During recess period (Lunch time and at the end of day's work) or when work is suspended for more than half an hour, the gas cutting hoses shall be disconnected from the cylinder valves and removed from ship's confined space and keep the same in an open area / Main Deck.
- (ix) All gas equipment shall be subjected to "Water Dip" test daily, before taking those on board. A record of the testing to be maintained by the person carrying out such test.
- (x) Electric power shall be cut off from welding transformer end during recess period, at the end of day's work.
- (xi) During hot work activity at the overhead location and on the bulk head, a person mustbe deputed at the opposite side of hot work from fire safety point of view.
- (xii) Use of LPG for gas cutting is strictly prohibited in the shipyard.

(c) House Keeping.

- (i) All inflammable wastes like cotton waste, plastic, broken wooden planks / parts, jute, cloth, electrodes packets, paper cartoon, refused cable insulation etc. should be removed by the contractors from the ship every day.
- (ii) Gas cutting hose & welding cables shall not be used / laid on board in a haphazard manner and to be hanged properly on suitable hook / support towards avoiding fire & electrocution hazard.
- (iii) AC Ducts are to be placed properly to avoid stumbling hazard on board vessels.
- (iv) Ingress /exit hatch must be cleared.
- (v) Iron dust generated from gas cutting, grinding and welding butts must be removed immediately after completion of the Job to avoid any slip & trip hazards.
- (vi) Leakage/ Seepage of hydraulic oil, lube oil on deck floor are to be removed at the earliest to avoid fall hazards & residual diesel /leakage/ seepage must be removed due to fire hazard/slip hazard.
- (vii) Residual Paints/ paints drums, thinner, D.P. containers & hardener containers etc. must be removed from ship after the Job completion or during the recess hours by the contractors.

- (viii) All housekeeping staff must be wear proper ISI marked PPE's like Safety Shoe, helmet, gum boots, hand gloves, rubber hand gloves, goggles and musk etc.
- (ix) During cleaning of water from ship's tank / compartment, no personnel should be allowed to work in bare foot. All such cleaning personnel should use "RUBBER GUM BOOT".

(d) Electrical Safety.

- (i) Portable Safety Hand Lamp (110 Volts) should be used on board vessel.
- (ii) All electrical connections should be *of* permanent type as far as possible.
- (iii) Industrial type Plug & Sockets shall be used for electrical connections.
- (iv) Mandatorily use of Industrial Type Extension board (proper earthing) with industrial plug and industrial socket with MCB in conjunction with RCCB.
- (v) Use of **Damaged Electrical Extension Board** (i.e. without having MCB, damaged Plug & Socket) is **prohibited.**
- (vi) The 440 V / 220 V supply lines should be provided with distinguishing mark & identified with red stickers at every meter distance.
- (vii) 440 Volt supply lines should be taken at overhead location.
- (viii) Armoured cable to be used for 440 V power supply from shore to on board vessel.
- (ix) Use of 440 V Welding Machine is strictly prohibited in side ship's compartment / confined spaces. However, under inescapable situation it may be permitted for specific reason / requirement, subject to approval PL / PCO of the ship, L&W Department and Safety Department.
- (x) The dedicated electrical panel of the Welding Machine should be earthed at two separate points.

- (xi) The electrical panel and Welding Machines placed on board vessels should be covered with metallic shed to prevent ingress of rain water and be secured on the Main Deck alongside the railing to prevent inadvertent fall due to stormy weather.
- (xii) Electrical rubber mat should be placed in front 440 V electrical panel.
- (xiii) 440 V electrical cables of the Welding Machine should be taken overhead (at least above the man height) for preventing any damage due to contact with sharp edge or hot work from the below deck.
- (xiv) Suitable Canopy to be provided over welding machine to prevent ingress of water.
- (xv) Electrical cables should be separated from Signal cable, Gas Hose, Compressed air line, Welding cables etc. (i.e. Electrical cables should not be entangled with Signal cable, Gas hose line, Compressed air line, Welding cable line etc.)

(e) Safety during Painting.

- (i) Painting work should not be undertaken, while hot work is in progress either in the compartments or in the adjacent areas.
- (ii) A board indicating "Painting in Progress" in Hindi, Bengali & English be displayed nearentrance of the compartment.
- (iii) While painting, a safety hand lamp fitted with insulated handle, wire case and glasscover over the lamp shall only be used.
- (iv) While painting in confined space / closed compartments, one person must be posted near the entry point for constant coordination with the person working inside the confined space.
- (v) During spray painting activity, Work Permit to be taken by the contractor firm as per GRSE norms.
- (vi) While painting is to be carried out in the compartment, suitable ventilation system (exhaust as well as fresh air) should be arranged during painting, and after painting, to prevent accumulation of inflammable gas/ fumes inside the compartment. Fresh air shall be taken from ship's Main Deck or available nearest open Deck. Suitable exhaust ventilation arrangement shall be made available for dispersal of Paint fumes from the ship's confined spaces / tanks at the outside of

the ship's compartment in to the open air, so that the discharged paint fumes does not affect / influence the adjacent area of work / compartment / tanks.

- (vii) Ventilation of the compartment should be continued at least for 24 hrs. after the spraying is stopped (or) until the compartment is gas free, whichever is longer.
- (viii) Storage of paints / thinners, other Inflammable materials are not to be allowed on board ship.
- (ix) Regularly all empty or in use paint drums/chemical /substance must be removed from the vessel immediately after completion of work & handover used/empty drum to the Paint Shop in charge.
- (x) Safety hand gloves, safety goggles and face mask respirator, fitted with suitable filtering media / canister should be used during painting.
- (xi) During painting activity inside the confined spaces the painter must use either Full Face Piece type respirator fitted with Supplied Air Line from the outside of the ship or Full-Face Mask Respirator fitted with suitable filtering media / canister which will give protection against the paint fumes inside the confined spaces as per recommendation of the OEM of the PPE. Helper shall use Full-Face Mask Respirator, fitted with suitable filtering media / canister, which will give protection against the paint fumes as per recommendation of the OEM of the PPE.
- (xii) Pre-employment & Periodical Medical Health Checkup (quarterly / half yearly) of all the painters are to be carried out through qualified MBBS Doctor & Report to be submitted at GRSE Medical Department through Paint Shop to issue Fitness Certificate of the painter prior to deployment at GRSE.
- (xiii) Only non-sparking spray guns and tools should be used. Metal parts of paint brushes and rollers should be insulated. Staging should be erected in a manner which ensures that it is non-sparking.
- (xiv) The vendor should close the painting permit after their day's work & return back the original permit to Paint shop.

(f) Safety during Grinding.

- (i) All grinding machines shall be provided with standardized & non-expired grinding wheels of reputed make and shall be fitted with protective metal guards during grinding job.
- (ii) Use of **oversize** grinding wheel is **strictly prohibited**.
- (iii) All grinding wheels shall be of reputed brand & make and shall be stored / handledcarefully prior to taking into use.
- (iv) Damaged grinding wheel shall be replaced forthwith for avoiding likely hood bursting of the wheel.
- (v) Suitable impact resistant Safety Goggles / Transparent Face Shield to be used for protection of eyesagainst foreign body.
- (vi) Double insulated type portable Grinding Machines to be used.
- (vii) Grinding work often produces sparks that can easily get into holes or gaps in floors, walls, and ceilings, or may fall on combustible materials. Therefore, foremost requirement is removing of flammable and combustible materials and liquids within a 5-metre radius of the work. If overhead hot work needs carrying out, then you may need to extend this radius. It must ensure that the atmosphere does not contain flammable or explosive vapours, gas, dust, painting fumes etc. Also cover these areas with suitable flameproof sheeting, purpose-made blankets, drapes, or screens before commencing grinding work.
- (viii) Do not drop grinding wheel on the floor. Don't use damaged plug top and electrical cables.
- (ix) Make sure the rotation of wheel is downwards against the job.
- (x) Make sure a machine will not run when unattended, by checking the dead main switch.
- (xi) Always use the side handle installed on the grinder to hold it firmly.
- (xii) Don't adjust work while the grinding wheel is in motion.
- (xiii) Don't wear loose clothing, articles, or jewelry while grinding.
- (xiv) Don't clean or make any adjustments on a moving grinder.

- (xv) Wear all appropriate safety gears like safety helmet, shoe, transparent face shield/safety goggles, hand gloves, ear plug/muff, dust respirator (if required) etc.
- (xvi) Before installing an abrasive wheel, visually inspect it for cracks or flaws and perform a "Ring Test".
- (xvii) Make sure the disc speed limit (rpm) is greater than the angle grinder operating speed.
- (xviii) Always use wheel guard during grinding. Ensure the wheel guard opening is opposite to the body.
- (xix) All grinding machines shall be provided with standardized & nonexpired grinding wheels of reputed make and shall be fitted with protective metal guards during grinding job.
- (xx) Ensure the correct flange and locking nut is used for the type of disc. Otherwise the disc can shatter at high speed.
- (xxi) Allow the grinder to "run up" to operating speed before applying it to the job. Before starting the grinding wok with a new grinding wheel, run the machine for 1 minute freely.
- (xxii) Ensure the grinder operates smoothly and does not vibrate.
- (xxiii) Hold the grinder against the work piece with minimum pressure so the disc doesn't "dig in" and cause it to kick back.
- (xxiv) Never put a grinder down until the disc stops rotating.
- (xxv) Disconnect power before changing discs.
- (xxvi) Ensure angle grinders have a cut-off switch.
- (xxvii) Do not carry a grinder by the power cord. Do not pull on the power cord to disconnect it from the power supply.
- (xxviii) Never use a cut off wheel for grinding or a grinding disc for cutting.
- (xxix) Dispose of any disc that has been dropped, Cracked or weakened discs can shatter in use.

(g) Safety while working at height

- (i) Suitable scaffolding structure having working platform of adequate strength with fencing shall be provided for workmen for all works that cannot be done safely from the ground/low level.
- (ii) Damaged / defective wooden planks shall not be used for staging purposes.
- (iii) Wooden planks are to be secured at both ends for preventing over turning of the planks.
- (iv) Use of oil drums for staging purpose is strictly prohibited. The Steel Stools / staging materials are to be used for staging purpose and to be used in safe manner.
- (v) While working at height, from where a person is likely to fall and injured, **retractable type Full Body Harness with double lanyard** shall be used with proper anchorage to the life line / rigid structure.
- (vi) Every floor opening shall be securely guarded.
- (vii) Automatic Fall Arrestors must be used for ascending / descending purpose.
- (viii) Rigid point is to use for anchoring of Safety Belt double lanyard full body harness) /Life Line.
- (ix) Safety Net of suitable mesh size is to be provided underneath the job location while working at height work.
- (x) Loose material should not be kept / store unnecessary on scaffolding structure platform.
- (xi) Workmen engaged for hot work at a certain height /on roof have to remove or enclose the underneath flammable materials (if any) with fire retardant cloths before starting of the job. Also cordoning the underneath area.
- (xii) A Bosun's chair (or Boatswain's chair) with double lanyard full body harness should be used for cleaning & painting of high rise building (where scaffolding is not possible to erect).
- (xiii) Passageway, or a scaffold, platform or any other working elevated surface which is in a slippery and dangerous condition should

not be used and water, grease, oil or other similar substances which may cause the surface slippery shall be removed or sanded, saw dusted or covered with suitable material to make it safe.

(xiv) Before staring of height work, height Work Permit to be taken by the contractor firm as per GRSE norms. The vendor should close the height Work Permit after their validity of work & return back the original permit to Civil Dept./ to the height work permit issuing department (as the case may be).

(h) Safety during erection of scaffolding structure :

- (i) The scaffolding platform shall be provided with suitable railing, toe guard & waist guard on each open side and shall be secured at both ends for preventing overturning of the planks.
- (ii) All personnel, engaged for erection of scaffolding structure must wear safety belt.
- (iii) All scaffolding materials such as steel tubular pipes, couplers are to be in good physical condition.
- (iv) Stability of the scaffolding structure to be established before any person is allowed to work on the scaffolding platform.
- (v) The scaffold platforms to be provided with suitable hard barricading at the open sides. Top rail must be at least 42", mid 21", toe board 4" from the working surface.
- (vi) While erecting scaffold, care should be taken to ensure that the distance between two transoms is not more than one meter.
- (vii) Personnel (scaffolders), while engaged for erecting staging, must wear safety belts (double lanyard full body harness) when they have to work on locations above ground level.
- (viii) Frequent checks must be made to ascertain condition of the staging to ensure that they are safe
- (ix) The staging / scaffolding planks should be so arranged that there is no gap between them.
- (x) If the erection of scaffolding is under vendor's scope as per SOTR, then concerned firms must provide certificate of scaffolder and inspector to the controlling GRSE officer and Safety dept. before

erection or dismantling of the scaffolding and engage only approved trained & certified scaffolding gang & certified supervisor for erection or dismantling of the scaffolding. Tag (Red, Yellow, and Green) to be used during erection of scaffolding.

- (xi) Base plate must be provided during erection of scaffolding structure (as per requirement).
- (xii) Passageway, or a scaffold, platform or any other working elevated surface which is in a slippery and dangerous condition should not be used and water, grease, oil or other similar substances which may cause the surface slippery shall be removed or sanded, saw dusted or covered with suitable material to make it safe.

(i) Safety while working on fragile roof (AC Sheets).

- (i) The AC Sheets dismantling activity shall be in compliance to the Rule 51 A of W.B. Factories Rules, 1958.
- (ii) All the metal access ladders (if not available at site, in that case to be erected) shall be provided with IS / EN marked vertical fall arrester for vertical ascending or descending of personnel from the fragile roof.
- (iii) Sufficient number of dedicated Roof Ladders / Crawling Boards / Duck Ladders (Load Tested at 500 Kgs and manufacturers load test certificate to be submitted) shall be used on the fragile roof according to site requirements. All personnel, required to work on fragile roof, shall be well trained and conversant with the use of Roof Ladder / Crawling Board / Duck Ladder, as the case may be.
- (iv) Overlay type P.P. Safety Net, having suitable mesh size, to be used underneath the working location for arresting inadvertent fall of man and materials (small nuts & bolts, broken asbestos sheets etc.) from height.
- (v) The underneath area of work shall be cordoned with cautionary tape with a minimum site clearance of 5 mtr. in all direction from the location of work and sufficient number of Cautionary Notice (in Bengali & Hindi Language) to be displayed & maintained at site as stipulated in Rule 51 A (c) of W.B. Factories Rules, 1958.
- (vi) IS / EN Marked Double lanyard Full Body Harness (with retractable attachment) and sufficient number of horizontal life lines to be erected above the fragile roof for anchoring of Full Body Harness during dismantling of asbestos sheets. If required, safety posts of

- adequate strength to be erected for laying of horizontal life lines for anchoring the lanyards of Full Body Harness.
- (vii) Before starting of the job, the contractor must submit individual Medical Fitness Certificate against every engaged employee, issued by MBBS Doctor, in favour of the workers required to work at height declaring that all such worker(s) are fit to work at height.
- (viii) Firm has to engage trained and experienced personnel at GRSE site and trade wise training / experience certificate of the individual concerned to be submitted to GRSE.
- (ix) 'Safety Tool Box' to be conducted by the Site In-charge on regular basis prior to commencement of day's work and a register of the personnel attended the Tool Box Talk to be maintained at site with signature of the individuals, duly endorsed by the Site In charge of the firm.
- (x) Suitable Scaffolding Platform with fencing, having adequate strength shall be provided for workmen for all works that cannot be done safely from the ground / low level.
- (xi) "Height Work Permit" shall be obtained by the Site In-charge of the contractor's firm on daily basis, duly endorsed by the concerned executing Dept. of GRSE & certified by GRSE Safety Department.
- (xii) All roads and open areas adjacent to the work site shall be suitably protected by erecting vertical safety net and PVC woven cloth for arresting the fall of fragmented materials during dismantling activity.

(j) Safety while working with Acetone

- (i) The persons while working with Acetone must wear impervious gloves and flame retardant anti-static protective clothing. For handling in a closed ventilation, the persons must wear safety glasses with side-shielded.
- (ii) Do not undertake any Hot Work (including grinding / drilling) in the vicinity of vapor, if formed and also do not use Electric switches. Safety clearance similar to hot work in extant is to be followed i.e. Work permit system should be implemented by concerned Department with a copy to Fire/ Safety Department before starting any job.
- (iii) In case of spillage of Acetone, soak up with inert absorbent materials (e.g. Sand, Saw dust) and shovel into suitable container for disposal. Do not use sparking tools. Do not allow product to enter sewer

- or waterways. Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation.
- (iv) During normal handling, ensure all equipment is electrically grounded before beginning transfer operation. Ensure adequate ventilation. Do not allow product to contact skin, eyes and clothing. Do not breathe vapors. Keep away fire, sparks and heated surfaces. Keep container tightly closed in a dry and well ventilated place. Do not use plastic buckets, which may lead to spillage.
- (v) Keep all Acetone containers in a well-ventilated space. Empty container may retain product residue including flammable or explosive vapors. Store in area designed for storage of flammable liquids.
- (vi) Do not cut, drill, grind or weld near full/ partially full or empty product containers. Keepaway from heat and source of ignition.
- (vii) Re-open used container with caution. Containers which are opened must be resealed and kept upright to prevent leakage.
- (viii) Provide local and general exhaust ventilation to effectively remove and prevent build- up of and vapors or mists generated from handling of the product.

(k) Deployment of Trained Employees by the contractors

- (i) Each contractor has to depute trained & experienced personnel in the respective trade(s) for working at GRSE Site.
- (ii) Contractor has to submit requisite trade training certificate of the individual to the executing dept. before commencement of job & issuance of Gate Entry Permit.

(I) <u>Safety during Handling/ Storage/ Disposal of Oil Drums and</u> Hazardous Wastes

- (i) The oil drums shall be handled in such a manner so that no damage to oil drums takesplace *I* spill on the ground.
- (ii) The oil drums should not be rolled on the ground. It should be carried with the help of proper trolley.
- (iii) Oil drums should not be left / kept in haphazard manner, instead it should be stored atdedicated storage place.

(m) <u>Safety in using of material handling equipment such as crane, hydra and forklift truck etc.</u>

(i) Statutory Requirements.

- (aa) <u>Valid Driving License of the vehicle operator</u>. The operator of the Crane, Hydra, Forklift Truck, Dumper Dozer, Lorry, Tractor etc shall have valid Driving License as applicable for the particular class of vehicle.
- (ab) Valid eye test certificate of the operator and the persons giving signal. The Eye Test and Colour vision test Certificate of the operator of Crane, Hydra, Forklift Truck, Dumper Dozer, Lorry, Tractor etc. and the person(s) giving signals to the Crane Operator to be obtained from a qualified Ophthalmologist as per Rule 49 of the W.B. Factories Rules, 1958 and the same should be checked & verified by GRSE Medical Department through proper channel. The eye sight and colour vision of the person as referred above shall be re-examined at least once in every period of 12 months up to the age of 45 years and once in every 6 months beyond that age. The record of examination and re-examination carried out shall be maintained by the service provider in Form 17A as specified in Rule 49 of the W.B. Factories Rules, 1958.
- (ac) Valid Load test certificate of the Lifting Machines. As per Section 29 of the Factories Act, 1948, the annual statutory Load Test Certificate of the Crane, Hydra, Forklift Truck etc. including all lifting tackles (Rope Sling, Chain Sling, Hook, Shackle, Swivel, Coupling, Socket, Clamp, Tray or similar appliance, whether fixed or movable, used in connection with the raising or lowering of loads or persons by use of lifting machines) to be obtained from the Competent Person as certified by the Chief Inspector of Factories. The service provider, prior to taken into use of the aforesaid lifting machine and lifting tackles at GRSE site, shall submit the copy of valid statutory load test certificate(s) of the aforesaid items in Form 8 (issued Under Rule 55 of the W.B. Factories Rules, 1958) along with a copy of Competency Certificate of the person issuing the test certificate in Form 8.

(ii) General Requirements.

- (aa) All personnel engaged for operating the Crane, Hydra, Forklift Truck, Dumper, Lorry, Tractor etc. and their helper(s) shall wear IS mark Personal Protective Equipment in the factory premises. The PPEs shall be supplied by the service provider and also ensure use of the same while at work.
- (ab) The operator of Crane, Hydra, Forklift Truck, Dumper, Dozer, Lorry, Tractor etc. and their helper must be provided with fluorescent type Jacket / Vest for better visibility from distance.
- (ac) During material handling with the help of Crane, Hydra etc. in suspended condition, the swinging of the load being handled shall be controlled from remote with help of guide rope.
- (ad) The helper of the Crane, Hydra, Forklift Truck, Lorry, Tractor etc. should have a whistle for giving signal to the personnel in the close vicinity during operation of the aforesaid vehicles.
- (ae) One pair Walkie -Talkie set should be supplied by the service provider to the crane driver & and the person(s) giving signals to the Crane Operator, for maintaining communication between them during crane operation.
- (af) Use of Mobile Phone and (or) Ear Phone is strictly prohibited during operation of the aforesaid vehicles.
- (ag) Safety Orientation programme to be carried out by the service provider for their employees before commencing of the activity at GRSE and also periodically during execution of the job.
- (ah) Material handling job shall be monitored and controlled by a competent supervisor of the service provider.
- (aj) Further the service provider shall be liable for adoption of additional safety measure(s) as and when recommended by GRSE as per requirement.

Contractor's liability for non-compliance of Safety Rules & Regulations

13. Each contractor firm shall be solely responsible for any untoward incident arising out of adopting unsafe practices while working at GRSE premises and in the event of any accident happening in the yard, resulting in physical injury to the contractor personnel or loss of lives or otherwise damaging any part of the property, the contractor shall be

required to make good the loss to the Company and shall be responsible for all consequences that follow from loss and / or injuries to the persons involved in such accidents/ litigation expenses or litigation consequences etc.

- 14. It will be liability of the contractor firm to ascertain the standard safety precautions for discharging his work as per the prevailing safety standards in GRSE. The decision of GRSE Management in all matters concerning to safety, shall be final and binding on the contractor.
- 15. For compliance of requisite safety norms, each contractor firm will deploy their own qualified Safety Officer at GRSE site.
- 16. On completion of work in any location (either on-board / in the yard), the contractor firm or his agents must ensure that the place is left in a reasonably clean state and all scraps are transferred to nearby scrap-bins / removed from GRSE premises as per terms and conditions.
- 17. GRSE reserves its right to suspend the work in the event of the contractor not complying with the rules / instructions with regard to safety practices for which no claim of any kind will be entertained. The executing department or the Head of Safety Dept., upon his satisfaction that the Contractor is not conforming to the safety requirement(s), may direct stoppage of work and require the Contractor to remedy the defects or supply the Omission/s as the case may be. The Contractor shall not proceed with the work until his compliance with such directions to the satisfaction of the executing department or the Head of Safety Department.
- 18. Without prejudice to the right conferred by the clause (e) above for stoppage of work for violating safety requirements, the Contractor shall be liable for a penalty as below: -

| | | Per | nalty (in Rupe | Penalty | |
|--------|---|----------|----------------|----------|--|
| SI.No. | Type of violation | 1st | 2nd | 3rd | 4th |
| | | instance | instance | instance | . instance |
| (a) | Any worker not having / not using PPEs properly | 10,000/- | 15,000/- | 20,000/- | Discontinued / debarred from participating in future tender upto 06 months / 02 consecutive tenders, which ever is later |

| SI.No. | o. Type of violation Penalty (in Rupees) | | | | Penalty |
|---------|--|----------|--|---|--|
| 31.140. | Type of violation | 1st | 2nd | 3rd | 4th |
| | | instance | instance | instance | . instance |
| (b) | Use of defective I non IS PPEs | 5000/- | 10,000/- | 15,000/- | Discontinued / debarred from participating in future tender upto 06 months / 02 consecutive tenders, which ever is later |
| (c) | Found adopting Unsafe Act (wilful violation of safety norms) | E000/ | 7500/- | 10000/- | Discontinued/ debarred |
| (d) | Creation of unsafe condition | 5000/- | 7500/- | 10000/- | Discontinued / debarred |
| (e) | Non deployment of trained personnel (Trade wise) | PCI | 10000/- per untrained personnel | 15000/- per untrained personne | Discontinued / debarred |
| (f) | Major violation of safety guidelines of the Tender terms and / or safety Guidelines issued by Safety Dept. from time to time | 10000/- | 20000/- | 30000/- | Discontinued/ debarred |

Note:-

- (i). In case of permanent disability / fatal accident during the execution of the contract, a penalty will be imposed on the contractor on the basis of recommendation of contract awarding Department on case to case basis. In such case the penalty may be banning of business dealing with GRSE or penalty of up to 10% of contract value to a minimum of Rs 50,000/- (fifty thousand) or both.
- (ii) In the case of repeated violation of safety guidelines, i.e, for more than 04 (four) instances during any Financial Year, GRSE shall have the sole discretion to terminate all / such affected contracts of the concerned non-complying contractor. GRSE may also impose Tender Holiday up to maximum period of 03 years in the

event of more than 04 Violations and / or on the severity of the violations as decided by the management. Tender Holiday will be issued on recommendation of existing Standing Committee and approval of Competent Authority.

Procedure to be followed for imposing penal action

19. Action by User Department

- (a) In the event of safety violation by the contractor or his worker / supervisor etc. the concerned officer of User Dept. (WDC issuing authority) shall inform the contractor in writing of such violations and subsequently initiate action to deduct the penal amount as per Para 6 of this policy from the next bill of the contractor or Security Deposit / Earnest Money Deposit etc. The penalty is to be implemented and advised for deduction by the concerned Officer of the user department at the time of issuing next WDC (Work Done Certificate) to the contractor.
- (b) The concerned officer of User Dept. shall simultaneously inform the above penal action to the Safety Dept., VD Cell, Contract Cell and HR Dept. / Contract Labour Cell mentioning name of the firm, contract / P.O. no., date of safety violation, type of violation, penalty amount and instance of violation.
- (c) Inform HR Department (Central Contract Labour Cell, Main unit and / or unit HR Officers) the name of the errant contractors' workmen found to be violating the policy for debarring their gate-passes.
- 20. <u>Action by Safety Dept</u>. Safety Department can also inform the user dept. regarding violation of safety guidelines and submit a report to the user department (WDC issuing authority) for taking necessary action. The fortnightly MIS of safety violations will be forwarded to Contract Cell and Occupiers. Inform HR Department (Central Contract Labour Cell, Main unit and / or unit HR Officers) the name of the errant contractors' workmen found to be violating the policy for debarring their gate-passes.
- 21. <u>Action by Contract Cell</u>. Based on the fortnightly MIS reports, Contract cell will issue caution letter to the defaulting contractors regarding debarring them in the event of safety violation after the 3rd instance. In case the violation takes place for more than 04 (four) times during a FY, the Contract Cell will initiate action for putting the defaulting contractor under Tender Holiday as per the laid down procedure
- 22. <u>Action by HR Dept</u>. Upon receiving information of Safety violation by a contractors' workman, the concerned HR Officer will inform the nodal Officer of Security department to debar the concerned contractors' workman from entering the unit for maximum 10 (ten) days period in each instance of Safety violation.
- 23. <u>Action by Security Dept</u>. Security Dept. will debar the concerned defaulting contractors' workman based on advisories by user department / Safety department and

recommendations by Contract Labour Cells of HR Dept. for each instance of Safety violation.

The penalty amount shall be recoverable from any Bill / Security Deposit / Earnest Money Deposit or from other dues of the contractor.

24. The above rules and procedures are only illustrative and not exhaustive.

PPE TABLE

| SI. No. | Description | Name of PPE | Applicable area of Protection | Purpose | Standard |
|------------|--------------------|------------------|---|---|---|
| 1 | Head Protection | Safety Helmet | In the shop floor / on board ship / working at height / under the suspended load or any other place where there is any possibility of head injury. | To protect the head from injury due to falling or moving objects, impact on stationary objects and from impact due to fall | IS: 2925 or EN 397. |
| 2 | Foot Protection | Safety Shoes | (a) Mandatorily wear safety shoe while working in shop floor / on board ship/ Stores/ Dock floor or any other place where there is possibility of foot injury. (b) Mandatorily wear closed footwear while entering the shipyard. (c) Wear Rubber Gumboot while working in water logged condition for removing of water from ship's tank, compartment, Dock Galley etc., cleaning of Dock floor / acid pickling area/ canteen cooking and washing areas etc. | To protect the feet from risks ranging from crush and impact injuries to contact with hot surface, slips, cuts, penetration wounds, electric shock etc. | (a) IS 15298 / EN ISO 20345 (b) Non ISI (c) IS: 12254 |

| SI. No. | Description | Name of PPE | Applicable area of Protection | Purpose | Standard |
|------------|--------------------|-------------------|--|--|--|
| 3 | Eye Protection | Safety Goggles | When engaged for welding / gas cutting / grinding / chipping / painting / chemical handling or any other activity where there is a possibility for eye injury due to penetration of flying particles / ultra violet radiation / splashing of chemical etc. | To protect eyes from damage or penetration due to flying particles, ultra violet radiation impact, burns, splashes etc. | |
| 4 | Ear Protection | Ear Plug | In high noise area (>90 db). | Use of hearing protection appropriate for reducing the sound levels of noisy equipment and processes to acceptable levels. | IS: 9167/ EN 352 |
| 5 | Hand Protection | Hand Gloves | (a) Leather Hand Gloves. During material handling / welding / gas cutting or any other activity where there is possibility of hand injury due to contact with sharp edges, hot spatter from welding or gas cutting processes. (b) Electrical Rubber Hand Gloves. While executing any electrical maintenance jobs. (c) Acid / Alkali Proof Rubber Hand gloves. During handling of acid, skin irritants chemical & | To protect the hand from injuries such as cuts, abrasions, burns, ingress of chemicals & electric shock. | (a) IS:6994/EN 407 for heat applications (gas cutting / welding) / EN 420 for general requirement / EN 388 for mechanical hazard (b) IS 4770 (c) EN 374 |

| SI. No. | Description | Name of PPE | Applicable area of Protection | Purpose | Standard |
|------------|-------------------------------|---|--|---|--|
| 6 | Respirator y Protection | Weldin g Fume Respir ator, Paint Fume Respir | (a) <u>Dust Respirator.</u> To be worn during grinding job, floor cleaning, dusting or any other activity where there is possibility of producing dust. | To protect against respiratory hazards. | (a) IS: 9473 / EN: 149 |
| | | ator or, Dust mask | (b) Welding Fume Respirator. To be worn during welding, gas cutting, brazing job etc. | | (b) IS: 9473 / EN: 149 |
| | | | (c) <u>Chemical</u> Respirator. To be worn during painting, mixing of paint with solvents & FRP activities handling of acid, skin irritants, chemical & solvents etc. | | (c) IS: 15323 (Selection to be made according to the particular chemical hazard) |
| 7 | Fall Protection | Double lanyard Safety Belt & harness, automatic fall arrestor | To be worn while working in height: (a) Double Lanyard Full Body Harness. During working at height such as on scaffolding structure / suspended working platform / ship's mast / fragile roof / inclined surface on the roof top or at any other height where there is a possibility of person to fall and get injured. | To protect the personnel from falling while working at height such as on scaffolding structure / platform, ship's mast, fragile roof, inclined surface on the roof top etc. | (a) IS: 3521 |
| | | | (b) Automatic fall arrestor (in addition to full body harness). To be worn during carrying out job in the vertical ascending / descending on the scaffolding | | (b)EN 361 |

| SI. No. | Description | Name of PPE | Applicable area of Protection | Purpose | Standard |
|------------|-------------------------------------|--|--|---|--|
| | | | structure, working on the suspended working platform and inclined surface on the roof top, horizontal movement at height. | | |
| 8 | Electric Arc Flash Protection | Electric Arc rated flash suit jacket, pant, hood and gloves | electrical installations inside the HT Switch | To protect the personnel from accidental exposure to high temperature of electric arc flash during operation & maintenance of electrical installations inside the HT Switch Gear Rooms. | As per guideline of NFPA- 70E |
| 9 | Fire- Fighting protection | (a) Three Layer Fire Close Proximity Suit (b)Self-Containe d Breathing Apparatu s (SCBA) Set | Personnel engaged in Fire Fighting service should wear Fire Close Proximity Suit and use Self-Contained Breathing Apparatus (SCBA) Set during combating fire in a hazardous environment. | To protect the Fire Fighting personnel during Combating Fire in a Hazardous Environment / High Level Respiratory Protection | Fire Proximity Suit approved by EN- 469:2005 + A1: 2006 +AC: 2006D and CE. Jacket & Trouser (EN- 469) Hand Gloves (EN-659) Outer Head Protection Helmet (EN- 443/1997) and inner Protection EN 1391, |

| SI. No. | Description | Name of PPE | Applicable area of Protection | Purpose | Standard |
|------------|------------------------|---|---|--|---|
| | | | | | Self-Contained Breathing Apparatus(S CBA) Set, as per approval of CE and EN-137 CLASS II standards and Approval of PESO |
| 10 | Face protection | Industrial safety face shields with plastic visor | When person engaged for grinding / chipping / buffering or any other activity where there is a possibility for face injury due to penetration of flying particles | To protect the face from flying particle | IS 8521 Design of visor may be selected as per design of safety helmet |
| 11 | Protective Clothing | Cotton boiler-suit | In the shop floor / on board ship / production floor and in any other areas of operation. | To protect the whole body of a contractors' workman from dirt, dust etc. | IS: 177- 1989 (Reaffirmed in 2003), Variety 3 standard |
| | | | should bear name of the omanner for easy identifica | | the back-side |

DIFFERENT PERMIT FORMAT

ब्लास्टिंग / पेंटिंग गतिविधि अनुमति BLASTING / PAINTING ACTIVITY PERMIT (DAY / NIGHT SHIFT)

| परामट स./ Permit No. यार्ड/ YARD: | दिनांक /Date: |
|---|---|
| विक्रेता /VENDOR: कार्य की अवधि /DURATION OF JOB: दिनांक /Date 1. स्थान विवरण /Location Details: 2. पर्यवेक्षक का र No of the Supervisor: | |
| 3. गेट पास नं. के साथ ऑपरेटर/ ब्लास्टर (ओं) / पेंटर औ Name of Operator/Blaster (s)/Painter & Helper(s | |
| (i) | (iv) |
| (ii) | (v) |
| (iii) | (vi) |
| Sig | फर्म के पर्यवेक्षक के हस्ताक्षर nature of the Supervisor of the firm |
| 4. स्वीकृत /Approved: से/From तक/ To 5. अनुमोदित नहीं होने के लिए कारण (यदि आवश्यव Reqd.): 6. उत्पादन और पेंट शॉप से संबंधित अधिकारी (ओं) के ह | |
| Officer(s) of Production & Paint Shop: | |
| पेंट शॉप /PAINT SHOP पीएल/पीसीओ PL/PCO | अग्नि/ संरक्षा विभाग FIRE/SAFETY DEPT. |
| 7. पेंट / ब्लास्टिंग का काम पूरा होने का समय / Comple | etion time of Paint / Blasting Work |
| पेंट / ब्लास्टिंग वर्क परिमट समाप्ति : दिनांक_ | समय |
| Painting/Blasting Work Permit Closed on: | Date time |
| ठेकेदार का नाम और हस्ताक्षर पेंट शॉप Name & Signature of Contractor's PAINT SHOP | अग्नि /संरक्षा विभाग P FIRE/SAFETY DEPT |

नोट 1: ब्लास्टिंग क्षेत्र की पर्याप्त कवरिंग और ब्लास्टिंग / पेंटिंग साइट पर उपयुक्त चेतावनी बोर्ड को प्रदर्शित किया जाना है ।

Note 1: Adequate covering of the blasting area & suitable warning boards are to be displayed at blasting / painting site.

नोट 2: ब्लास्टिंग/ पेंटिंग कार्य के लिए लगे सभी कार्मिक उचित पीपीई जैसे हैंड ग्लब्स, सेफ्टी शू और हेलमेट, नोज मास्क, सेफ्टी गॉगल्स, एयर लाइन रेस्पिरेटर, प्रोटेक्टिव कपड़े / ब्लास्टिंग सूट आदि का उपयोग करेंगे।

Note 2: All personnel engaged for blasting / painting work shall use proper ISI mark PPEs such as Hand Gloves, Safety Shoe & Helmet, Nose Mask, Safety Goggles, Air Line Respirator, Protective Clothing / Blasting suit etc.

गार्डन रीच शिपबिल्डर्स एण्ड इंजीनियर्स लिमिटेड (भारत सरकार का एक उपक्रम) Garden Reach Shipbuilders & Engineers Ltd.

(A GOVT. OF INDIA UNDERTAKING) ऊंचाई कार्य <u>परमिट / HEIGHT WORK PERMIT</u>

परमिट सं./ Permit No.:

| \sim | _ | |
|--------|--------|---|
| ादनाक | /Date: | _ |

| 1 | भ्यान | /Location | |
|----|--------|-----------|--|
| Ι. | . (911 | /LUCATION | |

| | \sim | `` | _ | r | | \sim | | | | | |
|------------|--------|-------|------------|-------|-----|----------|----------------------|---------|---------|-----|-------|
| 2 | क्रा | ्राच | ਗਕ | क्राज | ਕਨਾ | 1223III/ | Doorin | tian af | work to | h 0 | 4000 |
| Z . | 1476 | ריווט | GIG | члч | 471 | 199891/ | Descrip [*] | uon oi | WOIK IO | DE | aone. |
| | | | | | | | | | | | |

| क्रं. सं./ SI. No | क्षेत्र/स्थान/Area/ Location | कार्य का Description | विवरण | /Job | श्रमिकों की /Nos. Workers | संख्या of | टिप्पणियों REMARKS |
|----------------------------|---------------------------------|-------------------------|-------|------|---------------------------------|--------------|-----------------------|
| i) | | | | | | | |
| ii) | | | | | | | |
| iii) | | | | | | • | |
| iv) | | | | • | | • | |

| विभाग का नाम / कार्य को क्रियानि | वेत करने वाले अभिकरण | ं: (पी.ओ संख | <u> ख्रा</u> |). |
|-----------------------------------|---------------------------------|-------------------------------|-----------------------|----------------------|
| Name of Dept./ Agency execu | uting the job : | (P.O No. | | .). |
| 4. व्यक्ति को नियोजित किया जान | n है : श्रमिकों की सूची सं | लग्न है (सं. | प्रमुख) | |
| Person to be employed : Lis | st of workers are attac | ched (Nos | . Heads). | |
| 5. कार्य के लिए पर्यवेक्षक का नाम | : श्रीस | गइट इंजीनियर (मो [,] | बाइल:- |) |
| : % | गी साइट प | र्यवेक्षक (मोबाइल : | - | |
| Name of Supervisor for the job | o: Mr | Site Engineer | · (Mob: - | |
| | <u></u> | | | |
| परमिट की वैध अवधि | : दिनांक- से | तक | समय | बजे रे |
| बजे तक । | | | | |
| Period of validity of Permit | : Date- From | To | Time | AN |
| to PM. | | _ | _ | _ |
| 6. ऊंचाई पर कार्य करते वक्त साइ | <u>इट पर निम्नलिखित सुरक्षा</u> | एहतियात बनाए र | <u>खा जाता है (ज</u> | <u> जो लागू नर्ह</u> |

works at height (strike out which is not applicable):
क) सभी सुरक्षा उपकरण और ISI mark पीपीई (सेफ्टी शू, फुल बॉडी हार्नेस सेफ्टी बेल्ट, सेफ्टी हेलमेट, रूफ लैंडर / क्रॉलिंग बोर्ड, वर्टिकल फॉल अरेस्टर, सेफ्टी नेट, यदि लागू हो आदि) ऊंचाई पर काम शुरू करने से पहले ही उपलब्ध करा दिया जाता है ।/(a) All safety equipment's and ISI marked PPEs (Safety Shoe, Full Body Harness Safety Belt, Safety Helmet, Roof Ladder / Crawling board, vertical fall arrestor, Safety Net, if applicable etc.) has been provided before starting work at Height.

है मिटा दें) /The following safety precautions are being maintained at site while performing

- ख) ऊंचाई पर गतिविधि के दौरान, कार्यकर्ता लाइफ लाइन, फूल बॉडी हार्नेस, सेफ्टी बेल्ट का उपयोग कर रहे हैं और उन्हें बेल्ट को फर्म संरचना/लाइफ लाइन के साथ एंकर कर देना चाहिए।/(b) During movement on the height, worker are using Life Line, Full Body Harness, Safety Belt and they must anchor the belt with firm structure/Life line. ग) काम शुरू करने से पहले, यदि आवश्यक हो तो/आवश्यकतानुसार डीएसएल/इलेक्ट्रिकल लाइव लाइनों को डी-एनर्जेटिक किया जाएगा I/(c) DSL/Electrical live lines under the roof will be De-energized before starting of work. if necessary/as required.
- घ) काम करने वाले प्लैटफ़ार्म के साथ स्काफ़्फ़ोल्डिंग संरचना और आदमी और सामग्री के भार को झेलने के लिए पर्याप्त शक्ति होने के कारण खड़ा किया गया है। /(d) Scaffolding structure with working platform and fencing, having adequate strength to withstand the load of man and material has been erected.
- ङ) बारिश और तुफान के समय के दौरान श्रमिकों को किसी भी प्रकार की ऊंचाई के कार्य की अनुमति नहीं दी जाएगी ।/(e) During the time of rain & storm workers will not be allowed for any type of height work.
- च) संबंधित साइट के अलावा अन्य मानव गतिविधि को नियंत्रित करने के लिए कार्य स्थल के नीचे के क्षेत्र को सावधानी टेप से घेरा जाएगा । / (f) The area underneath the working site will be cordoned by cautionary tape for controlling human movement other than the concerned firm.
- छ) ठेकेदार मेसर्स...... किसी भी अवांछित घटना से बचने के लिए कार्य स्थल पर उचित सुरक्षा सुनिश्चित करेगा ।/(g)The Contractor M/S will ensure proper safety at working site to avoid any unwanted incident.
- ज) ठेकेदार ने सुनिश्चित किया है कि प्रशिक्षित और अनुभवी कर्मचारी काम पर लगे होंगे ।/ (h) The Contractor has ensured that trained & experienced workers will be engaged at work.

हस्ताक्षर/Signature:

ठेकेदार (साइटइंजीनियर) जीआरएसई संरक्षा विभाग

जीआरएसई सिविल विभाग/ एंगेजिंग अथॉरिटी

Contractor (Site Engineer)

GRSE Civil Dept./ Engaging Dept.

GRSE Safety

Dept

कार्य पर लगे हुए कार्मिकों की सूची /

LIST OF POERSONNEL ENGAGED FOR HEIGHT WORK 7.

ठेकेदार का नाम/Name of the Contractor:

| क्र.सं./ SI.No. | नाम/ Name | गेट पास/Gate Pass | पद/Designation |
|--------------------|-----------|-------------------|----------------|
| | | | |
| | | | |

| करग, । / | मिटा दें) के साथ फुल बॉडी हार्नेस (सेफ्टी बेल्ट) का इस्तेमाल | लाइफलाइन, सेप् करेंगे, । / |
|--|---|-------------------------------|
| M/shereby confirmed that all the above mentioned personnel (engage for height work) shall use ISI mark Full Body Harness (Safety Belt) with double lanyard fall arrestor, lifeline, Safety Net (strike out which is not applicable). | ed that all the above mentioned personnel (engaged Full Body Harness (Safety Belt) with double lanyard, | M/sfor height wor |

ठेकेदार का नाम और हस्ताक्षर Name & Signature of Contractor's साइट प्रभारी / साइट पर्यवेक्षक Site In charge / Site Supervisor

परमिट सं./Permit No. : (संरक्षा विभाग द्वारा जारी/Issued by Safety Dept.) हाइट वर्क परमिट का विस्तार/Extension of Height Work Permit

| क्र.सं./ SI. No. | विस्तार सं./ Extension No. | विस्तार अवधि, Period (दि समय /Date a | नांक और | ठेकेदार का नाम एवं हस्ताक्षर / Name & Signature of | सिविल विभाग/ एंगेजिंग अथॉरिटी का नाम एवं | संरक्षा विभाग का नाम और हस्ताक्षर/ | | | |
|------------------------|----------------------------------|--|---------------|---|---|---|--|--|--|
| | | कब से / From | कब तक / To | Contractor's | हस्ताक्षर/ Name & signature of Civil Dept./ Engaging Dept. | Name and Signature of Safety Dept. | | | |
| | | | | | | | | | |

हाइट वर्क परमिट का समापन / Closing of Height Work Permit

| कार्य पूर्णता/अस्थायी रूप से बंद/ | स्थगित | | | | | | | | |
|---|--|---------------------------------------|------------|--|--|--|--|--|--|
| Job Completion/Temporary Closed/Postponed: दिनांक/Date सम | | | | | | | | | |
| —— हाइट वर्क परमिट बंद करने का | अनुरोध / | | | | | | | | |
| Request to close the Height | Work Permit | | | | | | | | |
| ठेकेदार का नाम एवं हस्ताक्षर /N | ame & Signature o | of Contractor's | | | | | | | |
| हाइट वर्क परमिट समाप्ति | : दिनांक | समय | | | | | | | |
| Height Work Permit Closed | on: Date | time | _ | | | | | | |
| | स्ताक्षर/९ | Bignature | | | | | | | |
| | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | नाम / Name | _ | | | | | | |
| जाआरएसइ।सावल विभाग / एर | गाजग अथारिटा / GRS | SE Civil Dept./ Engaging | Dept. | | | | | | |
| | | ===================================== | ıre | | | | | | |
| | | नाम / Name |) | | | | | | |
| जीआरए | सई संरक्षा विभाग(जी | आरएसई) / GRSE Safety D | ept (GRSE) | | | | | | |

Revision 3.0 dated 11th November 2023

हाइट वर्क जॉब की दैनिक पूर्णता / हाइट वर्क परिमट का दैनिक समापन Daily Completion of Height Work Job / Daily Closing of Height Work Permit

| क्र.सं. / SI. No. | परमिट सं. (संरक्षा विभाग द्वारा जारी)/ Permit No. (Issued by Safety Dept.) | दिनांक Date | हाइट वर्क जॉब आरंभ का समय/ Starting time of the height work job | हाइट वर्क जॉब समाप्ति का समय / Completio n time of height work job | ठेकेदार का नाम एवं हस्ताक्षर / Name & Signature of Contractor's | सिविल विभाग/ एंगेजिंग अथॉरिटी का नाम एवं हस्ताक्षर/ Name & signature of Civil Dept./ Engaging Dept. | संरक्षा विभाग का नाम और हस्ताक्षर/ Name and Signature of Safety Dept |
|----------------------------|--|----------------|---|--|---|--|--|
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HOT Work Permit

| HOT WORK DONE BY CONTRACTOR: | | | Enter Permit No. | | | | |
|------------------------------|---------------|---------------------|--|--|--|--|--|
| | | | | | | | |
| Date: | | | PO NO. | | | | |
| Construction | n /Building: | | | | | | |
| Location: | J | | | | | | |
| Room/ Com | partment | | | | | | |
| DK and Fran | ne | | | | | | |
| NATURE OF | F JOB | | | | | | |
| Name of Co | ntractor | | | | | | |
| I verify the a | bove location | n has been examin | ed, the precautions checked on the Required | | | | |
| | Checklist ha | ave been taken to | prevent fire, and permission is authorized for | | | | |
| work | | | | | | | |
| | | | | | | | |
| Competent | Hot Work S | upervisor | | | | | |
| Contact # | | | | | | | |
| PERMIT | DATE: | Time AM | | | | | |
| REQUEST | | PM | | | | | |
| : | | | | | | | |
| PERMIT | DATE: | Time AM | | | | | |
| REQUEST : | | PM | | | | | |
| SIGNATUR | E OF CHWA | (Contractor) | | | | | |
| Approval fro | m PL/PCO/E | Ingaging Officer/de | esignated Engineer (GRSE Ltd.) | | | | |
| Checked by | Fire & Safet | y Department: | | | | | |

हॉट वर्क परमिट हेतु अनुलग्नक /Enclosure to Hot Work Permit (जाएगा किया नहीं जारी परमिट वर्क हॉट कोई बिना के अनुलग्नक इस) (No Hot Work Permit will be issued without this enclosure)

| परमिट सं. / Permit No. | | | nit No. | | दिनांक / Dated : |
|------------------------|------------|---|---------|---|------------------|
| U | C 3 | _ | OC 3: | • | |

हॉट वर्क हेतु नियुक्त कार्मिकों का विवरण /Details of the personnel engaged for the Hot Work:

| | विक्रेता के नाम / Name of the Vendor : | | | | | | | | | |
|-----------------------|---|--|---|-----------------------|--|--|--|--|--|--|
| शॉप सं | शॉप सं यार्ड /. / Shop / Yard No : | | | | | | | | | |
| क्रं.सं. SI No. | कार्मिक के नाम / Name of the personnel | पदनाम ,कटर गैस,वेल्डर) (आदि हेल्पर / Designation (Welder, Gas Cutter, Helper etc.) | जीआरएसई गेट पास सं. / GRSE Gate Pass No. | इएसआइ स. / ESI No. | | | | | | |
| 1. | | | | | | | | | | |
| 2. | | | | | | | | | | |
| 3. | | | | | | | | | | |
| 4. | | | | | | | | | | |
| 5. | | | | | | | | | | |
| 6. | | | | | | | | | | |

नोट / Note कि है जाता किया प्रमाणित यह : / This is to certify that :

- 1) उपर्युक्त सभी कार्मिकों को आवश्यक निजी सुरक्षा उपकरण हैं गए दिए गैजेट संरक्षा / (पीपीई) है में स्थिति अच्छी यह और /All the personnel mentioned above have been provided requisite Personal Protective equipment (PPE) / Safety gadgets & it is in good condition.
- 2) हॉट वर्क परिमट में उल्लिखित हॉट वर्क स्थल की जांच की गई है और वहाँ कोई भी ज्वलनशील / दहनशील सामग्री नहीं पाई गई है /The Hot Work place mentioned in the Hot Work Permit have been checked & found free from any flammable / combustible materials.
- 3) हॉट वर्क एरिया और आस नहीं गतिविधि पेंटिंग कोई पर स्थान के पास-चल रही है / No Painting activity is in Progress at hot work area & adjacent place.

| 4) | एग्जॉस्ट | वेंटिलेशन | और | ताजी | हवा व | की | आपूर्ति | की | व्यवस्था | की | गई ह | ਹੈ) ⁻ | यथा | लागू , | / (| Exhau | st |
|-----|----------|-----------|--------|-------|-------|-----|---------|-------|-----------|------|------|-------------------|-----|--------|-----|-------|----|
| ven | tilation | & supply | of fre | sh ai | r has | arı | ranged | l (as | s applica | able | e). | | | | | | |

कंपनी मुहर के साथ ठेकेदार फर्म के साइट प्रभारीहस्ताक्षर के पर्यवेक्षक/ Signature of Site In charge/Supervisor of the Contractor Firm with Co's seal

CHECKLIST

संरक्षा निरीक्षण जांचबिन्दु /SAFETY INSPECTION CHECKLIST हाईट वर्क /HEIGHT WORK

फर्म का नाम / Name of the firm: / तिथि एवं .सं.ओ. P.O. No. & date: स्थान / .सं यार्ड/Location / Yard No.: / तिथि की रिपोर्टिंग Date of reporting:

| क्र.सं. | मानदंड | हाँ | नहीं | लाग् | टिप्पणियां |
|---------|---|-----|------|------|------------|
| SI | Criteria | Yes | No | नहीं | Remarks |
| No. | | | | N/A | |
| 1. | क्या 'हाईट वर्क परमिट' प्राप्त किया गया है? | | | | |
| | Whether 'Height Work Permit' has been obtained? | | | | |
| 2. | क्या सभी पीपीई हैं उपलब्ध (चिह्नित ईएन/आईएसआई)? | | | | |
| | Whether all PPEs (ISI / EN Marked) are available? | | | | |
| 3. | क्या फुल बॉडी हार्नेस स्थिति शारीरिक की (साथ के डोरी डबल) | | | | |
| | है अच्छी? | | | | |
| | Whether Physical Condition of Full Body Harness | | | | |
| | (with Double Lanyard) is good? | | | | |
| 4. | क्या असेंडिंग/डिसेंडिंग उद्देश्य हेतु स्वचालित फॉल अरेस्टर का | | | | |
| | उपयोग किया जा रहा है? | | | | |
| | Whether automatic Fall Arrestors are being used for | | | | |
| | ascending / descending purpose? | | | | |
| 5. | क्या ऊंचाई पर काम करने हेतु रिट्रैक्टेबल फॉल अरेस्टर का | | | | |
| | उपयोग किया जाता है? | | | | |
| | Whether Retractable Fall Arrestor is used for work at | | | | |
| | height? | | | | |
| 6. | क्या संरक्षा नेट प्रदान किया गया है? | | | | |
| | Whether Safety Net is provided? | | | | |
| 7. | क्या स्कैफोल्डिंग और उपयुक्त सीढ़ी प्रदान की जाती है? | | | | |
| | Whether scaffolding and suitable ladder is provided? | | | | |
| 8. | क्या टो गार्ड, मिड व्यवस्था की स्कैफोल्डिंग में रेल-टॉप और रेल- | | | | |
| | है गया बांधा को तख्तों के लकड़ी पर सिरों दोनों और है गई की? | | | | |
| | Whether Toe guard, mid-rail & top-rail are provided | | | | |
| | with scaffolding and wooden planks are tied up at both | | | | |
| 9. | ends? | | | | |
| 9. | क्या सेफ्टी बेल्ट हेतु एंकरिंग के लाइन लाइफ/रिजिड बिंदु | | | | |
| | उपलब्ध हैं? | | | | |
| | Whether rigid points are available for anchoring of | | | | |
| 10. | Safety Belt / Life Line? क्या ऊंचाई के काम हेतु क्षैतिज जीवन रेखा ऐरेक्ट की जाती है? | | | | |
| 10. | Whether horizontal life line is erected for height work? | | | | |
| | whether nonzontal me me is elected for height work? | | | | |

| 11. | क्या क्राम शुरू करने से पूर्व डीएसएल लाइनें लाइव इलेक्ट्रिकल/ | | |
|-----|---|--|--|
| | एनर्जीकृत-डी की जाती हैं? | | |
| | Whether DSL / Electrical live lines are De-energized | | |
| | before starting of work? | | |
| 12. | क्या हाईट वर्क हेतु मौसम की स्थिति अनुकूल है? | | |
| | Is the weather condition is favourable for height work? | | |
| 13. | क्या हाईट वर्क व्यवस्था की रोशनी पर्याप्त हेतु (बाद के सूर्यास्त) | | |
| | है गई की? | | |
| | Whether adequate Lighting arrangement is provided | | |
| | for height work (After Sunset)? | | |
| 14. | क्या कार्य क्षेत्र की घेराबंदी की गई है? | | |
| | Whether cordoning of the work area has been done? | | |

अतिरिक्त टिप्पणियां / हो कोई यदि ,Additional Remarks, If any

मुहर सहित विक्रेता के संरक्षा अधिकारी स्थल/ प्रभारी अथवा पर्यवेक्षक का हस्ताक्षर/ Signature of the vendor's Safety Officer / Site In-charge or Supervisor with Stamp

संरक्षा निरीक्षण जांच बिन्दु /SAFETY INSPECTION CHECKLIST टैंक बंद् / स्थान / TANK / CONFINED SPACE

फर्म का नाम / Name of the firm:

पी / तिथि एवं .सं.ओ.P.O. No. & date:

स्थान / .सं यार्ड/Location / Yard No.:

/ तिथि की रिपोर्टिंग

Date of reporting:

| क्र.सं. | मानदंड | हाँ | नहीं | लागू | टिप्पणियां |
|---------|--|-----|------|------|------------|
| SI | Criteria | Yes | No | नहीं | Remarks |
| No. | | | | N/A | |
| 1. | क्या आपके पास बंद स्थान में प्रवेश हेतु लिखित परमिट है? | | | | |
| | Do you have a written permit for confined space entry? | | | | |
| 2. | | | | | |
| | संक्षारक, ईंधन या खतरनाक पदार्थीं, यदि कोई हो, से पूरी तरह से | | | | |
| | खालीहैं गए धोए और शुद्ध/? | | | | |
| | Are confined spaces thoroughly emptied / purged and | | | | |
| | rinsed of corrosive, fuel or hazardous substances, if | | | | |
| | any? Before entry check with Gas Detector. | | | | |
| 3. | | | | | |
| | Is adequate ventilation time provided in confined | | | | |
| 4. | spaces? क्या टैंक/ बंद स्थानों के अंदर और आसपास के क्षेत्र में भी पर्याप्त | | | | |
| 4. | सामान्य रोशनी उपलब्ध है? | | | | |
| | Whether adequate general illumination is available | | | | |
| | inside the tank / confined spaces and also in the close | | | | |
| | vicinity? | | | | |
| 5. | क्या डेक/बल्कहेड के विपरीत दिशा सहित आसपास के क्षेत्र में | | | | |
| | किसी ज्वलनशीलपेंट/विस्फोटक/ भाप या वाष्प संवेदनशील/ | | | | |
| | है उपस्थिति कोई की सामग्री? | | | | |
| | Is there any presence of any flammable/explosive/ paint | | | | |
| | fume or vapour/ sensitive material in surrounding zone | | | | |
| | including the opposite side of deck/ bulkhead? | | | | |
| 6. | बंद स्थानों में आदि टैंकों/हॉट वर्क करने से पूर्व क्या ज्वलनशील | | | | |
| | गैस सुरक्षित इसे और है गई की जांच की मौजूदगी की (एलईएल) | | | | |
| | है गया किया घोषित? | | | | |
| | Prior to undertaking hot work in confined spaces / tanks etc. whether existence of flammable gas (LEL) has | | | | |
| | been checked and declared safe? | | | | |
| 7. | | | | | |
| | निरंतर साथ के व्यक्ति वाले करने काम अंदर के स्थान सीमित/टैंक | | | | |
| | है गया किया प्रतिनियुक्त हेतु बातचीत और पर्यवेक्षण? | | | | |
| | Is there any responsible person has been deputed at | | | | |
| | the outside of the Tank / Confined space for continuous | | | | |
| | supervision and interaction with the person working | | | | |
| | inside the Tank / Confined space? | | | | |

| 8. | क्या बंद स्थानों में किए जाने वाले कार्य हेतु आपूर्ति की वोल्ट 110 है गया किया प्रदान लैंप हैंड सेफ्टी इंसुलेटेड और? | | |
|----|---|--|--|
| | Whether 110Volts supply and insulated Safety Hand | | |
| | Lamp is provided for the work to be performed in the | | |
| | confined spaces? | | |
| | commed spaces: | | |
| 9. | क्या बिजली के झटके से सुरक्षा हेतु बंद स्थानों के अंदर उपयोग | | |
| | किए जाने वाले सभी पोर्टेबल उपकरण ग्राउंडेड या इंसुलेटेड और | | |
| | आरसीसीबी के साथ फिट हैं? | | |
| | Is all portable equipment used inside confined spaces | | |
| | grounded or insulated and fitted with RCCB for electric | | |
| | shock protection? | | |
| 10 | बंद स्थानों के अंदर गैस कटिंग से वेल्डिंग/पूर्व, क्या गैस होज और | | |
| | कटिंग टॉर्च की वाटर डिप टेस्ट के साथ लीक हेत् जाँच की जाती | | |
| | है? | | |
| | Before gas cutting / welding inside the confined spaces, | | |
| | are gas hoses and cutting torches are checked for leaks | | |
| | with Water Dip Test? | | |
| 11 | बंद स्थान और उपयुक्त) साधन सुरिक्षत का पहुँचने तक टैंक/ | | |
| | है गया किया प्रदान (सीढ़ी सुरक्षित? | | |
| | Safe means of access (suitable & safe ladder) to | | |
| | confined space / tank is provided? | | |
| 12 | उपयुक्त निजी सुरक्षा उपकरण)आईएस / ईएन स्तर) प्रदान किया | | |
| | जाता है? | | |
| | Suitable Personal Protective Equipment (IS / EN | | |
| | Standard) is provided? | | |
| 13 | क्या किसी आपात स्थिति हेतु उचित बचाव योजना उपकरण/ | | |
| | है उपलब्ध? | | |
| | Whether proper rescue plan / equipment is available for | | |
| | any emergency? | | |
| | | | |

अतिरिक्त टिप्पणियां / हो कोई यदि ,Additional Remarks, If any:

मुहर सहित विक्रेता के संरक्षा अधिकारी स्थल/प्रभारी अथवा पर्यवेक्षक का हस्ताक्षर/

Signature of the vendor's Safety Officer / Site In-charge or Supervisor with Stamp

संरक्षा निरीक्षण जांचबिन्दु / SAFETY INSPECTION CHECKLIST औद्योगिक इलेक्ट्रिकल एक्सटेंशन बोर्ड / INDUSTRIAL ELECTRICAL EXTENSION BOARD

फर्म का नाम / Name of the firm: स्थान / .सं यार्ड/Location / Yard No.: पी / तिथि एवं .सं.ओ.P.O. No. & date: / तिथि की रिपोर्टिंग Date of reporting:

| क्र.सं. | मानदंड | हाँ | नहीं | लागू नहीं | टिप्पणियां |
|---------|--|-----|------|-----------|------------|
| SI No. | Criteria | Yes | No | N/A | Remarks |
| 1. | क्या औद्योगिक प्रकार के इलेक्ट्रिकल एक्सटेंशन बोर्ड का उपयोग किया | | | | |
| | जाता है ? | | | | |
| | Whether the industrial type electrical extension board is | | | | |
| | used? | | | | |
| 2. | क्या औद्योगिक एक्सटेंशन बोर्ड में औद्योगिक प्रकार का -3पिन प्लग | | | | |
| | टॉप प्रदान किया गया है ? | | | | |
| | Whether the industrial type -3pin plug top provided in | | | | |
| | Industrial Extension Board? | | | | |
| 3. | पुष्टि करें कि -3पिन प्लग क्षतिग्रस्त नहीं हैं । | | | | |
| | Confirm -3pin plugs are not damaged. | | | | |
| 4. | क्या साइट पर केबल का कोई अनुचित जुड़ाव मौजूद है ? | | | | |
| | Is any improper jointing of Cables are prevailing at Site? | | | | |
| 5. | क्या कनेक्शन एमसीबीहैं गए किए रूट से माध्यम के आरसीसीबी/? | | | | |
| | Whether the connections are routed through MCB / RCCB? | | | | |
| 6. | क्या अर्थिंग की निरंतरता की जाँच की जाती है? | | | | |
| | Whether the continuity of earthing is checked? | | | | |
| 7. | पृष्टि करें कि एक्सटेंशन बोर्ड पर खुले तार का उपयोग नहीं किया गया | | | | |
| | है। | | | | |
| | Confirm bare wire is not used on the extension board. | | | | |
| 8. | क्या केबल और एक्सटेंशन बोर्ड की स्थिति ठीक है? | | | | |
| | Whether the condition of Cable and extension board is ok? | | | | |
| 9. | क्या एक्सटेंशन बोर्ड के सॉकेट क्षतिग्रस्त हैं ? | | | | |
| | Whether sockets of the extension board is damaged? | | | | |
| 10. | क्या प्लग एंड सॉकेट की रेटेड क्षमता का उपयोग किया जाता है? | | | | |
| | Whether rated capacity of Plug & Socket is used? | | | | |
| 11. | पुष्टि करें कि सॉकेट अधिक लोड नहीं लिए है। | | | | |
| | Confirm that Socket is not over loaded. | | | | |
| 12. | पुष्ट्रि करें कि औद्योगिक प्रकार का इलेक्ट्रिकल एक्सटेंशन बोर्ड गीला | | | | |
| | नहीं है। | | | | |
| | Confirm that industrial type electrical extension board is not | | | | |
| | soaked with water. | | | | |

अतिरिक्त टिप्पणियां / हो कोई अगर ,Additional Remarks, If any:

मुहर सहित विक्रेता के संरक्षा अधिकारी/ स्थल पर्यवेक्षक अथवा प्रभारी के हस्ताक्षर Signature of the vendor's Safety Officer / Site In-charge or Supervisor with Stamp

संरक्षा निरीक्षण जांचबिन्दु / SAFETY INSPECTION CHECKLIST

ग्राइंडिंग गतिविधि /GRINDING ACTIVITY

फर्म का नाम / Name of the firm: स्थान / .सं यार्ड/Location / Yard No.: पी / तिथि एवं .सं.ओ.P.O. No. & date:

/ तिथि की रिपोर्टिंग Date of reporting:

| क्र.सं. SI No. | मानदंड Criteria | हाँ Ye | नहीं No | लागू नहीं N/A | टिप्पणियां Remarks |
|-------------------|---|-----------|------------|------------------|-----------------------|
| 1. | जॉब हेतु व्हील के प्रकार और आकार सही है ? | S | | | |
| | Wheel type and size are right for the job? | | | | |
| 2. | ग्राइंडिंग मशीन पर व्हील गार्ड लगाया गया है ? | | | | |
| | Wheel guard is fitted on the grinding machine? | | | | |
| 3. | क्या उचित पीपीई उपलब्ध है)आईएस / ईएन स्टैंडर्ड बॉयलर सूट, सेफ्टी शू, सेफ्टी हेलमेट, डस्ट मास्क, हियरिंग प्रोटेक्टर्स, ग्राइंडिंग गॉगल्स फुल/फेस (शील्ड-? Whether Proper PPE is available (IS / EN Standard Boiler Suit, Safety Shoe, Safety Helmet, Dust Mask, Hearing protectors, Grinding Goggles/ full face-shield) ? | | | | |
| 4. | ग्राइंडिंग मशीन के संचालन की गति व्हील पर अंकित गति से अधिक नहीं होती है। Grinding Machine operating speed does not exceed what is marked on the wheel. | | | | |
| 5. | क्या बिजली का स्रोत ठीक से ग्राउंडेड है और कनेक्शन अच्छी स्थिति में हैं ? Whether electrical power source is properly grounded and connections are in good condition ? | | | | |
| 6. | पृष्टि करें कि कार्य क्षेत्र में कोई पानी या अन्य तरल नहीं है जो बिजली के झटके की संभावना पैदा कर सकता है। Confirm the work area contains no water or other liquid that could create electric shock potential. | | | | |
| 7. | पुष्टि करें कि कार्य क्षेत्र में कोई ज्वलनशील पदार्थ प्रज्वलित से चिंगारी जो है नहीं तरल/ है। सकता हो Confirm there is no inflammable material / liquid in the work area that could be ignited by sparks. | | | | |
| 8. | क्या कार्य क्षेत्र की रोशनी पर्याप्त है। Whether the work area lighting is adequate. | | | | |
| 9. | पृष्टि करें कि ग्राइंडिंग व्हील माउंटिंग करने से पूर्व है। चुका कर पास "टेस्ट रिंग" Confirm Grinding Wheel has passed "ring test" before mounting. | | | | |

अतिरिक्त टिप्पणियां / हो कोई यदि ,Additional Remarks, If any:

मुहर सहित विक्रेता के संरक्षा अधिकारी/ पर्यवेक्षक अथवा प्रभारी स्थल/के हस्ताक्षर Signature of the vendor's Safety Officer / Site Incharge or Supervisor with Stamp

संरक्षा निरीक्षण जांच बिन्दु / SAFETY INSPECTION CHECKLIST हॉट वर्क (गैस कटिंग एवं वेल्डिंग)/ HOT WORK (GAS CUTTING AND WELDING)

फर्म का नाम / Name of the firm: पी.ओ.सं. एवं तिथि / P.O. No. & date:

स्थान/यार्ड सं. / Location / Yard No.: रिपोर्टिंग की तिथि / Date of reporting:

| क्र.सं. SI No. | मानदंड Criteria | हाँ Yes | नहीं No | लागू नहीं N/A | टिप्पणियाँ Remarks |
|-------------------|--|------------|------------|---------------------|-----------------------|
| 1. | क्या गैस कटिंग /वेल्डिंग शुरू करने से पहले अग्निशमन | | | | |
| | विभाग/हॉट वर्क नियंत्रक अधिकारी से लिखित मंजूरी (हॉट वर्क | | | | |
| | परिमट) प्राप्त कर ली गई है?/ Prior to starting Gas Cutting / Welding whether written clearance (Hot | | | | |
| | Work Permit) has been obtained from Fire Fighting | | | | |
| | Department / Hot Work Controlling Officer? | | | | |
| 2. | क्यां किसी पेंटिंग गतिविधि की योजना बनाई गई है या आसपास | | | | |
| | / विपरीत बल्कहेड / कम्पार्टमेंट के नीचे में की जा रही है?/ | | | | |
| | Whether any Painting Activity is planned or been | | | | |
| | carried out in the close vicinity / opposite bulkhead / compartment below? | | | | |
| 3. | हॉट वर्क से पहले, क्या पेंट का खाली ड्रम सहित दहनशील या | | | | |
| | ज्वलनशील सामग्री को डेक/बल्कहेड के विपरीत दिशा सहित | | | | |
| | उक्त स्थान से हटा दिया गया है?/ Before Hot Work, | | | | |
| | whether combustible or flammable materials | | | | |
| | including empty paint drums have been removed | | | | |
| | from the location including the opposite side of deck / bulkhead? | | | | |
| 4. | क्या हॉट वर्क स्थान/आस-पास के क्षेत्र में पेंट की | | | | |
| | धूआं/ज्वलनशील गैस की कोई उपस्थिति है?/ Is there any | | | | |
| | presence of paint fume / flammable gas in the hot | | | | |
| | work location / in the surrounding zone? | | | | |
| 5. | क्या हॉट वर्क के दौरान निरंतर निगरानी के लिए डेक के | | | | |
| | विपरीत दिशा में /बल्कहेड/ ओवरहेड स्थिति में किसी जिम्मेदार | | | | |
| | व्यक्ति को नियुक्त किया गया है?/ Is there any responsible | | | | |
| | person has been deputed at opposite side of deck / bulkhead / overhead position for continuous | | | | |
| | surveillance during hot work? | | | | |

| क्र.सं. SI No. | मानदंड Criteria | हाँ Yes | नहीं No | लागू नहीं N/A | टिप्पणियाँ Remarks |
|-------------------|---|------------|------------|---------------------|-----------------------|
| 6. | क्या उचित पीपीई उपलब्ध है (आईएस / ईएन स्टैंडर्ड बॉयलर सूट, सेफ्टी शू, सेफ्टी हेलमेट, मास्क, गॉगल्स/फुल फेस-शील्ड) ? | | | | |
| | Whether Proper PPE is available (IS / EN Standard Boiler Suit, Safety Shoe, Safety Helmet, Mask, Goggles/ full face-shield)? | | | | |
| 7. | क्या गैस कटिंग होसेस (आईएस: 447) और गैस कटिंग टॉर्च (आईएस: 7653) आईएस मार्क के हैं?/ Whether Gas Cutting Hoses (IS: 447) and Gas Cutting Torches (IS: 7653) are IS Marked? | | | | |
| 8. | क्या फ्लैश बैक अरेस्टर (आईएस 11006 / आईएसओ: 5175 - भाग 1 चिह्नित) गैस काटने के उपकरण पर लगाया जाता है?/ Whether Flash Back Arrestor (IS: 11006 / ISO: 5175 -Part 1 Marked) is fitted on Gas Cutting equipment? | | | | |
| 9. | क्या वेल्डिंग केबल्स आईएस मार्क (IS:9857) और दोष मुक्त हैं?/ Whether Welding Cables are IS Marked (IS:9857) & defect free? | | | | |
| 10. | क्या वेल्डिंग होल्डर फुल इंसुलेटेड प्रकार का है और अच्छी भौतिक स्थिति में है?/ Whether Welding Holder is Full Insulated Type and in good physical condition? | | | | |
| 11. | गैस काटने वाले होसेस विद्युत/वेल्डिंग केबलों से नहीं उलझे हैं।/ Gas cutting hoses are not entangled with electrical / welding cables. | | | | |
| 12. | क्या गैस कटिंग टॉर्च (जो उपयोग में नहीं है) को टैंक या सीमित स्थान से हटाया जाता है?/ Is gas cutting torch (which is not in use) is removed from the tank or confined spaces? | | | | |
| 13. | क्या हॉट वर्क प्रारंभ करने से पहले पर्याप्त वेंटिलेशन की व्यवस्था की जाती है?/ Whether adequate ventilation is arranged prior to commencement hot work? | | | | |

टिप्पणियाँ /Remarks:

(a) गैस कटिंग होसेस को दिन का कार्य समाप्त होने के पश्चात गैस सिलेंडर / गैस मैनीफ़ोल्ड से पृथक किया जाएगा और बंद स्थान / कम्पार्टमेंट से हटा दिया जाएगा और खुले डेक पर रखा जाएगा।/Gas cutting hose will be isolated from the gas cylinder / gas manifold after the end of day's work and will be removed from the confined space / compartment & keep on the open deck.

(b) दिन का कार्य समाप्त होने के पश्चात सभी वेल्डिंग मशीनों को विद्युत शक्ति स्रोत से स्विच ऑफ कर दिया जाएगा।/ After the end of day's work all Welding Machines will be SWITCHED OFF from electrical power source.

मुहर सहित विक्रेता के संरक्षा अधिकारी/स्थल प्रभारी अथवा पर्यवेक्षक का हस्ताक्षर/ Signature of the vendor's Safety Officer / Site In-charge or Supervisor with Stamp

संरक्षा निरीक्षण जांचबिन्दु /SAFETY INSPECTION CHECKLIST <u>पेंटिंग /PAINTING</u>

फर्म का नाम / Name of the firm: date: पी / तिथि एवं .सं.ओ.P.O. No. &

स्थान / .सं यार्ड/Location / Yard No.:

/ तिथि की रिपोर्टिंग Date of reporting:

| क्र.सं. | मानदंड | हाँ | नहीं | लागू | टिप्पणियां |
|---------|--|-----|------|------|------------|
| SI | Criteria | Yes | No | नहीं | Remarks |
| No. | | | | N/A | |
| 1. | कंपार्टमेंट/बल्कहेड के विपरीत दिशा में/निकटवर्ती क्षेत्रों में कोई हॉट | | | | |
| | वर्क प्रगति पर नहीं है।/No hot work is in progress either in the | | | | |
| | compartment / opposite side of the bulkhead / in the | | | | |
| | adjacent areas. | | | | |
| 2. | हैच / कंपार्टमेंट / पेंटिंग जॉब / पेंट किए गए क्षेत्रों के पास के प्रवेश द्वार | | | | |
| | के पास हिंदी, बंगाली और अंग्रेज़ी में "पेंटिंग कार्य प्रगति पर है - नो हॉट | | | | |
| | वर्क" इंगित करने वाला एक बोर्ड प्रदर्शित किया गया है।/A board | | | | |
| | indicating "PAINTING IN PROGRESS – NO HOT WORK" | | | | |
| | in Hindi, Bengali and English is displayed near entrance of | | | | |
| | the HATCH / COMPARTMENT / ADJACENT TO PAINTING JOB / PAINTED AREAS | | | | |
| 3. | टैंक / बंद डिब्बे में निकास वेंटिलेशन और ताजी हवा की आपूर्ति की | | | | |
| J . | व्यवस्था है। | | | | |
| | Exhaust ventilation & supply of fresh air is arranged in the | | | | |
| | tank / closed compartment. | | | | |
| 4. | उपयुक्त पीपीई उपलब्ध (उपयुक्त आईएस/एन मानक पेंट फ्यूम | | | | |
| | रेस्पिरेटर/ आपूर्ति की गई एयर लाइन रेस्पिरेटर, बॉयलर सूट, संरक्षा | | | | |
| | जूता, संरक्षा हेलमेट) है और यह अच्छी स्थिति में है।/Proper PPEs | | | | |
| | available (suitable IS/ EN Standard Paint Fume Respirator | | | | |
| | / supplied Air Line respirator, Boiler Suit, Safety Shoe, | | | | |
| | Safety Helmet) & it is in good condition. | | | | |
| 5. | कोई नेक्ड लेंप का उपयोग नहीं किया जाना चाहिए । पेंटिंग करते | | | | |
| | समय, यदि हैंड लैंप का उपयोग किया जाना है, तो इसे इंसुलेटेड हैंडल | | | | |
| | और बिना जुड़े उचित इंसुलेटेड तार, वायर मेष कवर और लैंप के ऊपर | | | | |
| | ग्लास कवर के साथ फिट किया जाना चाहिए।/No naked lamp to | | | | |
| | be used. While painting, if hand lamp to be used, it should | | | | |
| | be fitted with insulated handle and proper insulated wire | | | | |
| | without joining, wire mesh cover and glass cover over the | | | | |
| | lamp | | | | |
| 6. | सभी कामगार संरक्षा प्रशिक्षण प्राप्त किए हैं। All workmen have | | | | |
| | undergone safety training. | | | | |

7. सीमित स्थान पर पेंटिंग कार्य के दौरान सुपरवाइजर/हेल्पर की उपलब्धता, यह सुनिश्चित करने के लिए कि उस डिब्बे के सभी सिक्स साइड कोई हॉट वर्क नहीं किया जा रहा है और सीमित स्थान के अंदर काम करने वाले पेंटर की समस्या की निगरानी की जा रही है।/Availability of supervisor/Helper during painting work at confined place to ensure that, no hot work is executed at all the six sides of that compartment & to monitor problem of the Painter working inside of the confined space.

टिप्पणियां /Remarks: मैं आश्वासन देता हूं कि दिन के पेंटिंग कार्य के पश्चात, खाली भरे से रूप आंशिक / सामान सभी जिसमें कंटेनर या ड्रम पेंट पूर्ण /, कपास अपशिष्ट शामिल हैं, को पोत /बंद स्थानों से पूरी तरह से हटा दिया जाएगा।/ I assure that after day's painting work, the empty / partially filled / full paint drums or containers including all accessories, cotton wastes will be removed

completely from the ship / confined spaces.

नोट/ NOTE: इस प्रारूप को भरा जाना चाहिए, हस्ताक्षरित और मुद्रित किया जाना चाहिए तथा अनिवार्य रूप से पेंटिंग वर्क परमिट के साथ संलग्न किया जाना चाहिएThis format to be filled up, signed & stamped and mandatorily to be attached with the Painting Work Permit.

मुहर सहित विक्रेता के संरक्षा अधिकारी स्थल/ प्रभारी अथवा पर्यवेक्षक का हस्ताक्षर/ Signature of the vendor's Safety Officer / Site In-charge or Supervisor with Stamp

संरक्षा निरीक्षण जांचबिन्दु / SAFETY INSPECTION CHECKLIST ऑन बोर्ड प्रेशर टेस्टिंग)एपीटी) /ON BOARD PRESSURE TESTING (APT)

फर्म का नाम / Name of the firm:

पी / तिथि एवं .सं.ओ.P.O. No. &

date:

स्थान / .सं यार्ड/Location / Yard No.:

/ तिथि की रिपोर्टिंग

Date of reporting:

| क्र.सं. | मानदंड | हाँ | नहीं | | टिप्पणियां |
|---------|---|-----|------|------|------------|
| SI | Criteria | Yes | No | नहीं | Remarks |
| No. | | | | N/A | |
| 1. | क्या टैंकछ के कम्पार्टमेंट/: साइडों में सभी हॉट वर्क के पूरा होने की पुष्टि | | | | |
| | प्राप्त की गई है ? | | | | |
| | Whether confirmation regarding completion of all hot works | | | | |
| | in six sides of the tank / compartment is obtained? | | | | |
| 2. | क्या सभी ओपनिंग्स को खाली करने की पुष्टि हो गई है ? | | | | |
| | Whether blanking of all openings is confirmed? | | | | |
| 3. | क्या परीक्षण योजना के अनुसार दबाव एवं होल्डिंग समय की पुष्टि की | | | | |
| | गई है ? | | | | |
| | Whether pressure & holding time is confirmed as per testing | | | | |
| | plan ? | | | | |
| 4. | क्या कैलिब्रेटेड परीक्षण उपकरण का उपयोग किया जाता है ? | | | | |
| | Whether Calibrated test equipment are used? | | | | |
| 5. | क्या लीकेज की जांच की गई है ? | | | | |
| | Whether Check for leakages have been done? | | | | |
| 6. | क्या बांग्ला और हिंदी भाषा में वाले करने उल्लेख का "वर्क हॉट नो" | | | | |
| | को बोर्ड नोटिसजॉब स्थान के सभी तरफ प्रदर्शित किया जाता है जो | | | | |
| | दबाव में है ? | | | | |
| | Whether Notice Board mentioning "NO HOT WORK" in | | | | |
| | Bengali & Hindi Language is displayed at all sides of the job | | | | |
| | location which is under pressure? | | | | |
| 7. | क्या टैंकह एपीटी के कम्पार्टमेंट/ेतु कंप्रेस्ड एयर की व्यवस्था है ? | | | | |
| | Whether compressed air is arranged for APT of Tank / | | | | |
| | Compartment ? | | | | |
| 8. | क्या स्टेंड्रड कुमप्रेस्ड वायु लाइन हेतु मानकीकृत उच्च दबाव रबर नली | | | | |
| | का उपयोग किया जाता है ? | | | | |
| | Whether standardised high-pressure rubber hose is used | | | | |
| | for compressed air line ? | | | | |

टिप्पणियां: यह प्रमाणित किया जाता है कि एपीटी टैंक अन्य किसी अलावा के एयर कंप्रेस्ड हेतु कम्पार्टमेंट/ । जाएगा किया नहीं उपयोग का गैस

 $\underline{\text{Remarks}}$: It is confirmed that no gas will be used other than Compressed Air for APT of Tank / Compartment.

मुहर सहित विक्रेता के संरक्षा अधिकारी का हस्ताक्षर Signature of the vendor's Safety Officer with Stamp

संरक्षा निरीक्षण जांच बिन्दु/SAFETY INSPECTION CHECKLIST

वेल्डिंग मशीन/WELDING MACHINE

फर्म का नाम /Name of the firm: पीतिथि एवं .सं.ओ./P.O. No. & date:

स्थान / .सं यार्ड/Location / Yard No. : संरक्षा निरीक्षण की तिथि/Date of safety inspection:

| | जाँच की जाने वाली | मानदंड /Criteria | हाँ | नहीं | लागू | | |
|----|--------------------|--|-----|------|------|--|--|
| | मद/ Item to be | | Yes | No | नहीं | | |
| | | क्या वेल्डिंग मशीन अच्छी कार्यशील स्थिति में है?/Is welding machine in good working condition? | | | | | |
| | | क्या वेल्डिंग मशीन में अर्थिंग या ग्राउंडिंग प्रदान की जाती है?/Is | | | | | |
| | | welding machine provided with earthing or grounding? | | | | | |
| | | क्या डबल्यू/एम ठीक से ढका हुआ है और बारिश से सुरक्षित | | | | | |
| | वेल्डिंग मशीन | है?/Is W/M properly covered & protected from rain? | | | | | |
| | WELDING MACHINE | | | | | | |
| 1. | | मेक: आईडी मार्क | | | | | |
| | | /Have welding machine any identification number / mark? | | | | | |
| | | क्या 3-पिन प्लग टॉप (पोर्टेबल मशीन के लिए) प्रदान किया गया | | | | | |
| | | है?/Is 3- pin plug top provided (for portable machine)? | | | | | |
| | टर्मिनल / जाइंट्स | क्या टर्मिनल/जोड़ काम करने की अच्छी स्थिति में हैं?/Are terminal/joints in good working condition? | | | | | |
| 2. | TERMINAL / | क्या टर्मिनल/ जाइंट्स सुरक्षित और प्रभावी रूप से पृथक | | | | | |
| | JOINTS | हैं?/Are terminal/joints secured and effectively | | | | | |
| | | insulated? | | | | | |
| | _ | क्या वेल्डिंग केबल ठीक से इंसुलेटेड है और कोई खुला केबल | | | | | |
| | वेल्डिंग केबल | नहीं है?/Is welding cable properly insulated and no exposed cables? | | | | | |
| | WELDING CABLE | क्या कॉपर कोर की आईएसआई मार्क वाली वेल्डिंग केबल | | | | | |
| 3. | OADLL | (आईएस: 9857) प्रतिष्ठित बनावट की है?/Is welding cable of | | | | | |
| | | copper core with ISI marked (IS: 9857) of reputed | | | | | |

| | | क्या आसान पहचान के लिए वेल्डिंग केबल में उचित कलर कोडिंग दी गई है?/Is welding cable provided with proper Colour coding for easy identification? | | |
|----|-------------------------------|---|--|--|
| | | क्या वेल्डिंग केबल अच्छी स्थिति में है?/Is welding cable in good condition? | | |
| | उनेस्रोत जेल्या / | क्या इलेक्ट्रोड होल्डर त्रुटि मुक्त है और पूरी तरह से इंसुलेटेड | | |
| | इलेक्ट्रोड होल्डर / क्लैंप | insulated? | | |
| 4. | ELECTRODE HOLDER / | क्या रिटर्न केबल क्लैंप त्रुटि मुक्त है?/Is return cable clamp free from defects? | | |
| | CLAMP | क्या उपयोग में नहीं होने पर इलेक्ट्रोड अलग हो जाता है?/Is electrode detached when not in use? | | |
| | | क्या आस-पास कोई दहनशील या ज्वलनशील पदार्थ हैं?/Are | | |
| | कार्य क्षेत्र | there any combustible or flammable materials in vicinity? | | |
| 5. | WORK AREA | क्या वेल्डिंग मशीनों के पास अग्निशामक उपलब्ध है?/Is Fire | | |
| | | extinguisher provided near welding Machines? क्या अच्छी हाउसकीपिंग मेन्टेन किया जा रहा है?/Is good housekeeping maintain? | | |

• अग्नि संरक्षा की दृष्टि से निर्माण गतिविधियों के दौरान एल्यूमीनियम वेल्डिंग केबल का उपयोग निषिद्ध है / Use of Aluminium Welding Cable is prohibited during construction activities from fire safety point of view.

<u>अतिरिक्त टिप्पणियां / यदि कोई हो </u>,ADDITIONAL REMARK, IF ANY:

मुहर सहित विक्रेता के संरक्षा अधिकारी स्थल/ प्रभारी अथवा पर्यवेक्षक का हस्ताक्षर/ Signature of the vendor's Safety Officer/ Site In-charge or Supervisor with Stamp