



**National Highways & Infrastructure Development Corporation Limited
(Ministry of Road Transport & Highways, Govt. of India)**

**PART DESIGN, CONSTRUCTION, OPERATION & MAINTENANCE (For a Period of 5 Years)
OF FULLY AUTOMATIC MULTI-LEVEL CAR PARKING SYSTEM AT CENTRAL CIVIL
SECRETARIAT, ITANAGAR, ARUNACHAL PRADESH**

Contract No: NHIDCL/AMLCP Const Work/AP/2020

VOLUME 7

CONDITION OF CONTRACTS ON ENVIRONMENT, HEALTH & SAFETY (EHS)

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SAFETY CODE

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to $1(\frac{1}{4}$ horizontal and 1vertical.)
2. Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3ft.)
5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. ($11\frac{1}{2}$ "") for ladder upto and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least $\frac{1}{4}$ " for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that maybe brought by any person for injury sustained owing to neglect of the aboveprecautions and to pay any damages and cost which may be awarded in anysuch suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.
6. (a)Excavation and Trenching - All trenches 1.2 m. (4ft.) or more in depth, shall at all

times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.

(b) Safety Measures for digging bore holes:

- (i). If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;
- (ii). During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer in-charge of the work;
- (iii). Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50m around the point of drilling to avoid entry of people;
- (iv). After drilling the bore well, a cement platform (0.50m x 0.50m x 1.20m) 0.60m above ground level and 0.60m below ground level should be constructed around the well casing;
- (v). After the completion of the bore well, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
- (vi). After the bore well is drilled the entire site should be brought to the ground level.

7. Demolition - Before any demolition work is commenced and also during the progress of the work,

- (a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
- (b) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
- (c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned:- following safety equipment shall invariably be provided.

- (a) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- (b) Those engaged in white washing and mixing or stacking of cement bags or any

- material which is injurious to the eyes, shall be provided with protective goggles.
- (c) Those engaged in welding works shall be provided with welder's protective eye shields.
 - (d) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - (e) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measures are adhered to:-
 - (i) Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.
 - (ii) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
 - (iii) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
 - (iv) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
 - (v) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
 - (vi) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
 - (vii) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
 - (viii) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
 - (ix) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge shall decide the time up to which a worker may be allowed to work continuously inside the manhole.
 - (x) Gas mask with Oxygen Cylinder should be kept at site for use in emergency.
 - (xi) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 metres away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
 - (xii) The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.
 - (xiii) The workers shall be provided with Gumboots or non-sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers

- (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewerlines.
- (xiv) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manholewell.
- (xv) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- (xvi) The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.
- (xvii) Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:-
1. No paint containing lead or lead products shall be used except in the form of paste or ready-made paint.
 2. Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
 3. Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
- (xviii) Workmen executing work on scaffolds or other structures above specified height shall be provided with full body harness and fall arresters.
9. An additional Clause (viii)(i) of Central Public Works Department Safety Code the Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use :
- (a) White lead, sulphate of lead or product containing these pigments, shall not be used in painting operation except in the form of pastes or paint ready for use.
 - (b) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
 - (c) Measures shall be taken, wherever practicable, to prevent danger arising out of dust caused by dry rubbing down and scraping.
 - (d) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - (e) Overall shall be worn by working painters during the whole of working period.
 - (f) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
 - (g) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by competent authority of NHIDCL.
 - (h) NHIDCL may require, when necessary medical examination of workers.
 - (i) Instructions with regard to special hygienic precautions to be taken in the painting

trade shall be distributed to workingpainters.

10. When the work is done near any place where there is risk of drowning, all necessary equipment's should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
11. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions :-
 - (i)
 - (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good workingorder.
 - (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patentdefects.
 - (ii) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals tooperator.
 - (iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated.No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - (iv) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineerconcerned.
12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
13. All scaffolds, ladders and other safety devices mentioned or described herein shall

be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge of the department or their representatives.
16. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

Model Rules for the Protection of Health and Sanitary Arrangements for Workers Employed by the Contractor during the execution of work.

1. APPLICATION

These rules shall apply to all buildings and construction works in charge of NHIDCL in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress.

2. DEFINITION

Work place means a place where twenty or more workers are ordinarily employed in connection with construction work on any day during the period during which the contract work is in progress.

3. FIRST-AID FACILITIES

- (i) At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- (ii) The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment: -
 - (a) For work places in which the number of contract labour employed does not exceed 50- Each first-aid box shall contain the following equipment's:-
 - 1. 6 small sterilized dressings.
 - 2. 3 medium size sterilized dressings.
 - 3. 3 large size sterilized dressings.
 - 4. 3 large sterilized burndressings.
 - 5. 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
 - 6. 1 (30 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - 7. 1 snakebitelancet.
 - 8. 1 (30 gms.) bottle of potassium permanganate crystals.
 - 9. 1 pairscissors.
 - 10. 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, NHIDCL of India.

11. 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.
 12. Ointment for burns.
 13. A bottle of suitable surgical antiseptic solution.
- (b) For work places in which the number of contract labour exceed 50.
Each first-aid box shall contain the following equipment's.
1. 12 small sterilized dressings.
 2. 6 medium size sterilized dressings.
 3. 6 large size sterilized dressings.
 4. 6 large size sterilized burn dressings.
 5. 6 (15 gms.) packets sterilized cotton wool.
 6. 1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.
 7. 1 (60 ml.) bottle containing sal volatile having the dose and mode of administration indicated on the label.
 8. 1 roll of adhesive plaster.
 9. 1 snake bite lancet.
 10. 1 (30 gms.) bottle of potassium permanganate crystals.
 11. 1 pair scissors.
 12. 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes/Government of India.
 13. A bottle containing 100 tablets (each of 5 gms.) of aspirin.
 14. Ointment for burns.
 15. A bottle of suitable surgical antiseptic solution.
- (iii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- (iv) Nothing except the prescribed contents shall be kept in the First-aid box.
- (v) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the workplace.
- (vi) A person in charge of the First-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- (vii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.

- (viii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

4. DRINKING WATER

- (i) In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
- (ii) Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- (iii) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and waterproof.
- (iv) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once month.

5. WASHING FACILITIES

- (i) In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.
- (ii) Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- (iii) Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

6. LATRINES AND URINALS

- (i) Latrines shall be provided in every work place on the following scale namely:-
 - (a) Where female are employed, there shall be at least one latrine for every 25 females.
 - (b) Where males are employed, there shall be at least one latrine for every 25 males.

Provided that, where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be up to the first 100, and one for every 50 thereafter.

- (ii) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.
- (iii) Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat-resisting non-absorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system.
- (iv) (a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women Only" as the case may be.
(b) The notice shall also bear the figure of a man or of a woman, as the case may be.
- (v) There shall be at least one urinal for male workers up to 50 and one for female workers up to fifty employed at a time, provided that where the number of male or female workmen, as the case may be exceeds 50, it shall be sufficient if there is one urinal for every 50 males or females up to the first 50 and one for every 100 or part thereafter.
- (vi) (a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
(b) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- (vii) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- (viii) Disposal of excreta: - Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure).
- (ix) The contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority

for execution of such on his behalf.

7. PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 meters (10 ft.) from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sqm. (6 sft) per head.

Provided that the Engineer-in-Charge may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

8. CRECHES

- (i) At every work place, at which 20 or more women worker are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a play room for the children and the other as their bedroom. The rooms shall be constructed with specifications as per Clause 19H (ii) a,b&c.
- (ii) The rooms shall be provided with suitable and sufficient openings for light and ventilation.
- (iii) There shall be adequate provision of sweepers to keep the places clean.
- (iv) The contractor shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the bed room.
- (v) The contractor shall provide one ayaa to look after the children in the creche when the number of women workers does not exceed 50 and two when the number of women workers exceed 50.
- (vi) The use of the rooms earmarked as creches shall be restricted to children, their attendants and mothers of the children.

9. CANTEENS

- (i) In every work place where the work regarding the employment of contract labour is likely to continue for six months and where in contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such contract labour.
- (ii) The canteen shall be maintained by the contractor in an efficient manner.

- (iii) The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.
- (iv) The canteen shall be sufficiently lighted at all times when any person has access to it.
- (v) The floor shall be made of smooth and impervious materials and inside walls shall be lime- washed or colour washed at least once in each year. Provided that the inside walls of the kitchen shall be lime-washed every four months.
- (vi) The premises of the canteen shall be maintained in a clean and sanitary condition.
- (vii) Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause an nuisance.
- (viii) Suitable arrangements shall be made for the collection and disposal of garbage.
- (ix) The dining hall shall accommodate at a time 30 per cent of the contract labour working at a time.
- (x) The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs shall not be less than one square metre (10 sft) per diner to be accommodated as prescribed in sub-Rule 9.
- (xi) (a) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number.
(b) Washing places for women shall be separate and screened to secure privacy.
- (xii) Sufficient tables stools, chair or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule 9.
- (xiii) The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.
- (xiv) The charges for food stuffs, beverages and any other items served in the canteen shall be based on 'No profit, No losses and shall be conspicuously displayed in the canteen.
- (xv) In arriving at the price of foodstuffs, and other article served in the canteen, the following items shall not be taken into consideration as expenditure namely:-
 - (a) The rent of land and building.
 - (b) The depreciation and maintenance charges for the building and equipment's provided for the canteen.
 - (c) The cost of purchase, repairs and replacement of equipment's including

furniture, crockery, cutlery and utensils.

- (d) The water charges and other charges incurred for lighting and ventilation.
- (e) The interest and amounts spent on the provision and maintenance of equipment's provided for the canteen.
- (f) The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

10. ANTI-MALARIAL PRECAUTIONS

The contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-Charge including the filling up of any borrow pits which may have been dug by him.

11. The above rules shall be incorporated in the contracts and in notice inviting tenders and shall form an integral part of the contracts.

12. AMENDMENTS

NHIDCL may, from time to time, add to or amend these rules and issue directions - it may consider necessary for the purpose of removing any difficulty which may arise in the administration thereof

Contractor's Labour Regulations

1. SHORRTITLE

These regulations may be called the NHIDCL Contractors Labour Regulations.

2. DEFINITIONS

(a) **Workman** means any person employed by NHIDCL or its contractor directly or indirectly through a subcontractor with or without the knowledge of NHIDCL to do any skilled, semiskilled or unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment are expressed or implied but does not include any person:-

- (i) Who is employed mainly in a managerial or administrative capacity or
- (ii) Who, being employed in a supervisory capacity draws wages exceeding five hundred rupees per mensem or exercises either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature or
- (iii) Who is an out worker, that is to say, person to whom any article or materials are given out by or on behalf of the principal employers to be made up, cleaned, washed, altered, ornamentally finished, repaired, adopted or otherwise processed for sale for the purpose of the trade or business of the principal employers and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal employer.

1. No person below the age of 14 years shall be employed to act as a workman.
2. Fair wages mean wages whether for time or piece work fixed and notified under the provisions of the Minimum Wages Act from time to time.
3. Contractors shall include every person who undertakes to produce a given mere supply of goods or articles of manufacture through contract labour or who labour for any work and includes a subcontractor.
4. Wages shall have the same meaning as defined in the Payment of Wages Act. Normally working hours of an adult employee should not exceed 9 hours a day and shall be so arranged that inclusive of interval for rest, if any, it shall not spread hours on any day.
5. When an adult worker is made to work for more than 9 hours on any day or for any week, he shall be paid over time for the extra hours put in by him at a rate of wages.
6. Every worker shall be given a weekly holiday normally on a Sunday,

- b) Where the minimum wages prescribed by the Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day, provided he has worked under the same contractor for a continuous period of not less than 6 days.
- c) Where a contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day on one of the five days immediately before or after the normal weekly holiday and pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

3. DISPLAY OF NOTICE REGARDING WAGES ETC.

The contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clear and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers giving the minimum rates of wages fixed under Minimum Wages Act, the actual wages being paid, the hours of work for which such wages are earned, wages periods, dates of payments of wages and other relevant information as per Appendix 'III'.

4. PAYMENT OF WAGES

- i) The contractor shall fix wage periods in respect of which wages shall be payable.
- ii) No wage period shall exceed one month.
- iii) The wages of every person employed as contract labour in an establishment or by a contractor where less than one thousand such persons are employed shall be paid before the expiry of seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- iv) Where the employment of any worker is terminated by or on behalf of the contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- v) All payment of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.

- vi) Wages due to every worker shall be paid to him direct or to other person authorized by him in this behalf.
- vii) All wages shall be paid in current coin or currency or in both.
- viii) Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf for permissible under the Payment of Wages Act 1956.
- ix) A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-Charge under acknowledgment.
- x) It shall be the duty of the contractor to ensure the disbursement of wages in the presence of the Junior Engineer or any other authorised representative of the Engineer-in-Charge who will be required to be present at the place and time of disbursement of wages by the contractor to workmen.
- xi) The contractor shall obtain from the Junior Engineer or any other authorized representative of the Engineer-in-Charge as the case may be, a certificate under his signature at the end of the entries in the "Register of Wages" or the "Wage-cum-Muster Roll" as the case may be in the following form:-
"Certified that the amount shown in column Nohas been paid to the workman concerned in my presence on at....."
- xii) "Certified that the amount shown in column No has been paid to the workman concerned through bank account of labour on at... "

5. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES

- (i) The wages of a worker shall be paid to him without any deductions of any kind except.
 - (a) Fines
 - (b) Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - (c) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money or any other deduction which he is required to account, where such damage or loss is directly attributable to his neglect or default.

- (d) Deduction for recovery of advances or for adjustment of overpayment of wages, advances granted shall be entered in a register.
- (e) Any other deduction which the Central Government may from time to time allow.
- (ii) No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved of by the Chief Labour Commissioner.

Note:-An approved list of Acts and Omissions for which fines can be imposed is enclosed at Appendix-XI

- (iii) No fines shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- (iv) No fine imposed on any worker shall be recovered from him by installment, or after the expiry of sixty days from the date on which it was imposed.
- (v) Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

6. LABOUR RECORDS

- (i) The contractor shall maintain a **Register of persons employed** on work on contract in Form XIII of the CL (R&A) Central Rules 1971 (Appendix IV)
- (ii) The contractor shall maintain a Muster Roll register in respect of all workmen employed by him on the work under Contract in Form XVI of the CL (R&A) Rules 1971 (Appendix V).
- (iii) The contractor shall maintain a Wage Register in respect of all workmen employed by him on the work under contract in Form XVII of the CL (R&A) Rules 1971 (Appendix VI).
- (iv) Register of accident - The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:
 - (a) Full particulars of the laborers who met with accident.
 - (b) Rate of Wages.
 - (c) Sex
 - (d) Age
 - (e) Nature of accident and cause of accident.
 - (f) Time and date of accident.
 - (g) Date and time when admitted in Hospital,
 - (h) Date of discharge from the Hospital.

- (i) Period of treatment and result of treatment.
- (j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- (k) Claim required to be paid under Workmen's Compensation Act.
- (l) Date of payment of compensation.
- (m) Amount paid with details of the person to whom the same was paid.
- (n) Authority by whom the compensation was assessed.
- (o) Remarks
- (v) The contractor shall maintain a Register of Fines in the Form XII of the CL (R&A) Rules 1971 (Appendix-XII)

The contractor shall display in a good condition and in a conspicuous place of work the approved list of acts and omissions for which fines can be imposed (Appendix-XI)

- (vi) The contractor shall maintain a Register of deductions for damage or loss in Form XX of the CL (R&A) Rules 1971 (Appendix-XIII)
- (vii) The contractor shall maintain a Register of Advances in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIV)
- (viii) The contractor shall maintain a Register of Overtime in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XV)

7. ATTENDANCE CARD-CUM-WAGE SLIP

- i) The contractor shall issue an Attendance card-cum-wage slip to each workman employed by him in the specimen format (Appendix-VII & VIII)
- ii) The card shall be valid for each wage period.
- iii) The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.
- iv) The card shall remain in possession of the worker during the wage period under reference.
- v) The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- vi) The contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

8. EMPLOYMENT CARD

The contractor shall issue an **Employment Card** in Form XIV of the CL (R&A) Central Rules 1971 to each worker within three days of the employment of the worker (Appendix-IX).

9. SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the contractor shall issue to the workman whose services have been terminated, a Service certificate in Form XV of the CL (R&A) Central Rules 1971 (Appendix-X).

10. PRESERVATION OF LABOUR RECORDS

All records required to be maintained under Regulations Nos. 6 & 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-in-Charge or Labour Officer or any other officers authorised by the Ministry of UrbanDevelopment in this behalf.

11. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

The Labour Officer or any person authorised by Central NHIDCL on their behalf shall have power to make enquires with a view to ascertaining and enforcing due and proper observance of Fair Wage Clauses and the Provisions of these Regulations. He shall investigate into any complaint regarding the default made by the contractor or sub-contractor in regard to such provision.

12. REPORT OF LABOUR OFFICER

The Labour Officer or other persons authorised as aforesaid shall submit a report of result of his investigation or enquiry to the Executive Engineer concerned indicating the extent, if any, to which the default has been committed with a note that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the contractor under Clause 13 of these regulations, actual payment to labourers will be made by the Engineer after the Authorised Engineer has given his decision on such appeal.

- i) The Engineer shall arrange payments to the labour concerned within 45 days from the receipt of the report from the Labour Officer or the Authorised Engineer as the case may be.

13. APPEAL AGAINST THE DECISION OF LABOUR OFFICER

Any person aggrieved by the decision and recommendations of the Labour Officer or other persons authorized may appeal against such decision to the Authorised Engineer concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Executive Engineer concerned but subject to such appeal, the decision of the officer shall be

final and binding upon the contractor.

14. PROHIBITION REGARDING REPRESENTATION THROUGH LAWYER

- i) A workman shall be entitled to be represented in any investigation or enquiry under these regulations by:-
 - a) An officer of a registered trade union of which he is a member.
 - b) An officer of a federation of trade unions to which the trade union referred to in clause (a) is affiliated.
 - c) Where the employer is not a member of any registered trade union, by an officer of a registered trade union, connected with the industry in which the worker is employed or by any other workman employed in the industry in which the worker is employed.
 - d) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by:-
 - e) An officer of an association of employers of which he is a member.
 - f) An officer of a federation of associations of employers to which association referred to in clause (a) is affiliated.
 - g) Where the employer is not a member of any association of employers, by an officer of association of employer connected with the industry in which the employer is engaged or by any other employer, engaged in the industry in which the employer is engaged.
- ii) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

15. INSPECTION OF BOOKS AND SLIPS

The contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received to the Labour Officer or any other person, authorized by the Central NHIDCL on his behalf.

16. SUBMISSIONS OF RETURNS

The contractor shall submit periodical returns as may be specified from time to time.

AMENDMENTS

The NHIDCL may from time to time add to or amend the regulations and _____ on any question as to the application/Interpretation or effect of those regulations

thedecisionofthe Authorized Engineerconcernedshallbefinal.

APPENDIX-I

REGISTER OF MATERNITY BENEFITS (Clause 19 F)

Name and address of the contractor(s):

Name and location of the work:

Name of the employee	Father's/Husband's Name	Nature of employment	Period of actual employment	Date on which notice of confinement given name
1	2	3	4	5

Date of delivery/ miscarriage	Date on which maternity leave commenced and ended			
	In case of Delivery		In case of Mis-carriage	
	Commenced	End	Commenced	Ended
6	7	8	9	10

Leave pay paid to the employee				Remarks
In case of delivery		In case of mis-carriage		
Rate of leave pay	Amount paid	Rate of leave pay	Amount paid	
1	12	13	14	15

APPENDIX-II**SPECIMEN FORM OF THE REGISTER, REGARDING MATERNITY BENEFIT ADMISSIBLE TO THE CONTRACTOR'S LABOUR IN T.M.C. WORKS.**

Name and location of the work:

Name and address of the contractor(s):

1.	Name of the woman and her husband's Name:	
2.	Designation:	
3.	Date of appointment:	
4.	Date with months and years in which she is employed:	
5.	Date of discharge/dismissal, if any:	
6.	Date of production of certificates in respect of	
7.	Date on which the woman inform & about the	
8.	Date of delivery/Miscarriage/death:	
9.	Date of production of certificate in respect of	
10.	Date with the amount of maternity/death benefit paid in advance of expected delivery:	
11.	Date with the amount of subsequent payment of maternity benefit:	
12.	Name of the person nominated by the woman to receive the payment of the maternity benefit after her death.	
13.	If the woman dies, the date of her death, the name of the person to whom maternity benefit amount was paid, the month thereof and the date of payment	
14.	Signature of the contractor authenticating entries in the register:	
15.	Remarks column for the use of inspecting Officer :	

APPENDIX-III**LABOUR BOARD**

1	Name of work:	
2	Name and address of contractor:	
3	Name and address of Division:	
4	Name and address of Labour Officer:	
5	Name and address of Labour	

S.NO.	CATEGORY	MINIMUM WAGE FID	ACTUAL WAGE PAID	NUMBER PRESENT	REMARKS

Weekly holiday:	
Wage period:	
Date of payment	
Working hours:	
Rest interval:	

APPENDIX-IV

Name and address of the contractor:

Name and address of establishment in/under which contract is carried on:

Name and location of the work:

Name and address of Principal Employer:

Sl. No.	Name and surname of workmen	Age and Sex	Father's/ husband's Name	Nature of employment /designation	Permanent home address of the workman (Village and Tahsil, Taluka & Dist.)	Local Address	Date commencement employment	Signature or thumb impression Of the workman	Date of Termination of employment	Reasons for termination	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

APPENDIX-V

MUSTER ROLL

Name and address of the contractor:

Name and address of establishment in/under which contract is carried on: -----

Name and location of the work: -

Name and address of Principal Employer: For the month of /fortnight--

Sl. No.	Name of work men	Sex	Father's Husband's Name	Dates					Remarks
1	2	3	4	5					6
				1	2	3	4	5	

APPENDIX-VI

FORM XVII

REGISTER OF WAGES

Name and address of the contractor:

Name and address of establishment in/under which contract is carried on: -----

Name and location of the work: -----

Name and address of Principal Employer:

Wages period: Monthly/Fortnightly

Sl. No.	Name of workmen	Serial No. in the register	Designation/Nature of work done	No. of Days worked	Units of work	Daily rate of wages /Piece rate	Amount of wages earned					Deductions if any, (Indicate nature)	Net Amount paid	Signature or thumb impression of workmen	Initial of contractor or his representative
							Basic Wages	Dearness allowances	Over time	Other cash payments	Total				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

APPENDIX-VII

WAGE CARD

Name and address of contractor

Name and location of work:

Name of workman:

Rate of Wages:

Date of issue:

Designation:

Month / Fortnight:

Month/Fortnight

PARTICULAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
MORNING																																	Rate:
EVENING																																	A
INITIAL																																	

Received from the sum of Rs.-----
 -.. of my wages

Signature on account

APPENDIX-VIII

FORM XIX

WAGE SLIP

Name and address of contractor.	
Name and Father's/Husband's name of	
Nature and location of work	
For the Week/Fortnight/Month ending	

1	No. of days worked	
2	No. of units worked in case of piece	
3	Rate of daily wages/piece rate	
4	Amount of overtime wages	
5	Gross wages payable:	
6	Deductions, if any:	
7	Net amount of wages paid:	

**Initials of the contractor or
his representative**

APPENDIX-IX

Form-XIV [See rule 76]

Employment Card

Name and address of contractor

..... Name and address of establishment under which contract is carried on-----

Name of work and location of work

Name and address of Principal Employer

..... 1- Name of the workman

2- Sl. No. in the register of workman employed-----

3- Nature of employment/designation

4- Wage rate (with particulars of unit in case of piecework)-----

5- Wage period

6- Tenure of employment

7- Remarks

Signature of contractor

APPENDIX-X

FORM XV

SERVICE CERTIFICATE

Name and address of contractor:	
Nature & Location of work	
Name and address of workman	
Age or Date of birth	
Identification marks	
Father's/Husband's Name	
Name and address of establishment in/under which	
Name and address of Principal	

Sl. No	Total period for which employed		Nature of work done	Rate of wages (with particulars of Unit in Case of piece work)	Remarks
	From	To			
1	2	3	4	5	6

Signature

APPENDIX-XI

LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

In accordance with NHIDCL Rules to be displayed prominently at the site of working in both English and local language.

1. Willful insubordination or disobedience, whether alone or in combination with other.
2. Theft, fraud or dishonesty in connection with the contractors beside a business or property of NHIDCL.
3. Taking or giving bribes or any illegal gratifications.
4. Habitual late attendance.
5. Drunkenness fighting, riotous or disorderly or indifferent behavior.
6. Habitual negligence.
7. Smoking near or around the area where combustible or other materials are locked.
8. Habitual indiscipline.
9. Causing damage to work in the progress or to property of the NHIDCL or of the contractor.
10. Sleeping on duty.
11. Malingering or slowing down work.
12. Giving of false information regarding name, age, father's name etc.
13. Habitual loss of wage cards supplied by the employers.
14. Unauthorized use of employer's property for manufacture or making of unauthorized articles at the work place.
15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the NHIDCL and for which the contractors are compelled to undertake rectifications.
16. Making false complaints and/or misleading statements.
17. Engaging on trade within the premises of the establishments.
18. Any unauthorized divulgence of business affairs of the employees.
19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorized by the employer.
20. Holding meeting inside the premises without previous sanction of the employers.
21. Threatening or intimidating any workman or employee during the working hours

within the premises.

**APPENDIX-XII
FORM XII
REGISTER OF FINES**

Name and address of contractor:	
Name And address of establishment in/underwhich	
Name of work and location of work:	
Name and address of Principal employer:	

Sl No.	Name of Workmen	Father's /Husband's name	Designation/ nature of employment	Act/omission for which fine is imposed	Date of Offence	Whether workmen Showed cause against them	Name of person in whose presence employee's explanation was heard	Wage period & wages payable	Amount of fine imposed	Date on which fine realized	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

**APPENDIX-XIII
FORM XX**

REGISTER OF DEDUCTIONS FOR DAMAGE OR LOSS

Name and address of contractor:	
Name And address of establishment in/under which	
Name of work and location of work:	
Name and address of Principal employer:	

Sl. No.	Name of Workmen	Father's /Husband's name	Designation/ Nature of employment	Particular of damage or loss	Date of damage or loss	Whether workmen showed cause	Name of person in whose presence	Amount of deduction imposed	No of Installments	Date of recovery		Remarks
										First installment	Last installment	
1	2	3	4	5	6	7	8	9	10	11	12	13

**APPENDIX-XIV
FORM XXII**

REGISTER OF ADVANCES

Name and address of contractor:	
Name And address of establishment in/under which	
Name of work and location of work:	
Name and address of Principal employer:	

SI No.	Name of Workmen	Father 's /Husband's name	Designation /nature of employment	Wage period and wages payable	Date and amount of advance given	Purpose(s) for which advance made	No. of Instalment by which advance to be repaid	Date and amount of each installment repaid	Dateand which last installment was repaid	Remarks
1	2	3	4	5	6	7	8	9	10	11

APPENDIX-XV

**FORM XXIII
REGISTER OF OVERTIME**

Name and address of contractor:	
Name And address of establishment in/under which	
Name of work and location of work:	
Name and address of Principal employer:	

Sl No	Name of Workmen	Father's /Husband's name	Sex	Designation/ nature of employment	Date on which overtime worked	Total over time worked or production in case	Normal rate of wages	Overtime rate of wages	Overtime earning	Rate on which over time	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

TECHNICAL SPECIFICATIONS ENVIRONMENT HEALTH AND SAFETY POLICY

1 SCOPE

This specification established the Environment, Health and Safety (EHS) management requirement to be complied with by the Contractors during construction.

Requirements stipulated in this specification shall supplement the requirements of EHS Management given in relevant Act (s) / legislations General Terms and Conditions of Contract (GTC), Special terms and Conditions of Contract (STC) and Job Specifications. Where different documents stipulate different requirements, the most stringent shall be adopted.

2 REFERENCES

This document should be read in conjunction with following:

- ❖ General Terms and Conditions of Contract (GTC)
- ❖ Special Terms and Conditions of Contract (STC)
- ❖ Job Specifications

3 REQUIREMENTS OF ENVIRONMENT, HEALTH & SAFETY (EHS) MANAGEMENT SYSTEM TO BE COMPLIED BY BIDDERS

3.1 MANAGEMENT RESPONSIBILITY

3.1.1 The Contractor should have a documented EHS policy to cover commitment of their organization to ensure health, safety and environment aspects in their line of operations.

3.1.2 The EHS management system of the Contractor shall cover the EHS requirements including but not limited to what is specified under Para 1.0 and para 2.0 above.

3.1.3 Contractor shall be fully responsible for planning and implementing EHS requirements. Contractor as a minimum requirement shall designate / deploy the following to co-ordinate the above:

No. of workers deployed:	
0-250	Deploy one qualified and experienced Safety Engineer / officer
250 & Above	One additional safety engineer/officer as above.

3.1.4 The Contractor shall indemnify & hold harmless Project Architect/EIC & either representative free from any and all liabilities arising out of non-fulfillments of EHS requirements.

3.1.5 The Contractor shall ensure that the Environment, Health & Safety

(EHS) requirements are clearly understood & faithfully implemented at all levels at site.

- 3.1.6 The Contractor shall promote and develop consciousness for Safety, Health and Environment among all personnel working for the Contractor. Regular awareness, program, site meetings shall be arranged on EHS activities to cover hazards involved in various operations during construction.
- 3.1.7 Arrange suitable first aid measures such as First Aid Box, trained personnel to give First Aid, Stand by Ambulance or Vehicle and install fire protection measures such as: adequate number of steel buckets with sand and adequate fire extinguishers to the satisfaction of Project Architect/EIC.
- 3.1.8 The Contractor shall evolve a comprehensive planned and documented system for implementation and monitoring of the EHS requirements. This shall be submitted to CMPDIL/ Owner for approval. The monitoring for implementation shall be done by regular inspections and compliance to the observations thereof. The Contractor shall get similar EHS requirements implemented at his sub- contractor(s) work site/office. However, compliance of EHS requirements shall be the sole responsibility of the Contractor. Any review / approval by Project Architect/EIC shall not absolve contractor of his responsibility / liability in relation to all EHS requirements.
- 3.1.9 Non-Conformance on EHS by Contractor (including his Sub-contractors) as brought out during review/audit by Project Architect/EIC representatives shall be resolved forthwith by Contractor. Compliance report shall be provided to Project Architect/EIC.
- 3.1.10 The Contractor shall ensure participation of his Resident Engineer / Site-in- Charge in the Safety Committee / EHS Committees meetings arranged by Project Architect/EIC. The compliance of any observations shall be arranged urgently. He shall assist Project Architect/EIC to achieve the targets set by them on EHS during the project implementation.
- 3.1.11 The Contractor shall adhere consistently to all provisions of EHS requirements. In case of non-compliance or continuous failure in implementation of any of EHS provisions; Project Architect/EIC may impose stoppage of work without any Cost & Time implication to Owner and/or impose a suitable penalty for non-compliance with a notice of suitable period, up to accumulative limit of 1.0% (one percent) of Contract Value with a maximum limit of Rs. 10 lakhs. This penalty shall be in addition to all other penalties specified elsewhere in the contract. The decision of imposing stoppage work, its extent & monetary penalty shall rest with Project Architect/EIC & binding on the Contractor.
- 3.1.12 All fatal accidents and other personnel accidents shall be investigated

by a team of Contractor's senior personnel for root cause & recommend corrective and preventive actions. Findings shall be documented and suitable actions taken to avoid recurrences shall be communicated to Project Architect/EIC. Project Architect/EIC shall have the liberty to independently investigate such occurrences and Contractor shall extend all necessary help and co-operation in this regard.

3.2 HOUSE KEEPING

3.2.1 Contractor shall ensure that a high degree of housekeeping is maintained and shall ensure inter alia the followings wherever applicable:

- a. All surplus earth and debris are removed/disposed off from the working areas to identified location(s).
- b. Unused/Surplus Cables, Steel items and steel scrap lying scattered at different places within the working areas are removed to identify location(s).
- c. All wooden scrap, empty wooden cable drums and other combustible packing materials, shall be removed from work place to identified location(s).
- d. Roads shall be kept clear and materials like: pipes, steel, sand boulders, concrete, chips and bricks etc. shall not be allowed on the roads to obstruct free movement of men & machineries.
- e. Fabricated steel structural, pipes & piping materials shall be stacked properly for erection.
- f. Water logging on roads shall not be allowed.
- g. No parking of trucks / trolleys cranes and trailers etc. Shall be allowed on roads which may obstruct the traffic movement.
- h. Utmost care shall be taken to ensure over all cleanliness and proper up keep of the working areas.
- i. Trucks carrying sand, earth and pulverized materials etc. shall be covered while moving within the premises.
- j. Only properly designed steel scaffolding materials to be used for working at heights more than 3.0M. Double scaffolding using wooden ballies maybe allowed for working at height less than 3.0M.

3.3 ENVIRONMENT, HEALTH AND SAFETY

3.3.1 The Contractor shall provide safe means of access to any working place including provisions of suitable and sufficient scaffolding at various stages during all operations of the work for the safety of his workmen, and, Project Architect/EIC. Contractor shall ensure deployment of appropriate equipment and appliances for adequate safety and health of the workmen and protection of surrounding areas.

3.3.2 The Contractor shall ensure that all their staff and workers including their sub- contractor(s) shall wear Safety Helmet and Safety shoes. Contractor shall also ensure use of safety belt, protective goggles, gloves etc. by the personnel as per job requirements. All these gadgets shall conform to relevant IS specifications or equivalent.

- 3.3.3 Contractor shall ensure that a proper Safety Net System shall be used at appropriate locations. The safety net shall be located not more than 30 feet (9.0 meters) below the working surface at site to arrest or to reduce the consequences of a possible fall of persons working at different heights.
- 3.3.4 Contractor shall ensure that flash back arrester shall be used while using Gas Cylinders at site. Cylinders shall be mounted on trolleys.
- 3.3.5 The Contractor shall assign to his workmen, tasks commensurate with their qualification, experience and state of health for driving of vehicles, handling and erection of materials and equipment's. All lifting equipment's shall be tested certified for its capacity before use. Adequate and suitable lighting at every work place and approach there to, shall be provided by the Contractor before starting the actual operations at night.
- 3.3.6 Hazardous and/or toxic materials such as solvent coating or thinners shall be stored in appropriate containers.
- 3.3.7 All hazardous materials shall be labeled with the name of the materials, the hazards associated with its use and necessary precautions to be taken.
- 3.3.8 Contractor shall ensure that during the performance of the work, all hazards to be health of personnel have been identified, assessed and eliminated.
- 3.3.9 Chemical spills shall be contained & cleaned up immediately to prevent further contamination.
- 3.3.10 All personnel exposed to physical agents such as ionizing radiation, ultraviolet rays or similar other physical agents shall be provided with adequate shielding or protection commensurate with the type of exposure involved.
- 3.3.11 Where contact or exposure of hazardous materials could exceed limits or could otherwise have harmful effects, appropriate personal protective equipment's such as gloves, goggles, aprons, chemical resistant clothing and respirator shall be used.
- 3.3.12 A Crèche where 10 or more female workers are having children below the age of 6 years.
- 3.3.13 Reasonable Canteen facilities are made available at appropriate location depending upon site conditions.
- 3.3.14 Suitable facilities for toilet, drinking water, proper lighting shall be provided at site and labour camps, commensurate with applicable Laws / Legislation. Contractor shall ensure storage and utilization methodology of materials that are not detrimental to the environment. Where required Contractor shall ensure that only the environment friendly materials are selected.
- 3.3.15 All persons deployed at site shall be knowledgeable of and comply with the environmental laws, rules & regulations relating to the hazardous materials substances and wastes. Contractor shall not dump, release or otherwise discharge or disposes off any such materials without the express authorization of Project Architect/EIC.

4 DETAILS OF EHS MANAGEMENT SYSTEM BY CONTRACTOR

4.1 On Award of Contract

The Contractor shall prior to start of work submit his Safety Health and Environment Manual or procedure and EHS Plans for approval by Project Architect/EIC. The Contractor shall participate in the pre-start meeting with Project Architect/EIC to finalize EHS Plans including the following:

- ❖ Job procedure to be followed by Contractor for activities covering. Handling of equipment, Scaffolding, Electric Installation, describing the risks involved actions to be taken and methodology for monitoring each activity.
- ❖ Project Architect/EIC review / audit requirement.
- ❖ Organization structure along with responsibility and authority records / reports etc. on EHS activities.

4.2 During job execution

4.2.1 Implement approved Environment, Health & Safety management procedure including but not limited to as brought out under para 3.0. Contractor shall also ensure to:

- ❖ Arrange workmen compensation insurance, registration under ESI Act, third party liability insurance etc., as applicable.
- ❖ Arrange all HSE permits before start of activities (as applicable) like hot work, confined space, work at heights, storage of chemical / explosive materials and its use and implement all precautions mentioned therein.
- ❖ Submit timely the completed checklist on EHS activities, Monthly EHS report, accident reports, investigation reports etc. as per Project Architect/EIC requirements. Compliance of instructions on EHS shall be done by Contractor and informed urgently to Project Architect/EIC.
- ❖ Ensure that Resident Engineer / Site-in-Charge of the Contractor shall attend all the Safety Committee / EHS meetings arranged by Project Architect/EIC. Only in case of his absence from site that a second senior most person shall be nominated by him in advance and communicated to Project Architect/EIC.
- ❖ Display at site office and work locations caution boards, list of hospitals, emergency services available.
- ❖ Provide posters, banners for safe working to promote safety consciousness.
- ❖ Carryout audits /inspection at subcontractor works as per approved EHS document and submit the reports for Project Architect/EIC review.
- ❖ Assist in EHS audits by Project Architect/EIC, and submit compliance report.
- ❖ Generate & submit HSE records/report as per EHS Plan.
- ❖ Appraise Project Architect/EIC on EHS activity.