NUMALIGARH REFINERY LIMITED

A GOVERNMENT OF INDIA ENTERPRISE



GENERAL CONDITIONS OF CONTRACTS 2023

(Effective from 11.09.2023)

NUMALIGARH REFINERY LIMITED ASSAM, INDIA

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SECTION I

1.0 DEFINITION OF TERMS

In the CONTRACT (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires provided that if any interpretation is required under any circumstance, the decision of the owner/company with regard to the same shall be final and binding on the parties:

- 1. The "OWNER/COMPANY" shall mean followings:
 - Numaligarh Refinery Limited or NRL in short having its registered office at 122A, GS Road, Christian Basti, Guwahati-781005.
- 2. The "CONTRACTOR" shall mean the person or persons, firm or company whose Tender has been accepted by OWNER and includes the Contractor's Legal Representatives, his Successors and permitted Assigns.
- 3. The "Managing Director" shall mean the Managing Director of the Numaligarh Refinery Limited (NRL) or his successor in office as designated by the Owner.
- 4. The "Engineer-in-Charge" shall mean the person nominated from time to time by the Consultant/owner and shall include those who are expressly authorised by Consultant/owner to act for and on its behalf for operation of this CONTRACT.
- 5. The "WORK" shall mean and include all Works, Consultancy services and Non-Consultancy (Other) Services to be executed in accordance with the CONTRACT or part thereof as the case may be and shall include all extras, additional, altered, or substituted works as required for the purpose of the CONTRACT.
- 6. "PERMANENT WORK" shall mean and include works which will be incorporated in and form a part of the work to be handed over to the owner by the contractor on completion of the contract.
- 7. "CONSTRUCTIONAL PLANT/EQUIPMENT" shall mean all Appliances/Equipment or things of whatsoever nature required in or for the execution, completion, operation or maintenance of the works or temporary works (as hereinafter defined) but does not include materials or other things intended to form or forming part of the permanent works.
- 8. "SITE" shall mean the land and waters and other places on, under, in or through which the WORK is to be carried out and any other lands, water or places provided by Owner for the purpose of the CONTRACT together with any place designated in the CONTRACT as forming part of the SITE.
- 9. The "Contract document" shall mean collectively the Tender Documents, Designs, Specifications Schedule of Rates/Prices, purchase order / outline agreement-contract of Tender, Agreed variation, if any and other documents constituting the Tender and acceptance thereof.
- 10. The "CONTRACT" shall mean the agreement between OWNER and CONTRACTOR for the execution of the WORK including therein all documents such as the Request for Quotation, Instructions to Tenderers, General Conditions of Contract, Special Conditions of Contract, Specifications, General Requirements, Time Schedule, Prices, Purchase Order, Outline Agreement Contract, Agreed Variations, if any, etc.
- 11. "Consultant" shall mean the Consulting Engineers to the OWNER engaged for a particular project/service.
- 12. The "Sub-contractor" shall mean any person or firm or company (other than the CONTRACTOR) to whom any part of work has been entrusted by the CONTRACTOR, with the complete knowledge of the Engineer- in-Charge, and the Legal Representatives, Successors and permitted Assigns of such person, firm or Company.
- 13. "SPECIFICATIONS" shall mean all directions, various technical specifications, provisions and requirements attached to the tender document, which pertain to the method and manner of performing the

WORK to the quantities and qualities of the WORK and the materials to be furnished under the CONTRACT for the WORK as may be exemplified or modified by Owner during the performance of the CONTRACT in order to provide for the unforeseen conditions or in the best interests of the WORK. It shall also include the latest edition including all addenda/corrigenda of relevant Indian Standard Specifications and other relevant Codes before entering into contract.

- 14. "DRAWINGS" shall include maps, plans, sketches and tracings or prints thereof with any modifications approved in writing by the owner/Engineer-in-Charge and such other Drawings as may from time to time be furnished or approved in writing by the Owner/Engineer-in-Charge.
- 15. The "Tender" shall mean the tender along with supporting documents submitted by the CONTRACTOR for acceptance by OWNER.
- 16. The "Alteration/Variation/Change Order" means an order given in writing by the Engineer-in-Charge to effect additions to or deletions from and alterations in the WORK.
- 17. "Virtual completion" means completion of all important/essential works pending certain small value works kept in abeyance by the owner to achieve required co-ordinate completion with other inter linked unavoidable activities.
- 18. The "COMPLETION CERTIFICATE" shall mean certificate to be issued by the Engineer-in-Charge when the WORK has been completed in accordance of contract document to his satisfaction.
- 19. The "FINAL CERTIFICATE" in relation to the WORK shall mean the certificate regarding the satisfactory compliance of the various provisions of the CONTRACT by the CONTRACTOR issued by the Engineer- in-Charge after the period of liability is over.
- 20. The "Period of Liability" in relation to a WORK means the specified period from the date of completion of WORK as indicated in completion certificate upto the date of issue of final certificate during which the CONTRACTOR stands responsible for rectifying all defects that may appear in the WORKS executed by the contractor in pursuance of the contract and includes workmanship defects, warranties against manufacturing/fabrication defects covering all materials, plants, equipment, components and the like supplied by the contractor.
- 21. The "Appointing Authority" for the purpose of arbitration, if any, shall be the person so designated by the Owner
- 22. "TEMPORARY WORK" shall mean all temporary works of every kind required in or about the execution, completion or maintenance of the WORK.
- 23. "Plans" shall mean all maps, sketches and layouts as are incorporated in the Contract in order to define broadly the scope and specifications of the work or works and all reproductions thereof.
- 24. "Notice in Writing or Written Notice" shall mean a notice written, typed or printed form, sent by e-mail to the last known e-mail address or otherwise by post/courier, personal delivery, proved to have been received by the addressee by registered post/courier to the last known private or business address or registered office of the addressee and shall be deemed to have been received in the ordinary course of post as if it would have been delivered.
- 25. "Approved" shall mean approved in writing including subsequent written confirmation of previous verbal approval and "Approval" means approval in writing including as aforesaid.
- 26. Fax / Letter of Acceptance shall mean intimation by a Fax/Letter to Tenderer that the Tender has been accepted in accordance with the provisions contained therein.
- 27. "Day" means a day of 24 hours from the midnight to midnight irrespective of the number of hours worked in that day.

- 28. "Working Day" means any day other than declared to be holiday or rest day by the Owner.
- 29. "Week" means a period of any consecutive seven days.
- 30. "Metric System" all technical documents regarding the construction of works are given in the metric system and all work in the project should be carried out according to the metric system. All documents concerning the work shall be maintained in the metric system.
- 31. "Value of Contract" means the sum accepted or the sum calculated in accordance with the prices accepted in tender and/or the contract rates as payable to the contractor for the entire execution and full completion of the work.
- 32. "Language of Drawings and Instruction" all the drawings, titles, notes, instruction, dimensions etc. shall be in English language.
- 33. "Mobilization" shall mean establishment of sufficiently adequate infrastructure by the Contractor at "Site" comprising of construction equipment, aids, tools, tackles including setting of site offices with facilities such as power, water, communication etc., establishing manpower organization comprising of Resident Engineers, Supervising personnel and an adequate strength of skilled, semi-skilled and un-skilled workers, who, with the so established infrastructure shall be in a position to commence execution of work at site (s), in accordance with the agreed time schedule of completion of work. Mobilization shall be considered to have been achieved, if the Contractor is able to establish infrastructure as indicated above to begin work at all site (s) / locations as per the Time Schedule, where so warranted in accordance with agreed schedule of work implementation to the satisfaction of Engineer-in-charge/Owner.
- 34. "Commissioning" shall mean putting into service of the system including the plant(s), equipment(s), Vessel (s), Pipeline, machiner(ies), or any other section or sub section of installation (s) pertaining to the work of the Contractor after successful testing and trial runs of the same.

"Commissioning" can be either for a completed system or a part of combination of systems or sub system and can be performed in any sequence as desired by Owner and in a manner established to be made suited according to availability of prerequisites. Any such readjustments made by Owner in performance of "Commissioning" activity will not be construed to be violating Contract provisions and Contractor shall be deemed to have provided for the same.

SECTION II

2.0 GENERAL INFORMATION

2.1 LOCATION OF SITE AND ACCESSIBILITY:

The SITE for the work is as defined in the Special Conditions of Contract or elsewhere in the tender document and unless otherwise stated, is within the Refinery premises and its associated infrastructures e.g. Township, marketing terminal, pipeline installation etc. It is served by all normal weather roads. The intending Tenderer should inspect the SITE and make himself familiar with site conditions and available Communication facilities.

Location of Refinery:

Numaligarh Refinery, PO-NR Project, Golaghat, Assam-785699

Entry into the refinery area and other installations is restricted. Only pass and permit holders as also vehicles with special permits only are permitted within the boundary of the refinery. Inside the premises access to various Workspots is also further regulated by permits issued for each area.

Contractor if necessary shall build other temporary access road to the site of construction for his own work at his own cost. The contractor shall be required to permit the use of the roads so constructed by him for vehicles/personnel of the owner or any other parties who may be engaged on the project site. The contractor shall also facilitate the construction of the permanent roads should the construction thereof start while he is engaged on this work. He shall make due allowance in this tender for any inconvenience he anticipates on such account.

Non availability of access roads and/or railway siding or permits for entry of Vehicles' & Equipment to any specific area shall in no case be the cause to condone any delay in the execution of the works or be the cause for any claims or extra compensation.

2.2 SCOPE OF WORK:

The scope of Work is defined in the tender document. The CONTRACTOR shall provide all necessary materials, equipment and labour etc. for the execution and maintenance of the WORK till completion unless otherwise specifically mentioned in the tender. All materials that go with the WORK shall be approved by Engineer-in-Charge prior to procurement and use.

2.3 WATER SUPPLY:

Contractor will have to make his own arrangements for supply of water to his labour camps and for works. All pumping installation, pipe net work and distribution system will have to be carried by the contractor at his own cost.

Alternatively the owner at his discretion may endeavor to provide water to the contractor at the owner's source of supply at one point, provided the contractor make his own arrangement for piping net work and arrangement from source of supply and distribution pipe net work shall have the prior approval of the Engineer-In-Charge, so as not to interfere with the layout and progress of the other construction works.

However, the owner doesn't guarantee the supply of water and this does not relieve the contractor of his responsibility in making his own arrangement and for the timely completion of the various works as stipulated.

OWNER may provide source of supply at one point depending on the location as specified in Special Conditions of Contract (SCC) of the tender condition.

2.4 POWER SUPPLY

2.4.1 OWNER may provided source of supply of power at one point depending on the location as specified Special Conditions of Contract (SCC) of the tender condition.

The number of local switch board/power outlets and location being at the discretion of the OWNER and CONTRACTOR shall make his own arrangements for connecting his CONSTRUCTIONAL PLANT/EQUIPMENT etc. to the said switch board/power outlets. All the work will be done as per IEA regulations and NRL Safety Systems and procedures and duely approved by the Engineer-in-Charge. The temporary lines will be removed forthwith after the completion of the WORK or if there is any hindrance caused to other Works due to the alignment of these lines, the CONTRACTOR will reroute or remove the temporary lines at his own cost. OWNER shall not, however guarantee the supply of electricity and no compensation for any failure or short supply of electricity will be entertained.

However, the contractor shall make his own arrangement of DG sets for all welding jobs.

It shall be the responsibility of the contractor to provide and maintain the complete installation of the load side of the supply with due regard to safety and proper circuit protection requirement at site. All cabling, equipment, installation etc. shall comply in all respects with the latest statutory requirements and safety provisions i.e., as per the Central / State Electricity Acts and Rules etc. The contractor will ensure that his equipment and electrical wiring etc. are installed modified, maintained by a licensed Electrician/Supervisor. A test certificate is to be produced to the Engineer – In – Charge for this approval, before power is made available. Non adherence of safety code shall render the Contractor to be penalized as deemed fit by Engineer-in- Charge.

The Contractor will have to provide and install his own light and power meters duly tested by State Electricity Board /NRL Testing laboratory which will be governed as per Central / State Government Electricity Rules. The meter shall be sealed by the Owner.

The total requirement of powers with equipment wise break - up shall be indicated by the tenderer along with his tender.

- 2.4.2 At all times IEA regulation shall be followed failing which the owner has a right to disconnect the power supply without any reference to the contractor. No claim shall be entertained for such disconnection by the Engineer-In- Charge. Power supply will be reconnected only after production of fresh certificate from the authorized electrical supervisors.
- 2.4.3 The owner is not liable for any loss or damage to the contractor's equipment as a result of variation of voltage or frequency or interruption in power supply or other loss to the contractor arising there from.
- 2.4.4 In case of damage of any of the Owner's equipment on account of fault, intentional or unintentional on the part of the contractor, the Owner reserves the right to recover the cost of such damage from the contractor's bill. Cost of HRC Fuses replace at the Owner's terminals due to any fault in the contractor's installation shall be to contractor's account at the rates decided by the Engineer-in-charge. Ratings of fuses to be provided/use by the contractor shall not be more than the rating approved by owner.
- 2.4.5 The total requirement of power with equipment wise breakup shall be indicated by the tenderer along with his tender.

2.5 LAND FOR CONTRACTOR'S FIELD OFFICE, GODOWN AND WORKSHOP:

OWNER may at his own discretion and convenience and for the duration of the execution of the WORK make available near the SITE on chargeable basis as per prevailing rate or free of cost, land for construction of CONTRACTOR' S field office, godowns, workshops and assembly yard required for the execution of the CONTRACT. The CONTRACTOR shall at his own cost construct all temporary buildings and provide suitable water supply and sanitary arrangement approved by the Engineer-in-Charge.

On completion of the WORK undertaken by the CONTRACTOR, he shall remove all temporary Works erected by him and have the SITE cleaned as directed by Engineer-in-Charge. If the CONTRACTOR shall fail to comply with these requirements the Engineer-in-Charge may at the expenses of the CONTRACTOR remove such surplus and rubbish materials and dispose of the same as he deems fit and get the SITE cleared as aforesaid and the CONTRACTOR shall forthwith pay the amount of all expenses so incurred and shall have no claims in respect of any such surplus material disposed of as aforesaid. But OWNER reserves the right to ask the CONTRACTOR any time during the pendency of the CONTRACT to vacate the land by giving seven (7) days' notice on security reasons or on national interest or otherwise. If the contractor fails to clear/vacate the site and clean the debris the same shall be done by the Engineer-in- charge engaging any agency and the cost incurred for doing so shall be recovered from the contractor from his bill/SD or any other works.

2.5.1 PUTTING UP BUILDINGS ON PROJECT SITE:

The contractor may put up temporary structures as required by them for their office, fabrication shop and construction stores only in the area allocated to them on the project site by the owner or his authorized representative.

Approval shall be obtained from EIC for design/material of construction of such aforementioned temporary structures before putting up the same.

No unauthorized buildings, construction or structures should be put up by the contractor anywhere on the project site. For uninterrupted fabrication of the work, Contractor, shall put up temporary covered structures at his cost within area (12M&50M or as considered necessary) in the location allocated to them in the project site by the owner or his authorized representatives, but after written approval from the owner.

2.6 SAFETY STANDARDS FOR TEMPORARY BUILDINGS

All temporary buildings, sheds, workshops, field station, etc. shall be constructed in conformation with the safety and security regulations of the OWNER, as regards location and type of structures.

SECTION III GENERAL INSTRUCTIONS TO TENDERERS

3.0 SUBMISSION OF TENDER:

- **3.1** Instructions for Online Bid Submission:
- i) The bidders are required to submit soft copies of their bids electronically on the designated e-procurement portal, using valid Digital Signature Certificates (DSC).
- ii) Bidders are required to enroll on the e-Procurement module of the designated portal.
- iii) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

3.2 SUBMISSION OF TENDER:

- 3.2.1 Tenders must be submitted without making any additions, alterations, and as per details given in other clauses here under. The requisite details shall be filled in by the contractor of tender document. The rates shall be filled in the schedule given in this tender document.
- 3.2.2 Addenda/Corrigenda to tender document, if issued, must be signed and submitted along with the tender document. The tenderer should write clearly the revised quantities in the schedule of rates of tender document and should price the work based on revised quantities when amendments of quantities are issued in addenda.
- 3.2.3 Tenderers are advised to submit quotation strictly based on the Terms and Conditions and Specifications contained in the Tender Document and not stipulate any deviations. Should it, however, become unavoidable deviations should be stipulated with reference to the clause and page number of Tender Document. OWNER/Consultant reserves the right to evaluate quotations containing deviations having financial implications after adding the cost for such deviations as determined by Owner/Consultant.
- 3.2.4 Tender should be submitted in double sealed envelope (in case of manual bid submission) with the name of WORK super scribed thereon. The full name, postal address, telegraphic address and telex/telephone no. of the Tenderers shall be written on the bottom left hand corner of the sealed cover.
- 3.2.5 All information, correspondence, letters and details accompanying the Tender Document and all further correspondence in connection with the Tender shall be submitted along with the offer, unless otherwise stated.

3.2.6 Instructions for two part bidding:

- i) The bid should be submitted in two parts viz.
 - a) Techno commercial bid
 - b) Price bid
- ii) Techno commercial bid shall have the following information / details
 - a) Technical deviation if any
 - b) Commercial deviation if any
 - c) Copy of price bids with prices blanked off
 - d) Documents required as per the tender to establish techno-commercial acceptability of the bid.
 - e) Any other relevant documents/ information.

- iii) Priced part of the bid shall have only prices as per schedule of rates.
- iv) Techno commercial bid and priced bid shall be enclosed in two separate envelopes (in case of manual bid submission) with the subject job, type of bid, bidders name superscribed on top. Both these envelopes shall be sealed in a common envelope and submitted as specified above.
- 3.2.7 Tenderers are deemed to have read through and fully understood all terms and conditions of the tender.
- 3.2.8 Tender, on submission as mentioned above, shall be the property of the OWNER and it shall not be returned to the tenderer on any account.

3.3 ALL PAGES TO BE INITIALLED (For Manual Tender):

All signatures in Tender Document shall be dated, as well as all the pages of all sections of Tender Document shall be initialed at the lower right hand corner and signed wherever required in the Tender Papers by the Tenderer or by a person holding power of attorney authorising him to sign on behalf of the Tenderer before submission of Tender.

3.4 RATES TO BE IN FIGURES AND WORDS (For Manual Tender):

The Tenderer should quote in English both in figures as well as in words the rates and amounts tendered by him in the Schedule of Rates forming part of the Tender Document in such a way that interpolation is not possible. The amount for each item should be worked out and entered and requisite total given of all items, both in figures and in words. The tendered amount for the WORK shall be entered in the Tender and duly signed by the Tenderer. If some discrepancies are found between the rates given in words and figures of the amount shown in the Tender, the following procedure shall be followed:

- i) When there is difference between the rates in figures and words, the rate which corresponds to the amount worked out by the Tenderer shall be taken as correct.
- ii) When the rate quoted by the Tenderer in figures and words, tallies but amount is incorrect, the rate quoted by the Tenderer shall be taken as correct.
- iii) When it is not possible to ascertain the correct rate as prescribed above, then the rate in words shall be adopted.

3.5 CORRECTION AND ERASURES (For Manual Tender):

All corrections and alteration in the entries of Tender papers will be signed in full by the Tenderer with date. No erasures or over writings are permissible.

3.6 SIGNATURE OF TENDERER:

The Tender shall contain the name, residence and place of business of person or persons making the Tender and shall be signed by the Tenderer with his usual signature. PARTNERSHIP firms shall furnish the full names of all partners in the Tender. It should be signed in the partnership's name by all the partners or by duly authorised representative followed by the name and designation of the person signing. Tender by a corporation shall be signed by an authorised representative, and a Power of Attorney in that behalf shall accompany the Tender. A copy of constitution of the firm with names of all partners shall be furnished.

3.7 DETAILS OF EXPERIENCE:

The Tenderer should enclose documents to show that he has previous experience in similar type of works and has successfully completed in the recent past works of this nature, together with the names and address of Owners, their schedule, location of sites, value of contracts, date of commencement and completion of works. The information so provided if found partly or fully false shall render the tender of such Contractor liable for rejection and the tenderer shall be liable to be put into Holiday list of NRL or even banned.

3.8 PURCHASE PREFERENCES:

Owner reserves the right to allow MSEs purchase preferences as admissible/applicable from time to time under the existing Govt. policy.

Owner reserves the right to allow exemption of EMD to Govt. Educational Institutions / other Govt Bodies as admissible. Also applicability of EMD is further subject to relaxations under MSE policy or to Start-ups recognized by DPIIT or any other Govt. policy as specified in the tender document.

3.9 EARNEST MONEY DEPOSIT:

3.9.1 Submission of EMD:

The Bid Security (EMD) of applicable amount shall be submitted in the form of Electronic transfer through NEFT using payment gateway mentioned in the tender document, or Bank Guarantee from any of the Commercial Banks, safeguarding the purchaser's interest in all respects. The bid security should remain valid for a minimum period of 60 (sixty) days beyond the final bid validity period.

Default mode of Collection & settlement (refund/retention) of EMD should be through electronic fund transfer using online EMD solutions for EMD value upto **Rs.5 lakhs**. Alternate mode of submission of EMD through BG executed by any Nationalised / Scheduled Bank in favour of Numaligarh Refinery Limited, in prescribed format of NRL, shall also be accepted for EMD value above **Rs.5 lakhs**. Bank guarantee should be routed through SFMS platform.

- 3.9.2 Bid securities of the unsuccessful bidders shall be returned after expiry of the final bid validity period and generally within 30 days after the award of the contract.
- 3.9.3 Bid security shall be refunded to the successful bidder on receipt of initial security deposit as per tender provision.
- 3.9.4 Where the EMD in the form of Bank Guarantee are submitted, it should be ensured that:
 - i) Bank Guarantees are strictly in accordance with the proforma mentioned provided with the tender.
 - ii) Prompt action should be taken by the bidder to renew the Bank Guarantee whenever required.
- 3.9.5 No interest shall be paid by the OWNER on the Earnest Money deposited by the Tenderer.

3.10 CONVERSION OF EMD TO SECURITY DEPOSIT:

The EMD of the successful bidder, if paid in forms other than Bank Guarantee, may be converted to Initial Security Deposit / Security deposit, by making good the shortfall amount, if any, between EMD and the ISD required for due performance of the contract if the contractor so desires. The "security deposit/retention money" vide clause 3.15 shall also be applicable limiting to a maximum of 10% of the contract value.

3.11 VALIDITY:

The tender submitted by Tenderer shall remain valid for acceptance for a period of six (6) months from the date of opening and the tenderer shall not be entitled during the said period of six (6) months, without the consent in writing of the OWNER, to revoke or cancel his Tender or to vary the tender given or any term thereof. In case the Tenderer revokes/cancels/varies/withdraws his tender within the above period, the OWNER shall have the right to forfeit the EMD without any further notice to the tenderer.

In case of such revocation or cancellation or variation by the Tenderer, without the consent of the OWNER, the OWNER shall have the right to put the tenderer on holiday list, barring the tenderer from participating in any tender for future works / Contracts /services etc.

3.12 ADDENDA/CORRIGENDA:

- 3.12.1 Addenda/Corrigenda to the Tender Document may be issued till closing of Tender submission to clarify documents or to reflect modification in the design or CONTRACT terms.
- 3.12.2 Each addendum/corrigendum issued by the owner will be published in respective e-tender portal, as applicable. Tenderer will consider this addendum/corrigendum for submission along with his Tender and can keep a copy for him for future reference. All addenda/corrigenda issued by the owner shall become part of Tender Document.

3.13 RIGHT OF OWNER TO ACCEPT OR REJECT TENDER:

- 3.13.1 The right to accept the Tender will be absolutely with the OWNER. The OWNER, however, does not bind itself to accept the lowest tender, and reserves to itself the authority to reject any or all the Tenders received without assigning any reason whatsoever. The works may be split up between two or more agencies or only part of the work may be awarded to selected tenderer if felt necessary.
- 3.13.2 Tenders in which any of the particulars and prescribed information are missing or are incomplete in any respect and / or the prescribed Conditions are not fulfilled are liable to be rejected at the discretion of the OWNER without assigning any reason.
- 3.13.3 Canvassing in connection with tenders is strictly prohibited and tenders submitted by the tenderer who resort to canvassing will be liable to rejection. Tenders containing uncalled remarks or any additional conditions are liable to rejection.

3.13(A) RIGHT OF BIDDER TO QUESTION REJECTION AT TECHNO-COMMERCIAL STAGE

The tenderer is to be permitted to send his representation in writing in case he feels that a proper procurement process is not being followed and/or his techno-commercial bid has been rejected wrongly. In case of techno-commercial rejection, such representation must be submitted within 48 hours from notification. Representation in case of GeM tenders must be submitted through the facility provided in GeM portal.

Bidder's right to question rejection of his bid:-

Only a directly affected bidder can represent in this regard:-

- i) Only a bidder who has participated in the concerned procurement process (i.e., pre-qualification and bidding) can make such representation;
- ii) In case pre-qualification bid has been evaluated before the bidding of technical/ financial bids (in 2 stage bidding process), an application for review in relation to the technical/ financial bid may be filed only by a bidder who has qualified in pre-qualification bid (1st stage);
- iii) In case techno-commercial bid has been evaluated before the opening of the financial bid, an application for review in relation to the financial bid may be filed only by a bidder whose technical bid is found to be acceptable.
- iv) However, following shall not be subject to review:
 - a) Determination of the need for procurement;
 - b) Selection of the mode of procurement or bidding system;
 - c) Choice of selection procedure;
 - d) Provisions limiting participation of bidders in the procurement process;
 - e) The decision to enter into negotiations with the L1 bidder;
 - f) Cancellation of the procurement process except where it is intended to subsequently re-tender the same requirements;
 - g) Issues related to ambiguity in contract terms may not be taken up after a contract has been signed, all such issues should be highlighted before consummation of the contract by the vendor/contractor; and
 - h) Complaints against specifications, except under the premise that they are either vague or too specific so as to limit competition.

3.13(B) CONFIDENTIALITY OF BID EVALUATION PROCESS

Information relating to the examination, clarification, evaluation and comparison of bids, and recommendations for the award of a contract, shall not be disclosed to bidders or any other person not officially concerned with such a process until the award to the successful bidder has been announced.

From the time of bid opening to the time of contract award, no bidder shall contact the Procuring Entity on any matter related to the bid, except on request and prior written permission.

Any effort by the bidder to influence the Procuring Entity in bid evaluation, bid comparison or contract award decisions will vitiate the process and will result in the rejection of the bidder's bid.

3.14 HOLIDAY LISTING:

NRL's policy for holiday listing/ banning/ debarring of contractors/ suppliers, as prevailing on the date of issue of the show-cause notice, shall be applicable. For updated holiday listing policy, the NRL website www.nrl.co.in shall be referred.

3.15 SECURITY DEPOSIT:

The person/ persons whose tender may be accepted (here after called the contractor) shall within 21 days of the receipt by him of the notification of the acceptance of the tender, shall remit/deposit the initial security deposit of 2.5% of the accepted value of the tender to Numaligarh Refinery Limited. For further details refer to Clause No. 4.6

3.16 TIME SCHEDULE:

3.16.1 Time is the essence of the Contract in all respects. The time allowed for carrying out the work is as shown in the document. This shall be signed and submitted along with the tender. Requests for revision of contractual period after tenders are opened will not be considered. In case the work is continued beyond the period of completion as per the time schedule either by extension of time or otherwise it shall not be considered as a waiver of this condition on the OWNER, and time shall continue to be the essence of the Contract.

If the contractor shall desire an extension of the time for completion of the work on the grounds of his having been unavoidably hindered in its execution or on any other grounds, he shall apply in writing to the Engineer-in-Charge within two weeks of the date of hindrance on account of which he desires such extension as aforesaid, and the Engineer-in-Charge shall if in his opinion (which shall be final), reasonable grounds have been shown thereof, authorize such extension of time as may in his opinion be necessary or proper. In the event of extension of Time of the contract, if granted, the contractor shall be required to suitably extend the period of Bank Guarantee if submitted, towards security Deposit/retention money suitably.

- 3.16.2 A joint programme of execution of the work will be prepared by the Engineer-in -Charge and Contractor based on priority requirements of the project. This programme will take into account the time for completion in 3.16.1 and the time allowed for the priority works by the Engineer-In-Charge.
- 3.16.3 Monthly/Weekly programmes will drawn up by the Engineer-in- Charge jointly with the contractor based on availability of work fronts and the joint construction program as per 3.16.2 above. The contractor shall scrupulously adhere to these targets/programmes by deploying adequate personal, construction tools and tackles and he shall also supply himself all materials of his scope of supply on good time to achieve the target programmes. In all matters concerning the extent of target setout in the weekly and monthly programmes and the degree of achievement, the decision of the Engineer-in-Charge will be final and binding on the contractor.

3.17 COLLECTION OF DATA-TENDERER'S RESPONSIBILITY:

The Tenderer shall visit the SITE prior to quoting and acquaint himself fully of the SITE. No claims whatsoever will be entertained on the plea of ignorance of difficulties involved in execution of WORK or carriage of materials, market price of all inputs — man, machine, material, services, royalties, taxes and duties etc. required to complete the work in all aspects.

3.18 RETIRED GOVERNMENT OR COMPANY OFFICERS:

No Engineer of Gazetted rank or other Gazetted Officer, employed in Engineering or administrative duties in Engineering Department of the State/Central Government or of the OWNER/Consultant of owner is allowed to work as a Contractor for a period of two (2) years after his retirement or resignation from Government Service or from the employment of the OWNER/Consultant of owner without the previous permission of the OWNER/Consultant. The CONTRACT, if awarded, is liable to be cancelled if either the Contractor or any of his employees is found at any time to be such a person, who had not obtained the permission of the State/Central Government or of the OWNER/Consultant as aforesaid before submission of Tender, or engagement in the CONTRACTOR'S service as the case may be.

3.19 SIGNING OF CONTRACT AGREEMENT:

If specified in the Special Conditions of Contract, the successful Tenderer shall be required to execute an Agreement in the Proforma attached to the Tender Document / Work Order. Such agreement shall be submitted within ten (10) days of the receipt of the notification of Acceptance of tender by him (21 days in case of Global Tender Enquiry).

In case of non-submission of contract agreement within the specified period of 10 days or till first bill is due for payment, his bill shall not be processed until the contract agreement is submitted and signed.

For works & services costing Rs.10,00,000/- or below, it will not be necessary to have a written contract agreement, unless otherwise specified in the Tender Document / Work Order.

3.20 FIELD MANAGEMENT:

- 3.20.1 The field management will be under the control of the Engineer-in-Charge. The Engineer-in-Charge may also authorise his representatives to perform his duties and functions.
- 3.20.2 Clause 5.19 of the General Conditions of Contract shall be referred to in this connection.

3.21 CO-ORDINATION OF WORK

The Engineer-in-Charge shall co-ordinate the works of various Agencies engaged at SITE to ensure minimum disruption of Work carried out by different Agencies. It shall be the responsibility of the CONTRACTOR to plan and execute the WORK strictly in accordance with instructions from Engineer-in-Charge to avoid hindrance to the Work being executed by other Agencies. The CONTRACTOR is deemed to have full knowledge with regard to such situation and shall not be entitled to raise any claim as against the OWNER on that account.

3.22 FOREIGN BIDDERS:

It is mandatory for the foreign bidder to furnish the documents for the compliance to requirement of PAN No., Tax Residency Certificate and Form No.10F (applicable for foreign bidder in case of services in India is required as per scope of bidding document) as per Income Tax Act in case his receipts are subject to tax deduction at source in India:

(a) PAN No.

PAN as per the Indian Income Tax requirements shall be submitted, failing which the Supplier/Contractor/Consultant shall be responsible for any additional tax deduction at source as per the provisions of the Indian Income Tax Act/Rules and the same shall be deducted from the payment made to supplier/contractor/consultant.

(b) Tax Residency Certificate (TRC)

TRC containing prescribed particulars from the Government of foreign country in order to claim the benefits of DTAA as per the Indian Income Tax requirements shall be submitted, failing which the relief under DTAA will not be available and consequently the actual rate of withholding tax will be applicable and deducted from the payment made to supplier/contractor/consultant (i.e., non-resident taxpayer). The TRC shall be duly verified by the Government of the country of which the assessee claims to be a resident for the purposes of tax.

(c) Form 10F

In additional to TRC, in order to claim the benefits of DTAA, bidder shall also submit additional information in form no. 10F. Form 10F has to be signed & verified by the assessee himself.

The above shall be furnished before release of any payment or within one month of the release of Order, whichever is earlier. In case of failure to submit the above information, any additional tax liability on Owner, will be deducted from the payment due to the contractor.

3.23 SCHEDULE OF RATES:

- 3.23.1 The schedule of rates should be read in conjunction with all the other sections of the tender.
- 3.23.2 The tenderer shall be deemed to have studied the drawings, specifications and details of work to be done within time schedule and to have acquainted himself of the conditions prevailing at site.
- 3.23.3 Rate must be filled in the copies of pages of Schedule of Rates of original Tender Documents. If quoted in separate typed sheet, no variation in item description or specification shall be accepted. Any exception taken by the tenderer to the Schedule of Rates shall be brought out in the terms and conditions of offer, but it does not guarantee acceptance of the same by the owner.

3.23.4 In case of e-TENDERING:

Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the prices bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete unprotected cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

- 3.23.5 The quantities shown against the various items are only approximate. Any increase or decrease in the quantities shall not form the basis of alteration of the rates quoted and accepted. However any likely increase in quantity of any items should be brought to the notice of Engineer-In- Charge well in advance prior to execution. Contractor shall not execute excess quantity other than the ordered quantity without prior approval from EIC.
- 3.23.6 The owner reserves the right to interpolate the rates for such items if work falling between similar items of lower and higher magnitude.
- 3.23.7 If a bidder offers suo motu discounts and rebates after opening of the tender (techno-commercial or financial), such rebates/discounts shall not be considered for the purpose of ranking the offer but if such a firm does become L1 at its original offer, such suo motu rebates will be incorporated in the contracts by NRL.

3.24 AWARD OF CONTRACT:

3.24.1 The acceptance of tender will be intimated to the successful tenderer by the means defined as LETTER OF ACCEPTANCE /FOA/Purchase Order. Once the tender is accepted and Letter of Acceptance/ FOA/ PO is issued, the contract shall be deemed to have been established and the same shall be binding on the contractor to execute the job as per tender agreed terms and conditions, however party has to execute the contract agreement as per prescribe format immediately after issuance of LOA/FOA/PO.

3.25 LOCAL CONDITIONS:

3.25.1 It will be imperative on each tenderer to inform himself of all local conditions and factors which may have any effect on the execution of WORK covered under the tender document.

Tenderer shall familarize himself with all taxes and duties such as Income Tax, Sales Tax, Excise Duty, WCT, VAT, GST, Royalty etc. applicable as of bid closing date from various Govt Authorities such as Central Govt, State Govt., Municipal / local bodies etc. Applicability of Taxes and Duties shall be investigated by the Tenderer prior to submission of bids.

3.25.2 It must be understood and agreed that such factors have properly been investigated and considered while submitting the tender. No Claim for financial or any other adjustments due to lack of clarifications of such factors shall be entertained.

3.26 ABNORMAL RATES:

An Abnormally Low Bid is one in which the Bid price, in combination with other elements of the Bid, appears so low that it raises material concerns as to the capability of the Bidder to perform the contract at the offered price. Procuring Entity may in such cases seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to scope, schedule, resource mobilization, allocation of risks and responsibilities, and any other requirements of the bids document. If, after evaluating the price analyses, procuring entity determines that the Bidder has *substantially failed* to demonstrate its capability to deliver the contract at the offered price, the Procuring Entity may reject the Bid/ Proposal.

The tenderers are expected to quote the rate for each item after careful analysis of the cost involved for the performance of the completed item considering all specifications and conditions of contract. This will avoid loss of profit or gain in case of curtailment or change of specification for any item. In case it is noticed that the Bid price quoted by the tenderer is unusually high or unusually low (i.e., over +/- 25% between Bid price and estimate), Procuring Entity may in such cases seek written clarifications and/or price analysis, to decide on further course of action towards award of contract / rejection of bid, as deemed appropriate.

As a safeguard, it should be closely monitored by the EIC that final payments in such cases do not abnormally increases due to extra items. Further, there is no abnormal increase in quantities of the item for which contractors have initially quoted very high rates.

SECTION IV

GENERAL OBLIGATIONS

4.0 INTERPRETATION OF CONTRACT DOCUMENT:

4.1 Except if and to the extent otherwise provided by the CONTRACT, the provisions of the General Conditions of Contract and Special Conditions of contract shall prevail over those of any other documents forming part of the CONTRACT. Several documents forming the CONTRACT are to be taken as mutually explanatory. Should there be any discrepancy, inconsistency, error or omission in the CONTRACT or any of the CONTRACT documents, the matter may be referred to Engineer-in-Charge who shall give his decision and issue to the CONTRACTOR instructions directing in what manner the WORK is to be carried out. The decision of the Engineer-in-Charge shall be final and conclusive and the CONTRACTOR shall carry out WORK in accordance with this decision.

Works shown in the Drawing but not mentioned in the Specifications or described in the specifications without being shown in the Drawings shall nevertheless be held to be included in the same manner as if they had been specifically shown in the Drawings and described in the Specification.

4.2 HEADINGS AND MARGINAL NOTES:

All headings and marginal notes to the clauses of these General Conditions of Contract or to the Specifications or to any other part of Tender Document are solely for the purpose of giving concise indication and not a summary of the contents thereof, and they shall never be deemed to be part thereof or be used in the interpretation or construction thereof of the CONTRACT.

4.3 **SINGULAR AND PLURAL:**

In this Contract Document unless otherwise stated specifically, the singular shall include the plural and vice versa wherever the context so requires. Words implying 'Persons' shall include relevant corporate companies / Registered Associations / Body of individuals / Firm of Partnership.

4.4 SPECIAL CONDITIONS OF CONTRACT:

- 4.4.1 Special conditions of Contract shall be read in conjunction with the General Conditions of Contract, Specifications of Work, Drawings and any other documents forming part of this CONTRACT wherever the context so requires.
- 4.4.2 Notwithstanding the sub-division of the documents into these separate sections and volumes, every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the CONTRACT so far as it may be practicable to do so.
- 4.4.3 Where any portion of the General Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, then unless a different intention appears, the provisions of the Special Conditions of Contract shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail.
- 4.4.4 Wherever it is mentioned in the Specifications that the CONTRACTOR shall perform certain work or provide certain facilities, it is understood that the CONTRACTOR shall do so at his own cost.
- 4.4.5 The Materials, Design and Workmanship shall satisfy the relevant Indian Standards Specifications contained herein and Codes referred to. Where the Specifications stipulate requirement in addition to those contained in the standard Codes and Specifications, these additional requirements shall be satisfied.

4.5 CONTRACTOR TO OBTAIN HIS OWN INFORMATION:

The CONTRACTOR, in fixing his rate, shall for purposes whatsoever, be deemed to have himself independently obtained all necessary information for the purpose of preparing the Tender and his tender as accepted shall be deemed to have taken into account all contingencies as may arise due to such information or lack of same. The correctness of the details, given in the Tender Document to help the CONTRACTOR to make up the Tender is not guaranteed.

The CONTRACTOR shall be deemed to have examined the Contract Document, to have generally obtained his information in all matters whatsoever that might affect the carrying out the WORK at the Scheduled Rates and to have satisfied himself to the sufficiency of his Tender. Any error in description of quantity or omission therefrom shall not vitiate the CONTRACT or release the CONTRACTOR from executing the WORK comprised in the CONTRACT according to Drawings and Specifications at the Scheduled Rates. He is deemed to have known the scope, nature and magnitude of the work and the requirements of Materials and Labour involved etc. and as to what all WORK he has to complete in accordance with the CONTRACT whatever be the defects, omissions or errors that may be found in the Contract Document. The CONTRACTOR shall be deemed to have visited surroundings, to have satisfied himself to the nature of all existing structures, if any and also as to the nature and the conditions of the railways, roads, bridges and culverts, means of transport and communications, whether by land, water or air, and as to possible interruptions thereto and the access and egress from the SITE, to have made enquiries, examined and satisfied himself as to the Sites for obtaining sand, stones, bricks and other materials, the Sites for disposal of surplus materials, the available accommodation as to whatever required, Depots and such other Buildings as may be necessary for executing and completing the WORK to have local independent enquires as to the sub-soil, sub-soil water and variations thereof, storms, prevailing winds, climate conditions and all other similar matters affecting the WORK. He is deemed to have acquainted himself as to his liability for payment of Government taxes, customs duty and other charges. Whatsoever prevailing at present or changed in future.

Any neglect or failure on the part of the CONTRACTOR in obtaining necessary and reliable information upon the foregoing or any other matters affecting the CONTRACT shall not relieve him from any risks and liabilities or the entire responsibility from completion of the WORK at the scheduled rates and time in strict accordance with the Contract Document.

No verbal agreement or inference from conversation with any officer or employee of the Owner/Consultant either before or after the execution of the Contract Agreements shall in any way affect or modify any of the terms or obligations herein contained.

Any change in layout due to site condition or technological requirement shall be binding on the contractor and no extra claim on this account shall be entertained.

In case of use of forest produce including sand, stone, etc., by the contractor, the contractor would be liable to pay forest royalty on such forest produce at the rates specified by the applicable rule of the State where job is being executed. The contractor shall submit the necessary proof of online payment of royalty through Govt. portal or Forest Royalty Clearance Certificate (FRCC) issued by the competent authorities of the concerned State Government certifying that the contractor has paid all forest royalty in respect of the forest produce used in the job. If the contractor fails to submit the said documentary proof before the owner or the EIC, the owner shall be entitled to deduct / withhold, from any amount payable to the contractor, either from the present job or any other job, the said quantum of forest royalty plus any penalty that may be directed to be imposed by the concerned State Government vide various notifications issued from time to time, in this regard. The owner shall be entitled to pay the amount of Forest royalty, so deducted / withheld to the State Government along with penalty, if any, and the contractor shall not be entitled to raise any dispute with regard to the same with the owner or claim the said amount from the owner.

4.6 SECURITY DEPOSIT

4.6.1 Security Deposit:

A sum of Ten percent (10%) of the accepted value of the Tender shall be deposited by the person/persons (hereafter called the CONTRACTOR) as Security Deposit with the OWNER. This may be deposited initially at two and half percent (2.5 %) of the value of CONTRACT (referred as Initial Security Deposit) within Twenty one (21) days of receipt by him of the Work Order / LOA and the balance Seven and half percent (7.5%) will be recovered in installments through deductions at the rate of Ten percent (10%) of the value of each running account bill till total Security Deposit amount is collected, after which no further deductions from Bills will be made on this account, subject to Clause 4.6.2 below.

Alternatively, the CONTRACTOR may, at his option, deposit the full amount of Ten percent (10%) of the accepted value of the Tender towards the Security Deposit within Twenty one (21) days of receipt by him of the Work Order. CONTRACTOR can furnish the Initial or Total Security Deposit amount through a Bank Guarantee from any Scheduled Bank in the prescribed form of NRL. The validity period for the Bank Guarantee should be 03 months beyond completion of execution of the contract or 03 months beyond end of defect liability period, whichever is later as per the terms and conditions of the particular contract.

However if the value of WORK as per actual execution exceeds the accepted value of Tender i. e. value given in the Purchase Order, further recoveries towards Security Deposit shall be effected at Ten percent (10%) of the value in excess of the accepted value of the Tender from running Bills and final Bill. Similarly if the value as per actual execution is less than the accepted value of Tender, recovery towards Security Deposit, effected in the running Bills, in excess of Ten percent (10%) of the value of WORK as per actual execution shall be refunded to the CONTRACTOR along with final Bill.

- 4.6.2 If the CONTRACTOR/Sub-contractor or their employees shall break, deface or destroy any property belonging to the OWNER or others during the execution of the CONTRACT, the same shall be made good by the CONTRACTOR at his own expenses and in default thereof, the Engineer-in-Charge may cause the same to be made good by other Agencies and recover expenses from the CONTRACTOR (for which the certificate of the Engineer-in-Charge shall be final) in any manner the owner may choose. In such a case, OWNER is at liberty to enforce the Bank Guarantee and to get the amount whenever a claim is put forward by OWNER against CONTRACTOR irrespective of any dispute regarding the claim between OWNER and the CONTRACTOR.
- 4.6.3 All compensation or other sums of money payable by the contractor to the owner under terms of this contract may be deducted from or paid by the encashment or sale of a sufficient part of his security deposit or from any sums which may be due or may become due to the contractor by the owner on any account whatsoever and in the event of his security deposit being reduced by reasons of any such deductions or a sale of said, the aforesaid contractor shall within ten days thereafter make good in cash or Bank drafts as aforesaid any sum or sums which may have been deducted from his security deposit, or any part thereof. No interest shall be payable by the owner for sum deposited as security deposit.

4.7 TIME OF PERFORMANCE:

4.7.1 TIME FOR MOBILISATION:

The work covered by this contract shall be commenced after receipt of Work Order or Letter of Intent and within 7 days or within the period as mentioned in the Tender document after receipt of instruction from EIC and should be completed in stages as mentioned in the Time Schedule of completion of work. The contractor should bear in mind that time shall be the essence of the contract. Request for revision of completion time after tenders are opened will not be entertained at all.

4.7.2 TIME SCHEDULE

4.7.2.1 The general Time Schedule of construction is given in the Tender Document. CONTRACTOR should prepare a detailed monthly or weekly construction programme jointly with the Engineer-in-Charge

immediately on receipt of the LOA / Work Order / outline agreement-contract of Tender. The WORK shall be executed strictly as per the Time Schedule given in this Document. The period of construction given includes the time required for testing, rectification, if any, re-testing and completion in all respects to the entire satisfaction of the Engineer-in-Charge.

- 4.7.2.2 The contractor shall submit a detailed PERT net work within the time frame agreed above consisting of adequate number of activities covering various key phases of the work such as design, procurement, manufacturing, shipment and field erection activities within 15 days from the date of LETTER OF ACCEPTANCE OF TENDER. This network shall indicate the interface facilities to be provided by the owner and the dates by which such facilities are needed.
- 4.7.2.3 Contractor shall discuss the network so submitted with the owner and the agreed net work which may be in the form as submitted with the owner or in revised form in line with the out come of discussions shall form part of the contract, to be signed within thirty (30) days from the date of LETTER OF ACCEPTANCE OF TENDER. During the performance of the contract, if in the opinion of the owner proper progress is not maintained suitable change shall be made in the contractors operation to ensure proper progress. If however owner feels that progress is not as per pre agreed progress which will have re-persuasion on timely completion of the contract, owner will have liberty either to terminate the contract or impose suitable penalty for delay.

The above PERT network shall be reviewed periodically and report shall be submitted by the Contractor as directed by Owner/Consultant.

4.8 **FORCE MAJEURE:**

A Force Majeure (FM) means extraordinary events or circumstance beyond human control such as an event described as:-

- (i) An act of God: A natural calamity like flood, storm, drought, lightning, tidal wave, tsunami, cyclone other natural disaster; earthquakes, epidemics, plague, quarantine restrictions.
- (ii) Or events such as a war, strike, riots, rebellion or sabotage, terrorism or acts of public enemy (including the acts of any independent unit or individual engaged in activities in furtherance of a programme of irregular warfare), acts of belligerence of foreign enemies (whether declared or undeclared), blockades, revolution, or insurrection, exercise of military or usurped power, or any attempt at usurpation of power; lockouts, crimes, hostility, civil commotion.
- (iii) Unforeseen incidents such as fires, explosions, accidents, loss or breakage of major equipment or facilities, structural collapse, radioactive contamination or ionizing radiation; air crash, shipwreck, or train wreck.
- (iv) Or events like expropriation of facilities by Government authorities, compliance with any order or request of any Governmental authorities, and freight embargoes

FM does not include negligence or wrong-doing, predictable/seasonal rain and any other events specifically excluded in the clause.

A FM clause in the contract frees both parties from contractual liability or obligation when prevented by such events from fulfilling their obligations under the contract. An FM clause does not excuse a party's non-performance entirely, but only suspends it for the duration of the FM. The contractor has to give notice of FM within 14 days from the date of such event and it cannot be claimed ex-post facto. There may be a FM situation affecting the purchase organisation only. In such a situation, the purchase organisation is to communicate with the supplier along similar lines as above for further necessary action.

If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of FM for a period exceeding 90 (ninety) days, either party may at its option terminate the contract without any financial repercussion on either side.

Any delays in or failure of the performance of either party hereto shall not constitute default hereunder or give rise to any claims for damages, if any, to the extent such delays or failure of performance is caused by force majeure.

Upon receipt of the intimation from the contractor of the happening of a FM event, the EIC shall within 10 days therefrom, determine as to whether such event is an FM event within the meaning of the FM clause and such decision of the EIC shall be final and binding upon the parties. In case EIC is not applicable in the contract, the decision of the HOD of Commercial Dept. shall be final and binding.

4.9 **EXTENSION OF TIME**

If the CONTRACTOR shall desire an extension of the time for completion of the WORK on the grounds of his having been unavoidably hindered in its execution or any other grounds, he shall apply in writing to the Engineer-in-Charge within ten (10) days of the date of the hindrance on account of which he desires such extension as aforesaid, and the Engineer-in-Charge shall, if in his opinion (which shall be final) reasonable grounds have been shown therefore, authorizes such extension of time as may, in his opinion, be necessary or proper. Provided that such extension shall not change the agreement that time is the essence of Contract and provided further that the CONTRACTOR shall continue the work during consideration of the request for extension.

In the event of extension of time of the contract, if granted, the contractor shall be required to extend the period of Bank guarantee if submitted towards Retention Money or otherwise suitably.

Until a final decision is taken by the owner on the application of the CONTRACTOR for extension of time on any ground, a provisional time extension may be given by Engineer-in-charge in order to keep the contract alive without prejudice towards the rights, claims, contentions of the owner to take action against the CONTRACTOR as per terms of the contract.

Provisional penalty (percentage as decided by the engineer-in-charge) for delay shall be kept on hold during provisional time extension period and the amount shall be recovered from the subsequent Running Bills and other bills & dues of the CONTRACTOR till final closing of the contract.

4.10 COMPENSATION FOR DELAY (LIQUIDATED DAMAGES):

4.10.1 The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor. The work shall throughout the stipulated period of the contract be proceeded with all the diligence (time being deemed to be essence of the contract) and the contractor shall pay Liquidated Damages for per day of delay beyond the specified date of completion, an amount equal to 0.5% for every week or part thereof, subject to the total amount of Damages not exceeding 5% (five per cent) of the Contract Price, after which period action will be taken by the Engineer-In-Charge under the provisions of the contract. The decision of Engineer-In-Charge, in writing, in respect of imposition of LD shall be final. However, the Contractor is entitled to time extension arising out of delays on account of change of scope and force majeure or delays caused by or attributable to NRL. Decision of the EIC regarding allowable period of time extension (in writing) shall be final.

The parties hereby agree that this is a genuine pre-estimate of the loss/damage which will be suffered by the OWNER on account of delay on the part of the CONTRACTOR as it is not possible to compute the exact quantum of damage. The said amount will be payable on demand without there being any proof of the actual loss or damages having been caused by such delay. Delay attributable to the contractor shall be deemed to be a breach of the contract, irrespective of any time extension given by the owner to keep the contract alive and in the interest of completion of the work. The OWNER shall be at liberty to adjust or deduct the said amount of liquidated damages from any amount due to the CONTRACTOR including the retention money /

Performance Bank Guarantee.

Price reduction clause (PRC) for late delivery shall convey the same meaning as Liquidated Damages (LD).

For special nature of works e.g., short duration work of shutdown job or any other kind of emergent situation, owner may decide to incorporate in the SCC, an enhanced rate and limit of maximum penalty on account of delay.

Where any delay in delivery is due to default by the seller/contractor, any increase in statutory duties and/or upward rise in prices due to the price variation clause (PVC) and/or any adverse fluctuation in foreign exchange during the extended/delayed delivery period are to be borne by the seller/contractor. This will be over and above levy of LD/PRC. However, the purchaser reserves his right to get any benefit of a downward revisions in statutory duties, PVC and foreign exchange rate during the extended/delayed delivery period. Thus, PVC, other variations and foreign exchange clauses operate only during the original delivery period.

4.11 SUM PAYABLE BY WAY OF COMPENSATION TO BE CONSIDERED AS REASONABLE COMPENSATION WITHOUT REFERENCE TO ACTUAL LOSS:

4.11.1 All sums payable by way of compensation under any of the conditions shall be genuine pre estimate of damages and shall be considered as reasonable compensation without reference to the actual loss or damage, which shall have been sustained.

4.12 RIGHTS OF THE OWNER TO FORFEIT SECURITY DEPOSIT:

Whenever any claim against the CONTRACTOR for the payment of a sum of money arises out of or under the CONTRACT and the CONTRACTOR fails to make good such amount through any other means, the OWNER shall be entitled to recover such sum by appropriating in part or in whole the Retention Money / PBG of the CONTRACTOR. In the event of the Retention Money being insufficient or if no Retention Money, has been taken from the CONTRACTOR then the balance of the total sum recoverable, as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the CONTRACTOR. The CONTRACTOR shall pay to the OWNER on demand any balance remaining due.

4.13 FAILURE BY THE CONTRACTOR TO COMPLY WITH THE PROVISIONS OF THE CONTRACT:

In any case, under any clause or clauses of this CONTRACT, if the CONTRACTOR have forfeited the whole of his Retention Amount or have committed a breach of any of the terms contained in this CONTRACT, the OWNER shall have power to adopt any of the following courses as he may deem best suited to his interest:

- a) To rescind the CONTRACT (of which recession notice in writing to the CONTRACTOR under the hand of the OWNER shall be conclusive evidence) in which case the Retention Amount Deposit of the CONTRACTOR shall stand forfeited and be absolutely at the disposal of the OWNER.
- b) To employ labour paid by the OWNER and to supply materials to carry out the WORK or any part of the WORK, debiting CONTRACTOR with the cost of labour, cost of tools and, plants and equipment charges, the cost of materials (for which a certificate of the Engineer-in-Charge shall be final and conclusive against the CONTRACTOR), plus 15% of costs as above to cover all departmental charges, and crediting him with the value of the Work done, in all respects in the same manner and at same rates as if it had been carried out by the CONTRACTOR under the terms of CONTRACT. And should the total amount (cost+15%) thereof exceed the amount due to CONTRACTOR, CONTRACTOR shall pay the difference to OWNER. The certificate of Engineer-in-Charge as to the value of the Work done shall be final and conclusive against the

CONTRACTOR. The parties hereby agree that the 15% overhead charge is a pre-estimate of departmental charges incurred by OWNER. There is no need to establish actual departmental charges.

c) To measure up the Work of the CONTRACTOR and to take such part thereof as shall be unexecuted out of his hand to give it to another Contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to CONTRACTOR, if the WORK had been executed by him (the certificate in writing of the Engineer-in-Charge of the excess amount shall be final and conclusive) shall be borne and paid by the CONTRACTOR and may be deducted from any money due to him by the OWNER under the CONTRACT or otherwise or from his Retention Amount or from the proceeds of sale thereof, of a sufficient part thereof.

In the event of any of the above course being adopted by the OWNER, the CONTRACTOR shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any agreements or made any advances on account of or with a view to the execution of the WORK of the performance of the CONTRACT. In case the CONTRACT shall be rescinded under the provision aforesaid, the CONTRACTOR shall not be entitled to recover or be paid any sum for any WORK actually performed under this CONTRACT unless the Engineer-in-Charge will certify in writing the performance of such work, and the value payable in respect thereof and he shall only be entitled to be paid the value so certified, after recoveries and deductions if any to be made by the owner as per contract.

4.14 LIABILITY TO PAY COMPENSATION IF ACTION NOT TAKEN UNDER CLAUSE 4.13

If any case in which any of the powers conferred upon the OWNER by clause 4.13 thereof shall have become exercisable and the same had not been exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any further case of default by the CONTRACTOR for which any clause or clauses thereof, he is declared liable to pay compensation and the liability of the CONTRACTOR for past and future compensation shall remain unaffected. In the event of the OWNER putting in force the power under sub-clause (a), (b) or (c) vested in him under the preceding clause he may, if he so desires, take possession of all or any tools and plants, materials and stores in or upon the WORK or the SITE thereof belonging to the contractor or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing or for the same in account at the contract rates or in the case of these not being applicable at current market rates to be certified by the Engineer-in-Charge whose certificate thereof shall be final. Otherwise, the Engineer-in-Charge may give notice in writing to the CONTRACTOR or his foreman or other authorised agent, requiring him to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice), and in the event of the CONTRACTOR failing to comply with any such requisition, the Engineer-in-Charge may remove them at the CONTRACTOR's expense or sell them by auction or private sale on account of the CONTRACTOR and at his risk in all respects without any further notice as to the date, time or place of sale and the certificate of the Engineer-in-Charge as to the expense of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the CONTRACTOR.

4.15 CHANGES IN CONSTITUTION:

Where the CONTRACTOR is a partnership firm, prior approval, in writing, of the OWNER shall be obtained before any change is made in the constitution of the firm. Where the CONTRACTOR is an individual or a Hindu undivided family business concern, such approval as aforesaid, shall likewise be obtained before such CONTRACTOR enters into any agreement with other parties, where under the reconstituted firm would have the right to carry out the WORK hereby undertaken by the CONTRACTOR. In either case if prior approval as aforesaid is not obtained, the CONTRACT shall be deemed to have been allotted in contravention of clause 4.21 (i) hereof and the same action may be taken and the same

consequence shall ensure as provided in the said clause.

4.16 IF THE CONTRACTOR DIES

Without prejudice to any of the rights or remedies under this CONTRACT, if the CONTRACTOR dies, the OWNER shall have the option of terminating the CONTRACT without compensation to the CONTRACTOR.

4.17 EMPLOYEES OF THE OWNER NOT INDIVIDUALLY LIABLE:

No Director, or Official or employee of the OWNER shall be in any way personally bound or liable for the acts or obligations of the OWNER under the CONTRACT or answerable for any default or omission in the observance or performance or performance of any of the acts, matters or things which are herein contained.

4.18 OWNER NOT BOUND BY PERSONAL REPRESENTATION:

The Schedule of rates or the Contract value as accepted by OWNER shall be firm. The CONTRACTOR shall not be entitled to any increase on the Schedule Rates or any other right or claim whatsoever by reason of any representation, explanation or statement or alleged representation, promise or guarantees given or alleged to have been given to him by any person.

4.19 **CONTRACTOR'S OFFICE AT SITE:**

The CONTRACTOR shall provide and maintain an office at the SITE for accommodation of his agent and staff and such office shall be open at all reasonable hours to receive instructions, notices or other communications.

4.20 CONTRACTOR'S SUBORDINATE STAFF AND THEIR CONDUCT:

- 4.20.1 The CONTRACTOR, on or after award of the WORK shall name and depute a qualified engineer having sufficient experience in carrying out WORK of similar nature, to whom the Equipment, materials, if any shall be issued and instructions of work given. The CONTRACTOR shall also provide to the satisfaction of the Engineer-in-Charge sufficient and qualified staff to supervise the execution of the WORK, competent sub-agents, foremen and leading hands including those specially qualified by previous experience to supervise the type of works comprised in the CONTRACT in such manner as will ensure work of the best quality and expeditious working. Whenever in the opinion of the Engineer-in-Charge additional properly qualified supervisory staff is considered necessary, they shall be employed by the CONTRACTOR without additional charge on account thereof. The CONTRACTOR shall ensure to the satisfaction of the Engineer-in-Charge that Sub-contractors, if any, shall provide competent and efficient supervision, over the Work entrusted to them.
- 4.20.2 If and whenever any of the CONTRACTOR or Sub-Contractor's agents, sub-agents, assistants, foremen or other employees shall in the opinion of Engineer-in-Charge be guilty of any misconduct or be incompetent or insufficiently qualified or negligent in the performance of their duties or that in the opinion of the OWNER or the Engineer-in-Charge, it is undesirable for administrative or any other reason for such person or persons to be employed in the WORK, the CONTRACTOR, if so directed by the Engineer-in-Charge, shall at once remove such person or persons from NRL site thereon. Any person or persons so removed from the WORK shall not again be employed in connection with the WORK without the written permission of the Engineer-in-Charge. Any person so removed from the WORK shall be immediately replaced at the expense of the CONTRACTOR by a qualified and competent substitute. Should the CONTRACTOR be requested to repatriate any person removed from the WORK he shall bear all costs in connection herewith.
- 4.20.3 The CONTRACTOR shall be responsible for the proper behaviour of all the staff, supervisor, workmen, and others and shall exercise a proper degree of control over them and in particular and without prejudice to the said generality, the CONTRACTOR shall be bound to prohibit and prevent any employees from

trespassing or acting in any way detrimental or prejudicial to the interest of the community or of the properties or occupiers of land and properties in the neighbourhood and in event of such employees so trespassing, the CONTRACTOR shall be responsible therefore and relieve the OWNER of all consequent claims or actions for damages or injury or any other grounds whatsoever. The decision of the Engineer-in-Charge upon any matter arising under this clause shall be final. Contractor shall ensure that none of their employees are ever engaged in any anti-national activity.

4.20.4 If and when required by the OWNER all CONTRACTOR'S personnel entering upon the OWNER'S premises shall be properly identified by badges of a type acceptable to the OWNER which must be worn at all times on OWNER'S premises.

Contractor may be required to obtain entry passes for his staff/employees from Owner to work within operating areas.

4.21 **SUB-LETTING OF WORK:**

- i) No part of the CONTRACT nor any share or interest therein shall in any manner or degree be transferred, assigned or sub-let by the CONTRACTOR directly or indirectly to any person, firm or corporation whatsoever except as provided for in the succeeding sub-clause without knowledge of the OWNER.
- ii) If Contractor goes for sub contracting any part of the job which includes man power supply also, same will be done with complete knowledge of EIC/OWNER. Formal Work order shall be issued by the Contractor to the subcontractor with scope of work and contractual details. However such sub contractor shall not be in holiday list of NRL.
- iii) For certain specialized/urgent nature of job, NRL may specify suitable Pre qualification criteria for selection of Sub contractor by Contractor.
- iv)At the commencement of every month the CONTRACTOR shall furnish to the Engineer-in-Charge list of all Sub- Contractors or other persons or firms engaged by the CONTRACTOR for working at the SITE during the previous month with particulars of the general nature of the subcontract or WORK.
- v) Notwithstanding any sub-letting with such approval as aforesaid and notwithstanding that the Engineer-in-Charge shall have received copies of any sub-contracts, the CONTRACTOR shall be and shall remain solely responsible for the quality and proper and expeditious execution of the WORK and the performance of all the conditions of the CONTRACT in all respects as if such sub-letting or sub-contracting had not taken place, and as if such WORK had been done directly by the CONTRACTOR.
- vi) If any Sub-Contractor engaged upon the WORK at the SITE executes any Work which in the opinion of the Engineer-in-Charge is not in accordance with the Contract Document, the OWNER may by written notice to the CONTRACTOR request him to terminate such contract and the CONTRACTOR upon the receipt of such notice shall terminate such sub-contract and dismiss the Sub-Contractors and the latter shall forthwith leave the WORK failing which the OWNER shall have the right to remove such Sub-Contractors from the SITE.
- vii) Any action taken by the OWNER under the clause shall not relieve the CONTRACTOR of any of his liabilities under the CONTRACT or give rise to any right to compensation, extension of time or otherwise, failing which the owner shall have the right to remove such sub-contractors from the site.
- viii) Following scope of jobs shall not be allowed to be sub-let and shall be retained with the CONTRACTOR in all cases:
 - Safety compliance with all jobs.
 - Planning and scheduling activities.
 - Quality assurance and quality control activities.
 - Resource mobilization including critical machinery.
 - All statutory provisions

- ix) The total value of sub-contracting work will not be above 50% of the contract on original SOR basis. Sub-contracting will generally be for specialized items of work, such as reinforced earth retaining walls, pre-stressing works, and so on. Procurement of material, hire of equipment or engagement of labour will not mean sub-contracting.
- x) All labor related Gate pass formalities, pertaining to the scope of sublet job shall be in the scope of concerned subcontractor, but the same is to be forwarded by SIC of the CONTRACTOR. [Compliance of all statutory and safety requirement related to workers shall be with the CONTRACTOR.]
- xi) Skilled/ Unskilled manpower (age limit upto 65 years) supply type contract can also be acceptable as subletting of job with all other labor related statutory compliances. [Compliance of all statutory and safety requirement related to workers shall be with the CONTRACTOR]
- xii) Subcontractor performance shall also be reported separately along with overall progress status to identify progress and constraint, and concerned EIC of Subcontractor may also be called for Periodic and Monthly review meeting taken by Client.
- xiii) Owner shall not allow any process of Sub Contractor to be further sub contracted.

4.22 **POWER OF ENTRY:**

If the CONTRACTOR shall not commence the WORK in the manner previously described in the Contract Document or if he shall at any time in the opinion of the Engineer-in-Charge:-

- i) fail to carry out the WORK in conformity with the Contract Document, or
- ii) fail to carry out the WORK in accordance with the Time Schedule, or
- iii) Substantially suspend WORK for a period of fourteen (14) days without authority from the Engineer-in-Charge, or
- iv) fail to carry out and execute the work to the satisfaction of the Engineer-in-Charge, or
- v) fail to supply sufficient or suitable constructional plant and equipment, temporary works, labour materials or things, or
- vi) Commit or suffer, or permit any other breach of any of the provisions of the CONTRACT to be performed on his part or observed to persist in any of the above mentioned breaches of the CONTRACT for fourteen (14) days, after notice in writing shall have been given to the CONTRACTOR by the Engineer-in-Charge requiring such breach to be remedied, or
- vii) Shall abandon the work, or
- viii) During the continuance of the contract shall become bankrupt, make any arrangement or composition with his creditors, or permit any execution to be levied or go into liquidation whether compulsory or voluntary not being merely a voluntary liquidation for the purpose of amalgamation or reconstruction. Then, in any such case the OWNER shall have the power to enter upon the WORK and take possession thereof and of the materials, temporary works, constructional plant and equipment and stock thereon, and to revoke the CONTRACTOR'S licence to use the same, and to complete the WORK by his Agents, other Contractors or Workmen, or to re-let the same upon any terms and to such other person, firm or corporation as the OWNER in his absolute discretion may think proper to employ and for the purpose aforesaid to use or authorise the use of any materials; temporary works, constructional plant and equipment and stock as aforesaid, without making payment or allowance to the CONTRACTOR for the said materials other than such as may be certified on writing by the Engineer-in-Charge to be reasonable, and without making any payment or allowance to the CONTRACTOR for the use of the temporary said works, constructional plant and equipment and stock or being liable for any loss or damage thereto, and if the OWNER shall incur additional expenditure by reason of his taking possession, of the works which are being completed by other Contractor (due account being taken of any

extra work or works which may be omitted) then the amount of such additional expenditure as certified by the Engineer-in-Charge shall be deducted from any money which may be due for work done by the CONTRACTOR under the CONTRACT and not paid for. Any deficiency shall forthwith be made good and paid to the OWNER by the CONTRACTOR and the OWNER shall have power to sell in such manner and for such price as he may think fit all or any of the constructional plant and equipment materials etc. constructed by or belonging to the Contractor and to recoup and retain the said deficiency or any part thereof out of the proceeds of the sale. The owner shall also have right to blacklist/ holidaylist the tenderer from future works/contracts/services etc.

This will be in line with Clause 4.13.

4.23 CONTRACTOR'S RESPONSIBILITY WITH OTHER AGENCIES:

Without repugnance to any other condition, it shall be the responsibility of the Contractor to work in close co-operation and co-ordinatation with other contractors working in the same area or influencing the work of other contractors. For example, Contractor executing the Work of Civil construction works with the Mechanical, Electrical, Air-conditioning and Intercommunication Contractors and other Agencies or their authorised representatives in providing the necessary grooves, recesses, cuts and opening etc. in walls, slabs, beams and columns etc. and making good the same to the desired finish as per Specifications for the placement of Electrical, Intercommunication cables, Conduits, Air-conditioning inlet and outlet grills and other Equipment etc. where required. For the above said requirements in the false ceiling and other partitions, the Contractor before starting up the work shall in consultation with the Electrical, Mechanical, Intercommunication, Air-conditioning Contractors, and other Agencies prepare and put up a joint scheme, showing the necessary openings, grooves, recesses, cuts, the methods of fixing required for the work of the aforesaid, and the finishes therein, to the Engineer-in-Charge and get the approval. The Engineer-in Charge before communicating his approval to the scheme, with any required modifications, shall get the final agreement of all the Agencies, which shall be binding. No claim shall be entertained on account of the above.

The CONTRACTOR shall conform in all respects with the provisions of statutory regulations, ordinances or bylaws of any local or duly constituted authorities or public bodies which may be applicable from time to time to the WORK or any temporary works. The CONTRACTOR shall keep the OWNER indemnified against all penalties and liabilities of every kind, arising out of non-adherence to such statutes ordinances, laws, rules, regulations etc.

4.24 OTHER AGENCIES AT SITE:

The CONTRACTOR shall have to execute the WORK in such place and condition where other Agencies will be engaged for other Works such as Site Grading, Filling and Levelling, electrical and Mechanical Engineering Work, etc. No claim shall be entertained due to Work being executed in the above circumstances.

4.25 NOTICES:

Any notice hereunder may be served on the CONTRACTOR or his duly authorised representative at the SITE or may be served by registered mail/ E-mail/ Fax direct to the address furnished by the CONTRACTOR. Proof of issue of any such notice will be conclusive of the CONTRACTOR having been duly informed of all contents therein.

4.26 **RIGHTS OF VARIOUS INTERESTS:**

i) The OWNER reserves the right to distribute the WORK between more than one Contractor. The CONTRACTOR shall co-operate and afford other Contractor's reasonable opportunity for access to the WORK for the carriage and storage of materials and execution of their Work. ii) Wherever the Work being done by any department of the OWNER or by other Contractors employed by the OWNER is contingent upon WORK covered by this CONTRACT, the respective rights of the various interests involved shall be determined by the Engineer in Charge to secure the completion of the various portions of the WORK in general harmony.

4.27 RIGHT OF OWNER TO DETERMINE/TERMINATE CONTRACT:

- 1. The OWNER shall, at any time, be entitled to determine and terminate the CONTRACT, if in the opinion of the OWNER the cessation of the WORK becomes necessary owing to paucity of funds or for any other cause whatsoever. On such determination / termination, the cost of approved materials, brought by the CONTRACTOR and lying at the site, at current market rates as verified and approved by OWNER'S Engineer and of the value of the work done to date by the CONTRACTOR shall be paid for in full at the rate specified in the Contract. A notice in writing from the OWNER to the CONTRACTOR of such determination and termination and reasons thereof shall be the conclusive proof of the fact that the Contract has been so determined and terminated by the OWNER.
- 2. Should the CONTRACT be determined under sub-clause 1 of this Article and the CONTRACTOR claims payment to compensate expenditure incurred by him in the expectation of completion the work, the OWNER shall consider and admit such claim as are deemed fair and reasonable and are supported by the vouchers to satisfaction of the Engineer-in-Charge. The OWNER'S decision on the necessity and propriety of such expenditure shall be final and conclusive and binding on the CONTRACTOR.
- 3. The contractor shall not be entitled to get any possible loss of profit that he could have earned had the contract been not determined / terminated under sub clause 1 of this section.

4.28 **PATENTS AND ROYALTIES:**

4.28.1 CONTRACTOR, if licensed under any patent covering Equipment, Machinery, Materials or compositions of matter to be used or supplied or methods and process to be practised or employed in the performance of this CONTRACT, agrees to pay all royalties and licence fees which may be due with respect thereto. If any Equipment, Machinery, Materials, composition matters to be used or supplied or methods and processes to be practised or employed in the performance of this CONTRACT, is covered by a patent under which the CONTRACTOR is not licensed then the CONTRACTOR before supplying or using the Equipment, Machinery, Materials, compositions method or processes shall obtain such licences, and pay such royaltiesand licence fees as may be necessary for performance of the CONTRACT. In the event the CONTRACTOR fails to pay any such royalty or obtain any such licence any suit for infringement of such patents which is brought against the CONTRACTOR or the OWNER as a result of such failure will be defended by the CONTRACTOR at his own expense and the CONTRACTOR will pay any damages and costs awarded in such suit.

The CONTRACTOR shall promptly notify the OWNER if the CONTRACTOR has acquired knowledge of any patent under which a suit for Infringement could be reasonably brought because of the use by the OWNER of any Equipment, Machinery, Materials, Process methods to be supplied hereunder. CONTRACTOR agrees to and does hereby grant to OWNER together with the right to extend the same to any of the subsidiaries of the OWNER as irrevocable, royalty free licence to use in any country any invention made by the CONTRACTOR or his employees in or as a result of the performance of the work under the CONTRACT.

With respect to any sub contract entered into by CONTRACTOR pursuant to the provisions of the relevant clause there of, the CONTRACTOR shall obtain from the sub-Contractor an undertaking to provide the OWNER with the same patent protection that CONTRACTOR is required to provide under the provisions of this clause.

- 4.29 All charges on account of royalty, tollage, rent, terminal or sales tax and/or other duties or any other levy on materials obtained for the work or temporary work or part thereof (excluding materials provided by the owner) shall be done by the contractor.
- 4.30 The contractor shall not sell or otherwise dispose of or remove except for the purpose of this contract, the sand, stone, clay, ballast, earth, rock or other substances, or materials obtained from any excavation made for the purpose of the work or any building or produce upon the site at the time of delivery of the possession thereof, but all substance, materials, buildings and produce shall be the property of the owner provided that the contractor may with the permission of the Engineer-In-Charge, use the same for the purpose of the work by payment of cost of the same as such as rate may be determined by the Engineer-In-Charge.
- 4.31 All drawings, blue prints, tracings, reproducible, models, plans, specification and copies thereof, furnished by the Owner as well as drawings, tracings, reproducible, plans specifications, design, calculations etc. prepared by the contractor for the purpose of execution of works covered in or connected with this contract shall be the property of Owner and shall not be used for any other work but are to be delivered to the Owner at the completion of the contract.
- 4.32 Where so desired by Engineer-in-Charge, the contractor agrees to respect the secrecy of any document, drawings etc. issued to him for the execution of this contract, and restrict access to such documents, drawing etc. to the minimum and further, the contractor agrees to execute an individual SECRECY agreement from each or any person employed by contractor having access to such documents, drawings and to any other agency or individual, without the written approval by Engineer-in-Charge.
- 4.33 The Contractor shall indemnify and save harmless the Owner from any loss on account of claims against the Owner for the contributory infringement of patent right arising out and based upon the claim that the use by the Contractor of the process included in the design prepared by the Contractor and used in the operation of the plant infringes on any patent right. With respect to any sub contract entered into by contractor pursuant to the provisions of the relevant clause hereof, the contractor shall obtain from the sub contractor an undertaking to provide the owner with the same patent protection that contractor is required to provide under the provisions of clause 4.28.1.

4.34 LIENS

- 4.34.1 If at any time, there should be evidence of any lien or claim for which the OWNER might have become liable and which is chargeable to the CONTRACTOR, the OWNER shall have the right to retain out of any payment then due or thereafter to become due an amount sufficient to completely indemnify the OWNER against such lien or claim and if such lien or claim be valid the OWNER may pay and discharge the same and deduct the amount so paid from any money which may be or may become due and payable to the CONTRACTOR. If any lien or claim remain unsettled after all payments are made, the CONTRACTOR shall refund or pay to the OWNER all moneys that the latter may be compelled to pay discharging such lien or claim including all costs and reasonable expenses.
- 4.34.2 The Owner shall have general lien over all tools, equipment, machinery and materials etc. belonging to the CONTRACTOR for any amount due from the CONTRACTOR to the Owner on any account. The owner shall have a general lien, over any amount payable to the contractor on any account whether presently due or not, for any amount due from the contractor to the owner on any account whatsoever including under any previous jobs/contracts and owner shall have full right for adjustments/ appropriation of such amounts without notice to the contractor.
- 4.34.3 The final payment shall not become due until the contractor delivers to the Engineer-In-Charge a complete release or waiver of all lien arising or which may arise out of his agreement or receipt in full certification by the contractor in a form approved by Engineer-In-Charge that all invoices for labour, materials, services have been paid in lien thereof and if required by the Engineer-In-Charge in any case an affidavit that so far as the contractor has knowledge or information the releases and receipts include all the labour and material

for which a lien could be filled.

4.34.4 CONTRACTOR will indemnify and hold the owner harmless, for a period of two year after the issue of final Certificate, from all liens and other encumbrances against the owner on account of debts or claims alleged to be due from the contractor or his sub contractor to any person including sub due from the CONTRACTOR or his sub contractor to any person including sub or litigation in connection therewith. CONTRACTOR shall defend or contest at his own expense any fresh claim or litigation brought against the owner or the contractor by any persons including his sub contractor, till its satisfactory settlement even after the expiry of two years from the date of issue of final certificate.

4.35 OPERATION OF CONTRACT:

4.35.1 Law Governing:

Regardless of the place of contracting, place of performance or otherwise, this Agreement, and all amendments, modifications, alterations, or supplements, thereto shall be governed by the laws of India and respective state laws for the nature, validity and interpretation thereof.

4.35.2 Non-Waiver of Default:

Any failure by the Owner or Contractor at any time, or from time to time, to enforce or require the strict keeping and performance of any of the terms or conditions of this agreement, or to exercise a right hereunder, shall not constitute a waiver of such terms, conditions or rights, and shall not affect or impair same, or the right of the Owner or the Contractor, as the case may be at any time to avail itself of same.

4.36 LIMITATION OF LIABILITY:

The aggregate liability of the Contractor to NRL under the Contract shall be total Contract Price/total Contract Value, except that this Clause shall not limit the liability of the Contract for following;

- i. Any liability pursuant to Contractors breach of any Applicable Law; or
- ii. Any loss resulting from fraud, intentional or willful misconduct or illegal or unlawful acts or gross negligence or omissions of contractor or its affiliates or any sub-contractor or any supplier or any of its or their respective officers, directors, employees, servants or agents or any other person acting on behalf of the Contractor; or
- iii. Any liability to rectify, repair, restore or replace any materials and / or works or deficiencies therein in terms of the Contract; or
- iV. In the event of any claim or loss or damage arising out of infringement of Intellectual Property.

Neither party shall be liable to the other party for any kind of indirect or consequential loss or damage including loss of use, loss of profit, loss of production or business interruption which is connected with any claim arising under the contract.

SECTION V

PERFORMANCE OF WORK

5.0 EXECUTION OF WORK:

All the WORK shall be executed in strict conformity with the provisions of the Contract Document and with such explanatory detailed Drawings, Specifications and Instructions as may be furnished from time to time to the CONTRACTOR by the Engineer-in-Charge, whether mentioned in the CONTRACT, or not. The CONTRACTOR shall be responsible for ensuring that WORK throughout are executed in the most substantial, proper and workman like manner with the quality of material and workmanship in strict accordance with the Specifications and to the entire satisfaction of the Engineer-in-Charge.

5.1 CO-ORDINATION AND INSPECTION OF WORK:

The co-ordination and inspection of the day-to-day WORK under the CONTRACT shall be the responsibility of the Engineer-in-Charge. The written/ verbal instructions regarding any particular work will normally be passed by the Engineer-in-Charge or his Authorised Representative. A work order book /log book will be maintained by the CONTRACTOR for each job in which the aforesaid instructions will be entered. These will be signed by the CONTRACTOR or his authorised representative by way of acknowledgment within Twelve (12) hours. The non maintaining of the order book/ log book or non-signing by the contractor shall not preclude the contractor from complying with the instructions.

5.2 ALTERATIONS IN SPECIFICATIONS AND DESIGNS AND EXTRA WORK:

5.2.1 The work covered under this contract having to be executed by the contractor on a lumpsum firm price/item rate quoted by him, the owner may accept proposals for changes in value of contract or extension in time on account of any changes which may arise to the contractor's scope of work as a result of detailed Engineering and thereafter during the execution of work.

In such cases a change order will be initiated by the contractor at the appropriate time for the Owner's prior approval giving the full back up data for their review as well as indicating any impact on price for final clearance. Contractor shall execute the work under such change request based on written communication from the EIC.

5.2.2 The Engineer-in-Charge shall have power to make any alterations in, omission from, additions to or substitutions for, the schedule of rates, the original Specifications, Drawings, Designs and instructions that may appear to him to be necessary or advisable during the progress of WORK and CONTRACTOR shall be bound to carry out such altered extra/new items of Work in accordance with any instruction which may be given to him in writing signed by the Engineer-in-Charge, and such alterations, omissions, additions or substitutions shall not invalidate CONTRACT and any altered, additional or substituted Work which CONTRACTOR may be directed to do in manner above specified as part of the Work shall be carried out by CONTRACTOR on the same conditions in all respects on which he agreed to do the WORK. The time for completion of WORK may be extended for the part of the particular job at the discretion of the Engineer-in-Charge, for only such alterations, additions or substitutions of Work, as he may consider as just and reasonable. The rates for such additional, altered or substituted Work under this clause shall be worked out in accordance with the following provisions:

I. FOR ITEM RATE CONTRACT:

- a) If the rates for additional, altered or substituted Work are specified in CONTRACT for the WORK, the CONTRACTOR is bound to carry out the additional, altered or substituted Work at the same rates as are specified in CONTRACT.
- b) If the rates for the additional, altered or substituted Work are not specifically provided in CONTRACT for

WORK, the rates will be derived from the rates for similar class of Work as are specified in CONTRACT for the WORK. The opinion of the Engineer-in-Charge, as to whether or not the rates can be reasonably so derived from the items in the CONTRACT will be final and binding on CONTRACTOR.

- c) If the rates for the altered, additional or substituted Work cannot be determined in the manner specified in the sub-clause (a) & (b) above, then CONTRACTOR shall, within seven (7) days of the date of receipt of order to carry out WORK, inform the Engineer-in-Charge of the rate which it is his intention to charge for such class of Work, supported by analysis of the rate or rates claimed, and the Engineer-in-Charge shall determine the rate or rates on the basis of the prevailing market rates of materials, labour cost at schedule of labour plus fifteen percent (15%) thereon to cover CONTRACTOR'S supervision, over-heads and profit and pay the CONTRACTOR accordingly. The opinion of the Engineer-in-Charge as to the current market rates of materials and the quantum of labour involved per unit of measurement will be final and binding on CONTRACTOR.
- d) Where the items of work will be execute by the CONTRACTOR through nominated specialist agency as approved by the Engineer-In-Charge, then the actual amount paid to such nominated agency supported by the documentary evidence and as certified by Engineer-In-Charge shall be considered plus 10% (Ten percent) to cover all contingencies, overhead, profits to arrive at the rates.
- e) Where the value of addition of new items together with the value of alterations, additions/deletion/substitution lead to execution of the Contract value below 75%, compensation shall be paid on recommendation from EIC for decrease in the value of work as followed:

5% of (75% of the awarded value of contract minus actually executed value of contract, inclusive of extra item, if any)

Contractor shall apply for compensation to respective EIC for due consideration during closing of the contract.

II. FOR LUMPSUM CONTRACTS

CONTRACTOR shall within 7 days of the date of receipt of order to carry out the altered, additional or substituted work, inform the Engineer-In-Charge of the rates which it is his intention to charge for such class of work, supported by analysis of the rate or rates claimed, and the Engineer-In-Charge shall determine the rate or rates on the basis of the prevailing market rates, labour cost at schedule of labour rates plus 15% to cover contractor supervision, overheads and profit and pay the contractor accordingly. The opinion of the Engineer-In-Charge as to current market rates of materials and the quantum of labour involved per unit of measurement will be final and binding of the Contractor.

5.3 WORK ON SUNDAYS AND HOLIDAYS:

For carrying out WORK on Sundays and Holidays, The CONTRACTOR will approach the Engineer-in-Charge or his representative at least two (2) days in advance and obtain permission in writing.

5.4 GENERAL CONDITIONS FOR CONSTRUCTION AND ERECTION WORK:

5.4.1 Contractor should appraise himself of all the conditions prevailing in Refinery, Marketing Terminals and other sensitive location and the restrictions placed on movement of personnel and equipment, types of equipment and tools permitted, working methods allowed etc. in the light of security and safety regulations operative in the area. The safety regulations to be compiled with by the contractor are given in this document. No idle time wages or compensation for temporary stoppage of work or restrictions would be paid and the rate quoted for various items of work should cover the cost of such

contingencies and eventualities. Special care shall be taken by contractor in transportation, storage, working on equipments and other construction activities to protect the existing features and prevent damage to any facilities. Necessary protective structures, barricades have to be erected at various places as directed by Engineer-in- Charge. No extra payment for such protective work shall be made unless specially provided in the schedule of rates.

- 5.4.2 The working time is forty-eight (48) hours per week. Overtime work is permitted in cases of need and the OWNER will not compensate the same. Shift working at two (2) or three (3) shifts per day, if necessary and the CONTRACTOR should take this aspect into consideration for formulating his rates for quotation. No extra claims will be entertained by the OWNER on this account.
 - For carrying out work beyond working hours the contractor will approach the Engineer-In-Charge or his authorized representative and obtain the prior written permission.
- 5.4.3 The CONTRACTOR must arrange for the placement of workers in such a way that the delayed completion of the WORK or any part thereof for any reason whatsoever will not affect their proper employment. The OWNER will not entertain any claim for idle payment whatsoever.
- 5.4.4 The CONTRACTOR shall submit to the OWNER reports at regular intervals regarding the state and progress of WORK. The details and proforma of the report will mutually be agreed after the award of CONTRACT.

The contractor shall provide display boards showing progress and labour strength at work site, as directed by the Engineer-In-Charge.

5.5 DRAWINGS TO BE SUPPLIED BY OWNER:

- 5.5.1 The drawings accompanying the tender document are indicative of nature of work and issued for-tendering purpose only. Purpose of this drawing is to enable the tenderer to make an offer in line with requirements of the owner. However no extra claim whatsoever shall be entertained for any variation in the "Approved for Construction" and "Tender Drawings" regarding any change /units. Construction shall be as per drawings /specifications issued/approved by the Engineer-In-Charge during the course of execution of work. Detailed construction Drawings on the basis-of which actual execution of work is to proceed will be furnished *to* the contractor progressively based on the detailed construction program evolved after the award of work and also based on construction progressed achieved.
- 5.5.2 Detailed working Drawings on the basis of which actual execution of WORK is to proceed, will be furnished from time to time during the progress of WORK. CONTRACTOR shall be deemed to have gone through the Drawings supplied to him thoroughly and carefully and in conjunction with all other connected Drawings and bring to the notice of the Engineer-in-Charge discrepancies if any, therein before actually carrying out the WORK.
- 5.5.3 Copies of all detailed working Drawings relating to WORK shall be kept at the CONTRACTOR's office of the SITE and shall be made available to the Engineer-in-Charge at any time during the CONTRACT. The Drawings and other Documents issued by the OWNER shall be returned to the OWNER on completion of the WORK.

5.6 DRAWING TO BE SUPPLIED BY THE CONTRACTOR:

5.6.1 Where Drawings/Data are to be furnished by the CONTRACTOR, they shall be as enumerated in the special conditions of the CONTRACT, and shall be furnished within the specified time.

5.6.2 Where approval of Drawings for Manufacture/Construction/Fabrication has been specified, it shall be CONTRACTOR's responsibility to have these Drawings prepared as per the directions of Engineer-in-Charge and got approved before proceeding with Manufacture/ Construction/Fabrication as the case may be. Any changes that may have become necessary in these Drawings during the execution of WORK shall have to be carried out by the CONTRACTOR to the satisfaction of Engineer-in-Charge at no extra cost. All final Drawings shall bear certification stamp as indicated below duly signed by both the CONTRACTOR and the Engineer-in-Charge.

Certified true for	
Project	
Agreement No	
Signed	
(CONTRACTOR)	(Engineer-in-Charge)

5.6.3 A period of three (3) weeks from the date of receipt shall be required for approval of Drawings by the Engineer-in-Charge or Consultant as the case may be.

The drawings submitted by the contractor shall be reviewed by the Engineer- In-Charge as far as practicable within 3(three) weeks and shall be modified by the contractor if any modifications and/or corrections are required by the Engineer-In-Charge. The contractor shall incorporate such modifications and/or corrections and submit the final drawings for approval. Any delays arising out of failure by the contractor rectify the drawing in good time shall not alter the contract completion time.

- 5.6.4 It shall be the responsibility of the contractor to furnish the manufacturer's drawings wherever supply of equipment is in the scope of contractor in order to facilitate the inspection or erection of equipment supplied by them.
- 5.6.5 "As-built" drawings showing all corrections, adjustments etc. shall be furnished by the Contractor six copies (either hard or soft as directed by EIC) and one transparency for record purpose of the Owner.
- 5.6.6 The Contractor will furnish drawings, manufacturers catalogue, operating manual for items manufactured or procured by the contractor in properly bound form/ soft copy. In case the contractor fails to submit these document in time a suitable amount at the discretion of the owner would be retained or recovered from the bills.

5.7 SETTING OUT WORK:

- 5.7.1 The Engineer-in-Charge shall furnish the CONTRACTOR with only the four (4) corners of the SITE and a level Bench Mark and the CONTRACTOR shall set out the WORK and shall provide an efficient staff for the purpose and shall be responsible for the accuracy of such setting out.
- 5.7.2 The CONTRACTOR shall provide, fix and be responsible for the maintenance of all Stakes, Template, Level Marks, Profiles, and other similar things and shall take all necessary precautions to prevent their removal or disturbance and shall be responsible for the consequence of such removal or disturbance should the same takes place and for their efficient and timely reinstatement. The CONTRACTOR shall also be responsible for the maintenance of all existing Survey Marks, Boundary Marks, Distance Marks and Centre Line Marks, either existing or supplied and fixed by the CONTRACTOR. The WORK shall be set out to the satisfaction of the Engineer-in-Charge. The approval thereof or joining with the CONTRACTOR by the Engineer-in-Charge in setting out the WORK shall not relieve the CONTRACTOR of any of his responsibilities.

- 5.7.3 Before beginning the WORK, the CONTRACTOR shall at his own cost, provide all necessary reference and level posts, bamboos, flags, ranging rods, strings and other materials for proper layout of the WORK in accordance with the scheme for bearing marks acceptable to the Engineer-in-Charge. The centre, longitudinal or face lines and cross lines shall be marked by means of small masonry pillars. Each pillar shall have distinct marks at the centre to enable theodolite to be set over it. No work shall be started until all these points are checked and approved by the Engineer-in-Charge in writing but such approval shall not relieve the contractor of any of his responsibilities. The CONTRACTOR shall also provide all labour, material and other facilities, as necessary, for the proper checking of layout and inspection of the points during construction.
- 5.7.4 Pillars bearing geodetic marks located at the SITE of work under construction should be protected and fenced by the CONTRACTOR.
- 5.7.5 On completion of WORK, the CONTRACTOR must submit the geodetic documents according to which the WORK was carried out.

5.8 RESPONSIBILITY FOR LEVEL AND ALIGNMENT:

The CONTRACTOR shall be entirely and exclusively responsible for the horizontal and vertical alignment, the levels and correctness of every part of WORK and shall rectify effectually any errors or imperfections therein. Such rectification shall be carried out by CONTRACTOR at his own cost, when instructions are issued by the Engineer-in-Charge.

5.9 MATERIAL TO BE SUPPLIED BY CONTRACTOR:

5.9.1 The contractor shall procure and provide the whole of the materials required for construction including Steel, Cement, electrodes, consumables and other building and construction materials, tools, tackles, construction plant and equipment for the completion and maintenance of the work except the materials which will be issued by owner and shall make his own arrangement for procuring such materials and for the transport thereof. The owner may give necessary recommendation to the respective authority if so desired by the contractor but assumes no further responsibility of any nature. The owner will insist on the procurement of materials which bear ISI stamp and /or which are supplied by reputed suppliers.

All materials procured should meet the specification given in the tender document. The Engineer-In-Charge may, at his discretion, ask for samples and test certificates for any batch of any material procured. Before procuring, the contractor should get the approval of Engineer-In- Charge for any material to be used for the works. If name of manufacturers or make for materials is specified in the Contract, Contractor shall procure materials from the same manufactures.

Manufacture certificate shall be submitted for all materials supplied by the contractor. If, however, in the opinion of the Engineer- In- Charge any tests are required to be conducted on the materials supplied by the contractor, these will be arranged by the contractor, promptly at his own cost.

- 5.9.2 The CONTRACTOR shall properly store all materials either issued to him/ brought by him to the site to prevent damages due to rain, wind, direct exposure to sun, etc. as also from theft, pilferage etc. for proper and speedy execution of his works. The CONTRACTOR shall maintain sufficient stocks of all materials required by him.
- 5.9.3 No material /shall be dispatched from the contractor's stores before obtaining the approval, in writing, of Engineer-In-Charge.

5.10 STORES SUPPLIED BY THE OWNER / SECURITY OF MATERIALS / EQUIPMENTS:

- 5.10.1 If Specification of WORK provides for the use of any material of special description to be supplied from OWNER's stores or it is required that CONTRACTOR shall use certain stores to be provided by the Engineer-in-Charge, such materials and stores, and price to be charged therefore as herein mentioned being so far as practicable for the convenience of CONTRACTOR but not so as in any way to control the meaning or effect of CONTRACT. CONTRACTOR shall be bound to purchase and shall be supplied such materials and stores as are from time to time required to be used by him for purpose of CONTRACT only. The sums due from CONTRACTOR for the value of material supplied by OWNER will be recovered from the running account bill on the basis of the actual consumption of materials in WORK covered and for which the running account bill has been prepared. After the completion of WORK, however, the CONTRACTOR has to account for the full quantity of materials supplied to him as per relevant clauses in this Document.
- 5.10.2 The value of the stores materials as may be supplied to CONTRACTOR by OWNER will be debited to CONTRACTOR'S account at the rates shown in the schedule of materials and if they are not entered in the schedule, they will be debited at cost price, which for the purpose of CONTRACT shall include the cost of carriage and all other expenses whatsoever such as normal storage supervision charges which shall have been incurred in obtaining the same at OWNER'S stores. All materials so supplied to CONTRACTOR shall remain the absolute property of OWNER and shall not be removed on any account from SITE, and shall be at all times open for inspection to the Engineer-in-Charge. Any such materials remaining unused at the time of the completion or termination of CONTRACT shall be returned to OWNER's stores or at a place as directed by the Engineer-in-Charge in perfectly good condition at CONTRACTOR's cost.

5.11 CONDITIONS FOR ISSUE OF MATERIALS:

- i) Materials specified as to be issued by OWNER will be supplied to CONTRACTOR by OWNER from his stores. It shall be the responsibility of CONTRACTOR to take delivery of the materials and arrange for its loading, transport and unloading at SITE at his own cost. The materials shall be issued between the working hours and as per the rules of OWNER as framed from time to time.
- ii) The CONTRACTOR shall bear all incidental charges for the storage and safe custody of materials at SITE after these have been issued to him.
- iii) Materials specified as to be issued by OWNER shall be issued in standard sizes as obtained from the Manufacturers.
- iv) The CONTRACTOR shall construct suitable godowns at SITE for storing the materials safe against damage by rain, dampness, fire, theft etc. He shall also employ necessary watch and ward establishment for the purpose.
- v) It shall be the duty of CONTRACTOR to inspect the materials supplied to him at the time of taking delivery and satisfy himself that they are in good condition. After the materials have been delivered by OWNER, it shall be the responsibility of CONTRACTOR to keep them in good condition and if the materials are damaged or lost, at any time, they shall be repaired and / or replaced by him at his own cost according to the directions of the Engineer-in-Charge.
- vi) OWNER shall not be liable for delay in supply or non-supply of any materials which OWNER has undertaken to supply where such failure or delay is due to natural calamities, act of enemies, transport and procurement difficulties and any circumstances beyond the control of OWNER. In no case, CONTRACTOR shall be entitled to claim any compensation or loss suffered by him on this account.

- vii) It shall be the responsibility of CONTRACTOR to arrange in time all materials required for WORK other than those to be supplied by OWNER. If, however, in the opinion of the Engineer-in-Charge, the execution of WORK is likely to be delayed due to CONTRACTOR'S inability to make arrangements for supply of materials which normally he has to arrange for, the Engineer-in-Charge shall have the right at his own discretion to issue such materials if available with OWNER or procure the materials from the market or elsewhere and CONTRACTOR will be bound to take such materials at the rates decided by the Engineer-in-Charge. This however does not in any way absolve CONTRACTOR from responsibility of making arrangements for the supply of such materials in part or in full, should such a situation occur nor shall this constitute a reason for the delay in the execution of WORK.
- viii) None of the materials supplied to CONTRACTOR will be utilised by CONTRACTOR for manufacturing item which can be obtained as supplied from standard manufacturer in finished form.
- ix) The CONTRACTOR shall, if desired by the Engineer-in-Charge, be required to execute an indemnity bond in the prescribed form, for safe custody and accounting of all materials issued by OWNER.
- x) The CONTRACTOR shall furnish to the Engineer-in-Charge sufficiently in advance a statement showing his requirement of the quantities of the materials to be supplied by OWNER and the time when the same will be required by him for WORK, so as to enable the Engineer-in-Charge to make necessary arrangements for procurement and supply of the materials.
- xi) A day-to-day account of the materials issued by OWNER shall be maintained by CONTRACTOR indicating the daily receipt, consumption and balance in hand. This account shall be maintained in a manner prescribed by the Engineer-in-Charge along with all connected papers viz., requisitions, issues etc. and shall be always available for inspection in the CONTRACTOR'S office at SITE.
- xii) CONTRACTOR should see that only the required quantities of materials are got issued. CONTRACTOR shall not be entitled to cartage (CARRIAGE CHARGES) and incidental charges for returning the surplus materials, if any, to the stores where from they were issued or to the place as directed by the Engineer-in-Charge.
- xiii) Materials/Equipment supplied by OWNER shall not be utilised for other purpose (s) than issued for.

5.12 MATERIAL PROCURED WITH ASSISTANCE OF OWNER, RETURN OF SURPLUS:

Notwithstanding anything contained to the contrary in any or all the clauses of this CONTRACT where any materials for the execution of CONTRACT are procured with the assistance of OWNER either by issue from OWNER'S stock or purchases made under orders or permits or licences issued by Government, CONTRACTOR shall hold the said materials as trustee for OWNER and use such materials economically and solely for the purpose of CONTRACT and not dispose them of without the permission of OWNER and return, if required by the Engineer-in-Charge, all surplus or unserviceable materials that may be left with him after the completion of CONTRACT or at its termination for any reason, whatsoever on his being paid or credited such price as the Engineer-in-Charge shall determine having due regard to the condition of the materials. The price allowed to CONTRACTOR, however, shall not exceed the amount charged to him excluding the storage charges, if any. The decision of the Engineer-in-Charge shall be final and conclusive in such matters. In the event of breach of the aforesaid condition, CONTRACTOR shall, in terms of licences or permits and/or for criminal breach of trust, be liable to compensate OWNER at double rate or any higher rate. In the event of those materials at that time having higher rate or not being available in the market, then any other rate to be determined by the Engineer-in-Charge at his discretion shall be final and conclusive.

5.13 MATERIALS OBTAINED FROM DISMANTLING:

If CONTRACTOR in the course of execution of WORK is called upon to dismantle any part for reasons other than those stipulated in clauses 5.19 and 5.24 hereunder, the materials obtained in the work of dismantling etc., will be considered as OWNER'S property and will be disposed of to the best advantage of OWNER.

5.14 ARTICLES OF VALUE FOUND:

All gold, silver and other minerals of any description and all precious stones, coin, treasure, relics, antiquities, natural wealth and other similar things which shall be found in under or upon Site, shall be the property of OWNER and CONTRACTOR shall duly preserve the same to the satisfaction of the Engineer-in-Charge and shall from time to time deliver the same to such person or persons indicated by OWNER.

5.15 DISCREPANCIES BETWEEN INSTRUCTIONS:

Should any discrepancy occur between the various instructions furnished to CONTRACTOR, his agents or staff or any doubt arise as to the meaning of any such instructions or should there be any misunderstanding between CONTRACTOR'S staff and the Engineer-in-Charge's staff, CONTRACTOR shall refer the matter immediately in writing to the Engineer-in-Charge whose decision thereon shall be final and conclusive and no claim for losses alleged to have been caused by such discrepancies between instructions, doubts, or misunderstanding shall in any event be admissible.

5.16 WORK IN MONSOON AND DEWATERING:

- 5.16.1 The execution of the work may entail working in the monsoon also. The Contractor must maintain a minimum labor force as may be required for the job and plan and execute the construction and erection according to the prescribe schedule. No extra rate will be considered for such work in monsoon.
- 5.16.2 During the monsoon and other period, it shall be the responsibility of the Contractor to keep the construction work site free from water at his own cost.

5.17 ACTION WHERE NO SPECIFICATION IS ISSUED:

In case of any class of Work for which there is no such Specification supplied by OWNER as is mentioned in the Tender Document such Work shall be carried out in accordance with Indian Standard Specifications and if the Indian Standard Specifications do not cover the same the Work should be carried out as per Standard Engineering Practice, subject to the approval of the Engineer-in-Charge.

5.18 INSPECTION OF WORK:

5.18.1 The Engineer-in-Charge will have full power and authority to inspect the WORK at any time wherever in progress either on the SITE or at the CONTRACTOR's Premises / Workshops wherever situated, Premises/Workshops of any person, firm or corporation where work in connection with the CONTRACT may be in hand or where materials are being or are to be supplied, and CONTRACTOR shall afford or procure for the Engineer-in-Charge, every facility and assistance to carry out such inspection. CONTRACTOR shall, at all time during the usual working hours and all other times at which reasonable responsible notice of the intention of the Engineer-in-Charge or his representative to visit the WORK shall have been given to CONTRACTOR, either himself be present to receive orders and instructions, or have a responsible agent duly accredited in writing present for the purpose. Orders given to the CONTRACTOR's agent shall be considered to have the same force as if' they had been given to

CONTRACTOR himself. The CONTRACTOR shall give not less than (7) days notice in writing to the Engineer-in-Charge before covering up or otherwise placing beyond reach of inspection and measurement of any Work in order that the same may be inspected and measured. In the event of breach of above the same shall be uncovered at CONTRACTOR's expense for carrying out such measurement or inspections.

5.18.2 No material shall be despatched from CONTRACTOR's stores before obtaining the approval in writing of the Engineer-in-Charge.

The CONTRACTOR is to provide at all times during the progress of WORK and maintenance period proper means of access with ladders, gangways, etc. and the necessary attendance to move and adopt as directed for inspection or measurement of WORK by the Engineer-in-Charge.

5.19 ASSISTANCE TO ENGINEER-IN-CHARGE:

The CONTRACTOR shall make available to the Engineer-in-Charge free of cost all necessary Instruments and assistance in checking of setting out for WORK and in the checking of any WORK made by CONTRACTOR for the purpose of setting out and taking measurement of WORK.

5.20 TESTS FOR QUALITY OF WORK/QUALITY ASSURANCE:

- 5.20.1 All workmanship shall be of the respective kinds described in the Contract Document and in accordance with the instructions of the Engineer-in-Charge and shall be subjected from time to time to such test at CONTRACTOR's cost as the Engineer-in-Charge may direct at the place of manufacture or fabrication or on the SITE or at all or any such places. CONTRACTOR shall provide assistance instrument, labour and materials as are normally required for examining, measuring and testing any workmanship as may be selected and required by the Engineer-in-Charge .
- 5.20.2 All the tests that will be necessary in connection with the execution of WORK as decided by the Engineer-in-Charge shall be carried out at the field testing laboratory of OWNER by paying the charges as decided by OWNER from time to time. In case of non-availability of testing facility with OWNER the required test shall be carried out at the cost of CONTRACTOR at government or any other testing laboratory as directed by Engineer-in-Charge.
- 5.20.3 If any tests are required to be carried out in connection with the Work or materials or workmanship not supplied by CONTRACTOR, such tests shall be carried out by CONTRACTOR as per the instructions of Engineer-in-Charge and cost of such tests shall be reimbursed by OWNER.
- 5.20.4 Bidder shall include in his offer the quality Assurance program containing the over all quality management and procedures which is required to be adhered on during the execution of contract or after the award of the contract detailed quality assurance program to be followed for the execution of the contract under various divisions of work will be mutually discussed and agreed to.
 - The Contractor shall establish document and maintain an effective quality assurance system as outlined in recognized codes. Quality assurance System Plans/Procedure of the contractor shall be furnished in the form of a QA manual. This document should cover details of the personnel responsible for the quality assurance, plans or procedures to be followed for quality control in respect of design, Engineering, Procurement, supply, installation, testing and commissioning. The quality assurance system should indicate organizational approach for quality control and quality assurance of the construction activities, at all stages of workout at site as well as at manufacturer's works and dispatch of materials. The Owner/EIL or their representative reserve the right to inspect/witness, review any or all stages of work at shop/site as deemed necessary for quality assurance.

5.21 SAMPLES:

The CONTRACTOR shall furnish to the Engineer-in-Charge for approval when requested or if required by the Specifications, adequate samples of all materials and finishes to be used in WORK. Such samples shall be submitted before WORK is commenced and in ample time to permit tests and examinations thereof. All materials furnished and finishing applied in WORK shall be fully equal to the approved samples.

5.22 ACTION AND COMPENSATION IN CASE OF BAD WORK:

If it shall appear to the Engineer-in-Charge that any Work has been executed with unsound, imperfect or unskilled workmanship, or with materials of any inferior description, or that any materials or Articles provided by CONTRACTOR for the execution of WORK are unsound, or of a quality inferior to that contracted for, or otherwise not in accordance with CONTRACT, CONTRACTOR shall on demand in writing from the Engineer-in-Charge or his authorised representative specifying the Work, materials or Articles complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith shall rectify or remove and reconstruct the work, so specified and provide other proper and suitable materials or Articles at his own charge and cost and in the event of failure to do so within a period to be specified by the Engineer-in-Charge in his demand aforesaid, CONTRACTOR shall be liable to pay compensation at the rate of one percent (1.0%) of the estimated cost of the WORK, for every week limited to a maximum of ten percent (10.0%) of the value of the WORK, while his failure to do so shall continue and in the case of any such failure, the Engineer-in-Charge may on expiry of notice period rectify or remove and re-execute the Work or remove and replace with others, the materials or Articles complained of as the case may be at the risk and expense in all respects of CONTRACTOR. The decision of the Engineer-in-Charge as to any question arising under this clause shall be final and conclusive.

5.23 **SUSPENSION OF WORK:**

- i) Subject to the provisions of the sub-para (ii) of this clause, CONTRACTOR shall if ordered in writing by the Engineer-in-Charge, or his representative, temporarily suspend the WORK or any part thereof for such period and such time as so ordered and shall not, after receiving such written order proceed with WORK therein ordered to be suspended until he shall have received a written order to proceed therewith. The CONTRACTOR shall not be entitled to claim compensation for any loss or damage sustained by him by reason of temporary suspension of WORK aforesaid. An extension of time for completion, corresponding with the delay caused by any such suspension of WORK as aforesaid will be granted to CONTRACTOR should he apply for the same provided that the suspension was not consequent to any default or failure on the part of CONTRACTOR.
- ii) In case of suspension of WORK ordered in writing by Engineer-in-Charge, for a period of more than three (3) months, CONTRACTOR shall have the option to terminate the CONTRACT, provided that the contractor shall exercise such option forthwith. The contractor shall not be entitled to claim any damages or compensation on this account.

5.24 OWNER MAY DO PART OF WORK:

Upon failure of CONTRACTOR to comply with any instructions given in accordance with the provisions of this CONTRACT, OWNER has the alternative right, instead of assuming charge of WORK to place additional labour force, tools, Equipment and materials on such parts of WORK, as OWNER may designate or also engage another Contractor to carry out WORK. In such cases, the OWNER shall deduct from the amount which otherwise might become due to CONTRACTOR, the cost of such WORK and materials with fifteen percent (15%) added to cover all departmental charges and should the total amount there of exceed the amount due to CONTRACTOR, CONTRACTOR shall pay the difference to OWNER. The 15% overhead charge is a pre-estimate of departmental charges incurred by OWNER. There is no need to establish actual departmental charges.

5.25 POSSESSION PRIOR TO COMPLETION:

The Engineer-in-Charge shall have the right to take possession of or use any completed or partially completed WORK or part of WORK. Such possession or use shall not be deemed to be an acceptance of any Work completed in accordance with CONTRACT. If such prior possession or use by the Engineer-in-Charge delays the progress of Work, equitable adjustment in the time of completion will be made and the CONTRACT shall be deemed to be modified accordingly to that extent provided that the contractor shall not be entitled to claim any compensation for the same.

5.26 PERIOD OF LIABILITY FROM THE DATE OF ISSUE OF COMPLETION CERTIFICATE:

The contractor shall guarantee the installation/site work for a period of 12 (twelve) Months from the date of completion of work, unless otherwise specified. Any damage that may lie undiscovered at the time of issue of completion certificate, connected in any way with the equipment or materials supplied by him or in the workmanship shall be rectified or replaced by the contractor at his own expense as deemed necessary by the Engineer-in-Charge or in default, the Engineer-in-Charge may cause the same made good by other workmen and deduct expenses (for which the certificate of Engineer-in-Charge shall be final) from any sums that may be then or at any time thereafter, become due to the contractor or from his security deposit.

5.27 FAILURE TO RECTIFY DEFECTS DURING LIABILITY PERIOD:

If the CONTRACTOR fails to make good the defect noticed during the liability period, the Owner shall carry out such works and recover the actual cost incurred towards labour, supervision, materials, and consumables or otherwise plus 100% (hundred percent) towards overhead from any pending bill/security deposit of the contractor.

If the CONTRACTOR feels that any variation in work or in quality of materials or proportions would be beneficial or necessary to fulfil guarantee called for, he shall bring this to the notice of the Engineer-in-Charge in writing.

5.28 EXTENDED LIABILITY ON CONTRACT PERFORMANCE GUARANTEE:

If during the period of liability any portion of the work/equipment, is found defective and is rectified/replaced, the period of liability or such equipment/portion of work shall be operative from the date of such rectification/ replacement are carried out and contract performance guarantee shall be furnished separately for the extended period of liability for the portion of work/equipment only. Notwithstanding the above provisions, the supplier's, guarantees/warrantees for the replaced equipment shall also be passed on to the Owner.

5.29 **CARE OF WORKS**:

From the commencement of completion of WORK, CONTRACTOR shall take full responsibility for the care for WORK including all temporary works and in case any damages, loss or injury shall happen to WORK or to any part thereof or to any temporary works from any cause whatsoever, shall at his own cost repair and make good the same so that at completion WORK shall be in good order and in conformity, in every respects, with the requirements of CONTRACT and the Engineer-in-Charge's instructions.

5.30 **DEFECTS PRIOR TO TAKING OVER:**

It at any time, before WORK is taken over, the Engineer-in-Charge shall:-

- a) Decide that any work done or materials used by CONTRACTOR or any Sub-Contractor is defective or not in accordance with CONTRACT, or that WORK or any portion thereof are defective, or do not fulfil the requirements of CONTRACT (All such materials being hereinafter, called; 'Defects' in this clause), and
- (b) As soon as reasonably practicable notice given to CONTRACTOR in writing of the said decision, specifying particulars of the defects alleged to exist or to have occurred, then CONTRACTOR shall at his own expense and with all speed make good the defects so specified.

In case the CONTRACTOR shall fail to do so, OWNER may take, at the cost of CONTRACTOR, such steps as may in all circumstances, be reasonable to make good such defects. The expenditure so incurred by OWNER will be recovered from the amount due to CONTRACTOR. The decision of the Engineer-in-Charge with regard to the amount to be recovered from CONTRACTOR will be final and binding on CONTRACTOR. As soon as WORK have been completed in accordance with CONTRACT (except in minor respects that do not effect their use for the purpose for which they are intended and except for maintenance thereof provided in clause 5.27 of General Conditions of the Contract) and have passed the tests on completion, the Engineer-in-Charge shall issue certificate (hereinafter called Completion Certificate) in which he shall certify the date on which WORK have been so completed and have passed the said tests and OWNER shall be deemed to have taken over WORK on the date so certified. If WORK have been divided into various groups in CONTRACT, OWNER shall be entitled to take over any group or groups before the other or others and thereupon the Engineer-in-Charge shall issue a Completion Certificate which will, however, be for such group or groups so taken over only. In such an event if the group /section /part. so taken over is related to the integrated system of the work, not withstanding date of grant of completion certificate for group/section/part. The period of liability in respect of such group/section/part shall extend 12 (twelve) month from the date of completion of work.

5.31 **DEFECTS AFTER TAKING OVER**: In order that CONTRACTOR could obtain a Completion Certificate he shall make good, with all possible speed any defect arising from the defective materials supplied by CONTRACTOR or workmanship or any act or omission of CONTRACT that may have been noticed or developed, after the WORK or group of Works has been taken over, the period allowed for carrying out such Work will be normally one (1) month. If any defect is not remedied within a reasonable time, OWNER may proceed to do WORK at CONTRACTOR's risk and expense and deduct from the Final Bill such amounts as may be decided by OWNER.

If by reason of any default on the part of CONTRACTOR a Completion Certificate has not been issued in respect of every portion of WORK within one (1) month after the date fixed by CONTRACT for the completion of WORK, OWNER shall be at liberty to use WORK or any portion thereof in respect of which a Completion Certificate has been issued, provided that WORK of the portion thereof so used as aforesaid shall be afforded reasonable opportunity for completing these Work for the issue of Completion Certificate.

5.32 The Retention Money / Bank Guarantee deducted/furnished as per clause 3.14 of NRL GCC shall be retained for the period of liability i.e. for twelve (12) months from the date of issue of completion certificate, as given in clause 84.0 above. This Retention amount or Bank Guarantee furnished against security deposit shall be released only on expiry of the period of liability and also based on the certification of the Engineer-in-charge that no defect/damage has been reported / observed during the stipulated period of liability for the contract.

5.33 WRONGFUL APPROPRIATION OF MATERIALS

Wrongful appropriation, or proven attempt of wrongful appropriation of materials belonging to the COMPANY or any other Contractor working within the Company premises or commission of any other criminal act by the CONTRACTOR, or his agents, or employees or workers shall be deemed to be a breach of contract on the part of the CONTRACTOR, and the COMPANY shall, in addition to the remedies available under this contract, be entitled to terminate the contract forthwith at the risk and cost of the CONTRACTOR. The decision of the OWNER in any of the above aspects shall be final and *conclusive*.

5.34 GUARANTEE / TRANSFER OF GUARANTEE:

For work like water-proofing, acid and alkali resisting materials, pre-construction soil treatment against termite or any other specialized works etc. the CONTACTOR shall invariably engage SUB-CONTRACTORS who are specialists in the field and firms of repute and such a SUB-CONTRACTOR shall furnish guarantees for their workmanship to the Owner, through the Contractor . In case such a SUB-CONTRACTOR /FIRM is not prepared to furnish a guarantee to the OWNER, the Contractor shall give that guarantee to the OWNER directly.

5.35 **PERFORMANCE OF CONTRACTOR:**

Performance of contractor shall be evaluated on each job by Engineer-in-Charge and recorded in the Standard format adopted by NRL.

Review of performance shall be carried out at appropriate intervals by concerned department of the owner.

SECTION VI

MEASUREMENTS, BILLING AND PAYMENTS

6.0 SCHEDULE OF RATES AND PAYMENTS:

(I) CONTRACTOR'S REMUNERATION:

The price to be paid by OWNER to CONTRACTOR for the WORK to be done and for the performance of all the obligations undertaken by CONTRACTOR under CONTRACT shall be ascertained by the application of the respective Schedule of Rates (the inclusive nature of which is more particularly defined by way of application but not of limitation, with the succeeding sub clause of this clause) and payment to be made accordingly for the Work actually executed and approved by the Engineer-in-Charge. The sum so ascertained shall (excepting only as and to the extent expressly provided herein) constitute the sole and inclusive remuneration of CONTRACTOR under CONTRACT and no further or other payment whatsoever shall be or become due or payable to CONTRACTOR under CONTRACT.

(II) SCHEDULE OF RATES TO BE INCLUSIVE:

The prices/rates quoted by CONTRACTOR shall remain firm till the issue of final certificate and shall not be subject to escalation. Schedule of Rates shall be deemed to include and cover all costs, expenses and liabilities of every description and all risks of every kind to be taken in executing, completing and handing over WORK to OWNER by CONTRACTOR. CONTRACTOR shall be deemed to have known the nature, scope, magnitude and the extent of WORK and materials required though Contract Document may not fully and precisely furnish them. He shall make such provision in the Schedule of Rates as he may consider necessary to cover the cost of such items of Work and materials as may be reasonable and necessary to complete WORK. The opinion of the Engineer-in-Charge as to the item of work which are necessary and reasonable for completion of WORK shall be final and binding on CONTRACTOR, although the same may not be shown on or described specifically in Contract Document.

Generality of this present provision shall not be deemed to cut down or limit in any way Contractor obligation under the Contract, because in certain cases it may and in other cases it may not be expressly stated that CONTRACTOR shall do or perform a work or supply articles or perform services at his own cost or without additional payment or without extra charge or words to the same effect or that it may be stated or not stated that the same are included in and covered by the Schedule of Rates.

(III) SCHEDULE OF RATES TO COVER CONSTRUCTIONAL EQUIPMENTS, MATERIALS, LABOUR ETC.:

Without in any way limiting the provisions of the preceding sub-clause, the Schedule of Rates shall be deemed to include and cover the cost of all Constructional Plant and Equipment, Temporary Work (except as provided for herein), Pumps, Materials, Labour, Insurance, Fuel, Stores and Appliances to be supplied by CONTRACTOR and all other matters in connection with each item in the Schedule of Rates and the execution of Work or any portion thereof finished, complete in every respect and maintained as shown described in the Contract Document or as may be ordered in writing during the continuance of CONTRACT.

(IV) SCHEDULE OF RATES TO COVER ROYALITIES, RENTS AND CLAIMS:

The Schedule of Rates shall be deemed to include and cover the cost of all royalties and fee for the articles, and processes, protected by letters, patent or otherwise incorporated in or used in connection with WORK, also all royalties, rents and other payments in connection with obtaining materials or whatsoever kind for WORK and shall include an indemnity to OWNER which CONTRACTOR hereby gives against all

actions, proceedings, claims, damages, costs and expenses arising from the incorporation in or use on WORK of any such articles, processes or materials, Octroi or other Municipal or Local Board Charges if levied on materials, Equipment or machineries to be brought to SITE for use on WORK shall be borne by CONTRACTOR.

(V) SCHEDULE OF RATES TO COVER TAXES AND DUTIES:

No claim or exemption or reduction of customs duties, excise duties, sales tax, quay or any port dues, transport charges, stamp duties or Central or States Government or Local Body or Municipal Taxes or duties, taxes or charges (from or of any other body), whatsoever, will be granted or obtained, all of which expenses shall be deemed to be included in and covered by the Schedule of Rates. CONTRACTOR shall also obtain and pay for all permits, or other privileges necessary to complete WORK.

(VI) SCHEDULE OF RATES TO COVER RISKS OF DELAY:

The Schedule of Rates shall be deemed to include and cover risk of all possibilities of delay and interference with CONTRACTOR'S conduct of WORK which occur from any cause including orders of OWNER in the exercise of his powers and no account of extension of time granted due to various reasons and for all other possible or probable causes of delay.

(VII) SCHEDULE OF RATES CANNOT BE ALTERED:

For Work under Unit Rate basis, no alteration will be allowed in the Schedule of Rates by reason of WORK or any part of them being modified, altered, extended, diminished or omitted. The Schedule of Rates are fully inclusive rates which have been fixed by CONTRACTOR and agreed to by OWNER and cannot be altered.

For Lumpsum Contract, the payment will be made according to the Work actually carried out, for which purpose an item-wise, or work-wise, Schedule of Rates shall be furnished, suitable for evaluating the value of Work done and preparing running account Bills.

6.1 **MEASUREMENTS**

All measurement shall ordinarily be in metric system. All the Work in progress will be jointly measured by the representative of the Engineer-in-Charge and CONTRACTOR'S authorised agent progressively. Such measurement will be recorded in the Measurement Book by the Engineer-in-Charge or his authorised representative and signed in token of acceptance by CONTRACTOR or his authorised representative.

For the purpose of taking joint measurement, CONTRACTOR'S representative shall be bound to be present whenever required by the Engineer-in-Charge. If, however, he absents for any reason whatsoever, the measurements will be taken by the OWNER'S Engineer or his representative and this will be deemed to be correct and binding on CONTRACTOR irrespective of it not being signed by the CONTRACTOR or his authorised representative.

6.2 BILLING:

CONTRACTOR will submit a Bill in approved proforma in quadruplicate to the Engineer-in-Charge of Work giving abstract and detailed measurements for the various items executed during a month, before the expiry of the first week of the succeeding month. The Engineer-in-Charge shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted, if possible, before the expiry of Ten (10) days from presentation of the bill.

6.3 SECURED ADVANCE AGAINST MATERIALS BROUGHT TO SITE

Secured advance on the security of materials (which are not combustible, fragile or perishable in nature) brought to the site but not yet incorporated in the works may be made up to 75 (seventy-five) per cent of invoice value, or 75 (seventy-five) per cent of the corresponding value of the materials determined on the basis of BOQ rates, subject to the condition that their quantities are not excessive and subject to other stipulations in the contract. The contractor will be required to sign an indenture bond, hypothecating the goods to the procuring entity, and also be responsible for their safe custody. Before the advance is released, the procuring entity may inspect the site to ensure that the Contractor has safeguarded the materials against pilferage and deterioration.

6.4 **DISPUTE IN MODE OF MEASUREMENTS:**

In case of any dispute as to the mode of measurement not covered by CONTRACT to be adopted for any item of Work, mode of measurement as per latest Indian Standard Specifications shall be followed.

6.5 **LUMPSUMS IN TENDER:**

For the item in Tender where it includes lump-sum in respect of parts of Work, CONTRACTOR shall be entitled to payment in respect of the items at the same rates as are payable under this CONTRACT for such items, or if the part of the Work in question is not, in the opinion of the Engineer-in-Charge capable of measurement or determination. OWNER may at his discretion pay the lump-sum amount entered in the Tender or a percentage thereof and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against CONTRACTOR with regards to any sum or sums payable to him, under the provisions of this clause.

6.6 RUNNING ACCOUNT PAYMENTS TO BE REGARDED AS ADVANCES:

All running account payments shall be regarded as payments by way of advance against the final payment only and not as payment for Work actually done and completed and shall not preclude the requiring of bad, unsound and imperfect or unskilled Work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the due performance of CONTRACT, or any part thereof, in this respect, or of the accruing of any claim by CONTRACTOR, nor shall it conclude, determine or affect in any way the powers of OWNER under these conditions or any of them as to the final settlement and adjustments of the accounts or otherwise, or in any other way vary or affect CONTRACT. The Final Bill shall be submitted by CONTRACTOR within one (1) month of the date of physical completion of WORK, otherwise, the Engineer-in-Charge's certificate of the measurement and of total amount payable for WORK accordingly shall be final and binding on all parties.

6.7 NOTICE OF CLAIM FOR ADDITIONAL PAYMENT:

- 6.7.1 Should CONTRACTOR consider that he is entitled to any extra payment or compensation or to make any claims whatsoever in respect of WORK he shall forthwith give notice in writing to the Engineer-in-Charge that he claims extra payment and/or compensation. Such notice shall be given to the Engineer-in-Charge within (10) days from the ordering of any Work or happening of any event upon which CONTRACTOR bases such claims and such notice shall contain full particulars of the nature of such claim with full details and amount claimed. Failure on the part of CONTRACTOR to put forward any claim with necessary particulars as above within the time above specified shall be an absolute waiver thereof. No omission by OWNER to reject any such claim and no delay in dealing therewith shall be waiver by OWNER of any rights in respect thereof.
- 6.7.2 Owner shall review such claims within a reasonable period of time and cause to discharge these in a manner considered appropriate after due deliberations thereon. However, Contractor shall be obliged to

carry on with the work during the period in which his claims are under consideration by the Owner, irrespective of the outcome of such claims.

Where additional payments for works considered extra are justifiable in accordance with the Contract provisions, Owner shall arrange to release the same in the same manner as for normal work payments. Such of extra works so admitted by Owner shall be governed by all the terms, conditions, stipulations and specifications as are applicable for the contract. The rates for extra work shall generally be the unit rates provided for in the Contract. In the event unit rates for extra works so executed are not available as per Contract, payments may either be released on day work basis for which

daily/hourly rates for workmen and hourly rates for equipment rental shall apply, or on the unit rate for work executed shall be derived by interpolation of unit rates already existing in the Contract. In all the matters pertaining to applicability rate and admittance or otherwise of an extra work claim of Contractor the decision of Engineer-In-Charge shall be final and binding.

6.8 PAYMENT OF CONTRACTOR'S BILL:

No payment shall be made for work till the whole of the work shall have been completed and a certificate of completion given unless otherwise specified in the Special Conditions of Contracts. OWNER at his discretion may include the payment terms such as monthly payment in the Special Contract Conditions.

CONTRACTOR shall on submitting the Bill thereof, be entitled to receive Payment as per the payment terms after the approval of by Engineer-in-Charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against Payment due to CONTRACTOR. This payment will be made after making necessary deductions as stipulated elsewhere in the contract document for materials, retention money or any moneys due to the Owner etc.

Payment to all the contractors having bank account where Electronic Fund Transfer facility (EFT) is available shall be made through EFT. CONTRACTOR must furnish his Bank Account Details when demanded by OWNER for the purpose of EFT payment. The final Bill shall be presented by the CONTRACTOR along with 'NO CLAIM CERTIFICATE' in a format acceptable to the OWNER or such other documents as directed by the OWNER. All payments shall be made in Indian Currency. The contractor shall not be entitled to claim any interest for any amount due or claimed to be due from the owner as per this contract.

6.9 COMPLETION CERTIFICATE:

6.9.1 APPLICATION FOR COMPLETION CERTIFICATE:

When CONTRACTOR fulfils his obligation under clauses 5.3, he shall be eligible to apply for Completion Certificate. CONTRACTOR may apply for separate Completion Certificate in respect of each such portion of Work by submitting the completion Documents along with such application for Completion Certificate.

The Engineer-in-Charge shall normally issue to CONTRACTOR the Completion Certificate within one (1) month after receiving an application therefore from CONTRACTOR after verifying from the completion Documents and satisfying himself that WORK has been completed in accordance with and as set out in the construction and erection Drawings, and the Contract Document.

CONTRACTOR, after obtaining the Completion Certificate, is eligible to present the Final Bill for WORK executed by him under the terms of CONTRACT.

6.9.2 **COMPLETION CERTIFICATE:**

Within one (1) month of completion of WORK in all respects, CONTRACTOR shall be furnished with a certificate by the Engineer-in-Charge, of such completion, but no certificate shall be given nor shall WORK be deemed to have been executed until all scaffolding, surplus materials and rubbish is cleared off from SITE completely nor until WORK shall have been measured by the Engineer-in-Charge whose

measurement shall be binding and conclusive. WORK will not be considered as complete and taken over by OWNER, until all the temporary works, labour and staff colonies etc. constructed, are removed and the worksite cleaned to the satisfaction of the Engineer-in-Charge.

If CONTRACTOR shall fail to comply with the requirements of this clause on or before the date fixed of the completion of WORK, Engineer-in-Charge may at the expenses of CONTRACTOR remove such scaffolding, surplus materials and rubbish and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and CONTRACTOR shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid expect for any sum actually realised by the sale thereof.

6.9.3 **COMPLETION CERTIFICATE DOCUMENTS:**

For the purpose of clause 6.9, the following Documents as applicable will be deemed to form the completion Documents:

- (i) The technical documents according to which Work was carried out.
- (ii) Six (6) sets of Construction Drawings showing therein the modification and corrections made during the course of execution signed by the Engineer-in-Charge.
- (iii) Completion Certificate for 'embedded' and 'covered' up Work.
- (iv) Certificates of final levels as set out for various work.
- (v) Certificate of tests performed to various works.
- (vi) Material appropriation Statement for the materials issued by OWNER for WORK and list of surplus materials returned to OWNER'S store duly supported by necessary Documents.

6.10 FINAL DECISION AND FINAL CERTIFICATE:

Upon expiry of the period of liability and subject to the Engineer-in-Charge being satisfied that WORK have been duly maintained by CONTRACTOR, during monsoon or such period as herein before provided in clause 5.27 and CONTRACTOR has in all respect duly made up any subsidence and performed all his obligations under CONTRACT, the Engineer-in-Charge shall (without prejudice to the rights of OWNER to retain the provisions of relevant clause hereof) otherwise give a certificate herein referred to as the final certificate to that effect and CONTRACTOR shall not be considered to have fulfilled the whole of his obligations until Final Certificate have been given by the Engineer-in-Charge notwithstanding any previous entry upon WORK and taking possession, working or using of the same or any part thereof by OWNER.

6.11 CERTIFICATE AND PAYMENTS ON EVIDENCE OF COMPLETION:

Except the final certificates no other certificate or payments against a certificate or on general account shall be taken to be an admission by OWNER of the due performance of CONTRACT or any part thereof or occupancy or validity of any claim by CONTRACTOR.

SECTION VII

TAXES AND DUTIES

7.0 TAXES, DUTIES ETC.:

7.1 CONTRACTOR agrees to and does hereby accept full and exclusive liability for the payment of any and all taxes, duties, GST, royalty etc. now or hereafter imposed, increased, or modified, and all the sales taxes, Value Added Tax (VAT), duties, GST, royalty etc. now in force and hereafter increased imposed or modified from time to time in respect of WORK and materials and all contributions and taxes for unemployment compensation insurance and old age pensions or annuities now or hereafter imposed by any Central or State Governmental authorities which are imposed with respect to or covered by the wages, salaries, or other compensations paid to the persons employed by CONTRACTOR and CONTRACTOR shall be responsible for compliance with all obligations and restrictions imposed by the Labour Law or any other law affecting employer-employee relationship and CONTRACTOR further agrees to comply and to secure the compliance of all Sub-Contractors, with applicable Central, State, Municipal and local laws and regulations and requirements of any Central, State or Local Government agency or authority. CONTRACTOR further agrees to defend, indemnify and hold harmless from any liability or penalty which may be imposed by the Central, State or Local authorities by reason of any violation by CONTRACTOR or Sub-Contractor of such laws, regulations or requirements and also from all claims, suits or proceedings that may be brought against OWNER arising under, growing out of, or by reason of WORK provided for by this CONTRACT, by third parties, or by Central or State Government authority or any administrative Subdivision thereof.

NRL is not liable for any claim from the supplier on account of fresh imposition and/or increase (including statutory increase) in excise duty, custom duty, GST, and any other tax, duty or other levy on raw materials and/or components used directly in the manufacture of the contracted goods taking place during the pendency of the contract, unless such liability is specifically agreed to in terms of the contract.

7.2 INSURANCE:

7.2.1 GENERAL

CONTRACTOR shall at his own expense carry and maintain insurance with reputable Insurance Companies to the satisfaction of OWNER as follows:-

Contractor at his cost shall arrange secure and maintain insurance as may be necessary and to its full value for all such amount to protect the works in progress from time to time and the interest of owner against all as detailed progress from time to time with the under works thereof in each case should be as acceptable to the Owner. However, irrespective of work acceptance the responsibility to maintain adequate insurance coverage at all times during the period, of contract shall be that of Contractor alone. Contractor failure in this regard shall not relieve him of any of his responsibilities and obligations under contract.

Any loss or damage to the equipment, during ocean transportation, port /custom clearance, in land and port handling, inland transportation, storage, erection and commissioning till such time the work is taken over by OWNER, shall be to the account of CONTRACTOR.

Statutory clearances, if any, in respect of foreign supply required for the purpose of replacement of equipment lost in transit and /or during erection, shall be made available by the Owner.

CONTRACTOR as far as possible shall cover insurance with Indian Insurance Companies, including marine Insurance during ocean transportation.

(i) EMPLOYEES' STATE INSURANCE ACT

CONTRACTOR agrees to and does hereby accept full and exclusive liability for compliance with all obligations imposed by the Employees' State Insurance Act, 1948, and CONTRACTOR further agrees to

defend, indemnify and hold OWNER harmless from any liability or penalty which may be imposed by the Central, State or Local authority by reason of any asserted violation by CONTRACTOR or Sub-Contractor of the Employees' State Insurance Act, 1948, and also from all claims, suits or proceeding that may be brought against OWNER arising under, growing out of or by reasons of the WORK provided for by this CONTRACT whether brought by employees of CONTRACTOR, by third parties or by Central or State Government authority or any political sub-division thereof.

CONTRACTOR agrees to fill in with the Employees' State Insurance Corporation, the Declaration Form, and all forms which may be required in respect of CONTRACTOR'S or Sub-Contractor's employees, required to be covered under the Employees' State Insurance Act. CONTRACTOR shall deduct and secure the agreement of the Sub-Contractor to deduct the employees' contribution as per the rates applicable under the ESI act from time to time and arrange to remit the same to the OWNER or such other agency as may be directed by the OWNER at regular monthly intervals along with the employees' contribution stipulated in the Act as applicable. CONTRACTOR agrees to maintain all records as required under the Act in respect of employees and payments and CONTRACTOR shall secure the agreement of the Sub-Contractor to maintain such records. Any expenses incurred for the contributions, making contributions or maintaining records shall be to CONTRACTOR'S or Sub-contractor's account.

OWNER shall retain such sums may be necessary from the Contract Value until CONTRACTOR shall furnish satisfactory proof that all contributions as required by the Employees' State Insurance Act, 1948, have been paid.

(ii) WORKMAN'S COMPENSATIONS AND EMPLOYER'S LIABILITY INSURANCE

Insurance shall be effected for all CONTRACTOR employees engaged in the performance of this CONTRACT if they are not covered under the Employees' State Insurance act. If any part of WORK is sublet, CONTRACTOR shall require the Sub-Contractor to provide Workman's Compensation and Employers' Liability Insurance for the latter's employees if such employees are not covered under the Employers State Insurance Act.

(iii) ANY OTHER INSURANCE REQUIRED UNDER LAW OR REGULATIONS OR BY OWNER:

Contractor shall also carry or maintain any and all other insurance (s), which he may be required under any law or regulation from time to time without any extra cost to OWNER. He shall also carry and maintain any other which may be required by the OWNER.

(iv) ACCIDENT OR INJURY TO WORKMEN:

Owner shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the Employment in the CONTRACTOR or any sub Contractor save and except an accident or injury resulting from any act or default of the owner, his agents or servants and the Contractor shall indemnify and keep indemnified the owner against all such damages and compensation (save and except and aforesaid) and against all claims, demands, proceeding, costs, charges and expenses, whatsoever in respect or in relation thereto.

(v) AUTOMOBILE LIABILITY INSURANCE:

CONTRACTOR shall take out an Automobile Liability Insurance to cover all risk to Owner for each of his vehicles plying on works of this contract and this insurance shall be valid for the total contract period. No extra payment will be made for this insurance. Owner shall not be liable for any damage or loss not made good by the insurance company, should such damage or loss result from unauthorized use by the Owner.

7.2.2 The contractor shall take adequate insurance cover at his cost for his properties, persons etc. used in the work or proposed for using, against all risks and the owner shall not in any way be liable for the damages or loss caused to such properties, person etc. due to whatever cause.

7.3 DAMAGE TO PROPERTY OR ANY PERSON OR ANY THIRD PARTY:

- (i) CONTRACTOR shall be responsible for making good to the satisfaction of OWNER any loss of and any damage to all structures and properties belonging to OWNER or being executed or procured or being procured by OWNER or of other Agencies within the premises of all WORK of OWNER if such loss or damage is due to fault and/or the negligence or willful acts or omission of CONTRACTOR, his employees, agents, representatives or Sub-Contractors.
- (ii) The CONTRACTOR shall take sufficient care in moving his plants, equipments and materials from one place to another so that they do not cause any damage to any person or to the property of the Owner or any third party including overhead and underground cables and in the event of any damage resulting to the property of the Owner or of a third party during the movement of the aforesaid plant, equipment or materials the cost of such damages including eventual loss of production, operation or services in any plant or establishment as estimated by the Owner or ascertained or demanded by the third party shall be borne by the CONTRACTOR under third party liability risk limited to Rupees Ten lakhs.
- (iii) CONTRACTOR shall indemnify and keep OWNER harmless of all claims for damage to property other than OWNER'S property arising under or by reason of this agreement if such claims result from the fault and/or negligence of willful acts or omissions of CONTRACTOR, his employees, agents, representative or Sub-Contractors.
- (iv) The agency should consider within his quoted rates, the third party liability insurance.

SECTION VIII

LABOUR LAWS, OTHER REGULATIONS AND ARBITRATION

8.0 LABOUR LAWS:

- (i) No labour below the age of eighteen (18) years shall be employed on WORK.
- (ii) CONTRACTOR shall not pay less than what is provided as per NRL declared rate for un-skilled, semi skilled and skilled manpower for workers engaged by him on WORK.
- (iii) CONTRACTOR shall at his expense comply with all labour laws and keep OWNER indemnified in respect thereof.
- (iv) The Contractor shall pay equal wages for men and women in accordance with applicable labour laws.
- (v) In addition to above, rules and regulations as contained in Contract Labour (Regulation and Abolition) Act, 1970 will also be applicable for the CONTRACT. He shall pay the required deposit under the Act appropriate to the number of workmen to be employed by him or through sub-contractor and get himself registered under the Act. He shall produce the certificate or registration granted by the Govt. authority under the Act to the company before commencement of work. The company recognizes only the contractor and not his sub-contractors under the provisions of the Act. The contractor will have to submit daily a list of his employees, who will be entering the Company's premises for the work awarded. He will also keep his wage register available at all times as close to the work site as possible and produce the same for inspection whenever required by designated company officials. If the company so desires, a deposit may be taken from the contractor to be refunded only after the company is satisfied that all the workmen employed by the contractor have been fully paid for the period of work in company's premises.

If the Contractor is covered under the Contractor labour (Regulation and Abolition)Act, he shall obtain a license from a licensing authority (i.e. office of the labour commissioner) by the payment of necessary prescribed fee and the deposit, if any, before starting the work under the Contract. Such fee deposit shall be borne by the Contractor.

- (vi) Contractor's labour shall have no privity with owner nor any Employee Employee relationship with the OWNER nor shall Owner be constructed as principal employer vis-à-vis such Contractor's Labour for whom the principal Employer, for purpose of contract Labour (Abolition & Regulation) Act, shall be the contractor.
- (vii) The contractor shall employ labour in sufficient numbers directly or through Sub-Contractors to maintain the required rate for progress and of quality to ensure Contract and to the satisfaction of the Engineer-In-Charge workmanship of the degree specified in the 1st half of the current month (1) the accident that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act 1961 or rules made there under and the amount paid to them.
- (viii) The Contractor shall comply with the provisions of the payment of Wages Act1936, Minimum Wages Act 1948, Employers Liability Act 1938, Workmen's compensation Act 1923, Industrial Disputes Act 1947, the Maternity Benefit Act 1961 and Contract Labour regulation and abolition Act 1970, Employment of children Act1938 or any modifications thereof or any other law relating thereto and rules made there under from time to time.
- (ix) The Engineer-In-Charge shall on a report having been made by an Inspecting officer as defined in Contract Labour (Regulation and Abolition) Act 1970 have the power to deduct from the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non fulfillment of the conditions the Contract for benefit of workers nonpayment of wages or of deductions made from his or their wages which are no justified by the terms of the Contract or non observance of the said regulations
- (x) The Contractor shall indemnify the Owner against any payments to be made under and for the observance of the provisions of the aforesaid 1938, Workmen's compensation Act 1923, Industrial Disputes Act

1947, the Maternity Benefit Act 1961 and Contract Labour regulation and abolition Act 1970, Employment of children Act1938 or any modifications thereof or any other law relating thereto and rules made there under from time to time.

(xi) The Engineer-In-Charge shall on a report having been made by an Inspecting officer as defined in Contract Labour (Regulation and Abolition)Act 1970 have the power to deduct from the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non fulfillment of the conditions the Contract for benefit of workers nonpayment of wages or of deductions made from his or their wages which are no justified by the terms of the Contract or non observance of the said regulations.

8.1 IMPLEMENTATION OF APPRENTICES ACT 1964/ PROVIDENT FUND ACT:

- 8.1.1 CONTRACTOR shall comply with the provisions of the Apprentices Act, 1964 and the Rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of CONTRACT and the Engineer-in-Charge may, at his discretion, cancel CONTRACT. CONTRACTOR shall also be liable for any pecuniary liability arising on account of any violation by him of the provision of the Act.
- 8.1.2 The Contractor should strictly comply with the provisions of the Employees provident Fund Act.
 - It is to be noted that the subject contract would be awarded only to those agencies who have fulfilled the following requirements:
 - a) Obtained License under Labour (Abolition and Regulation) Act 1970and submitted to NRL.
 - b) P.F. Registration number allotted to them by RPFC and submitted to NRL.
 - c) The agencies should promptly deposit PF. Deduction of the eligible contract employees plus the employers' contribution to the R.P.F.C. For this purpose agency must submit a certificate in their bill that PF amount has been deducted from the eligible employees and alongwith employers' contribution has been deposited with R.P.F.C. In support of this, the agency must furnish the challan/receipt for the payment to R.P.F.C for the earlier months.
 - d) If the certificate and the challan/receipt referred to in clause 9.2 (c) above are not furnished, the Finance and Accounts deptt of NRL will deduct 16% (sixteen percent) of the amount of the Contractor's bill and retain it as deposits may only be refunded to the Contractor on production of the Chalan/Receipt.

8.2 EMPLOYEES PROVIDENT FUND ACT, 1952 AND SCHEME:

- (i) CONTRACTOR agree to cover all the employees engaged by him or through Sub-Contractor under the employees provident fund scheme and shall submit necessary records to the OWNER in proof of compliance.
- (ii) CONTRACTOR further agrees to defend, indemnify and hold OWNER harmless from any liability or penalty which may be imposed by the Central, State, Local or other statutory authorities by reason of any asserted violation by CONTRACTOR or his Sub-Contractor of the provisions of the Employees Provident Fund. Act, 1952 and the schemes thereunder.

8.3 CONTRACTOR TO INDEMNIFY OWNER:

(i) CONTRACTOR shall indemnify OWNER and every member, officer and employees of OWNER, also the Engineer-in-Charge and his staff against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of or in connection with the matters referred to in clause 7.3 and elsewhere and all actions, proceedings, claims, demands, costs and expenses which may be made against OWNER for or in respect of or arising out of any failure by CONTRACTOR in the performance of his obligations under the Contract Document. OWNER shall not be liable for or in respect of any demand or compensation payable by law in respect of or in consequence of any accident, death, or injury to any workmen or other person in the employment of CONTRACTOR or his Sub-Contractor and CONTRACTOR shall indemnify and keep indemnified OWNER against all such damages and compensations and against all claims, damages, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

(ii) PAYMENT OF CLAIMS AND DAMAGES:

Should OWNER have to pay any money in respect of such claims or demands as aforesaid and amount so paid and the costs incurred by OWNER shall be charged to and paid by CONTRACTOR and CONTRACTOR shall not be at liberty to dispute or question the right of OWNER to make such payments notwithstanding the same may have been made without his consent or authority or in law or otherwise to the contrary.

(iii) In every case in which by virtue of the provisions of section 12, sub-section (1) of Workmen's Compensation Act, 1923 or other applicable provision of Workmen's Compensation Act or any other Act, OWNER is obliged to pay compensation to workman employed by CONTRACTOR in execution of WORK, OWNER will recover from CONTRACTOR the amount of compensation so paid and without prejudice to the rights of OWNER under section 12, sub-section (2) of the said Act. OWNER shall be at liberty to recover such amount or any part thereof by deducting it from the Retention money or from any sum due to CONTRACTOR whether under this CONTRACT or otherwise. OWNER shall not be bound to contest any claim made under section 12, sub-section (1) of the said Act, except on written request of CONTRACTOR and upon his giving to OWNER full security for all costs for which OWNER might become liable in consequence of contesting such claim.

(iv) EMPLOYMENT LIABILITY

The Contractor shall be solely and exclusively responsible for employing persons for the execution of work. All employees engaged by the contractor shall be on his/their payroll and paid by him / them. All disputes or differences between the contractor and his/their employees shall be settled by him/them. Owner has absolutely no liability whatsoever concerning the employees of the contractor. The contractor shall indemnify owner against all loss or damage or liability arising out of or in the course of his/their employees. The contractor shall make regular and full payment of wages without giving any complaint by any employee of the contractor or his sub-Contractor regarding non-payment of wages /salaries or other dues. Owner reserves the rights to make such payments directly, to such employees or sub contractor of the contractor and recover the amount in full from the bills of the contractor, and contractor shall not claim any compensation or reimbursement thereof. The contractor shall comply with the minimum wages Act applicable to the area with regard to payment of wages of his employees and also of employees of his sub-contractor.

The contractor shall advise in writing to all his employees and the employees of sub-contractor as follows: It is fully understood that your appointment and /or deployment is only in connection with the owner and it does not give you any right of claim for employment by the owner.

8.4 HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS:

In respect of all labour directly or indirectly employed in WORK for the performance CONTRACTOR's part of this CONTRACT, CONTRACTOR shall comply with or cause to be complied with all the rules and regulations of the local Sanitary and other Authorities and or as framed by OWNER from time to time for the protection of health and sanitary arrangements for all Workers and or as required under various welfare statutes.

The Contractor shall provide in the labour colony all amenities such as electricity, water and other sanitary and health arrangements. The Contractor shall also provide necessary surface transportation to the place of work and back to the colony for their personnel accommodated in the labour colony.

8.5 CONTRACTOR TO PAY WAGES DIRECT TO HIS LABOURERS:

The CONTRACTOR shall effect the payment of wages to his labourers directly without the intervention of any intermediary and no amount by way of commission or otherwise shall be deducted or recovered from the wages of the workmen. In this regard the CONTRACTOR has to comply the minimum wage category wise as per the prevailing rate at NRL.

8.6 MEDICAL FITNESS:

The contractor shall employ only medically fit Personnel of Age limit upto 65 years. Contractor shall ensure that workers including supervisors before deployment on the job are medically examined.

8.7 SETTLEMENT OF DISPUTES

8.7.1 FOR THE SETTLEMENT OF DISPUTES WITH THE PRIVATE PARTIES:

All disputes of difference whatsoever which shall at any time arise between the parties hereto touching or concerning the works or supply or the execution or maintenance thereof of this contract/supply or the rights touching or concerning the works or the execution effect thereof or to the rights or liabilities or the construction meaning, operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after completion of the Contract/supply or whether before or after determination, foreclosure or breach of the contract/supply (other than those in respect of which the decision of any person is by the contract/supply expressed to be final and binding) shall be endeavored to be amicably settled by the parties in the following manner:

- a) At the first instance by the Engineer-In-Charge/ Purchase Officer
- b) At the second instance by the Chief Executive of NRL (Presently Managing Director) or authorized representatives of Chief Executive of NRL.
- c) Parties may opt for conciliation under Arbitration and Conciliation Act 1996 as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof.
- d) In case party is not satisfied with the above, the matter will be referred to Arbitration.
- e) The option of amicably settling the dispute will be open at any time during and post arbitration or court litigation or Tribunal or in any other jurisdictional forum and/or before or after award, order, judgement etc. passed by arbitrator(s), court(s), tribunal(s) or any other jurisdictional forum(s).

8.7.2 **Arbitration Clause:**

- i. Any dispute or difference of any nature whatsoever, any claim, cross-claim, counter-claim or set off of NRL (hereinafter Company) against the Contractor/Vendors or of the Contractor/Vendors against company or regarding any right, liability, act, omission on account of any of the parties hereto arising out of or in relation to this agreement shall be resolved through Arbitration under Arbitration and Conciliation Act 1996 as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof.
- ii. Reference to Arbitration shall be made by writing a letter to the Managing Director of the Company, with copy to the Contractor/Vendor or the company, as the case may be.
- iii. On receipt of such letter referring the dispute to Arbitration, Managing Director or any other officer of the Company delegated by Managing Director shall, within 30 days from the receipt of the said letter, suggest to the parties the names of three persons, who are not disqualified to act as such Arbitrator under the Arbitration and Conciliation Act 1996, as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof for selection of one of them for appointment as a sole Arbitrator, to adjudicate the dispute(s) between the parties.
- iV. If while referring the dispute to Arbitration the parties mutually agree that the Arbitration will be by a Tribunal consisting of three Arbitrators, then each party will nominate one person, who is not forbidden to act as Arbitrator and the two Arbitrators so nominated will select the third and Presiding Arbitrator to adjudicate the dispute.
- V. Subject to the provisions of the Arbitration and Conciliation Act, 1996, as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof, the Award of the Arbitrator or the Arbitrators, as the case may be, shall be final, conclusive and binding on both parties to the Agreement.
- Vi. The party(ies) against whom the Arbitration proceedings have been initiated, that is to say, the Respondents in the proceedings, shall be entitled to prefer a Cross-Claim, Counter- Claim or set off before the Arbitrator(s) in respect of any matter or issue arising out of or in relation to the Agreement without seeking a formal reference to Arbitration for such Counter-Claim, Cross Claim or set off and the Arbitrator(s) shall be entitled to consider and deal with the same as if the matters arising there from has/have been referred to him/them originally and deemed to form part of the reference made to Arbitration.

- Vii. Place of arbitration shall be unless otherwise agreed by the parties, will be Numaligarh Or Guwahati as mutually agreed.
- viii. The parties hereby agree that, unless the Arbitration and Conciliation Act,1996, as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof prohibits, the courts in the city of Golaghat or Guwahati shall have jurisdiction to entertain any application or other proceedings in respect of anything arising under this agreement and any award or awards made by the Sole Arbitrator(s) / Arbitral tribunal shall be filed in the concerned courts in the District Court of Golaghat or Kamrup Metro.

8.7.3 FOR THE SETTLEMENT OF DISPUTES WITH PSEs / Government (except a dispute or difference concerning the Railways, Income Tax, Customs and Excise Duties):

Appointment will be done as per Government guidelines / circulars, etc. prevailing at the time of reference of the disputes.

8.7.4 **JURIDICTION**

All disputes, actions and proceedings arising out of this contract shall be under the jurisdictions of the courts in the city of Golaghat or Guwahati.

SECTION IX

SAFETY CODE

NOTE: Details related to Safety Rules and Regulations is enclosed below with the GCC as **Annexure C**. CONTRACTORS shall go through the CONTRACTORS SAFETY REGULATION along with the GCC before commencement of their work.

SECTION X

SECURITY REGULATIONS FOR REFINERY

10.0 INTRODUCTION

- 10.1 Contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions. All Security Rules shall also be observed by all personnel of Contractor to maintain orderly conditions. Security Regulations as laid down hereunder shall be strictly adhered to.
- 10.2 The term CONTRACTOR as used in this section shall be understood to include any and all sub contractors performing work on behalf of the CONTRACTOR, who shall be responsible for communicating the information contained herein to the respective sub-contractor and for directing and supervising their work.

10.3 PROCEDORE GOVERNING ENTRY / EXIT OF CONTRACTOR'S PERSONNEL INTO AND FROM REFINERY PREMISES

In order to prevent accidents/explosions that may arise due to highly inflammable vapor present in the surrounding area, following precautions and permissions shall be taken and procedures as laid down below shall be followed:

10.4 PLACES OF ENTRY / EXIT

- a) Entry / exit for all will be through the main gate of refinery only and those working in NRMT area will be allowed entry / exit via the NRMT gate
- b) Each contractor's supervisor must be present at the gates to direct them to the respective work location. The workers will move in one group.
- c) Contractor's supervisors at the time of exit must collect all their men to take the whole lot of them out of the refinery at the same time.
- e) Supervisor must submit every morning, the numbers of workers attended duty to the CISF control room on or before 09:00 AM.

10.5 TIMING FOR ENTRY / EXIT AND DAYS OF WORKS

a) Normal entry: 07:45 AM to 8:30 AM Normal exit: 4:30 PM to 5:30 PM Lunch Break: 1200 noon to 1:00 PM

- b) Contractor employees will not be normally permitted to enter Refinery premises on Sundays and Refinery holidays.
- c) Where it is essential for contract work to continue beyond 5.00 pm or for work on Sundays and Holidays, NRL site engineer will arrange for necessary permission etc. by obtaining approval of CISF officer.
- d) No contractor's workmen will be allowed to get out at any odd time without written authority from their supervisors and the workmen will have to produce the same at the gate along with the exit pass from NRL site supervisor.
- e) Worker going out of the Refinery for lunch will be issued with a lunch pass by their respective authorized supervisor at the exit gate.

10.6 GATE ENTRY / EXIT PROCEDURE & TRAINING

Being a major chemical hazard industry restriction of men and materials to Refinery and Terminal operations are very essential both for safety and security point of view. Therefore on award of a contract and prior to commencement of work the contractor must do all the formalities to get entry pass and must show identity/gate pass at entry point. All the persons must carry gate pass all the time while in Factory premises which may be checked by Owners representatives or CISF at any time.

- 1. Present Gate Pass System for Contractor / Supervisors / Workmen / Vendors / Visitors has been described in **Annexure A** below.
- 2. Vehicle Pass for Contractors: Refer clause 10.8

3. Special permission for holidays / Sundays / Night:

Modality: Special permission is required for working on holidays / Sunday / nights. For this, Request letter, routed through NRL EIC is to be initiated by the concerned contractor to CISF.

4. Material / Equipment Entry and exit:

Entry / Exit of material or equipment brought by the Contractor will be allowed through the designated Gate as per procedure and policy of the company. In general, for any material / equipment's brought inside the Refinery by the Contractors the challan must be endorsed at the designated Gate by Security Staff (CISF) and then taken to the authorized Representative of the Owner for checking before it is taken to site or put to use. While taking out the materials out of the Refinery, the same has to be certified by the same authorized Representative of Owner and the material gate pass along with stamped challan indicating cross reference to the gate pass will be handed over to security person at the designated Gate. Security Section will keep a record of Contractor's men who enter the Refinery and keep P&A informed. The Security Staff will check Contractor's vehicles including cars at the Gate.

10.7 BIOMETRIC CARD:

- a. Proximity punch card / Biometric photo Punch card will be issued to the contractor / Supervisor / AMC workers having a valid photo gate gate pass for a period not less than 6 months. The cost of each punch card is Rs 200/-. The Contractor should make a DD in favour of NRL immediately after receiving a valid photo gate pass for all the workers working under him.
- b.For workers whose gate pass is valid less than six months, a simple biometric punch card will be issued. the cost of the card will be Rs 100/-.
- c. If the card is lost, FIR should be lodged immediately by the card holder and a penalty of Rs. 100 per card will be imposed which should be paid by the contractor in the form of DD to NRL.
- d. Punch card is not transferable at all. If anyone misuse the punch card, his gate pass will be permanently cancelled.
- e. It is the responsibility of the contractor to hand over the punch card to the workers / supervisor after collecting from competent authority.
- f. The contractor should also collect the punch card from the worker if the gate pass is expired or if the worker is no more working under him.
- g. Final payment to the contractor shall be cleared only after the clearance of security in charge to ensure that all the punch cards issued are received by NRL.

10.8 VEHICLE MOVEMENT

Vehicles are always a probable source of ignition and as such it is considered as a hazard. In petroleum refining installation, presence of hydrocarbon or other inflammable vapour can't be ruled out. A minor source of ignition may cause fire & explosion and as such movement of vehicle inside the Refinery is to be controlled. With this in mind vehicles shall normally be kept outside the Main gate and a limited number of vehicles will be allowed to ply. No petrol engine driven vehicle is allowed to ply inside the Refinery. Motorcycles & Cycles should also be parked in the designated area outside the Main Gate.

However, some vehicles / mobile equipment, etc required for carrying out operation, maintenance & project activities may be allowed to ply inside the Refinery after certification with suitable justifications by the Engineer In-charge. Vehicle Owner & Driver of the vehicles, which are allowed to ply inside the Refinery Premises, must ensure to comply the following regulations. All relevant documents like RC, Insurance, License, PUC, Road tax clearances etc. should be kept in the vehicle.

- 10.8.1 Permit for Vehicle & Driver
- 10.8.2 Dress code for Driver & Licensee
- 10.8.3 Fire & Safety Training

- 10.8.4 Diesel Vehicle / Spark Arrestor
- 10.8.5 Designated Parking Place
- 10.8.6 Speed Limit
- 10.8.7 Designated Route / No Entry
- 10.8.8 Precautions / Regulations for Heavy Vehicles

10.8.1 Permit for Vehicle & Driver:

Vehicle Pass for contractors:

- a. Modality: Vehicle pass is not issued to personal cars used by contractors for their outside movement. However, if used for site activities (truck, dumper, maintenance van, etc), gate pass is issued for such vehicles on recommendation from NRL EIC. Only Diesel driven vehicles fitted with CCOE approved spark arrestors will be given gate pass.
- b. Validity: Initial for a maximum period of 06 month, which may then be extended further on recommendation from NRL Engineer In-Charge.
- c. Format: Printed format available with CISF.
- d. Gate pass of driver will be as per procedure for contractors' workmen, based on application along with all relevant documents. However few specific requirements are also shown here.
- e. Signatories (in sequence): Signatures of Contractor, NRL EIC, CISF.
- f. Necessary documents:
 - Completely filled up format along with sign and seal of all signatories.
 - Copy of RC, Insurance, PUC Certificate, Fitness Certificate.
 - Copy of valid Driving License of the driver.
 - The owner must apply for entry pass both for vehicle and driver to CISF through P&A in the prescribed format attaching all necessary documents.
 - All vehicles used inside the Refinery must be mechanically sound and having a current vehicle registration applicable as per Motor Vehicle Act. No unauthorized person other than the authorized driver of that vehicle is permitted to drive the vehicle. Action may be taken against the owner in case it is violated.

10.8.2 Dress Code for Driver & Licensee:

• The driver must have valid driving license and must wear uniform.

10.8.3 Fire & Safety Training:

Training on Fire & Safety is imparted to all Drivers / Helpers and after the training program, Safety Training Card is issued to the Drivers. The Drivers must keep this Safety training card with them. The Training card will be ceased if any Driver is found violating the safety instructions. Drivers having the formal permit must ensure to comply the following:

- Adherence to speed limit
- Actions in case of emergency siren
- Safety precautions to be exercised while driving the vehicle inside Refinery. Regular Safety briefing is also normally carried out for the Drivers / Helpers by the Company employees.

10.8.4 Diesel Vehicle / Spark Arrestor:

Only diesel engine driven vehicle having CCOE (PESO) approved spark arrester is allowed to ply inside the operational area. The Spark arrestor will be checked at Entry by CISF. Permit of the Vehicle plying without proper spark arrester may be ceased. NRL may provide the spark arrester, if available, on chargeable basis.

10.8.5 Designated Parking Place:

Contractors and their employees should not park motor vehicles or other mobile equipment in any manner that will block Fire Hydrants, Fire Fighting / Protection Equipment & Alarm system and access to Building, Walkway. Etc. Vehicles may not be parked where they are likely to impede the movements of other vehicles in the Refinery and

care must be taken when parking near railway tracks to see that sufficient clearance is allowed between vehicles and locomotive / trucks. The driver should be near to the vehicle always when parked inside and in no case he should take out the key of the vehicle with him so that in case of emergency vehicle can be moved to safe place. Bus should stop only in the designated location / Bus Stop.

10.8.6 Speed Limit:

All vehicles entering or leaving the Refinery must come to complete halt at the Security Gate for checking by the Security Staff. The maximum speed limit of any vehicle inside Refinery is 25 KM /Hr.

10.8.7 Designated Route / No Entry:

Roads close to the Critical Units are not permitted to use by any type of vehicles. Contractor / Driver must make themselves aware of these traffic rules.

10.8.8 Precautions / Regulations for Heavy Vehicles:

While carrying out various operation, maintenance & project related activities inside the Refinery Premises, Contractors are required to use truck, tractor, trailer, damper, etc. In order to prevent any untoward incident out of the operation of these vehicles, Contractor must follow the following guidelines.

- Contractor's trucks and other mobile equipment's should be built / constructed so as to prevent material from falling off the mobile equipment on the Refinery roads. If the material does fall from contractor's equipment, the contractor shall remove material from the road immediately. These equipments like must be maintained in good conditions.
- Hanging load on sides and at rear of vehicle is prohibited. If at all it is unavoidable, permission is to be obtained from EIC.
- Contractors must not refuel gasoline or diesel engine driven vehicles. When refueling is to be done inside the unit during turnaround, a special permission should be obtained from the EIC / F&S Section.
- No vehicle shall be loaded beyond its Safe Working Load (SWL) capacity.
- In case of any fire, all roads should be cleared for the movement of Fire Tenders & Rescue Vehicles. Over taking is strictly prohibited inside the Refinery Premises.
- Incident on violations of traffic rule within the Refinery premises if noticed will be strictly dealt with.

Sl No.	Pass holder	Type of Gate Pass and purpose of issue	Maximum validity /	Renewal period	Documents required for new issue	Documents considered for Residential proof	Documents required for extension
1	Contractor, vendor/Sup ervisor	Biometric	Fire Training Card validity or contractual period whichever is earlier	Next Fire Training Card validity or contractual period whichever is earlier	 Completely filled up application signed and sealed by EIC. Two copies of recent passport size photos. PF / ESI Code Proof of Fire Training taken in NRL Residential proof 	Any of the following: 1. PRC (issued by District / Sub Division authority) 2. Certificate issued by Village Head / Municipality Board Head with photograph verified by Police authority) 3. Passport / Driving license / Voter Identity card / Ration Card. 4. Aadhar card	 Filled in format signed and sealed by EIC. Photocopy of previous Biometric Card. Valid Fire Card
2	Contract worker.	Biometric Card	If Police Verification is available, Fire Training Card validity or contractual period whichever is earlier. Note: 1. If Police Verification is not available, Initially the card will be activated in system for 90 days. 2. If PV is not received from Police Deptt till 90 days, same will be activated	Next Fire Training Card validity or contractual period whichever is earlier.	Above documents along with appropriate format Forwarding letter from the concerned contractor along with list of persons PF/ESI/Bank Account No.	Any of the above documents	Above documents, using appropriate format

			for Fire Training Card validity or contractual period whichever is earlier. 3. In case of adverse PV report, card shall be cancelled.				
3	Very temporary contract workers	Paper Pass (to be issued in the application itself, for workers engaged for short duration jobs like mass concreting etc.	7 days	Nil	1. List of all workers along with their address (permanent and present address) and recent photographs in appropriate format 2. Undertaking from contractor (forwarded by NRL EIC), introducing the workers and taking all responsibility of activities of the workmen inside refinery. 3. Safety briefing record (to be endorsed F&S / Project Safety Official in the list). 4. Govt Photo ID		Issued job based. Not extendable.
4	Outside Executive on temporary assignment	pass shall be issued on the application itself (Format 5).	60 days	60 days.	 Completely filled up application signed and sealed by EIC. F&S briefing by user department (to be recorded in the application) 	Extra Residential Proof not required	Extension granted on recommendation of EIC No other document required.

In case stay	3. Photocopy of I	
beyond 5	Card of concerned	
days,	organization /	
biometric	Driving License /	
card may	Passport / Voter ID	
be issued	OR recent passport	
based on	size photograph	
the above	plus forwarding	
pass.	letter from	
	concerned	
	organisation.	

Proof of Date of Birth

Any one of the following documents should be submitted as Age Proof:

- 1. Birth Certificate issued by the Registrar of Births and Deaths or the Municipal Corporation or any other prescribed authority, whosoever has been empowered under the Registration of Birth and Deaths Act, 1969 to register the birth of a child born in India.
- 2. Transfer/School leaving/Matriculation Certificate issued by the school last attended/recognised educational board having the date of birth of the applicant.
- 3. PAN Card issued by the Income Tax Department having the date of birth of the applicant.
- 4. Aadhaar Card/E-Aadhaar having the date of birth of the applicant.
- 5. Copy of an extract of the service record of the applicant (only in respect of Government servants) or the Pay Pension Order (in respect of retired Government Servants), duly attested/certified by the officer/incharge of the Administration of the concerned Ministry/Department of the applicant, having his date of birth.
- 6. Driving licence issued by the Transport Department of the concerned State Government, having the date of birth of the applicant.
- 7. Election Photo Identity Card/Voter ID issued by the Election Commission of India containing the date of birth of the applicant.
- 8. Policy Bond issued by Public Life Insurance Corporations/Companies containing the date of birth of the holder of the insurance policy.

SAFETY REGULATION

INTRODUCTION

Safety in Hydrocarbon Industry such as Refineries, Marketing Installations and LPG Bottling Plants like ours deserves utmost attention, as these are inherently hazardous. A good number of contractor workmen are deployed in these sectors to carry out maintenance, construction and other jobs and these are widely recognized as accident prone activities. The analysis of the incidents / accidents in the Petroleum Sector reveals that a large number of such incidents involve contractor workforce which in turn have resulted in either causality, injury or property damage to owner or and contractor personnel & property besides leading to operational interruptions and environmental degradation.

The reasons for accidents are mainly due to unsafe act, unsafe working condition, lack of training and awareness, inadequate safety management, equipment failure and poor house keeping. It is seen that unsafe acts and unsafe conditions contribute approximately 88% and 10% of all accidents respectively. It is also said that a safe and alert worker is safer in unsafe condition than an unsafe and un-alert worker in a safe condition. Most of the accidents are caused due to inadequate safety management system; same needs to be prevented.

In order to improve the safety levels in our Refinery Premises, the contractor safety is of paramount and utmost importance and therefore a good contractor safety management system must be in place. The Contractor's management, supervisor, safety officers therefore must ensure that all these rules and regulations of this Safety management system are strictly enforced and monitored with the help and guidance of Owner's Engineer in charge / Safety officers so that precious lives and costly properties can be saved.

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1.0 GENERAL SAFETY GUIDELINE

- i) General: Safety of Contractor's employees working for Owner on sites should be of the same high standards as that of Owner's own people. The following is a list of rules and regulations which must be observed by any contractor or his sub-contractor working in the Refinery, other property/facilities outside, belonging to the company.
- ii) The contractors have to satisfy the provisions of Factories Act, 1948 and the Rules framed there under and other related Acts concerned to the running /construction of the factory/refinery.
- iii) The contractor shall take every precaution and provide the facilities necessary for the safety of all workmen employed and shall comply with the safety rules and regulations of the company.
- iv) Carrying of matches or any other means of ignition is strictly prohibited in the Refinery. Persons on entering the Refinery must deposit such articles at the security gates.
- v) No dry battery or accumulator type of electric hand lamp or torch which is not of the flame proof safety type shall be taken into the Refinery.
- vi) All persons engaged at the Refinery, if called upon , shall submit to be searched by the Company's recognized officials for the possession of articles prohibited under rule (iv) above . The search may take place at the time of entry to the Refinery or during the time when the employees is in the Refinery by the security staff.
- vii)Warnings and tags shall be placed pointing out hazards.
- viii) Hard safety hats shall be worn by all employees when assigned work in the Refinery operating area/unit before entering the unit to protect from head injuries.

Safety helmets: Contractors employees require the wearing of helmets under the following conditions:

- a) In plant under shutdown maintenance.
- b) In areas where maintenance is being carried in the opinion of the company's Engineer helmet should be worn.
- c) After entering the 2nd gate of the refinery, safety helmet shall be available with every contract worker.
- ix) While walking, be on the side of the roads and the central portion of the road should be left for vehicular traffic.
- x) Resolve to keep good housekeeping a habit. If the work place is tidy and the job is being done in neat manner, there are fewer interruptions, delays and above all it helps in controlling accidents. Job site of contractor shall be kept reasonably clean and free from rubbish and debris which, may create tripping of fire hazards. Remove grass/shrubs whenever required to carryout the work in safe manner.
- xi) Safety goggles, gloves, gumboots, aprons, hard and other safety equipment shall be used by the contractor's employee where, in accordance with Company's regulation, use of such equipment is prescribed.

Owner's representative will stop the work of contractor whose employees are found not to be wearing safety shoes, not using hand gloves and are not wearing hard hat. The work will be allowed to commence only when these employees are found wearing the personal protective equipments.

No contract worker will be allowed to enter beyond 2^{nd} gate of the refinery without Safety Helmet and Safety Shoe.

- xii) Ladders/scaffolds/lifting tackle / tools and equipment used by Contractor shall meet applicable safety codes and rules, unsafe tools equipment hall not be used under any circumstances. In this regard, the decision of the company Representative /Safety section shall be final.
- xiii) Oil, rags, cloths or any waste materials are dangerous fire and tripping hazards. Dispose off such materials immediately in the dust bins only.

- xiv) Fire extinguishers, water hydrants and steam hoses are there to extinguish fire and should not be used for cleaning tools, washing, etc. Free access must always be maintained to such equipment.
- xv) Do not wear oily clothes.
- xvi) Report oil leaks promptly to owner's operating personnel. Stop all the hot work in the surrounding areas.
- xvii) Do not leave tools, bolts, and other equipment in the walkways, on the beams or in any place where they will cause a tripping hazard.
- xviii) Do not turn on steam, water, electricity or set in motion machinery without permission and seeing that any one is in a position to be injured. Never remove a tag from any vessel without proper authorization.
- xix) Inspects walk planks, runways and ladders before use and keep them in good conditions.
- xx) Do not throw material from high elevation. Lower it by means of a rope.
- xxi) Cordon of all excavations and trenches to avoid falls, by fencing, barricading or otherwise and place a sign indicating the same.
- xxii) Never point compressed air or steam hoses towards employee/workmen.
- xxiii) No contractor will be allowed to work in the Electricity sub-station without a standby from Owner's electrical department.
- xxiv) Following completion of work, contractor shall clean up job-site to Company's satisfaction.
- xxv) Debris shall be disposed off, at designated location(s). Metal scrap and salvageable materials belonging to the Company shall be moved to the Refinery Salvage Yard/Scarp yard.
- xxvi) Contractor's employees shall no enter manufacturing units, office buildings or maintenance shops and store house premises without specific approval. They shall not leave their representative job site without prior approval.
- xxviii) Company Representative and Safety section are authorized to correct any conditions which they may consider hazardous.

xxix)Contractor should:

- Make themselves and their employees aware of all the hazards; provide means and organization to comply with the safety & health measures required at the workplace before commencement of any job inside Refinery. Educate workmen about their duties at the workplaces.
- Implement safe methods and practices; deploy appropriate machinery, tools & tackles, experienced supervisory personnel and skilled work force etc. required for execution. Ensure inspection and certification of all tools being used. Remove defective tools immediately.
- Nominate / engaged qualified & trained Safety Engineers / Officers reporting to the Site Incharge for supervision, co-ordination and liaison for the implementation of the safety plans & procedures.
- Ensure that only PPEs of the Owner approved type is used at work site. Arrange suitable facilities in liaison with the Owner for drinking water, toilets, lighting, etc applicable as per Laws / Legislation at site.

- Ensure strict compliance with work permit system after ensuring that all safety precautions / conditions in the permit are complied with and closing the same after job completion. Arrange for fire protection equipment as per the advice of owner.
- Ensure that its employees have completed appropriate health and safety training as required by the statute / regulation and also as per requirements of the Owner / Consultant. The documentation of such training imparted to all its employees should be maintained and produced for verification as required.
- Ensure that workers have proper training for their job assignments, including use of appropriate PPE and first aid fire fighting equipment.
- Report each incident and / or injury in accordance with established procedures and assist in investigation. To maintain accident & near miss record in a register.
- Conduct daily inspections to ensure compliance with safety standards, codes, regulations, rules and orders applicable to the work concerned. Arrange daily toolbox meeting and regular site safety meetings and maintain records.
- Attend training and ensure participation of his workers for training as per schedule arranged by the Owner / Consultant and keeps himself updated.
- Keep records of number of persons working at the site. Also keep a constant liaison with EIC / Owners' representative on safety issues.

2.0 SAFETY MANAGEMENT

2.1 JOB SAFETY ANALYSIS/PLAN

Job safety analysis provides the Contractor, Safety Officer or Supervisor a mechanism to take a detailed look at the individual task how it is performed and what are its inherent hazards and then take preventive actions accordingly. Contractor must do the exercise for all critical activities and submit it to Owner's EIC for approval before taking up a Job. A job safety analysis/plan includes the following five steps:

- Select a Job
- Break the Job down into sequence of steps
- Indentify the hazards against each step
- Apply the Control to the hazards
- Evaluate the controls

2.2 WORK PERMIT SYSTEM

2.2.1 The **Work Permit System** is an important tool for ensuring safety in Hydrocarbon Processing & Handling Installations like Refinery, Marketing Terminals, LPG Bottling Plant, etc. For the safety of the personnel, machineries & plants, a safe and user friendly **Work Permit System** has been formulated in line with OISD & other statutory guidelines. If a work has to be performed by any person other than the operating personnel of that area, a duly authorized written permit shall be obtained by the executing agency before commencement of work. Such Permit is valid only for a specific job for a specific period. Every Contractor must comply with this **Work Permit System** without fail. If a work has to be performed by any person other than the operating personnel in that area, a duly authorized written Permit must be obtained by the person / agency executing the job before commencement of work. Since several maintenance & construction jobs are carried out with assistance from Contractors, it is essential to provide sufficient exposure to contractors, their supervisor and workmen about this Permit System. Work Permits are normally not issued directly to any Contractor.

In generals NRL has the following system of permits.

- a) Hot Work Permit: Combined for hot job and confined space entry
- b) Cold work permit
- c) Excavation permits
- d) Working at height
- e) Radiography permits
- f) Electrical lock out permit
- g) Road excavation permits
- h) Mobile material handling equipment permit

If required contractor has to prepare and submit job safety plan for special nature of job along with the permit which are to be approved by EIC and Fire and Safety deptt. It is normally the contractor's responsibility to fulfill the conditions of permit like keeping/wearing PPEs, Harness and life lines , gas detector , Portable fire extinguishers, spray nozzles, Fire hoses etc., however owner may also supply the same and if feel necessary may be charged also.

For the entire jobs, permits are to be taken as per owner's prescribed format and procedure and must be initiated & get it signed by Owner's designated representatives and other depts. as per procedure. Contractors working within Refinery without valid work permit or violating condition of permit may be panelized and shall be removed from the approved list of company contractors.

2.2.2 A) Hot work permits:

- **I.** The performance of work which
 - i) Constitutes a source of ignition
 - ii) Constitutes a potential fire hazards or
 - iii) Interferes in any way with normal fire fighting operations, shall require an approved Hot work permit.
- a) i) Excavation permit:

Any excavation within the limits of the Refinery whether carried out by earth moving Equipment or hand tools, requires and excavations permit. It must be signed by owner's representative, in addition to the Hot work permit.

ii) Electrical permit:

For carrying out any electrical work, proper authorization and permission is requires from Electrical Maintenance including energizing/ de- energizing certificate /Electrical permit. The contractor is not supposed to switch on/off any circuit connected to the electrical system or any work without emerging/de- energizing certificate/electrical permit.

- b) i) Entry of motor vehicle and equipment fitted with internal combustion engines into the unit limits of operating areas. All engine driven equipment used on plant must be securely fitted with approved exhaust spark arrestors.
 - ii) Any work on oily water and intermediate sewer systems.
 - iii) Making any opening in the fire bound-walls enclosing storage tanks.
- c) Before starting any work, the contractor must fill in the prescribed form for doing hot work and hand it to the owner's representative. Person authorized to issue work and work permit will be intimated to the contractor by the owner.
- **II.** a) Hot work permits are required for all locations in the Refinery other than those specifically exempted for this requirement.
- b) Hot work permits are valid for the period mentioned therein and shall require renewal or extension by the issuing authority if work is to continue beyond the specified hours.

- c) Refinery operating personnel and shift-in-charge of Fire & Safety have the authority to withdraw any approved permit and stop work should they consider a hazardous condition exists or is likely to exist during the course of the work.
- d) Contractor's personnel assigned to the job requiring Hot work permits shall conduct the job safely and abide by all precautions specified on the permit.
- e) Hot work permits shall be endorsed by Fire & Safety Dept., copy of which shall be retained by them and the original shall be in possession of contractor's personnel actually working while work is in progress.
- III. Issuance of Hot work permit for carrying out specified" Hot work" does not permit smoking on worksite.

B) Cold work permit:

- a) The purpose of a "cold work permit" is to give written permission to a person/contractor to carry out work on a separate item of operating equipment or any facility belonging to an operating plant/area. The permit is to ensure that the equipment and area are safe to carry out the specific work.
- b)Cold work permits are required for all work of maintenance, repair, modification or construction nature performed in the operating areas and/on operating equipment.
- c) Work permits are valid only for the duration specified and will require renewal or extension by the issuing authority if work is to continue beyond the specified hours.
- d) Work permit must be signed by the Gas Safely Inspector/Office-in-charge responsible for the operation of the equipment/unit or area concerned.
- e) Work permit shall be endorsed by authorized NRL employees of different classified areas and copy of which shall be retained by them, original must be in possession of Contractor's personnel actually working while work is in progress.

C) Clearance from field Supervisor:

The hot work and cold work permits shall not be valid until a clearance certificate is obtained from the field supervisor responsible for the operation of the equipment/unit or area concerned.

2.2.3 In the event of hazardous conditions developing in an area where work is being performed. Work permits will be withdrawn by Refinery Operations/Fire and Safety personnel. Work thus suspended shall not recommence until the work permits are re-issued.

2.2.4 Important Notes:

- a) No work involving HOT WORK or the opening of equipment and lines may be carried out in the refinery without a Hot work permit and a cold work permit and where necessary a gas certificate. All vessels such as tanks, columns etc. which have contained any inflammable liquids or corrosive chemicals may only be entered by a person after a clearance certificate and cold work permit are issued.
- b) All the conditions laid down in permit /clearance must be implemented in totality before start of job/activity and in case of any doubt the same shall be clarified with concerned NRL supervisor in charge of the work. Contractor must keep his workers fully informed of the details and possible dangers of the job in hand in daily meeting conducted at respective site.
- c) Workmen must not be allowed to enter any vessel, tank, pump, trench or drain without a work permit issued for the job stipulating the necessary precautions to be taken for the safety of the workmen. It is the responsibility of the contractor to see that the certificate is valid up to date before any work is to proceed. d) Any job involving dangerous chemicals must be covered by a cold permit, where such jobs required the use of protective clothing for the protection of the workmen; this will be supplied by the NRL in certain cases and it is the responsibility of the contractor to ensure that his workmen wear the protective clothing.

- e) Electricity driven appliances such as drills, grinders, etc require a permit before they are to be used on plant plots, refinery reads, etc.
- f) In case the diesel generating sets are required to be used for any particular work, the contractor shall arrange for necessary certificates for uses from Govt. Authorized Elect. Inspector. The wiring of DG set shall be with double earthing ELCB and approved by NRL Engineer.
- g) All work in connection with roofs of a building must be covered by a work permit and cowling board or Cat Ladders must be used with a safety harness. On no account will any workmen be allowed to stand, walk or crawl over any roof.

2.3 USE OF PERSONNEL PROTECTIVE EQUIPMENTS:

The Personal Protective Equipments (PPE) are used at work site to reduce risk of dangerous occurrences and provide a physical barrier between the user and the hazard. It is of course of primary importance that Personal Protective Equipment (PPE) are carefully selected before procurement and then maintained. Improper selection, use and maintenance can only cause danger to the life of the user. All personnel using PPEs should be thoroughly trained about the right use of Personal Protective Equipment (PPE), its upkeepment and maintenance by the Contractor. If required, guidance from Owner's representatives should be taken. PPEs are two types - Non-respiratory Personal Protective Equipment & Respiratory Personal Protective Equipment. The Contractor should follow the following guidelines.

- It is the prime responsibility of the Contractor to supply all PPEs to his workmen and strict adherence of the compliance of the same at the work place. He cannot allow his worker to perform job without using the requisite PPE for the job. Owner may issue any of these PPEs to Contractor, if available, on chargeable basis.
- All the PPE should be of BIS Standard or equivalent International standard. All PPEs like Safety
 Helmet, Safety Shoe, Boiler Suit, Full Body Harness, Gloves, Chemical suit, Mask, Welding
 goggles, Eye shield, Ear plug, Ear muff, BA apparatus, Life line, Mask for Toxic Gases should be
 procured as per this standard and supplied to his worker.
- Contactor should also ensure that these PPEs are replaced as per guidelines.
- A register for issue of PPEs to the workers is to be maintained by the contractor at site which may be checked by owners representatives.
- Certain PPE like helmet, Safety Shoe and Boiler suit will be checked at Main Entry and Owner will stop entry of such persons who are not having these PPEs.
- Contractor should take advice from owner the probable requirement of PPEs for a specific job before quoting or submitting his tender.
- The contractor has to train his persons about the usage of PPEs.
- Owner may check the quality of the PPEs supplied by the contractor to his workers through competent persons. Owner may also stop work and impose penalty to the Contractor for not using PPEs by their employees.

2.4 INSPECTION / AUDIT

Inspection / Audit is a tool to evaluate compliance of all safety requirements inside our Refinery Premises. Most of the relevant information can be gathered through site inspection using ready-made checklists to ensure that the Contractors are following the rules and regulations at work site. Contractors are therefore required to develop checklists in consultation with Owner's EIC & Safety Officers. Before starting a job and at regular interval thereafter, Contractor's supervisor and Owner's representative should inspect as per the checklist and take appropriate action in case of non-compliance.

2.5 PENALTY FOR NON-COMPLIANCE

In order to ensure 100% compliance of safety related regulations and procedures and nonuse of PPE, penalty will be imposed on the Contractors or their Workmen not adhering to permit conditions / safety rules & regulations. The Contractors must endeavour to avoid penalty by encouraging, motivating and making their employees aware about all the Safety regulations. Remember that the purpose of this scheme is to ensure safety of the personnel & property. A few of the non-compliances are as under:

- Non-usage of PPEs / Safety Belt(Full Body Harness)
- Violation of safety permit conditions
- Non-barricading of area
- Working without valid work permit
- Unauthorized road closure
- 1. The Penalties on the Contractor or their workmen may be in the form of:
 - Warning
 - Seizure of Gate Pass
 - Denying Entry / Entry Pass renewal
 - · Compulsory Training at Contractor's cost
 - Delisting
- 2. Owner's authorized representatives will report such violations to the concerned departmental head for imposing necessary penalty.
- 3. The above penalties shall be double in case of violations more than 3 times during the contractual period for a particular contract.
- 4. Imposing any penalties for violation of HSE norms does not absolve the Contractors from their contractual obligation / responsibility.
- 5. Contractors shall own full responsibility for any accident and injury to any of their employees or property due to violation of HSE norms.
- 6. All such financial Penalties imposed on Contractors shall be considered for evaluation of Contractor's performance for tendering.

2.6 ANNEXURE – I : FORM FOR INTIMATION

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- 2. NAME OF THE CONTRACTOR:
- 3. DATE & TIME OF VIOLATION:
- 4. AREA / LOCATION / UNIT:
- **5.** DETAILS OF VOILATION:

Sl	Description of violation (Pl indicate the penalty clause no)	ie	Penalty	Remarks
1				
2				
Namai		Cionatura		Doto
Name:		Signature:		Date:

2.7 REPORTING UNSAFE ACTS/CONDITIONS/FIRE/ INCIDENT /ACCIDENT / INJURIES / HAZARDS ETC

If the Contractor's employee notices any oil leak, fire or hazard or any other abnormal situation including unsafe acts and conditions he should immediately report to owner's representatives. Also Refer emergency procedure clauses 3.3

2.7.1 Hazard communication including fire reporting and control:

Contractor must familiarize themselves about all probable sources of hazards like Fire, Explosion or Toxic release inside the Refinery & Marketing Terminal. He in turn will also ensure that the same information has been passed to his supervisor and workmen. Proper record of such dissemination of information must be kept by the Contractor and submit to the Engineer In charge on demand.

2.7.2 Action by person noticing Fire / Emergency situation are as under:

- 1. Attempt to extinguish fire with equipment available.
- 2. Inform NRL personnel immediately available in the job / unit.
- 3. Operate Fire Alarm (MCP) and / or inform Fire Station on telephone No.333/444 giving specific information like identity of caller, location of fire/incident, other site information like road blocked, etc. for ensuring earliest arrival of fire crew & equipment.

2.7.3 Reporting Accident / Injuries and Records :

- According to the Factory & Other Acts, any workman sustaining an injury in the Refinery and
 then absenting himself from work from more than 48hours, his accident report is to be sent to the
 Government authorities. To comply with this regulation, it is the responsibility of the Contractor
 to inform immediately to Owner's representative regarding the accident, which may occur to his
 employee while working in the Refinery premises.
- If any Contractor employee is referred to an outside hospital as a result of an injury suffered by him and whether hospitalization is required or not, the Contractor will keep Owner posted on day to day basis about the condition of the injured person. Contractors to maintain proper records of Accidents of his personnel.
- Any injury must be reported to the Occupational Health Centre (OHC) and EIC immediately. Also Contractor must fill in the First Information Report (FIR) within 4 hours from the incident and the accident investigation Report (AIR) within 24 hours of the incident.
- Contractors are also required to submit the safety statistics like accident / incident / injuries for the last 3 consecutive years for the various jobs executed by them in various work sites along with tender.

2.7.4 FIRST AID / TREATMENT OF INJURIES:

- In the event of any injury sustained by any of Contractor's employees within Refinery & Marketing Terminal Premises, it should be informed to OHC at telephone 222/3700. The Contractor should ensure that FIRST- Aid should be immediately made available to the victim.
- Facilities for treatment of injuries (FIRST AID) are available at all times at the company Occupational Health Center. Injuries should be treated with a minimum of delay. Contractors are to follow the advice given by the Occupational Health Centre for the subsequent treatment.
- Contractor shall arrange expenses for Medical treatment including charges during hospitalization of Contractor's Personnel.

2.8 SAFETY COMMITTEE MEETING:

To maintain awareness, update training, convey important safety and health information, Safety Meetings should be held at a periodic interval. The Contractor, their Supervisors & Safety supervisors, should attend such meetings. The Owner's Supervisor / EIC and Safety Officers may also attend these meetings at random basis. The Contractors should maintain record of these

meetings. Following three types of safety meetings should be held.

- 2.8.1 Tool Box Meeting
- 2.8.2 Site Safety Committee Meeting
- 2.8.3 Periodic Safety Review Meeting

2.8.1 Toolbox meeting

To maintain awareness, update training and convey important safety and health information, contractor supervisors should conduct toolbox meetings at site prior to start of work. All Contractor workmen should attend this meeting. The Owner's Supervisor / EIC & Safety Officers may also attend this meeting. The frequency of Toolbox meeting is to be decided based on the circumstances.

2.8.2 Site Safety Committee Meeting

The Safety Committee should include representatives from Owner, Consultant & Contractor and it should be headed by EIC. The purpose of this Committee is to enable Owner & Contractor to monitor Site safety to prevent accidents and improve working condition. Its size & membership will depend on the size and nature of job. Owner's EIC / Safety Officer will guide in this matter.

The Safety Committee should have monthly meeting and the outcome of these meetings should be documented. The functions carried out by safety committee should include:

- i. Review compliance status of pending items of last Safety meetings.
- ii. Discussion on incident / accident / near-miss reports to make appropriate recommendation for prevention. Examination / evaluation of suggestions made by workmen.
- iii. Forward recommendation to Apex Body for consideration / approval.

2.8.3 Safety Review Meeting

This meeting is generally be headed by the Location head and attended by Owner's Supervisor / EIC / Safety Officer and may be by all concerned department heads. Prime purpose of this review is to ensure that all the recommendations of various committees are being complied with. The frequency of the meeting is at least once in every quarter. All the investigation reports / audit findings with status of implementation shall be discussed.

2.9 SAFETY TRAINING

F&S Training is mandatory for all Contractor employees for getting an entry pass and also before start of any work inside the Refinery Premises.

a Training of Contractors' Proprietor, Partners, Directors, etc:

- The Proprietors, Partners, Directors of the Contractors who have ultimate responsibility to carry out the work must undergo a comprehensive safety familiarization programme.
- This programme would be conducted once in a quarter by Fire & Safety / Training & Development Section the schedule of which will normally be notified in advance.
- On completion of the programme a certificate of Attendance / Safety training card will be issued to each participants which will be required for issue of Entry Pass.

b Supervisors' Training:

- Contractors' supervisor will have to undergo training on Health, Safety and Environment (HSE) in Refinery which also includes "Work Permit Systems".
- HSE training card would be issued on completion of the training which would be valid for 1 year.

c Workmen's Training:

- Contractor's workmen will have to undergo one day's classroom and practical training on "Safety" before commencement of the job.
- On completion of Training, "Certificate of Attendance" would be issued by F&S Section.
- The "Certificate of Attendance" would remain valid for a period of one year. However, the same may be required for rectification with the same procedure if the workman is found violating any safety norms or indulging any unsafe act.
- Entry pass would be issued on production of valid certificate only.

Refresher Training:

Supervisors / workmen will be required to undergo refresher training from time to time as decided by Fire & Safety Section. The coverage & methodology of Refresher Training would be same as the initial training.

2.10 MEDICAL CERTIFICATE

Contractor will ensure that workers including Supervisors are medically examined by a certified surgeon / Occupational Health Physician having qualification of MBBS+AFIH as per Assam Factories Rule, 1960 or any competent physician before deployment on the job. Only medically sound person as certified by above medical practitioner would be allowed to do the job. Workmen deployed on high risk jobs like working in confined space, working at height, working under water, etc. must also be additionally certified for such jobs. The medical certificates older than more than 6 months will not be accepted. Health Assurance certificates submitted by the Contractors would be checked at random by the Refinery medical officers.

3.0 SAFETY PRACTICES AT WORK PLACES:

3.1 SAFE PRACTICES FOR INDIVIDUALS

- **3.1.1** i) Where walkways are provided use them instead of short-cuts. If walkways not available you must use the roadway keep to the right so you will face approaching vehicle.
- ii) As a protective measure employees must not walk through or cut across any operative units unless their duties require them to do so.
- iii) Walking on or over any mechanical or roller conveyor is strictly prohibited.
- iv) Employees should not walk on rail road tracks if it can be avoided.
- v) Passing under railway wagon as a short-cut is dangerous and strictly prohibited.
- vi) It is prohibited for any person to ride on the running board of any vehicle or any part of the vehicle without being properly seated.
- vii) All stairways, platforms and walkways must be kept clear at all times.
- viii) Make shift of any kind are prohibited.
- ix) Umbrellas are not permitted to be used while cycling.
- **3.1.2** i) Before starting a job be sure you know how to do it. If any doubt, consult your supervisor.
- ii) Do not touch or attempt to operate or set in motion any machine or equipment, which you are not assigned to operating or repairing.
- iii) Only the authorized personnel may operate any switch-gear from routine stopping and starting of motors and lighting.
- iv) Never look directly into the arc produced when welding without proper eye protection.
- v) When starting any steam pump or machine, make sure the exhaust steam heads are drained, so that hot water will not be sprayed out creating a hazard.
- vi) Protruding nails should be pulled out or bent over.
- Vii) Goggles or shields must be used when working on emery wheels, brushes, chipping etc... or any other circumstances where there are possible eye hazards.
- viii) Gloves must never be worn while grinding materials on an emery wheel. Gloves are not provided to keep hands but to protect against abrasions, silver corrosives an extreme temperatures. Gloves should not be used when operating machinery without sanction from section Head.
- ix) When working around moving machinery, the wearing of loose clothing such as Dhotis, lungies etc. Is prohibited.
- x) Learn the right way to lift so as to avoid strain. Bend your knees, keep your body erect, and push upward with your legs.
- xi) All the tools to be used on job should be of good quality and good condition. Defective tools are dangerous. Do not use them. Never use a tool except for its purpose.
- xii) Do not leave tools or materials where they may accidently drop on persons below.
- xiii) Do not tamper with or attempt to repair instruments. Only instrument technicians are permitted to work on instrument.

- xiv) Process technicians must always be stand on the windward side when taking samples, bleeding or draining lines or equipment.
- xv) No work should be started on oil, chemical, gas stream, air, sewer, or water lines or equipment carrying these before a clearance certificated is obtained from Ops. Dept.
- xvi) Shift employees must not leave their jobs until the men who relieve them are properly advised of all operating conditions.
- xvii) When work is completed, all left over junk and tools are to be removed to the proper places.
- xviii) NO WORK is to be started until all permits are obtained.
- xix) If an object is too heavy for you, get help.
- xx) Watch your hands and footing when you are handling heavy objects.
- xxi) The use of safety shoe is mandatory.
- xxii) Finger rings should not be worn.
- **3.1.3** i) If you become aware of an immediate hazard such as unexposed escape of petroleum products, gas etc. see that the work in surrounding area is immediately stopped. Your prompt action can prevent injury to others. If any gas leaks occurs signs must be placed on road to keep automotive equipment away from contaminated area. Fire section should be informed immediately.
- ii) Safety is your responsibility and not responsibility of that imaginary someone else. All conditions that may affect the safety of employees or equipment must be reported at once.
- iii) Lines or equipment must not be purged with compressed air.
- iv) Compressed air or gas must not be used for cleaning or blowing dust out of clothing or for pressure testing within refinery.
- v) Never points an open hose at another person.
- vi) Drums, full or empty may not be used as work benches or supports for any job, or in place of ladders .
- vii) All drums must be clearly marked as to their contents.
- viii) Do not hesitate to suggest any additional guarding for improvements to existing guards that may make for added safety.
- ix) Excavations in any area must be suitably protected and marked. This also applies to any trench or drains which has a cover removed. During unit shut-down if ladders, grating or hand rails removed, safely ropes must be placed around the opening to eliminate the danger of fall. Before starting excavations of any description in the refinery or residential area an approval must first be obtained from the Engineering Department, so as to avoid any possible damage to electrical cables or pipelines.
- x) When it is necessary to block off any road in any area including the residential area, only official road barriers should be used. These are obtainable from the Fire Station on request. The supervisor in-charge of excavation work is responsible for carrying out of this regulation.
- xi) The excavation or ditch more than 1.5 meter deep must be properly shored up, before any employee is permitted to work in it.
- xii) Whenever your clothes become saturated with oil, change your clothes immediately and wash your body part with water.
- xiii) Coupling or connections on stream, air or water lines for hose connection should point downwards, so that if the hose blows of their will be less danger of personally injury .
- xiv) No clothing or any inflammable material is allowed to be dried out on steam lines or any other hot equipment.
- xv) As gas or liquids have natural freezing qualities when the pressure is suddenly released, care must be exercise not to expose any part of the body to serious leaks or when taking samples. Frost bite is often the effect of such exposure.
- xvi) When a person is working in any vessel in the immediate vicinity of operating units one person must be Stationed at the opening of the vessel as a watchman.
- xvii) Sample bottles must not be used for any purpose other than samples.
- xviii) All belts and couplings must be properly guarded.
- xix) A guard may not be removed or adjusted while machinery is in operation. The machine must be rendered in operative by the removal of fuses or locking of moving parts before a guard is removed or repairs commenced. Guards must be replaced before machinery is put back into operation.
- xx) All guards on pumps, motors, gears, machinery, etc.etc. must be fitted after any maintenance work. These must be in place before handling over the equipment for operation.

- xxi) When work is completed all guards ,and rails etc. must be replaced.
- xxii) All moving parts of the machinery such as couplings, pulleys, wheels, belts chains, fly wheels etc. must be equipped with proper guards.
- xxiii) It is strictly prohibited to use any grade of petrol or any other inflammable liquids or corrosive chemical such as caustic soda or acid for cleaning purposes. Approved paint removers may however be used.
- xxiv) Transporting or storing of Petrol/Diesel or light product s or corrosive chemicals etc. in any open container is strictly prohibited.
- xxv) Every precaution must be taken to avoid oil splashes when opening lines or other equipments. Oil must be drained into suitable containers wherever possible. In the event of an oil spill the Fire Section should be advised with a minimum of delay . Spills which involve light products must receive immediate attention.
- xxvi) Protective Clothing and equipment must be worn by personal handling corrosive chemicals such acid, caustic soda etc. When required gas masks can be obtained from Fire Station.
- xxvii) All storage containers such as tanks, drums etc. containing corrosive chemicals must be clearly marked indicating the nature of the contents.
- xxviii) All pumps in service on corrosive or dangerous chemicals must have gland guards to prevent spraying. All equipments which comes in contact with corrosive chemicals must be washed with water immediately After finishing the job.
- xxix) Before using any types of swinging scaffold, stages of boatswains chairs, it should be tested while close to the guards.
- xxx) Don't insert a bolt or nail in a chain to shorten it. The bolt or nail may slip or break and an accident results.
- xxxi) Only members of the operating personnel are allowed to change over pumps, open or close valves on the operating lines or vessels etc. or in an emergency at least a member of the plant operating personnel must be in attendance when this is carried out.
- xxxii) When loading , unloading or handling pipe joints, a piece of wood or smaller short pipe should be inserted into the ends of the pipe. This will keep the hands free and prevent crushed fingers.
- xxxiii) Hand towing of Lister trailers only allowed in plant areas.
- xxxiv) Do not transport any material including in process or final products samples by bicycles which are equipped with special carriers.
- xxxv) If glass panes or windows ventilators or shutters etc. are broken or cracked, the entre pane must be renewed immediately.
- **3.1.4** i) Vehicles of all description must be equipped with good exhaust and muffler system to enter the refinery Area. Any unit with a defective exhaust system will be prohibited from entering the refinery area. All Traffic signs and regulations must be complied within the refinery area.
- ii) Vehicles must not be driven off roads on the operating plant area without a Hot Work permit and cold work permit.
- iii) Diesel must not be siphoned out of tanks of vehicles.

3.1.5 General Loss Control Rules:

Refinery being a highly hazardous industry it is mandatory that the Contractor's employees follow all applicable safe practices and confine to the work place only and neither move from their job site nor loiter around the Refinery operating and other Units. They will not be allowed to relax or sleep in the operating units even in the period of work breaks. It is Contractor's responsibility to explain all the safety regulations / instructions to his employees. All the Contractors and their employees must ensure the following General Loss Control Rules:

- 1. Numaligarh Refinery and its Terminal area (Factory) are under hazardous industry and every worker/visitor/contractor must observe safety rules and regulations and insist on its observance by other co-workers also. All are to enter factory premises with valid gate pass/authorization only.
- 2. Carrying of matches or any other means of ignition source is strictly prohibited inside Factory Premises. Before entering the Factory premises, matches and lighters must be deposited at the security main-gate.
- 3. Smoking is strictly prohibited inside the Factory Premises.

- 4. Mobile phones are strictly prohibited inside the second gate of Factory Premises.
- 5. Wearing of Helmet & Safety Shoe with proper colour code is must inside the refinery premises after second gate. To perform a job safely use appropriate personal protective Equipment (PPE). Ensure all the PPEs are in proper condition.
- 6. Do not wear loose clothing (e.g. Dhoti, tie etc) in plant area. It is dangerous near running machinery.
- 7. Wear cotton protective cloths. Synthetic clothes may generate static electricity, which can be source of ignition in hydrocarbon processing plant.
- 8. Only Diesel driven vehicles fitted with approved spark arrestor are allowed in designated roads inside the Factory Premises.
- 9. Only authorized drivers with special Fire & Safety Driving training is allowed to drive inside the second gate of Factory Premises.
- 10. Speed limit of 25 km/hr should be strictly followed while driving inside the Factory Premises. The vehicles should stop at sites with sign board "STOP", "LOOK AROUND" & "GO" and follow the above instructions.
- 11. Don't carry out any job/operation without proper authorization/Work permit.
- 12. Before the start of any job be sure you know how to do it safely. If in doubt, ask your supervisor.
- 13. Non sparking tools must be used in hydrogen/LPG handling areas in refinery and Marketing terminal.
- 14. Fire fighting and safety equipment's must be kept in designated places and access to be kept unobstructed.
- 15. All stairways, platforms and walkways must be kept clear at all times
- 16. If you are working in an isolated place, keep in touch with the person designated by your supervisor.
- 17. In case of Disaster /Major Fire Siren all hot jobs being executed inside refinery shall be immediately stopped and electric power for the same shall be cut off.
- 18. In case of any accident / fire incident/dangerous occurrence / near misses immediately report to your supervisor and telephone Fire & Safety dept at Tel: 333/444. Get first aid promptly. For ambulance telephone Occupational Health Centre at <u>Tel:222</u>.
- 19. Two person should not be allowed while riding bicycle inside the refinery premises.
- 20. All the vehicles including material handling crane, hydra, excavator etc should have back horn.

3.1.6 Movement inside Refinery / Marketing Terminal Premises

- 1. Always use walkways instead of short cuts. No one should walk through or across any operative units unless their duties require them to do so.
- Walking on or over any rolling item, mechanical roller or conveyor is prohibited. Avoid walking on railroad tracks. Passing under railway wagon as a short cut is dangerous and strictly prohibited.

3.2 HOUSEKEEPING

- **3.2.1** Housekeeping is an important aspect towards maintaining a healthy & safe work environment inside any Industry. If proper housekeeping can be maintained, lots of problems are
- automatically resolved. The Contractor therefore must ensure for removal of scrap, inflammable material, waste and debris at appropriate interval including proper storage of materials and equipment. The debris, scrap and other unwanted materials generated out of the activities carried
- out by the Contractors must be removed from site and shifted to the designated location or as instructed by EIC. The Contractor may ensure the following.
 - Ensure proper storage of both Owners' / Contractor's materials & equipment at site used for carrying out the maintenance or construction job.
 - Remove the loose materials, which are not required for use. Accumulation of these at the site can
 obstruct means of access to workplaces and passageways. Scrap generated out of the maintenance
 job should also be removed.
 - Workplaces and passageways, that are slippery owing to oil, grease or other causes, should be cleaned up or strewn with sand, sawdust, ash etc.
 - The workplace to be kept clean on continuous basis. Even for continued nature of work the work place must be cleaned not later than every four hour basis, non compliance of which shall be treated as major violation of safety norms.

- Before offering a completed job for final inspection/acceptance Contractor must ensure that all
 maintenance waste, scrap and other disposable items are removed from the workplace. Failing the
 same will call for rejection of inspection call and the contractor shall be penalized for the wastage
 of inspectors time through necessary recovery from their bill.
- All disposable material and scrap shall be dumped in the specified location only and panel
 recovery shall be made if found dumped in other location. It may be noted that in all the item rate
 contract housekeeping is a part of the activities and as such deduction will be made in case of noncompliance.

3.2.2. Worksite Inspection Clearance Report

The following report to be attached with the final bill. The report should be filled up and signed after joint inspection after completion of work. Inspection should be carried out jointly by the representatives of EIC, production Deptt or area in charge and contractor representative.

i Format for worksite Inspection Clearance report

Inspection Date

Time

LOA no Name of the Work / Worksite		Cleaning Status				
		Workable Material Stacked properly: Yes / No Left				
		scattered: Yes / No Scrap				
		Material				
		Transported to scrap yard: Yes / No				
		Left out at site: Yes / No				
		Waste Material				
		Transported to waste yard: Yes / No				
		Left out at site: Yes / No				
		Signature				
Name of Ro	epresentative					
Site I/C - C	Contractor					
EIC - Maintenance						
Area I/C – Operation						

3.3 EMERGENCY PROCEDURES

Emergencies like fires, explosion, leakages or accidents may occur at any time and in any case if contractors' personnel notice such abnormality he should immediately inform nearby NRL employees or Fire Station. He may use any of the following modes of communication to intimate Fire Station / Occupational Health Centre about the incident / accident.

- i) Intercom telephone to Fire Control room 333/444
- ii) Breaking MCP (Manual call point)
- iii) VHF Channel-8
- iv) PA system
- v) Occupational Health Centre (Ph 222) in case of injury

However, as a responsible person he should use portable Fire Fighting media in case of Fire and inform immediately the nearby Owners representative / Fire Station.

3.3.1 Siren Code: To communicate during emergency, NRL has following siren code:

- i) Minor Fire: No siren
- ii) Major Fire: Waling sound for 2 minutes
- iii) Emergency: In case disaster wailing siren will be sounded for 2 minutes thrice at a gap of 1 minute in subsequent blowing.
- iv) All Clear: 2 minutes straight siren

3.3.2 Important Procedures to be observed during Emergency

- If the Contractors employees notice any oil leak or fire, he should immediately report to Owner's representatives or Fire Station by using any one of the communication mode mentioned above and stop all the jobs.
- Action by contractors in the event of a Major Fire Alarm:
- 1. Contractor personnel under direct supervisor of NRL:
 - On sounding of a general alarm siren, contractor's personnel within the premises will carry on their normal work unless they are directed otherwise by their NRL Supervisors.
- 2. Contractors personnel under contractors direct supervision:
 - a) If not in the immediate vicinity of the incident he is to keep men working as normal
 - b) If in the vicinity of the incident, following shall be resorted to:
 - Stop all work, shut off engines/ welding machines etc. and take advise from owner's representatives.
 - Check the number of workforce immediately and if any of his personnel are missing then he is to report this to fire station control room.
 - Assemble the workers at a safe distance from the incident, preferably at the identified "Assembly Point" and wait direction from his normal NRL supervisor.
 - Only when the all-clear siren is blown work should be resumed. Fresh permits should be taken before commencing work in such cases.
 - c) Under no circumstance, must the contractor's supervisor allow his men to take part in any emergency action unless so required by a NRL's supervisor.
 - d) Any contractor who is driving a vehicle when the Fire Siren sounds should park his vehicle at a suitable location away from the site of fire.
 - e) Contractor personnel working at Refinery premises should be given demonstration and should acquire knowledge of the fire prevention and should be able to make use of the fire extinguishers.
- Those who are using firewater for any purpose must immediately stop using the same and must shut off the hydrant valve from which water being taken.
- When a fire extinguisher is operated for firefighting purpose or inadvertently, advice Fire station immediately so that extinguisher may be replaced.
- Any employee contravening the Fire Regulation is liable for instant removal.

4.0 PROCEDURES, REGULATIONS FOR SAFETY DURING EXECUTION OF WORK:

4.1 EXCAVATION OF WORK

Any excavation work inside the Refinery & Marketing Terminal Premises may affect underground sewers / telephone lines / cables / pipelines as a result of which there may be Fire & Explosion Accident or shutdown of the Plant. Any excavation within the limits of the refinery whether carried out by earth moving equipment or hands tools, requires an excavation clearance permit. It must be initiated & signed by Owner's representative and other depts. as per procedure.

The basic guidelines for excavation is as under:

4.1.1 General Provisions:

- Entire requirements as per IS-3764 & OISD 192 & 207 guidelines should be followed. All excavation work should be planned. The method of excavation and type of support work required should be decided considering the stability of the ground & affect on adjoining buildings, roads, underground pipes, cables or any other structures.
- All excavation work should be supervised and inspected for any defect regularly.
- Safe angle of repose while excavating trenches exceeding 1.5m-depth upto 3.0m should be maintained. Based on site conditions, provide proper slope, usually 450, and suitable bench of 0.5m width at every 1.5m depth of excavation in all soils except hard rock or provide proper shoring and strutting to prevent cave-in or slides.
- Don't allow vehicles to operate too close to excavated area. Barricade should be provided.
- Contractor' shall not make any underground road crossing without the specific prior approval of the Owner's representative. The Owner's representatives shall make alternate arrangement for emergency movement of fire tenders. Area drug-up will be kept with "Road closed" barrier. Side berm of Road should invariably be excavated manually.
- Dumping of excavated earth should be done at the designated area only. Penalty will be imposed in case of non-compliance. Checklist to be prepared and to be submitted to EICs before commencement of any excavation.

4.1.2 Checklist for Excavation Clearance

Sl	ITEM	REMARKS
i.	Whether excavation hot work permit is taken?	
ii.	Compliance status of precautions suggested in the permit. 1 2	
iii.	Whether barricading with glowing caution board is provided?	
iv.	Condition of the area where excavated earth is to be dumped.	
v.	Others	

Signature of Contractor's Site In charge

Signature of EIC

4.2 LADDERS AND SCAFFOLDS

Accidents are also caused by the ladders falling or the climber losing his balance or failure of scaffolds. As such, utmost care should be taken for these two items normally used extensively for maintenance and construction purpose inside the Refinery. Some of the safe practices as listed below are to be observed before commencement of work.

- i. Make sure that ladder is not defective or broken and is not a repaired one. All ladders used must be sound construction and the right length for the job in hand. The free length must extend by 1.5 meters above the point of landing but should not be more than 1/4th of the ladder length. No portable single ladder shall be over 9 meter in length.
- ii. Short ladder must not be tied together to give greater lengths. All ladders of 6 m or above should be tied to the structure on which they are resting to prevent from slipping. If they cannot be fixed with reasonable security, a worker must be stationed at the base of the ladder to foot it to prevent slipping. Ensure that the ladder is placed at a safe angle to prevent slip or fall back.
- iii. Metal ladders may not be used for electrical work.
- iv. Every member of scaffolding must be of sound construction. Steel planks used in scaffolds should be carefully inspected and should be tied on both sides with suitable fixing arrangements to the pipes. Scaffolding must not be overloaded.
- v. The Steel pipe & clamp to be used must be of good quality. The spacing between the vertical & horizontal members of the scaffolding should not be more than 1.5m and 1 meter respectively. The scaffolding should be further strengthened with cross bracing and stays.

- vi. The scaffolds should be provided with short climbs ladders for safe ascending / descending of workmen in the job. Only those men who are well trained / experienced in erecting scaffolding should be engaged for scaffolding work. The men working in the actual erection / dismantling of the scaffolding and all persons using the scaffolding must use suitable PPEs.
- vii. Bamboo or other flammable material is not allowed inside refinery for any type of scaffolding work other than specific purposes.
- viii. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing.
- ix. The Contractor or his representative shall check the approach platform to scaffolding for correctness and shall put a tag with signature that it is checked by them and found as per standard scaffolding norms. If required, necessary certificates regarding stability of such arrangement should be taken from the competent person before it is put to use.

4.3 ELECTRICAL SAFETY

Numaligarh Refinery Limited deals with product like Naphtha, SKO, Diesel and Hydrogen, which are very hazardous in nature in regard to flammability. The ignition point is so low that huge fire may occur with slightest of spark. Hence while dealing with electrical equipment / installation extreme care needs to be taken in terms of installation as well as operation. Hence ELECTRICAL SAFETY is prime requirement while executing any works inside the refinery. The subsequent clauses and sub clauses will give a brief idea about the system and procedure needs to be followed for operation of electrical equipment or running a electrical system.

4.3.1 Safety Standard: Applicable standards for Electrical Safety are:

- I. OISD standard
- ii. Indian Electricity Rule 1956
- iii. IS standard

4.3.2 Electrical License:

Only persons having valid licenses should be allowed to work on electrical facilities. The person who had undertaken contract for electrical installation work must possess Electrical contractor license. The person who supervises any electrical installation work must posses Electrical supervisor license based on the voltage level. The person who performs electrical power connection must possess Electrician work permit. The document must be furnished before commencement of any such job.

4.3.3 Procedure for Temporary Electrical Power Connection:

Owner may supply power to the Contractor from the nearest substation at one point. The Contractor have to make his own temporary installation including temporary cable as per guideline stated below following the Indian Electricity Rule 1956 and OISD GN 192 for Construction Safety. The Contractor shall dismantle at his own cost the installation including temporary cabling etc. after completion of job failing which penal recovery, as deemed fit by the owner will be imposed.

The following are the minimum requirement for the Contractor electrical installation without which power connection will not be provided.

- The installation to be protected with proper shed to prevent ingress of water. The SFU, bus bar chamber must be in metallic structure. The SFU must be provided with HRC fuse.
- The metallic stand / chamber must be earthed by using 2 nos of 3 meter long 65 mm dia GI earth electrode using minimum 25x3 mm G I strip. All non-current carrying metallic part needs to be connected to earth.
- Static energy meter alo ng calibration certificate needs to be installed. Required numbers of Fire bucket & Fire extinguisher is to be installed wherever required.
- The danger board must be displayed prominently. Authorization chart mentioning the name of authorized person to be displayed. Artificial respiration chart to be displayed.
- All Isolation switches are well accessible. And the entire Installation area to be well illuminated. All spare holes of the switchboard to be plugged. Wiring in the installation to be neatly dressed and all cable must be armored with proper size glands and lug.

Once completed, the Installation checked & certified by licensed supervisor.

- After completion of installation, the Contractor must submit the application for temporary electrical connection along with test report as per the prescribed format.
- The Owner will designate engineer for inspection of the said installation and power supply will be provided only after compliance of all safety requirements. Any delay on this account is attributable to the Contractor.
- The addition of any load beyond the approved load must be intimated to in same format of application along with test report. The same needs to be inspected by owners Engineer. Violation of above procedure may liable for power disconnection.
- The Owner from time to time will designate Engineer for checking of the installation and any non compliance found must be complied within a week failing for which power will be disconnected.
- The Contractor will maintain checking of the Installation every fortnightly and record the same in a register. Owners Engineer will review the register.

4.3.4 General Safety Precautions:

- No person should be allowed to work on live circuit.
- For power connection from Existing Refinery Electrical system, permit to be obtained from Electrical SIC and job needs to be carried out as per his written instructions. Before obtaining permit, Insulation Resistance test to be carried out and report to be furnished to Electrical Shift In charge .The Contractor must furnish all the document as per QAQC procedure of the Electrical works.
- All temporary switchboards put up at work site should be suitably protected from rain and the level of it should be enough to avoid contact with water due to water logging.
- Use only proper rated HRC fuses. Don't overload any equipment or system. Overloading of
 equipment may create overheating which ultimately led to fire hazard. ELCB for all temporary
 connections must be provided. Use insulated 3-pin plug tops.
- Industrial type extension boards and Plug sockets are only to be used.
- Use spark-proof / flame proof type electrical fittings in Fire Hazard zones as per area classification under OISD-STD-113.
- All temporary cables should be laid at least 750 mm below ground and cable markers should be provided. Proper sleeves should be provided at road crossings. Termination should be done using glands and lugs of proper size and adequately crimped.
- Illuminate suitably all the work areas. Hand lamps should be of 24V rating.
- All switchboards should be of steel only. Incoming source should be marked.
- Fire extinguishers (DCP/CO2/Sand buckets) should be kept near switchboards used for construction purposes. Don't use water for fighting electrical fires.
- Electricians should be provided with approved and tested tools, and personal protective equipment such as rubber gloves, mats etc.
- RCCB or ELCB should be provided as per Indian Electricity Rules used wherever required. A Residual Current Operated Circuit Breaker (RCCB) or Earth Leakage Circuit Breaker (ELCB) protects a human being to the widest extent.
- Notices displaying important electrical safety information should be kept exhibited at suitable places.

4.4 DEMOLITION

Demolition of any building or structure might cause accident or damage property. As such, all necessary precautions, methods and procedures should be adopted for demolition and disposal of waste or residues. The work should be planned and undertaken only under the supervision of a competent person after obtaining necessary permit. All hazards and risks involved in the process must be identified. A duly approved job safety plan must be available with the Contractor before commencement of any demolition job.

• Before any demolition work is commenced and also during the progress of the work, all roads and open areas adjacent to the work site shall either be closed suitably protected.

- All electric, hydrocarbon and utility service lines near the site should be shut off or adequately protected against damage before work commences.
- As far as practicable, the danger zone round the site should be adequately fenced off.
- Demolition activities should not be continued under adverse climatic conditions such as high winds, which could cause the collapse of already weakened structures.
- Structures should not be left in a condition in which they could be brought down by wind pressure or vibration.

4.5 WORK OVERHEAD / HOSTING EQUIPMENT

Accidents do happen while working overhead or due to failure or unsafe use of hoisting equipment. As such, adequate care must be taken to prevent it. The following are some of the precautions to ensure safety of the workmen engaged by the Contractor:

- i. Contractors involved in handling of any material overhead must install necessary barricades, warning signs or take any other steps necessary to prevent others from walking / standing beneath the load.
- ii. All equipments like crane, chain blocks, sling, rope including all other material handling equipments must have valid load test certificates.
- iii. If handrails are temporarily removed from platforms, stairways, etc., the resulting opening should be protected by extending rope line or by any other suitable device.
- iv. Contractors must safeguard their workmen on all overhead work by ensuring suitable construction and erection of ladders & scaffolding. Contractors must also take measures to safeguard person on ground against objects falling from the work above.
- v. Hoisting machines, tackles including their attachments, anchorage & supports must conform to the good mechanical construction, sound materials and adequate strength and free from patent defect and shall be preserved in good condition.
- vi. Every crane driver or hoisting appliances operator shall be properly qualified and no person below the age 21 years should be in charge of any hoisting machine.
- vii. Every hoisting machine and all gears shall be plainly marked with the safe working load. No part of any machine or gear shall be loaded beyond the safe working load.
- viii. In case of owner's machine, the safe working load shall be notified by EIC. For Contractor's machines, the Contractor shall notify the safe working load to EIC.
- ix. Motors, gearing transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with safe guards.
- x. Permission must be obtained from EIC before any person is allowed to work on an asbestos roof with all fall arresting appliances. When working on asbestos covered roofs, proper boards must be used to support your weight-crawling boards or cat ladders.

4.6 CONFINED SPACE ENTRY:

- i) Working in confined space is highly dangerous and must be carried out as per the work permit condition and under very close supervision.
- ii) No work in any confined space shall be carried out without a valid permit and clearance certificate. No entry board shall be displayed when equipment like columns, vessels are opened for work till clearance for entry is given after testing. Safe to enter board shall be displayed the person giving the clearance for the entry after conducting necessary tests.
- iii) Before entry into any confined space proper tests for hydrocarbon, toxic gas, oxygen level must be carried out by NRL authorized person, Adequate means of entry and exit must be provided. Adequate light must be provided inside the confined space with max. 24V.
- iv) Ventilation as required to extract welding fumes, dust etc must be provided as prescribed in the permit. Minimum 19.5% oxygen must be available in the confined space for entry and work.
- v) Never enter a confined space without provision of standby personnel. Stand by person should be aware of NRL emergency handling procedure and adequately trained in rescue operation.
- vi) Use life harness, one end of which shall be held by the standby personnel outside. Use all personal protective equipment including fresh air hose mask if hydrocarbon gas concentration is more than 5% of Lower Explosive Limit (LEL).

- vii) No one shall enter any confined space even with a supplied air respirators if the gas concentration is more than 20% of LEL.
- viii) No one shall be allowed to enter a confined space if hydrocarbon sulphide or other toxic gas is present.
- ix) Emergency equipment as required must be kept ready and in good condition.
- x) Portable lights used in confined space not exceed 24 volts.

4.7 Material handling:

- 4.7.1 Accidents occur in handling materials because of unsafe working practices such as lifting improperly, carrying too heavy a load and failure to use personnel protective equipment. Following directives should be adhere to:
 - 1. Before lifting and carrying objects size the load and if necessary get help.
 - 2. Survey that the route to be followed is free of obstructions.
 - 3. Lift and carry in the proper position. Lift material with your leg and not your back.
 - 4. When two or more men must carry a single object must have good coordination.
 - 5. Make sure that object carried does not hit anybody or fall on someone working below.
 - 6. While using mechanical hoists and cranes, test hoist, controls and brakes before starting the job.
 - 7. Never carry loads over men working nearby. Signal them out of the way.
 - 8. Move the load on signal from one person only.
 - 9. While handling unusually heavy loads like exchangers and drum, use extreme caution.
- 4.7.2 The crane lifting tackles, slings, D'shakles etc. used for the work at site shall comply with the statutory requirement and shall accompany with valid test certificates duly approved by statutory authority.
- 4.7.3 Contractors bringing any equipment into the company premises are required to declare it at the security gates and obtain necessary endorsement on the challans from security department.
- 4.7.4 Any automobile or container, as well as, any company or personnel property of any kind, brought into or carried out of the plant, is subject to inspection by the security staff and government excise.
- 4.7.5 A gate pass issued by a designed representative of the company must be presented to the security for inspection of all materials, tools and equipment leaving the premises of the company along with the stamped challans.
- 4.7.6 Transporting materials from one place to another by a forklift, Escort, Hydra or mobile cram is prohibited. Material must be transported on trailer, truck or handcart of adequate capacity.
- 4.7.7 Handcart must of good mechanical construction, sound material and adequate strength and must be declared safe to use by competent and authorized person. Display the name of the contractor who owns it. Record of all the Hand carts should be properly maintained which shall include details of purchase, repairs carried out time to time by authorized person. Hand carts must be used with defective wheels or other body parts. Defective hand carts should be discarded from the system and record of such discarded hand carts should be properly maintained in prescribed manner.
- 4.7.8 Over-hanging loads whether on the sides or at the rear of the hand cart or any vehicle is dangerous and particular care must be exercised.
- 4.7.9 Trained and experienced riggers only must carry out materials handling.

4.8 USE OF OWNER'S EQUIPMENT & MACHINERY

4.8.1 Use of Owner's Equipment:

- i. Owner's equipment must not be handled or tampered with by the Contractor & Contractor's employees. Owner may grant permission to Contractor to operate his equipment, if so require, but Contractor shall not use Owner's equipment and tools without obtaining permission from Owner's representative.
- ii. Contractor shall assume full responsibility for proper care of Owner's equipment and tools, which are made available to them for the execution of their work and ensure to return such equipment and tools in good working order. Owner will recover from Contractor's full cost of repairs to or replacement of equipment or tools in the event some damage is occurred due to improper use while in Contractor's custody.

- iii. Contractor is not permitted to make use of the Company's transport, unless special permission is obtained from competent authority.
- iv. Work of private nature using Company's or Contractor's equipment and / or materials is not to be performed in the Refinery site.
- v. **Tie -in to Owner's Equipment** / **System**: Contractor shall not open or tie -in their work into Owner's existing pipeline, equipment, sewer systems, electrical power circuits, and other process equipment without specific approval from the Owner's representative.
- vi. Safety Equipment:
 - All Contractors' must return the safety equipment loaned to them as soon as the work is completed. Loss or damage to this equipment will be charged.
 - Safety equipment, barricade ribbon, no entry sign board, etc given during any job as per
 job safety plan must be removed immediately once job is over. Continuing with such
 equipment even after completion of work shall also be treated as violation of safety
 norms.

4.9 TEMPORARY OFFICE / SHED

Temporary construction inside Refinery / Marketing Terminal Premises is normally not permitted. However, for a specific period if such shed is required for any construction / maintenance job, it may be permitted provided it meets some specific requirements apart from meeting the requirement of IS 8758. Therefore temporary construction should be done once it is approved by the EIC. In general temporary construction should have access, exit & entry and fire protection facilities.

The following are to be followed for getting permission.

- i. The Contractor should submit formal application for making temporary shed inside Refinery / Marketing Terminal to EIC who in turn take approval from Maintenance Planning. MP will route it Civil Maint, Electrical Maint and F&S for comments. The details like work order reference, purpose, size & shape, materials of construction, duration, location, power requirement & single line diagrams, etc should be submitted to EIC in the format indicated below.
- ii. The shed so constructed should not be at the cost of safety, security or aesthetics. Torn /rusted / repaired items should not be used for construction. The Contractor must ensure housekeeping aspect.
- iii. Power connection should be done only after approval by Electrical Maintenance Section.

4.9.1 Format / Checklist for applying for Temporary shed Construction:

Sl	Description	Remarks
1	Name of the Contractor / Contact person / Contact details	
2	Description of the Job	
3	Name of the Department / Name of EIC	
4	Purpose for which the shed is required.	
5	Location should be made in a plot plan showing distances from all major	
	structures, hazardous units etc.	
6	Size & materials of construction of the shed. (enclose sketch)	
7	Single line diagram. (enclose sketch)	
8	Duration / timing of work inside the shed.	
9	Approximate duration for which the shed is required.	
10	Fire Protection Measure, if any.	
11	An undertaking to the owner that the temporary office shall not be used	
	for any other purposes other than execution or managing execution of	
	specific work as per agreed contractual terms with the owner.	

5.0 STATUTORY / OISD GUIDELINES:

Contractors and their supervisors must acquaint themselves with all the relevant statutory guidelines like Factories Act and Assam Factories Rule, Indian Explosives Acts and Rules, Petroleum Acts and Rule, Indian Electricity Acts and rules, relevant IS codes, etc. relating to safety while working inside a hazardous industry like Refinery, Marketing Terminal & LPG Bottling plants. Copies of such statutory guidelines must be available with the Contractor as ready reference. Copies of OISD guidelines 105, 113,155, 192, 207, etc may be made available as and when required for reference by the Contractors.

6.0 EFFECTIVENESS OF RULES

- 6.1 Should any Discrepancy occur between the various oral or written instructions furnished to contractor, the Contractor shall refer the same to the Head of Security /Fire & Safety Dept. whose decision will be final And conclusive and no claim for losses alleged to have been caused by such discrepancy between Instructions/doubts/misunderstanding shall in any event be admissible.
- 6.2 These safety provisions should be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work spot. The person responsible for compliance of the safety regulations shall be named therein by the contractor.
- 6.3 a) 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 Engineer –in-Charge or officer-in-charge of safety or their representatives.
- b) Notwithstanding the above clauses there is nothing in these to exempt the contractor from the operations of any other act of rules in force in the Republic of India.
- c) The works without including any temporary works shall be carried out in such a manner as not
- to interfere in any way whatsoever with the traffic on any roads or footpaths at the site or in the vicinity thereto or any existing works whether the property of the Administration or of a third party.
- d) In addition to the above the contractor shall abide by the safety code provision as per P.W.D safety Code and Indian Safety Code framed from time to time.
- e) Violation of Safety Regulations may lead disciplinary action, even though the particular violation does not result in an accident.
- 6.4 The violation of following General Rules and Regulations shall be viewed seriously and disciplinary action shall be taken against employee found responsible for the same.
 - 1. Willful or negligent violation of any Safety Rule which has been previously made known to him.
 - 2. Failure to report immediately accident or personal injuries in which the owner may become involved.
 - 3. Violation of criminal low or committing of offence involving moral turpitude.
 - 4. Conduct which offends common decency and morality.
 - 5. Carrying weapons on side.
 - 6. Fighting or attempting to hurt another person on side.
 - 7. Drunkenness on side or while entering Refinery Premises.
 - 8. Malicious mischief resulting in injury to Owner's employees or property.
 - 9. Use of profane language with intent to insult or other abusive language to an employee.
 - 10. Introduction, Possession or use of intoxicating liquor or habit forming drugs on site.
 - 11. Stealing making fraudulent records or knowingly obtain material on fraudulent orders.
 - 12. Insubordination, including refusal to perform assigned work and international disregard or disobedience to instructors.
 - 13. Demonstrated incompetent and inability to do the work.
 - 14. Sleeping on premises.
 - 15. Negligence or carelessness resulting in damage to owner.

7. COMPLIANCE OF NRL HEALTH, SAFETY AND ENVIRONMENT PLANS;

The CONTRACTOR shall comply with the following Health, Safety and Environment Plans and also confirm his/its commitment to the same in the prescribed formats.

- i) Safety Action Plan
- ii) Housekeeping Plan
- iii) Environment Control Plan
- iv) Dust Control Plan and

The details of the above are available in **APPENDIX-A** below

8. FINANCIAL DETERRENT FOR VIOLATION OF HSE NORMS BT CONTRACTOS:

All contractors working for NRL have to strictly HSE norms as per NRL rules and regulations. Contractors who violate HSE norms while executing the job will be panelized financially. Penalty amount and Reporting Authority for Violation/non-adherence of various HSE norms are given in APPENDIX –B of the document.

APPENDIX-A

SAFETY ACTION PLAN

- All supervisors and contract workers shall attend safety training. Only safety trained workers will be deployed by me.
- All personal protective equipment will be provided by me.
- We will strictly adhere to NRL safety rules and regulations.
- We will follow the work permit system of NRL
- While working at height, safety harness will be used.
- While handling with chemicals proper precaution shall be taken to avoid spillage or splash on body.
- Any incident/accident shall be reported to NRL authorities and documented properly.
- Any injury to the personnel employed by me for the job will be promptly reported to NRL Medical centre/Occupational Health centre.
- Proper enclosures will be prepared for welding.
- While entering column/vessel proper care will be taken by providing standby personnel outside.
- Only safe to use scaffolding will be used.
- Daily safety briefing will be given to the personnel employed by me. Safety supervisor shall be designated who will monitor safe working.
- I/We will employ only medically fit employees for the execution of the job.

HOUSEKEEPING PLAN

- All equipment will be properly arranged and placed before start of work.
- A separate bin shall be provided for collecting waste generated by the personnel employed by me. i.e. canteen waste /gloves/cotton waste.
- All debris generated from plant will be collected and stored in NRL allocated space.
- Metallic debris will be carted away to warehouse and accounted for.
- Unused material will be deposited back to warehouse.
- Waste insulation material will be taken out of the site immediately.
- Spillage of oil, if any, will be cleaned immediately.
- Work area will be kept clean at all times.
- Contractor shed and surroundings, if allocated any, will be kept clean and debris will be deposited on road.
- We will maintain approach way for movement of cranes etc.

ENVIRONMENT CONTROL PLAN

- Proper care will be taken at site to avoid any oil leakage/seepage into the ground.
- In case of leakage while opening flange, the matter will be reported to NRL authorities.
- Debris generated like insulation, refractory, concrete etc. will be collected and stored in designed places as directed by NRL authorities.
- Welding machines used shall not emit smoke beyond the permissible level.
- Cleaning of work site will be carried out on a continuous basis.
- Proper breathing apparatus will be used wherever required.

DUST CONTROL PLAN

- Work shall be carried out in a manner where generation of dust is minimum.
- Loose dust/dirt debris will be collected in bags and dumped in designated areas.
- Work area will be barricaded, if required, to prevent dust inhalation.
- Dust mask will be used in dust prone areas.

I/ We are committed to all the ab		
Job No:	Job Name:	

APPENDIX - B - FINANCIAL DETERRENCE FOR NON-COMPLIANCE

FINANCIAL DETERRENT FOR VIOLATION OF SAFETY NORMS BY CONTRACTORS (APPLICABLE TO ALL WORKS CARRIED OUT IN THE REFINERY BY CONTRACTORS)

All contractors working inside the Refinery have to strictly follow safety norms as per NRL rules and regulations. Contractors who are violating safety norms while executing the job will be penalized financially. Penalty amount and Reporting Authority for violation / non adherence of various safety norms is given below.

Sr. No.	VIOLATION OF HSE NORMS	PENALTY AMOUNT	REPORTING AUTHORITY
1.	Working without proper Authorisation / Permit (Cold work)	Rs 6000/- per occasion	Engineer-in-charge, HOD, F&S HOD of Technical Functions
2.	Hot work without proper Authorisation/ Permit	Rs. 12000/- per occasion and delisting / holiday listing of 3 years if repeated.	Engineer-in-charge, HOD, F&S HOD of Technical Functions
3.	Violation of any of the conditions specified in the permit	Rs 2000/- per permit.	Engineer-in-charge, HOD, F&S HOD of Technical Functions
4.	Use of mechanically propelled equipment/engine/generator set without/ with faulty spark arrestor	Rs. 1000/- per equipment	Engineer-in-charge, HOD, F&S HOD of Technical Functions HOD, Warehouse
5.	Non-display of name board, permit etc., at site	Rs 600/- per location where job is being executed. Penalty will be repeated if not rectified within 3 days.	Engineer-in-charge, HOD, F&S HOD of Technical Functions
VIOL	LATION OBSERVED WHILE WO	ORKING AT HEIGHT	
6.	Working at height without safety belt arrangement as required i.e. without safety belt / Non use of double lanyard safety belt.	Rs 1000 / per person Engineer-in-charge,	Engineer-in-charge, HOD, F&S HOD of Technical Functions HOD, Warehouse
7.	Throwing up/down any material from height or not making proper provision to bring down material safety from height	Rs. 1000/- per occasion Engineer-in-charge,	Engineer-in-charge, HOD, F&S HOD of Technical Functions
8.	Non standard/unsafe platform/ ladder	Rs. 2000/- per case per day	Engineer-in-charge, HOD, F&S HOD of Technical Functions
9.	Non standard/unsafe Scaffolding	Rs. 2000/- per case per day	Engineer-in-charge, HOD, F&S HOD of Technical Functions

10.	Use of Uncertified Scaffolding	Rs. 2000/- per case per day	Engineer-in-charge, HOD, F&S HOD of Technical Functions
	USE OF PERSONAL PROTECTIVE		1
11.	For not using Non Respiratory Personal Protective Equipment (Helmet, goggles, gloves, safety belts, Boiler suit etc, Shoes .)	Rs. 1000/- Per day/item/person	Engineer-in-charge, HOD, F&S HOD of Technical Functions
12.	For not providing Respiratory – Personal Protective Equipment prescribed in Work permit/job safety plan /B.A. set/canister mask/B.A. compressor etc)		Engineer-in-charge, HOD, F&S HOD of Technical Functions
	ATION OBSERVED IN ELECTR	ICAL WORK	
13.	Non use of ELCB, using poor joints of cable, using naked wire without top plug into the socket, laying wire/cables on the roads, carrying out electrical jobs by incompetent person	Rs 5000/- per item per day	HOD, Elect. Maint. Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
14.	Non deployment of the Licensed electricians for electrical job.	Rs. 2000/- per person	HOD, Elect. Maint. Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
15.	Working/ on live electrical circuits without work permit/authorization	Rs. 5000/- per case per day	HOD, Elect. Maint. Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
VIOI	ATIONS IN EXCAVATION WOR	K	
16.	 Unsatisfactory fencing / barricading of excavated areas, not providing proper shoring / strutting / proper slope and not keeping the excavated earth at least 1.5 M away from excavated area Not using Equipment having non conductive handle during manual excavation. 	Rs. 2000/- per item per day	Engineer-in-charge, HOD, F&S HOD of Technical Functions
VIOI	ATIONS OBSERVED IN ROAD S	AFETY	
17.	Driving NRL or Contractor's vehicle without authority from DTO (Driving License).	Rs. 1000/- per case	Any employee through Head of Dept (F&S)
18.	Over speeding of Cars / buses, rash driving, wrong side parking.	Rs. 2000/- per item	Any employee through Head of Dept (F&S)
19.	Driving hydra/Crane/fork lift above its speed limit fixed for NRL refinery roads or Driving hydra without being escorted by cleaner who is sitting left side of the driver to guide him.	Rs. 1000/- per case	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions

20.	Entry of contractors vehicle in No Entry Area without proper authorization.	Rs. 1000/- per case	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions HOD Security/Admin.
21.	Entry of any person in barricaded area marked with tape.	Rs. 1000/- per person	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
22.	Riding on material handling vehicles or trolleys	Rs. 500/- per case	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
23.	Sitting or allowing sitting along with the drivers on fork lift.	Rs. 500/- per case	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
24.	Vehicle Accident- i.e. overturning, falling in pits, damaging equipment, hitting another vehicle etc.	Rs 5000/- per case plus replacement/ repair charges incurred by NRL for NRL owned material	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions HOD Security/Admin.
	DEPLOYEMENT OF REQUIRED	MANPOWER	
25.	Non-deployment of safety supervisor / supervisor responsible for safety at work site required as per Special Safety Conditions	Rs2000 per person per day	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
26.	Failure to maintain safety register and record by Contractor Safety Supervisor or Supervisor responsible for safety	Rs.2000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
27.	Failure to have weekly safety site inspection / audit and monthly safety meeting and maintain record (by contractors themselves)	Rs. 2000/- per occasion	Engineer-in-charge, Head of Dept. F&S,
28.	Failure to conduct tool box meeting every day and maintain the records of the same.	Rs. 500/- per day	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
29.	Failure to submit the monthly HSE report by 5 th of next month to Engineer-in-charge	Rs. 200/- per day	Engineer-in-charge
	ATION OF STATUTORY REQU	IREMENT	
30.	Acting in contravention to any of the provision mentioned in Factories Act 1948 and/or the rules framed there under including all amendments thereto.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions

31.	Failure to maintain records as per	Rs. 10000/- per	Engineer-in-charge, Head
51.	statutory requirement like	occasion	of Dept. F&S,
	1. Form No. 1A . for the shed/s	occusion	HOD of Technical Functions
	constructed by contractor		
	2. Form No. 6 . Certificate of		
	fitness		
	3. Form No. 10 . Register of		
	workers attending machinery		
	4. Form No. 11 . Report of		
	Examination of Hoist/Lift/Lifting		
	tackles.		
	5. Form No. 13 . Report of		
	Examination of any pressure		
	vessel brought by the contractor at		
	refinery site. 6. Form No. 16 . Notice of periods		
	of works for adult workers		
	7. Form No. 17 . Register of adult		
	workers		
	8. Form No. 23 . Special		
	certificate of fitness		
	9. Form No. 29 . Muster Roll		
OCC	URENCES OF INDUSTRIAL ACC	LIDENTS	
32.	Failure to furnish a first	Rs. 1000/- per	Engineer-in-charge, Head
	information report (FIR) as per	occasion	of Dept. F&S,
	prescribed Pro-Forma within 4		HOD of Technical Functions
	hours of the incident.		
33.	Failure to arrange immediate	Rs. 1000/- per	Engineer-in-charge, Head
55.	investigation / evidences	occasion	of Dept. F&S,
	documents of the incident and		HOD of Technical Functions
	furnish within 24 hours to NRL		
	Engineer-In-Charge.		
34.	Keep and maintain proper records	Rs. 1000/- per	Engineer-in-charge, Head
5-7.	of all incidents occurred at work	occasion	of Dept. F&S,
	site	occasion	HOD of Technical Functions
35.	Failure to report to NRL	Rs. 5000/- per	Engineer-in-charge, Head
	supervisor on - the - job, medical	occasion	of Dept. F&S,
	centre and area safety officer any		HOD of Technical Functions
	injury to his employees or any		
	near miss or any hazardous/		
	dangerous incident at work site		
	within the Refinery premises or		
	hiding of any accident or near miss.		
	111100.		
36.	Negligence on contractor's part		Engineer-in-charge, Head
	which has resulted in an		of Dept. F&S,
	Injury/fire:	D = 1.00.000/	HOD of Technical Functions
	Lost Time Injury	Rs.1,00,000/- per	
	Fatality	person Rs. 5,00,000/- per	
	a durity	person	
L		Person	

37.	Negligence on contractors part which has resulted in Minor Fire/Explosion/ etc Major Fire (Reportable)	Rs 1,00.000/- Rs 2,00.000/-	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
VIO	LATION OF LABOUR LAWS	_L	
38.	Working beyond statutory limits by contractors Workers	Rs. 1000/- per person per day	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
39.	Deployment of contractor's employees including supervisors without receiving necessary training on safety for working in the refinery.	Rs. 5000/- per person per day and holiday listing of contractor for 6 months if repeated	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
40.	Deployment of contractor's employees including supervisors without undergoing their medical examination, by the authorized medical professional.	Rs. 1000/- per person	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
	Deployment of workers on high risk jobs like working in confined space, working at height, working under water, etc. without being examined and certified as medically fit for such jobs by the doctors who are authorized to certify for such jobs.		
41.	Non subjecting to periodic medical examination after every six months after deployment of workers including supervisors on the job by the certifying surgeon as per Assam Factories Rule 1963.	Rs. 1000/- per person	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
42.	Deployment of child or adolescent	Rs. 10,000/- per person	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
43.	Use of untested and uncertified pressure vessel.	Rs. 5000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
44.	Use of untested and uncertified lifting tools/tackle	Rs. 5000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions

VIO	LATION IN MATERIAL HANDLI	NG	
45.	Improper material handling/ Manually handling of heavy material when it is require using mechanical equipment/ use of substandard/defective material handling trolleys/hand cart.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
46.	Failure to submit duly filled pre use check list for any new machine or equipment brought at site.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
47.	Inadequate supervision at work site(absence of supervisor/ designated employee as supervisor from site for more than 30 Minutes when work is in progress)	Rs. 2000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
SAF	ETY PERFORMANCE DISPLAY F	BOARD	
48.	Safety performance score board not displayed.	Rs. 100/- per day	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
VIO	LATIONS IN USE OF GAS CYLIN	DERS	
49.	Unsafe handling of compressed gas cylinders No trolley or jubilee clips or double gauge regulator or flash back arrestor on both gas lines & both ends or improper storage /handling or cylinders without caps when not in use/ damaged hoses)	Rs. 500/- per item per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
	LATIONS DURING RADIOGRAPI	HY PROCESS	
50.	Radiography without authorization	Rs. 10000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
51.	Non barricading the area during radiography	Rs. 10000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions
52.	Non announcement on PA system/alerting people working in vicinity, before start of Radiography jobs	Rs. 1000/- per occasion Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions

MIS	MISCELLANEOUS				
53.	Damage to fire hydrant & monitors, fire extinguishers including non return of extinguishers	Cost incurred by NRL for repair/replacement	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions		
54.	Poor House-keeping	Rs. 5000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions		
55.	Removal of grating/cover/lid on any opening in floor or vessel.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions		
56.	Use of dangerous portable tools/hand tools like grinding machine, drilling machine, pneumatic excavators/drill by unskilled worker.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions		
57.	Operating/allow to operate any machine without having guard on its dangerous/rotating part of the machine or an equipment.	Rs. 1000/- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions		
58.	Horseplay at work site	Rs1000 /- per occasion	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions		
59.	Shifting of debris from one location to another/dumping debris at unauthorized place.	Rs. 10000/- per Engineer-in-charge, Head occasion of Dept. F&S, HOD of Technical Function			
60.	Use of mobile in plant areas	Rs 1000/- per person per occasion.	Engineer-in-charge, Head of Dept. F&S, HOD of Technical Functions		

Please note that:

- 1. The above penalties will be applicable for all the contracts jobs carried out inside Refinery and covered by NRL Safety Regulations/ norms / work permit system.
- 2. Site Engineers, Operations Officers, Safety Officers will report such violation through their Department Head /Engineer-in-charge (Reporting Authority) to the respective contracting department (Commercial) for necessary action. Reporting Authority has been indicated against each violation.
- 3. On advice from Reporting Authority, Commercial department shall make the deductions from the next payment due to the contractor.
- 4. The above penalties shall be double in case of violations more than 3 times during the contract period for a particular contract. For annual and other rate contracts POs awarded as part of rate contract shall be considered for this.

- 5. In case of frequent penalties for a particular contractor, necessary action such as holiday listing / delisting will be taken.
- 6. In addition to the safety conditions mentioned in Special safety Conditions attached, contractors are required to adhere to the following additional safety requirement for which penalties are applicable as above for violation of these conditions:
 - a) All contractors shall themselves arrange weekly safety site inspection / audit and monthly safety meeting and record should be maintained.
 - b) All contractors shall submit monthly HSE report to respective Engineer-In-Charge by 5th of next month. Report should carry details of precautions against accident and injury to any of the workers or to any person or persons or of weekly safety site inspection / audit, monthly safety meeting, details about records maintained by Safety Supervisor and any other information felt necessary by Engineer-in-Charge for safe execution of job.
- 7. Implementation of above financial penalties for violation of Safety norms does not absolve contractors from their responsibilities to take at all times due and proper precautions to avoid injuries and accidents.
- 8. Contractors shall own the full responsibility for any accident and injury to any of the workers or to any person or persons or property arising due to violation of Safety norms by contractors even though financial penalty is not applied for such violation. Implementation of these financial penalties does not absolve Contractors from any of the responsibility as per General Contract Conditions (Latest Revision), General Terms and Conditions and Special Safety Conditions.
- 9. All such financial penalties imposed on contractors shall be displayed / publicized appropriately by the respective Contracting department.

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