brands/ models in the bid document is restrictive and discriminatory practice against local suppliers. If foreign certification is required to be stipulated because of non-availability of Indian Standards and/or for any other reason, the same shall be done only after written approval of Secretary of the Department concerned or any other Authority having been designated such power by the Secretary of the Department concerned.

f. "All administrative Ministries/Departments *whose procurement exceeds Rs. 1000 Crore per annum* shall notify/update their procurement projections every year, including those of the PSEs/PSUs, for the next 5 years on their respective website."

10A. Action for non-compliance of the Provisions of the Order: In case restrictive or discriminatory conditions against domestic suppliers are included in bid documents, an inquiry shall be conducted by the Administrative Department undertaking the procurement (including procurement by any entity under its administrative control) to fix responsibility for the same. Thereafter, appropriate action, administrative or otherwise, shall be taken against erring officials of procurement entities under relevant provisions. Intimation on all such actions shall be sent to the Standing Committee.

11. **Assessment of supply base by Nodal Ministries:** The Nodal Ministry shall keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing the higher minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.

12. **Increase in minimum local content**: The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.

13. **Manufacture under license/ technology collaboration agreements with phased indigenization**: While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.

13A. In procurement of all goods, services or works in respect of which there is substantial quantity of public procurement and for which the nodal ministry has not notified that there is sufficient local capacity and local competition, the concerned nodal ministry shall notify an upper threshold value of procurement beyond which foreign companies shall enter into a joint venture with an Indian company to participate in the tender. Procuring entities, while procuring such items beyond the notified threshold value, shall prescribe in their respective tenders that foreign companies may enter into a joint venture with an Indian company to participate in the tender. The procuring Ministries/Departments shall also make special provisions for exempting such joint ventures from meeting the stipulated minimum local content requirement, which shall be increased in a phased manner.

14. **Powers to grant exemption and to reduce minimum local content**: The administrative Department undertaking the procurement (including

procurement by any entity under its administrative control), with the approval of their Minister-in-charge, may by written order, for reasons to be recorded in writing,

a. reduce the minimum local content below the prescribed level; or
b. reduce the margin of purchase preference below 20%; or
c. exempt any particular item or supplying entities from the operation of this Order or any part of the Order.

The Administrative Department, while seeking exemption under this para, shall certify that such an item(s) has not been notified by Nodal Ministry/ Department concerned under para 3 (a) of the Order.

A copy of every such order shall be provided to the Standing Committee and concerned Nodal Ministry / Department. The Nodal Ministry / Department concerned will continue to have the power to vary its notification on Minimum Local Content.

15. **Directions to Government companies**: In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.
16. **Standing Committee**: A standing committee is hereby constituted with the following membership:
Secretary, Department for Promotion of Industry and Internal Trade - Chairman
Secretary, Commerce—Member
Secretary, Ministry of Electronics and Information Technology—Member Joint Secretary (Public Procurement), Department of Expenditure—Member Joint Secretary (DPIIT)—Member-Convenor

The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

17. **Functions of the Standing Committee:** The Standting Committee shall meet as often as necessary, but not less than once in six months. The Committee

a. shall oversee the implementation of this order and issues arising therefrom, and make recommendations to Nodal Ministries and procuring entities.
b. shall annually assess and periodically monitor compliance with this Order
c. shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content
d. may require furnishing of details or returns regarding compliance with this Order and related matters
e. may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures
f. may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization

g. may consider any other issue relating to this Order which may arise.

18. **Removal of difficulties**: Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.

19. **Ministries having existing policies**: Where any Ministry or Department has its own policy for preference to local content approved by the Cabinet after 1st January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.

20. **Transitional provision**: This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.

19/2/24

(Himani Pande)
Additional Secretary to the Government of India
Tel: 011-23038888
E-mail: ashp.dpiit@gov.in

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Appendix-III

INTEGRITYPACT

[To be executed on plain paper and applicable for all tenders of value above Rs. 10 Crore]

INTEGRITY PACT

Between

Bharat Petroleum Corporation Limited (BPCL) hereinafter referred to as "The Principal",

And

……..hereinafter referred to as "The Bidder/ Contractor/ Supplier".

Preamble

The Principal intends to award, under laid down organization procedures, contract/s for ..... . The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s, Contractor/s and Supplier/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint Independent External Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

a) No employee of the Principal, personally or through family members, will in connection with the tender, or the execution of the contract, demand, take a promise for or accept, for himself/ herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

b) The Principal will, during the tender process, treat all Bidders with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/ additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.

c) The Principal will exclude from the process all known persons having conflict of interest.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC) 1860 (replaced by Bhartiya Nyaya Sanhita (BNS), 2023) and Prevention of Corruption Act 1988, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder/ Contractor/ Supplier

(1) The Bidder/ Contractor/ Supplier commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

a) The Bidder/ Contractor/ Supplier will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person, any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange, any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b) The Bidder/ Contractor/ Supplier will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal, in violation of Competition Act 2022 (as amended from time to time). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

c) The Bidder/ Contractor/ Supplier will not commit any offence under the Indian Penal Code (IPC) 1860 (replaced by Bhartiya Nyaya Sanhita (BNS), 2023) and Prevention of Corruption Act 1988; further the Bidder/ Contractor/ Supplier will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d) The Bidder/ Contractor/ Supplier will, when presenting his bid, disclose any and all payments he has made, is committed to, or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

e) The Bidder/ Contractor/ Supplier shall make sure that the terms of this Integrity Pact are also adopted by its sub-contractors, sub-sub-contractors etc, if any and submit such adoption confirmation proof to the Principal. The Bidder/ Contractor/ Supplier shall be solely responsible for the adherence to the provisions of IP by its sub-contractors, sub-sub-contractors etc.

f) The bidder / contractor of foreign origin shall disclose the name and address of agents and representatives in India related to this tender. Similarly, the bidder / contractor of Indian nationality shall furnish the name and address of their foreign principals or associates, if any, related to this tender. Further details, as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers," shall be disclosed by the Bidder(s)/Contractor(s) as per Annex.

(2) The Bidder/ Contractor/ Supplier will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from Tender Process and Exclusion from Future Contracts

If the Bidder, before contract award, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason or take action as per laid down procedure to debar the Bidder(s)/Contractor(s) from participating in the future procurement processes.

(1) If the Bidder/ Contractor/ Supplier has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is also entitled to exclude the Bidder/ Contractor/ Supplier from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

(2) A transgression is considered to have occurred if the Principal after due consideration of the available evidences, concludes that no reasonable doubt is possible.

(3) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken.

This undertaking is given freely and after obtaining independent legal advice.

(4) If the Bidder/ Contractor/ Supplier can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

Section 4 – Compensation for Damages

(1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit/Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor/ Supplier liquidated damages equivalent to Security Deposit/ Performance Bank Guarantee.

(3) The Bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/ Contractor/ Supplier can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder/ Contractor/ Supplier shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous Transgression

(1) The Bidder declares that no previous transgression occurred in the last 3 years from the date of bid submission with any other Company in any country conforming to the TI / Anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/ Contractors/Suppliers/ Subcontractors

(1) The Bidder/ Contractor/ Supplier undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the principal before contract signing. In case of a joint venture, all the partners of the joint venture should sign

the Integrity Pact. In case of sub-contracting, the principal contractor shall be solely responsible for the adherence to the provisions of IP by subcontractor.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors/ Suppliers.

(3) The Principal will disqualify from the tender process all Bidders who do not sign this Pact or violate its provisions.

Section 7 - Punitive Action against Violating Bidders/ Contractors/ Suppliers/ Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor, Supplier or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor, Supplier or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - Independent External Monitors

(1) The Principal has appointed competent and credible Independent External Monitors for this Pact after approval by the Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

(3) The Bidder/ Contractor/ Supplier accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Bidder/ Contractor/ Supplier. The Bidder/ Contractor/ Supplier will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to this project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/ Contractor/ Supplier/ Subcontractor with confidentially. The Monitor has also signed declarations on 'Non disclosure of Confidential Information' and 'Absence of Conflict of Interest'. In case of any conflict of interest arising later, the IEM shall inform the Management of the Principal and recuse themselves from that case.

(4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the

contractual relations between the Principal and the Bidder/ Contractor/ Supplier. The parties offer to the Monitor the option to participate in such meetings.

(5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendation. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the Bidder/ Contractor/ Supplier to present its case before making its recommendations to the Principal.

(6) The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

(7) If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Indian Penal Code (IPC) 1860 (replaced by Bhartiya Nyaya Sanhita (BNS), 2023) and Prevention of Corruption Act 1988, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

(8) The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor/ Supplier 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualifying the bidders and exclusion from future business dealings.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by Chairperson of the Principal.

Section 10 - Other Provisions

(1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Mumbai. The Arbitration clause provided in the main

tender document/ contract shall not be applicable for any issue/ dispute arising under Integrity Pact.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) If the Bidder/ Contractor/ Supplier is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(5) If any Bidder/ Contractor/ Supplier entering into Integrity Pact, aggrieved by any decision / action of the Principal, shall approach the IEMs and await their decision before pursuing any other remedy available to him in law.

(6) Issues like Warranty / Guarantee, etc., shall be outside the purview of IEMs.

For & On Behalf of the Principal (Office Seal)	For & On Behalf of Bidder / Contractor / Supplier (Office Seal)
Place……. Date ……..	
Witness 1 (Name & Address)	Witness 1 (Name & Address)

Annex– Guidelines on Indian Agents of Foreign Suppliers

1.1 There shall be compulsory registration of agents for all Global Tender Enquiries (GTE) and Limited Tender Enquiries (LTE). An agent not registered with the Procuring Entity shall apply for registration with them.

1.2 Registered agents shall file an authenticated Photostat copy duly attested by a Notary Public / Original certificate of the Principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/remuneration/salary/ retainer ship being paid by the Principal to the agent before the placement of an order by the Procuring Entity.

1.3 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties, have stated that they are not paying any commission to the Indian agents, and the Indian representative is working based on salary or as a retainer, a written declaration to this effect should be submitted by the party (i.e., Principal) before finalising the Contract.

2.0 Disclosure of Particulars of Agents/ Representatives in India, if any.

2.1 Bidders of Foreign nationality shall furnish the following details in their offer:

2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorisation and authority given to commit the Principals. If the agent/representative is a foreign Company, it shall be confirmed whether it is a real functioning Company, and details of the same shall be furnished.

2.1.2 The amount of commission/remuneration included in the quoted price(s) for such agents/representatives in India.

2.1.3 Confirmation of the Bidder that the commission/ remuneration, if any, payable to his agents/representatives in India, may be paid by the Procuring Entity in Indian Rupees only.

2.2 Bidders of Indian Nationality shall furnish the following details in their offers:

2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e., whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorising the agent to make an offer in India in response to tender either directly or through the agents/representatives.

2.2.2 The amount of commission/remuneration included in the price (s) quoted by the Bidder for himself.

2.2.3 Confirmation of the foreign principals of the Bidder that the commission/remuneration, if any, reserved for the Bidder in the quoted price (s) may be paid by the Procuring Entity in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.

2.3 In either case, in the event of the contract materialising, the payment terms shall provide for payment of the commission /remuneration, if any, payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.

2.4 Failure to furnish correct and detailed information as called for in paragraph - 2.0 above shall render the concerned bid liable to rejection or, in the event of a contract materialising, the same liable to termination by the Procuring Entity. Besides this, there would be a penalty of banning business dealings with the Procuring Entity or damage or payment of a named sum.

"The Independent External Monitors (IEM) may be contacted in case of any complaint with respect to the Tender :

Sr. No.	*Name of IEM*	*E-mail ID*
1	Shri Javeed Ahmad	javeed60@yahoo.com
2	*Shri Atanu Purkayastha*	*dratanu2011@gmail.com*
3	*Shri Pradeep Kumar*	*pradeepawasthi1981@gmail.com*

APPENDIX-IV TO ITB

POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT

In order to provide preference to Domestically Manufactured Iron and Steel Products (DMI&SP) in Government procurement, Ministry of Steel has published the revised Domestically Manufactured Iron & Steel Products Policy-2025 in supersession of earlier Domestically Manufactured Iron & Steel Products Policy, vide The gazette of India, the G.S.R. 904 E dated 17.12.2025. Copy of this policy is available at https://steel.gov.in/policies.

1. In case of Item rate/ EPC /package enquiries, bidder(s) to furnish affidavit as per Annexure-4 (Form-1-Self Certification) at the time of delivery. Bidder to submit an undertaking to this effect as per Annexure-2 w.r.t compliance of this DMI&SP Policy. Compliance towards certification of Annexure-4 (Form-1-Seif Certification) shall be as stipulated at Sl.no. (i) and (ii) below;

   i) All bidders - including manufacturers, selling agents, authorized distributors, authorized dealers, and authorized supply houses - shall submit Annexure-4 (Form-1-Self Certification) as part of their bid, irrespective of whether they are the manufacturer or otherwise.

   ii) Bidders who are selling agents/authorized distributors/authorized dealers/authorized supply houses (if permitted for participation in the RFQ) of the domestic manufacturers of iron & steel products, covered by Appendix-A, are eligible to bid with Annexure-4 (Form-1-Self Certification) on behalf of the domestic manufacturers under the policy, subject to the bidder furnishing an authorization certificate issued by the domestic manufacturer at the time of delivery. In such case, Bidder shall submit an Undertaking as per Annexure-2A

2. For products covered under Appendix-B of the DMI&SP policy, the bidder shall furnish certification issued by the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) declaring that the capital goods to be used in iron & steel industry are domestically manufactured in terms of the domestic value addition prescribed.

Note

a) If a bidder does not submit above undertaking (as applicable) as per format, the offer of bidder shall be rejected.

b) In case of detection of wrong declaration by the bidder of the prescribed declaration(s), the following actions shall be taken by Owner/ Consultant:

In case the Contractor/Supplier submit False declarations and/ or does not meet the Domestic Value Addition {DVA} as specified in DMI&SP Policy, penalty actions shall be taken as per the provisions of Public Procurement (Preference to Make in India) (PPP-MII) Order 2017 and its subsequent amendments, irrespective of the fact whether the Public Procurement (Preference to Make in India) (PPP-MII) Order 2017 is applicable or not in the tender.

MINISTRY OF STEEL

NOTIFICATION

New Delhi, the 17th December, 2025

G.S.R. 904(E).— In supersession of earlier Domestically Manufactured Iron & Steel Products Policy, the revised Domestically Manufactured Iron & Steel Products Policy-2025 for providing preference to Domestically Manufactured Iron & Steel Products in Government procurement is hereby published for general information.

POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT- REVISED, 2025

1. **Background**

1.1. This policy provides preference for Domestically Manufactured Iron and Steel Products (DMI&SP) in Government procurement.

1.2. The policy applies to procurement of iron & steel products notified in Appendix A, procurement of capital goods listed in Appendix B and technology from indigenous technology suppliers in Appendix C.

2. **Definitions**

2.1. **Bidder** may be a domestic/foreign manufacturer of iron & steel or their selling agents/ authorized distributors/authorized dealers/ authorized supply house or any other company engaged in the bidding of projects funded by Government agencies.

2.2. **Domestically Manufactured Iron & Steel Products** are those iron and steel products that are manufactured by entities that are registered and established in India, including in Special Economic Zones (SEZs).

2.3. **Domestic Manufacturer** is a manufacturer conforming to Section 2(72) of the Central Goods and Services Tax (CGST) Act, 2017.

2.4. **Domestic value addition** means the amount of value added in India which shall be the total value of the item to be procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value of the item to be procured, in percent. The 'domestic value addition' definition shall be in line with the DPIIT guidelines and shall be suitably amended in case of any changes by DPIIT in the future. For the purpose of this policy document, domestic value addition and local content have been used interchangeably.

% Domestic value addition =

{Total value of the item to be procured (excluding net domestic indirect taxes) – The value of

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imported content in the item (including all customs duties)}

---------- X 100%

{Total value of the item to be procured}

2.5. **Finished Steel** means flat and long products, which can be subsequently processed into manufactured items.

2.6. **Government** for the purpose of the Policy means Government of India.

2.7. **Government agencies** include Government PSUs, Societies, Trusts, and Statutory bodies set up by the Government of India.

2.8. **Indigenous Technology:** A technology shall be deemed to be Indigenous technology if, at least 51 % of the entity's equity is held by Indian residents and the IPR is owned or co-owned by an Indian entity or licensed exclusively to them and the core engineering R&D, and project execution capabilities reside in India.

2.9. **L1** means the lowest tender, or the lowest bid or the lowest quotation received in a tender, bidding process, or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

2.10. **MoS** means Ministry of Steel, Government of India.

2.11. **Margin of purchase preference** means the maximum extent to which the price quoted by a domestic supplier may be above L1 for the purpose of purchase preference. In the case of DMI&SP policy, the margin of purchase preference shall be 20% for items in Appendix B.

2.12. **Melt & Pour** is defined as the steel that has been produced in a steel-making furnace and poured into its first solid shape. The location where this process takes place is called the country of melt and pour (COM). The COM is the original location where crude steel is first produced in a liquid state and poured into its first solid shape. The country of melt and pour (COM) should be India. The first solid shape can be a semi-finished product, like a slab, billet, ingot, or a finished steel mill product.

2.13. **Net Selling Price** means the invoiced price excluding net domestic taxes and duties.

2.14. **Semi-Finished Steel** means Ingots, billets, blooms, and slabs, which can be subsequently processed into finished steel.

3. **Exclusions**

3.1. Waivers may be granted by the Ministry of Steel to all such Government procurements subject to the below conditions:

3.1.1. Where specific grades of steel are not manufactured in the country, or

3.1.2. Where the quantities as per the demand of the project cannot be met through domestic sources.

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3.2. Exemption requests shall be submitted to the Standing Committee along with sufficient proof of unavailability of iron & steel products domestically.

4. **Standing Committee**

4.1. A Standing Committee chaired by the Secretary (Steel), shall oversee the implementation of the policy.

4.2. The Committee shall comprise of experts drawn from Industry/Industry Association/Government Institution or Body/Ministry of Steel. The said Committee in MoS shall have the mandate for the following:

4.2.1. Monitor the implementation of the policy.

4.2.2. Review and notify the list of Iron & Steel products, the domestic content requirement criteria and policy directives as mentioned in Appendix A, Appendix B and Appendix C.

4.2.3. Issue necessary clarifications for implementation of the policy including grant of exclusions to procuring agencies.

4.2.4. Constitute a grievance redressal committee for preliminary examination of complaints related to implementation of this policy.

4.2.5. Issue directions for suitable action to Ministries/Departments concerned in case of non-compliance with this policy by the procuring agency and advise.

4.3. Wherever a procuring entity concludes that an unreasonably high price has been quoted by the sole bidder/manufacturer, the matter may be referred to the Committee. In such cases, the procuring entity would be required to substantiate its case with complete and thorough documentation.

4.4. Specifying foreign certifications/unreasonable technical specifications in bid document is a restrictive and discriminatory practice against local suppliers. If foreign certification is required to be stipulated because of non-availability of Indian Standards and/or for any other reason, the same shall be done only after written approval of the Committee.

5. **Applicability**

5.1. The policy applies to every Ministry or Department of Government and all agencies/entities under their administrative control and to projects funded by these agencies for the purchase of iron & steel products for government projects. All Central Sector Schemes (CS)/Centrally Sponsored Schemes (CSS) for which procurement is made by States and Local Bodies, come within the purview of this Policy if that project/scheme is fully/partly funded by the Government of India.

5.2. The policy applies to public sector steel manufacturers and agencies/entities under their administrative control for purchase of capital goods (Appendix-B) for manufacturing iron & steel products.

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5.3. Appendix-B contains the list of capital goods used in manufacturing iron & steel products which can be imported, and the applicable minimum domestic content requirement for packages.

5.4. A purchase preference of 20% is applicable for capital goods used in steel manufacturing. For example, if the lowest bidder (L1) for an importable capital good is a foreign company with a quoted price of Rs.100 crore for the product package, under the policy, procurement preference of 20% will be applicable to a domestic supplier of the same capital good.

5.5. Appendix-C contains directives and methodology for steelmaking CPSEs to procure from indigenous technology suppliers.

5.6. The policy shall apply to projects and non-projects where the total procurement value of iron and steel products (Appendix-A) in a contract is greater than Rs. 5 lakhs, on itemized basis.

5.7. No Global Tender Enquiry (GTE) shall be invited for tenders related to the procurement of iron and steel products (Appendix-A of the DMI&SP Policy). No Global Tender Enquiry (GTE) shall be invited for tenders related to the procurement of Capital Goods for manufacturing iron & steel products (Appendix-B of the DMI&SP Policy) having estimated value up to Rs. 200 crore except with the approval of competent authority as designated by Department of Expenditure.

5.8. The policy applies to the purchase of iron & steel products by private agencies for fulfilling an EPC contract and/or any other requirement of a Ministry or Department of Government or their PSUs.

6. **Tender procedure for procurement**

6.1. Procuring agencies shall follow standard government procurement procedures while adhering to the DMI&SP policy.

6.2. The tender document, for procurement of both Goods as well as for EPC contracts, should explicitly outline the qualification criteria for adherence to the requirement as mentioned in Appendix A and Appendix B.

6.3. All bidders – including manufacturers, selling agents, authorized distributors, authorized dealers, and authorized supply houses – shall submit Form-1 as part of their bid, irrespective of whether they are the manufacturer or otherwise.

6.4. Bidders who are selling agents/authorized distributors/authorized dealers/authorized supply houses of the domestic manufacturers of iron & steel products, covered by Appendix-A, are eligible to bid with self-certification on behalf of the domestic manufacturers under the policy, subject to the bidder furnishing an authorization certificate issued by the domestic manufacturer at the time of delivery.

6.5. For products covered under Appendix B of the DMI&SP policy, the bidder shall furnish certification issued by the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) declaring that the capital goods to be used in iron & steel industry are domestically manufactured in terms of the domestic value addition prescribed.

6.6. If Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of projects of specific value in the procuring country etc., it shall provide such details to the procuring entities for appropriate reciprocal action.

6.7. Entities of countries that have been identified by the Ministry of Steel as not allowing Indian companies to participate in their Government procurement for any item related to the Ministry of Steel shall not be allowed to participate in Government procurement in India for all items related to Ministry of Steel, except for the list of items published by Ministry of Steel permitting their participation.

6.8. The stipulation above shall be part of all tenders including those on GeM portal invited by the Central Government procuring entities.

6.9. In case restrictive or discriminatory conditions against domestic suppliers are included in bid documents, an inquiry shall be conducted by the Administrative Department undertaking the procurement (including procurement by any entity under its administrative control) to fix responsibility for the same. Thereafter, appropriate action, administrative or otherwise, shall be taken against erring officials of procurement entities under relevant provisions. Intimation on all such action shall be sent to the Standing Committee under the DMI&SP policy.

6.10. A supplier debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities.

6.11. In case, the matter is referred to the Ministry of Steel, the grievance redressal committee set up under the MoS shall dispose of the complaint within 4 weeks of its reference and receipt of all documents from the bidder after taking into consideration, the view of the Government Agency. The bidder shall be required to furnish the necessary documentation in support of domestic value addition claimed in iron & steel products to the grievance redressal committee under MoS within 2 weeks of the reference of the matter.

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6.12. Procuring agency shall define the penalties, in case of a wrong declaration by the bidder of the prescribed domestic value addition, in the tender document. The penalties may include forfeiting of the EMD, other financial penalties, and blacklisting of such manufacturer/service provider etc., in terms of extant rules.

7. **Implementation monitoring by the Ministry of Steel**

7.1. The policy provisions shall be applicable for 5 years from the date of publication and may further be extended at the discretion of the Ministry of Steel.

7.2. MoS shall be the nodal ministry to monitor the implementation of the policy.

7.3. Agencies covered under DMI&SP policy shall send declaration on a quarterly basis indicating the extent of compliance to the policy and reasons for non-compliance thereof, during the preceding financial year.

Appendix-A

List of iron and steel products which can only be procured from domestic sources

Sl. No	Iron & Steel Products	HS Code	Condition
1	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, hot rolled, not clad, plated or coated	7208	Melt & Pour
2	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, cold rolled (cold-reduced), not clad, plated or coated	7209	Melt & Pour
3	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, clad, plated or coated	7210	Melt & Pour
4	Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, not clad, plated or coated	7211	Melt & Pour
5	Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, clad, plated or coated	7212	Melt & Pour
6	Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel	7213	Melt & Pour
7	Other bars and rods of iron or non-alloy steel, not further worked than forged, hot rolled, hot-drawn or hot-extruded, but including those twisted after rolling	7214	Melt & Pour
8	Other bars and rods of iron or non-alloy steel	7215	Melt & Pour
9	Angles, shapes and sections of iron or non-alloy steel	7216	Melt & Pour
10	Wire of iron or non-alloy steel	7217	Melt & Pour
11	Flat-rolled products of stainless steel, of a width of 600 mm or more	7219	Melt & Pour
12	Flat-rolled products of stainless steel, of a width of less than 600 mm	7220	Melt & Pour
13	Other bars and rods of stainless steel; angles, shapes and sections of stainless steel	7222	Melt & Pour
14	Wire of other alloy steel	7229	Melt & Pour

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15	Rails, railway or tramway track construction material of iron or steel	7302	50% Domestic Value Addition
16	Tubes, pipes and hollow profiles, of cast iron	7303	50% Domestic Value Addition
17	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel	7304	50% Domestic Value Addition
18	Other tubes and pipes (for example, welded, riveted or similarly closed), having circular cross-sections, the external diameter of which exceeds 406.4 mm, of iron or steel	7305	50% Domestic Value Addition
19	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel	7306	50% Domestic Value Addition
20	Tube or pipe fittings (for example, connectors/couplings, elbow sleeves), of iron or steel	7307	50% Domestic Value Addition
21	Bars and rods, hot-rolled, in irregularly wound coils, of stainless steel	7221	Melt & Pour
22	Wire of stainless steel	7223	Melt & Pour
23	Flat-rolled products of other alloy steel, of a width of 600 mm or more, including electrical steel	7225	Melt & Pour
24	Flat-rolled products of other alloy steel, of a width of less than 600 mm, including electrical steel	7226	Melt & Pour
25	Bars and rods, hot-rolled, in irregularly wound coils, of other alloy steel	7227	Melt & Pour
26	Other bars and rods of other alloy steel; angles, shapes and sections, of other alloy steel; hollow drill bars and rods, of alloy or non-alloy steel	7228	Melt & Pour
27	Sheet piling of iron or steel, whether or not drilled, punched or made from assembled elements; welded angles, shapes and sections, of iron or steel	7301	50% Domestic Value Addition
28	Structures (excluding prefabricated buildings of heading 9406) and parts of structures	7308	50% Domestic Value Addition
29	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 whether or not lined or heat insulated, but not fitted with mechanical or Thermal equipment	7309	50% Domestic Value Addition
30	Tanks, casks, drums, cans, boxes and similar containers, for any material(other than compressed or liquefied gas), of iron or steel, of a capacity not exceeding 300l.,whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment	7310	50% Domestic Value Addition
31	Containers for compressed or liquefied gas, of iron or steel	7311	50% Domestic Value Addition
32	Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated	7312	50% Domestic Value Addition
33	Barbed wire of iron or steel; twisted hoop or single flat wire, barbed or not, and loosely twisted double wire, of a kind used for fencing, of iron or steel	7313	50% Domestic Value Addition
34	Grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel	7314	50% Domestic Value Addition
35	Chain and parts thereof, of iron or steel	7315	50% Domestic Value Addition

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36	Anchors, grapnels and parts thereof, of iron or steel	7316	50% Domestic Value Addition
37	Articles of iron and steel	7317	50% Domestic Value Addition
38	Articles of iron and steel	7318	50% Domestic Value Addition
39	Articles of iron and steel	7319	50% Domestic Value Addition
40	Springs and leaves for springs, of iron or steel	7320	50% Domestic Value Addition
41	Stoves,ranges,grates,cookers(including those with subsidiary boilers for central heating), barbecues, braziers, gas-rings, plate warmers and similar non-electric domestic appliances, and parts thereof, of iron or steel	7321	50% Domestic Value Addition
42	Radiators for central heating, not electrically heated, and parts thereof, of iron or steel; air heaters and hot air distributors, not electrically heated, incorporating a motor-driven fan or blower, and parts thereof, of iron or steel	7322	50% Domestic Value Addition
43	Tables and similar house hold articles and parts thereof, of iron or steel	7323	50% Domestic Value Addition
44	Sanitary ware and parts thereof, of iron or steel	7324	50% Domestic Value Addition
45	Other cast articles of iron or steel	7325	50% Domestic Value Addition
46	Electrical steel and other articles of iron or steel	7326	50% Domestic Value Addition
47	Railway or tramway passenger coaches, not self-propelled	8605	50% Domestic Value Addition
48	Railway or tramway goods vans and wagons, not self-propelled	8606	50% Domestic Value Addition
49	Parts of railway or tramway locomotives or rolling-stock; such as bogies, bissel-bogies, axles and forged wheels, and parts thereof	8607	50% Domestic Value Addition

Appendix- B

List of Capital Goods (non-exhaustive) which can be imported for Manufacturing Iron & Steel products, and minimum domestic content applicable for the package

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	Mining		
1	**Equipment for Mining development** • Crushing & Screening Plant • Mineral beneficiation (iron ore and coal) plant; (Boundary Limit: from Receiving of ROM at the crusher hopper, comminution, segregation, ore/coal processing up to final product preparation) • Slime Beneficiation • Automatic Loading facilities • Conveyer system	75%	• Wet High Intensity Magnetic Separator / High Gradient Magnetic Separator • Heavy Media Cyclone • Gyratory Crusher • Spiral Concentrator • Online Ash Analyzer • Ball/Rod/AG Mill (Greater than 3.5 m dia)
2	**Mining transportation** • Slurry Pipelines • Long distance conveying system	30%	• PD Pump • Valves • Specialized/rope/pipe conveyor
3	**Other Mining Machinery & Heavy Earth Moving equipment for mines** (Boundary Limit: Equipment for drilling, raising, lading, haulage, and mine preparation)	Not Applicable	• Dumper (above 220 tons pay load capacity), Hydraulic Excavators (above 9 Cubic meter bucket capacity) • Blast Hole Drills 10"(Electric/Diesel) • Diesel driven Track Dozer >850 HP Capacity • Diesel Driven Wheel Dozer >500 HP capacity • Diesel driven Front End Wheel Loader >8 Cubic Meter bucket Capacity
4	**Pellet Plant Equipment** (Boundary Limit – Receiving Ground Hopper for flux & Binder, Belt Conveyor feeding IOF to product pellet belt conveyor)	85%	• Pellet car, High Intensive Mixer, Balling Discs, Vertical roller mill, Drive/discharge end Sprocket assembly, curved rail, Slide rails, Single deck roller screen and Double deck roller screen, Induration Machine Drive assembly, Level-2 automation
	Iron/steel making		
5	**Raw Material Handling System** (Boundary Limit – from Wagon Tippler to respective user units)	95%	• Barrel Couplings, Heavy Duty Bearings, Crane Rail Lubrication System, Slew Ring Bearings, Tongs (Special), Vibration Isolation System (Spring Damper), Hydraulic motor & hydraulic pump (installed in wagon tippler, side arm charger, stacker cum reclaimer, slew stacker), electronic cards, unbalanced motor, cam limit switch of wagon tippler.
6	**Coke Oven Battery** (Both top charged & stamp charged) (From Coal bunker to coke discharge bucket)	90%	• Springs of the anchorage systems, COG booster, stamping train, bonding press

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S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
7	**Coke Dry Quenching Plant** (From Hot coke receiving bucket to discharge chute of cooling chamber)	90%	• Mill fan & Motor, Special Refractory for Twin Flue of Cooling Chamber.
8	**By-Product Plant** (From Primary Gas cooler to clean coke oven gas up to the network)	90%	• Exhauster & Motor, burner of the clause kiln, Catalyst, Tail gas analyzer, Palletization unit.
9	**Sinter Plant Equipment** (Boundary Limit – Receiving Bin for Raw Material to Vibro-Feeder below Product Sinter Bin)	75%	• Highly Intensive Mixer & Granulator Unit, Pallet cars, Drive Sprocket, Main Drive with Gear Box of sinter machine, slide rail & curved rail, Hot Sinter breaker and Grizzly, Annular Dip Rail Cooler, LCI Drive system for Sinter Plant Exhauster application. • Ignition Furnace Spare parts (Refractory/Control System/Burner Assembly) • Exhauster (Waste Gas Fan) and System Spare Parts
10	**Blast Furnace Equipment** Boundary Limit: **Input** • **Raw material**- Top of bunkers of respective material • **Cold Blast**- Inlet of the snort valve • **Industrial water**- BF pump house **Output** • **Hot Metal**- Filled in the torpedo ladle • **Granulated Slag** - to the granulated slag yard	70%	• Bell less top gear box, upper seal device covering upper material gate and upper seal valve, lower seal device covering lower material gate and lower seal valve, Bleeder valve, Tilting Rocker, Wear liners, Goggle Valve, Equalizing & Relief Valve, Chute Rotation Motors, Distribution chute, Feeder spout, Chutes & Funnels etc. • Hearth Refractory (carbon blocks) • Top Recovery Turbine system (TRT) • Cu-staves • SGI Staves • Cast house equipment (Mud gun, Drilling machine and main trough Manipulator) • Probes, Profilometer & Stock level indicator (radar type) • Gas cleaning plant (AGS system) • Stove system – ceramic burner & technological valve • Waste Heat Recovery system • Turbo blowers • Ball Mill • PCI Injection System • Level-II automation • Copper plate coolers • Tuyere cooler • Stove technological valves • Dewatering Wheel of SGP • Torpedo Ladle Car chain assembly • Dome filled dump Valves • Tuyere stock assembly
11	**Gas based Direct Reduction Plant Equipment** (Boundary Limit: Receipt of raw	50%	• Reactor charging system • Reactor • Reactor discharging system

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	material at the top of the DRI reactor & discharge of hot DRI to EAF)		• Pneumatic transfer to EAF • Discharge route to briquetting system • Briquetting feeding system • Briquetting system • Reduction gas circuit • CO2 removal unit • Process gas heater • Reformer system • Heat Recovery System • Process Gas Compressors • Blowers • Seal Gas System • Flue Gas Fan/ Hot Fan • Process valves • Critical bellows • Critical refractories • Natural Gas pre-treatment system • Level-II automation
12	**Oxygen Plant 700 tpd & Above** (Boundary limit: Water, Power at oxygen plant boundary)	30%	• Main Air Compressor • Booster Air Compressor • Expansion Turbine • Reboiler • Cryogenic Pumps • Heat exchange elements of • ASU • Pressure Column • Main Condenser, Low Pressure Column • Crude Argon Column, Pure Argon Column and Condenser with Condenser Block • Main Heat Exchangers, Pure Argon Evaporator Sub-cooler • LOX-IC-Process Pump • LIN-IC-Process Pumps • LAR-Transfer -Process Pumps • Dense Fluid Expander • Booster Heat Exchangers • Molecular Sieves Switching Valves for PPU • Critical Safety valves • Specialized valves • Control Valves • Cold box • Control Valves GOX-Product • Flow Measuring devices of Cold box • Expander - Brake Generator, Frequency Converters
13	**Steel Processing**		
13.1	**Hot Metal De- De-Sulphurization Station (HMDS) Unit with Co-Injection Process** (Hot metal from the blast furnace (BF) is	75%	• Injection Lance and automatic sampling Unit with auxiliaries • De-slagging Machines (slag raking machine) with auxiliaries

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S. No.	Plant/Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	received in a torpedo ladle or open-top ladle, undergoes desulfurization treatment to reduce "Sulphur (S)" content, and is then transferred to the BOF converter)		• Temp. measuring and sampling device with auxiliaries
13.2	**Hot Metal De- De-Sulphurization Station (HMDS) Unit with Mechanical Stirrer (KR) Process** (Hot metal from the blast furnace (BF) is received in a torpedo ladle or open-top ladle, undergoes desulfurization treatment to reduce "Sulphur (S)" content, and is then transferred to the BOF converter)	70%	• Impeller, Impeller lifting & stirring equipment, Guide Frame with auxiliaries • De-slagging Machines (slag raking machine) with auxiliary facilities • Temp. measuring and sampling device with auxiliaries
13.3	**Basic Oxygen Furnace / LD Unit** [Treated hot metal is poured into the BOF converter, where it undergoes processing to convert it into steel, which is then supplied to the ladle furnace (LF)]	65%	• Lance body with clamping, Lance carriage, Lance guide, Lance hoist & trolley, Lance copper tips with auxiliaries. • Pneumatic motors for emergency tilting drive. • Bottom stirring system, valve station & rotary joint along with auxiliaries • Valve stations for oxygen/ argon/ nitrogen with auxiliaries • Sub-lance system with auxiliaries • Container lab with all auxiliaries. • Automatic gas coupling (auto coupler) with auxiliaries. • Converter wrecking machine. • Converter tap hole changing machine • Refractory monitoring (laser) machine. • Converter Shell parts, Suspension System, Rotary joint, Slag Stopper & its control valves • Converter Tilting Drive system & Suspension system, gearboxes & Motors, Pneumatic Motors & control valves, Position Encoders, Clutch system, Lubrication system components. • Ladle Transfer Car Rail Track System (A series type) & gearboxes, stirring couplings. • LOMAS Gas Analyzer, Multi-lab temperature & sample system. • Stirring couplings for ladle transfer Cars. • PLCs and RIOs. • Automation system and software. • Hot Zone Hydraulic Pumps and Valves. • Hot Zone Geared Motors with wheel block. • Converter Bearings. • Air & Electric operated Slurry Compaction Pump. • Primary ID fan, bearings, motors, drives & Lubrication system.

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S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
			• WDS-Cone
13.4	**Electric Arc Furnace Unit** (Primary materials such as scrap, DRI, pig iron, and hot metal in combination is converted into liquid steel using electrical energy to melt and refine the raw materials)	70%	• Electrode regulation system with auxiliaries • High current system including furnace transformer • Oxygen & Carbon Injection System with auxiliaries • Manual Temp Measuring & sampling Lance with auxiliaries
13.5	**Ladle Furnace Unit** [Liquid steel is processed/ treated to achieve the desired grade and held as buffer stock before being supplied to the continuous casting machine (CCM)]	70%	• Electrode regulation system with auxiliaries • Manual Temp Measuring & sampling Lance with auxiliaries.
13.6	**RH/ RH-OB Unit** [The liquid steel is degassed to achieve the required dissolved gas levels and then supplied to the continuous casting machine (CCM)]	65%	• Gas Stirring System/ Lift Gas Stirring System Valve Stand with auxiliaries • Oxygen Lance System with auxiliaries • Hydris Measurement System with auxiliaries
13.7	**Argon-Oxygen Decarburization (AOD) Unit**	70%	• Drive Unit for tilting of AOD converter, Air Motor, Brakes etc. • Lance copper tips • Hoses for water and oxygen • Pneumatic motors for emergency tilting drive. • Bearing for AOD Converter, Emergency Gears for air motor • Valve stations for oxygen/ argon/nitrogen with auxiliaries. • Refractory monitoring (laser) machine • Automation system.
13.8	**VD/VOD**	70%	• Gas analysis (Off-Gas Mass Spectrometers) only sensor. Holder is make in India • Automation and Process control software platform • Vacuum Pump System with Auxiliary • Oxygen tips • Valve stations for oxygen/ argon/nitrogen with auxiliaries.
13.9	**Submerged Arc Furnace (SAF) Unit**	65%	• Clay gun and drill M/c • Electrode equipment • Slipping device assembly • Electrode guiding assembly • Upper & Lower mantle assembly • Pressure ring assembly • Contact shoe assembly • Heat shield assembly • Electrode seal assembly • Pressure ring bellows • Seal refractory • Furnace automation and Controller Software

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S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
13.10	**Continuous Casting Unit** (Slab Caster/ Billet/ Bloom Round/ Combi/ Beam Blank) [The liquid steel is cast into slabs, billets, or blooms in the continuous casting machine (CCM)]	65%	• Ladle slag detection system completes with auxiliaries • Copper tube and Plate, Mould oscillation Cylinder. • Rotary Union. • Continuous temperature measuring system with auxiliaries. • Torch cutting machine/ Emergency torch cutter along with auxiliaries • De-burring machine along with electrical drive system with auxiliaries • Marking machine. • Roll gap checker completes with auxiliaries • Electromagnetic Stirrer (EMS)/ Electromagnetic Braking (EMBr) system along with auxiliaries
14	**Flat Product Mills**		
14.1	**Hot Strip Mills/ Plate Mill** (Boundary Limit: Slab yard to Dispatch Bay, including auxiliaries)	50%	• De-scalars, mill stand, bed plates, backup rolls, Work Rolls, mill spindles, chocks, AGC cylinders, bending blocks & cylinders, shears, down coilers, anti-friction roll neck bearings, oil film bearings, mill reducers, load cells, thickness gauge, profile gauge, width gauge, levelers, roll grinding machines, Coil Marking Machine, Plate Marking Machine, mill stand motors & mill stand MV drive system, automation system, etc.
14.2	**CRM (PLTCM)** (Boundary Limit: Pickling line entry to mill exit)	50%	• Welding machine, tension leveler, mill stands, backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, roll bending and roll shifting cylinders, mill spindles, load cells, position transducers, Electrostatic Oiler, Side Trimmer, Steering System, Surface Inspection System, thickness gauges, laser speed gauge, tensiometer, Flatness Gauge, tension reel, mill reducers, mill stand motors & mill stand MV drive system, automation system etc.
14.3	**CRM (HDGL)** (Boundary Limit: entry to exit of HDGL including temper mill & tension leveler)	60%	• Welding machine, radiant tube furnaces, jet cooling system, coating pot with induction heating, pot rolls, air knife wiping system, tension leveler, width gauge, thickness gauge, coating thickness gauge, load cells, roll force cylinders, mill stand motors & mill stand drive system, automation system, etc.
14.4	**CRM (SPM)** (Boundary Limit: entry to exit of SPM)	50%	• Mill stands, backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, Electrostatic Oiler, Coil Marking System, load cells, thickness gauge, mill stand motors & mill

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
			stand MV drive system, automation system, etc.
14.5	**CRM (Bell Annealing Furnace)** (Boundary Limit: From furnace bases to post cooling equipment)	55%	• Furnace, automation system, etc.
14.6	**CRM (Color Coating Line)** (Boundary Limit: Entry to exit of CCL)	80%	• Coater, Coating thickness gauge, digital printer, tension leveler, automation, etc.
14.7	**TSCDR (Thin Slab casting Direct Rolling)** (Boundary Limit: From turret to coil finishing & packaging area)	50%	• Ladle slag detection system complete with auxiliaries • Copper tube and Plate, Mould oscillation Cylinder. • Rotary Union. • Continuous temperature measuring system with auxiliaries. • Pendulum shear cutting machine. • Segments assembly • Roll gap checker complete with auxiliaries • Electromagnetic Stirrer (EMS)/Electromagnetic Braking (EMBr) system along with auxiliaries, • Tunnel furnace burners • Roughing & Finishing Mill stands, work roll & backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, mill stand MV drive and motors, automation system, laminar/power cooling components, hydraulic coilers. Profile gauge, thickness gauge, width gauge. • Nozzles • Grease system and auxiliaries • Hydraulic system and auxiliaries • Gearbox • ROT roll assembly • Roll assembly (Sleeve, Shaft, Roll) • Ladle turret and auxiliaries (Slew bearing, Disc coupling, Gearbox, Hydraulic clutch and Hydraulic Cylinder) • Mould breakout prediction system • Auto mould level control nucleonic gauge • Mould powder feeding system • CNC mould machining system with auxiliaries • Tundish and Turret weighing system • Tunnel furnace refractory rolls. • Tunnel furnace shuttle drive system and gas conveying system. • Backup roll hydrostatic lubrication system • Roll bite lubrication system • In-furnace camera with auxiliaries • Crop shear • Descaler system and component. • Coil marking machine

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S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
			• Online Coil weighing system • Cut to Length Stacker System • Roll Shop (CNC Combi grinders, CNC Roll Grinders, CNC Knife Grinders, CNC Turing Machine, Lathe Machines) • Coil Strapping machines • Down coiler system • Mill Measuring system and Sensors (Automatic gauge control (AGC) sensors (roll force, gap, pressure) • Looper Control System along its sensors • Condition based monitoring System and its sensors • Coil shuttle car and pallet conveying system. • Crane coil tong. • RO and UF membranes • Self-cleaning filters
14.8	**Normalizing Facilities for Plate Mill** (Boundary Limit: entry to Normalizing furnace to dispatch of finished plates)	50%	• Furnace burners, Furnace hearth rollers, leveler, load cell, automation
14.9	**SSM (Silicon Steel Mill)** (Boundary Limit: Pickling line entry to dispatch of SSM)	50%	• Mill stand, work roll & backup roll, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, mill stand MV drive system & motors, automation system, annealing furnace, decarburizing line, electrical steel testing facilities (e.g. Fischer scope thickness measuring device, Frankline Insulation Resistivity Tester, Magnetic Console, Stacking Factor tester).
14.10	**CRM (Cluster Mill stand)** Sendzimir Mill (Boundary Limit: entry to exit of Sendzimir Mill)	50%	• Sendzimir Mill stand, work roll & backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, mill stand MV drive system & motors, automation system
14.11	**HRM (Steckel Mill)** (Boundary Limit: From coiler furnace entry to Steckel Mill and exit to coiler furnace)	40%	• Steckel Mill stand, heated coilers, work roll & backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, mill stand MV drive system & motors, automation system
15	**Long Product Mills**		
15.1	**Bar Mill/ WRM/MM/ LSM** (Boundary Limit: From furnace entry to dispatch)	75%	• Fast finishing blocks, Roll turning lathes, Profile Gauge, automation systems, etc.
15.2	**Rail Mill/ Heavy Structural Mill** (Boundary Limit: From furnace entry to exit of the rail welding plant excluding material handling)	45%	• Mill stands, mill motor & drive system, heat treatment facility, straightening machine, NDT facilities, welding machine, Profile Gauge, Hot Saw, Cold Saw, Hot Marking Machine, Roll Turning Lathe, Saw Grinding Machine, automation system, etc.
15.3	**ERWPP (Electrical Resistance Welded Pipe Plant)**	50%	• Pre-forming Unit, Break-Down Stand, Edge Bender, Universal Cage, Finishing Pass

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	(Boundary Limit: From strip feeding to finishing facilities and dispatch of ERWPP)		(multiple stands), Pipe Guide, high frequency welding machine, high power electric inductors, hydro testing, ultrasonic machine
15.4	**SWPP (Spiral Welded Pipe Plant)** (Boundary Limit: From pipe forming to finishing facilities and dispatch of SWPP)	50%	• Submerged arc welding, outside welding (skelp joint), X-ray station, hydro testing, beveling machine, ultrasonic machine, end radiograph station
16	**Wheel Plant**		
16.1	**Wheel Plant** (receipt of round/ingot to finished wheel)	30%	• Circular saw, forging press, wheel rolling mill, wheel dishing press, wheel stamping machine, rim spaying machine, mobile chargers, (Handling Robots), machining facilities, testing facilities, automation system etc.
16.2	**Heat Treatment Facilities for Railway Wheels** (Boundary Limit: exit of Hot Dimension Measurement to Black Wheel Storage)	40%	• Furnace burners, hearth rollers, automatic wheel handling and quenching machine
16.3	**Non-Destructive Testing (NDT) Facilities for Wheels and Rails** (Boundary Limit: entry & exit of NDT facilities)	30%	• Hardness testing machine, Ultrasonic testing machine, Magnetic particle inspection machine, Eddy current testing machine
16.4	**Facilities for Manufacturing of Forged Rolls for Rolling Mill Stands** (Boundary Limit: entry of forged blank roll to dispatch of finished rolls)	30%	• Forging Press, Manipulators, roll hardening machine, Cryogenic treatment facilities, tempering furnaces, roll grinders, roll turning lathes, hardness testing machine, ultrasonic testing machine
16.5	**RGBS/ Roll Shop**	50%	• CNC work roll grinder/CNC combi grinder, CNC Roll turning lathe, • Facilities for Electric Discharge Texturing (EDT) and Electro Discharge Machining (EDM) for rolls
17	**Refractory Brick** (Receipt of raw material to finished brick)	50%	• Hydraulic Press
18	**Electrical** (Power Quality System)	30%	• MVSTATCOM • (Static Synchronous Compensator) System
	Other auxiliary and utility equipment		
19	**Calcination Plant** (Calcined Lime & Dolo)		• Firing system, Shaft level indicator, Automation system • VFD & Soft Starter Cards. Driving Air Blower, Dedusting Draft Fans, Cooling Air Fans, Lime Cooling Fan, Waste Gas Fans, Gas Booster Fan assembly • Hyd. Cylinders, Hyd. Motors, Hyd. Station.
20	**Electric Motor Driven Cold Blast Blower** (Axial/Axial with last stage radial)		• Axial/ Axial with last stage radial Blower • Motor with Drive System • Blow-off Valve • Blower non-return valve • Control & Instrumentation items

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S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
21	**Steam Turbine Driven Cold Blast Blower** (Axial/Axial with last stage radial)		• Axial/ Axial with last stage radial Blower • Blow-off Valve • Blower non-return valve • Control & Instrumentation items
22	**Diesel Engine Driven Cold Blast Blower** (Axial/Axial with last stage radial/radial)		• Axial/ Axial with last stage radial Blower/radial Blower and Systems • Diesel Engines • Blow-off Valves • Blower non-return valves • Control & Instrumentation items
23	**Gas Fired/ Heat Recovery Boilers**		• Special Grade Plates & Tubes • Flame Scanner • Instrumentation & controls
24	**Steam Turbine** (Extraction/ BPTG)		• Special Grade Blade Material • Governing System • Turbo Supervisory system • Instrumentation & controls
25	**Gas Holder**		• Gasholder seal, sealant. • Level weight ropes with fittings. • V. R. Valve gaskets • Specialized membranes for double/triple membrane system. • Hydraulics
26	**High pressure gas boosters** (Outlet pressure > 2000 mm WC)		• Gas booster proper including control and bypass valves • Piston Rings • Concentric Ring Type Valves (SS)
27	**Pollution Control Systems**		• TR sets • Controllers • Insulators • ESP electrical components • Control & Instrumentation items
28	**Water & Effluent Treatment System**		• Membranes • Evaporators (Compressor & Titanium Sheet) • HP Pumps • Control & Instrumentation items
29	**Compressed Air Station**		• Centrifugal Compressor core assembly including Impellors, Bull Gear, Pinion Shafts, Bearings, Vibration Probes and Local Control Panel.
30	**Hydrogen Plant**		• Electrolyser unit • HP Compressors • Control & Instrumentation items
31	**Packaged Chillers**		• Compressors • Control & Instrumentation items
32	**Other Utility areas like–** Air conditioning & ventilation system, VAM based chiller system, firefighting system, gas boosters (DP less than 2000 mm WC), cooling water system (pumping station, filters, cooling		• Items / Equipment have sub-components / parts which are imported • Compressors, Chillers, Crane AC units, Expansion Valve, Instruments, High Temperature Application AC.

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S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	towers, heat exchangers, etc.), gas mixing stations, pollution control systems, inter plant piping system		
33	**Electric overhead travelling crane and gantry crane, electric hoist**		• Barrel coupling, heavy duty bearing, crane rail lubrication, slew ring bearings, tongs
34	**Engineering shop**		• CNC lathe, CNC milling machine
35	Power Generation, transmission & Distribution system; Shop Electrics including Power & control system and associated electrical works	As per Minimum local content (MLC) % guideline of Ministry of Power	
Note: All equipment shall be procured/ complied as per the Class-I category of the Ministry of Power guidelines. In case(s) where the equipment is not mentioned in Class-I category, or where classification/specification of the equipment is not explicitly or clearly defined under the Ministry of Power guidelines, the provisions issued by DPIIT for Class-I and Class-II categories shall accordingly be followed.			
36	**Instrumentation items/ equipment** **	As per DPIIT guideline *	• Above / under burden probe system • Profilometer • Burden camera • Tuyere phenomena detection system (TPDS) • Top gas analyzers (CO, CO_2, H_2, O_2, pollutants) • Flow jam switch • Elemental analyzers • Moisture analyzer (Nucleonic) • CV analyzer • Thickness gauge • Hot metal detector • Width gauge • Furnace camera • Multifunction profile gauge • Flatness/shape gauge • Surface inspection system • Laser doppler velocity meter • Optical barrier • Thermal imaging systems for hot rolling • Automatic gauge control (AGC) sensors (roll force, gap, pressure) • Online mechanical property prediction systems (AI + sensors) • Oil film thickness monitoring systems (cold rolling) • X-Ray or Nucleonic Based Coating Thickness Gauges • Mass flow meter • Hydris (hydrogen detection in molten steel) • Mold level measurement • Break-Out Prediction System (BOPS) • Electromagnetic Brake (EMBr) Control & Sensors • Ladle tracking and management system • Slag Detection System (SDS)/ Slag Monitoring Systems

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S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
			• BOF Endpoint Detection (Laser-Induced Breakdown Spectroscopy – LIBS) • Sub-Lance Systems (Temp + O_2 + Carbon + Sampling) • Ladle Refractory Wear Monitoring (Laser/Ultrasonic/Infrared) • Continuous Emissions Monitoring Systems (CEMS – imported analyzers for SOx, NOx, PM, CO, CO_2, O_2, H2) • Off-gas analyzer for BOF/ EAF (CO, CO_2, H_2, dust) • Water quality analyzers (pH, Conductivity, Oil-in-water, TOC, Silica, BOD, COD, TSS, TDS, Phenol, Cyanide) • Laser-based gas leak detectors (CH_4, CO, H_2, H2S) • Acoustic / ultrasonic leak detection • Vibration / condition monitoring sensors / Axial shift / Differential expansion monitoring systems • Anti-collision system (Radar/ Laser/ Lidar) • Oven Identification System (OIS) • Pyrometers • LOMAS Analyzers • Master calibrators for pressure, temperature and electrotechnical parameters • Instruments installed in Eirich Mixers in Sinter plant, and Hanzel make lubrication systems. • Governor systems for Turbines and Turbo-blowers • Tail gas analyzers for By-product plant • Force sensors used in Coke bucket Lifter & reversing winch • Encoders, • Hydraulic valve controllers • Instruments installed in BLTs (Tilt switch, sonic sensor, encoders, etc.) • Flame sensors/scanners
37	**Automation items/ equipment ****	As per DPIIT guideline *	
38	**Voice Communication system ****	As per DPIIT guideline *	
39	**Fire Detection and Alarm (FDA) system ****	As per DPIIT guideline *	
40	**CCTV system ****	As per DPIIT guideline *	

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S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items

Note:

* Instrumentation, automation, communication equipment, Fire Detection & Alarm (FDA) system, and CCTV system shall comply with the domestic content requirements for capital goods in line with Class-I and Class-II supplier norms as per DPIIT as well as MEITY guidelines.

** Highly specialized equipment, components, and critical parts such as semiconductor chips for instrumentation, automation, communication systems, fire detection & alarm (FDA) systems, and CCTV systems are currently being sourced from global technology leaders. However, the overall system assembly, integration, and manufacturing activities are being carried out in India, with the remaining components procured through domestic sources.

Appendix-C

Promotion of Indigenous Technologies in Iron & Steel Sector

1) **Objective:**
To promote self-reliance in the Indian iron and steel sector by incentivizing the adoption, development, and scale-up of indigenous technologies across all stages of steel manufacturing.

2) **Scope:**
This policy applies to Central Public Sector Enterprises involved in steelmaking or putting up a steel manufacturing plant.

3) **Policy Directives:**

3.1 In cases where technology and proof for earlier engineering & supply is available but does not match the present capacity requirement, following conditions will be applicable for indigenous technology providers:

3.1.1 Production capacity reference to be 30% of the capacity of the proposed plant.

3.1.2 Availability of demonstrable tie ups with the vendors.

3.1.3 Experience of detailed engineering of projects for at least 75% of the capacity of the proposed plant.

3.2 In cases where technology is available but no reference for earlier supply is available, following conditions will be applicable for indigenous technology providers:

3.2.1 The indigenous technology supplier has done detailed engineering of projects matching at least 75% of the features of the proposed project.

3.2.2 The indigenous technology supplier has done detailed engineering matching 100% of the critical features of the proposed project.

3.2.3 Availability of demonstrable tie ups with the vendors.

3.2.4 Demonstrable evidence of technology availability (IPR or other sufficient evidence).

3.3 In cases where no Indian technology is available, a foreign technology supplier committing to transfer technology, including training and handholding to an Indian CPSE (including the procuring entity), within three years, shall be considered as deemed Class-I supplier irrespective of percentage of Domestic Value Addition. In this case, purchase preference shall be given to the foreign technology supplier as defined in DPIIT's Public Procurement (Preference to Make in India) Order amended from time to time.

4) **Implementation Oversight:**
The Standing Committee constituted by Ministry of Steel shall monitor implementation, resolve disputes, and update the eligibility and incentive criteria periodically.

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Form-1

Affidavit of Self-Certification for Compliance with Melt & Pour Requirements (Appendix-A) and/or Domestic Value Addition Requirements (Appendix-A & Appendix-B*)

*For Appendix-B capital goods, this affidavit must accompany the statutory auditor's / cost auditor's / CA certificate, as mandated under the policy.

I, _____, Resident of _____, being the authorised signatory of M/s _____,

do hereby solemnly affirm and declare as under:

1. I have read and understood the Domestically Manufactured Iron & Steel Products (DMI&SP) Policy, 2025, issued vide Notification No. _____ dated _____. I agree to abide by all terms and conditions of the said policy and the tender in which this affidavit is submitted.

2. This affidavit pertains to the following iron & steel product(s)/capital good(s):

Name of product(s): _____

HS Code(s): _____

Appendix classification: Appendix-A / Appendix-B (select as applicable)

Procuring agency: _____

3. Melt & Pour - Applicable only for Appendix-A items with Melt & Pour condition

I hereby declare that the above product(s) satisfy the Melt & Pour in India requirement as notified in Appendix-A. Specifically:

The steel was melted and poured in India.

The first solid shape (slab/billet/ingot/other) was produced at the following location(s):

Steelmaking facility: _____Location: _____ Heat numbers; Batch details: _____

I undertake to produce mill test certificates, heat records, and any other documentary proof to substantiate this declaration whenever required by the procuring agency.

(If not applicable, write "Not Applicable".)

4. Domestic Value Addition - Applicable for Appendix-A DVA items and Appendix-B capital goods:

I hereby declare that the Domestic Value Addition (DVA) for the product(s) is: _____ %. The DVA has been computed as per DPIIT guidelines and the formula specified in the DMI&SP Policy, 2025.

4A. For Appendix-B Capital Goods (Mandatory): A certificate issued by the statutory auditor / cost auditor / chartered accountant is enclosed herewith, confirming the DVA of the capital good package in accordance with the policy.

(If Appendix-A item only, strike this clause out.)

5. I confirm that: All information furnished is true and correct. All input steel costs, imported content, and domestic content calculations have been verified. All manufacturing, purchase, and pricing records are available for examination.

If any information is found incorrect or misleading: The procuring agency may disqualify me / my firm from Government tenders as per the procuring agency norms. I agree to pay all assessment costs and penalties, including forfeiture of EMD, as per policy and tender conditions.

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6. I undertake to maintain the relevant records, and make them available to any statutory authority.

7. Declaration: I do hereby declare that the statements made above are true to the best of my knowledge and belief. I understand that any misrepresentation shall attract penalties under the DMI&SP Policy, applicable laws, and tender conditions.

For and on behalf of

(Place & Date)

M/s _____

(Authorised Signatory)

[F. No. 8(2)/2023-ID-I]

ABHIJIT NARENDRA, Jt. Secy.

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Annexure-2

(to be submitted in Bidder's letter head)
[Item rate /EPC /Package Contracts]
UNDERTAKING ON LETTERHEAD

Item / Works : COMPOSITE WORKS FOR UTILITIES & OFF-SITES (PART-A & B)
Bidding Document no:JP/B957-999-PK-T-9501/1031

This has reference to "Policy for providing Preference to Domestically Manufactured Iron & Steel Products in Government Procurement" issued by Ministry of Steel, Govt. of India, vide their notification "The Gazette of India, Extraordinary Part..GSR 904 (E) dated 17.12.2025 including its amendments thereafter (if any)".
We confirm:

- that we will comply the Policy for providing Preference to Domestically Manufactured Iron & Steel Products in Government Procurement" issued by Ministry of Steel, Govt. of India.

- that we will submit Notarized Affidavit of Self Certification of Domestic value addition in Iron & Steel Products and submit to Owner/ EIL at the time of delivery of related iron and steel products required under the bidding document.

Sign & Stamp of bidder

Annexure-2A

(to be submitted in Bidder's letter head)

[for Bidders who are selling agents/authorized distributors/authorized dealers/authorized supply houses]

Item:

Bidding Document no:

This has reference to "Policy for providing Preference to Domestically Manufactured Iron & Steel Products in Government Procurement" issued by Ministry of Steel, Govt. of India, vide their notification "The Gazette of India, Extraordinary Part -..... dated..... including its amendments thereafter (if any)".

We confirm:

- that we will comply the Policy for providing Preference to Domestically Manufactured Iron & Steel Products in Government Procurement" issued by Ministry of Steel, Govt. of India.

- that we will submit authorization certificate issued by the domestic manufacturer at the time of delivery of related iron and steel products required under the enquiry document.

Sign & Stamp of bidder

Annexure-3

DECLARATION OF NON-APPLICABILITY OF DMI&SP POLICY

(to be submitted in Bidder's letter head)
UNDERTAKING ON LETTERHEAD

Item / Works:
Bidding Document no:

This has reference to "Policy for providing Preference to Domestically Manufactured Iron & Steel Products DMI&SP) in Government Procurement" issued by Ministry of Steel, Govt. of India, vide their notification "The Gazette of India, Extraordinary Part ..... dated ..... including its amendments thereafter (if any)".

We confirm that, we have understood the scope and terms & conditions of above mentioned DMI&SP Policy and also confirm that, based on the Prices quoted by us for each individual item, DMI&SP Policy is not applicable for the following items –

Where evaluation is on Item wise basis	
S. No	MR Item No
1	
2	
3	

Where evaluation is on Group wise basis		
S. No	Group	Item no of the respective group
1		
2		
3		

Further, in case at any stage before or after award, if it is observed by the EIL/OWNER the value of the above items is more than INR 5 Lakhs (Excluding Freight and GST) it shall be construed as the false/wrong declaration and procuring entity is entitled to take penal action as per provision of Bidding Document.

Sign & Stamp of Bidder

Annexure-4

Item / Works:

RFQ/Bidding Document no:

Form-1

Affidavit (Notarized) of Self-Certification for Compliance with Melt & Pour Requirements (Appendix-A) and/or Domestic Value Addition Requirements (Appendix-A & Appendix-B)*
**For Appendix-B capital goods, this affidavit must accompany the statutory auditor's / cost auditor's / CA certificate, as mandated under the policy.*

I,_____, Resident of _____, being the authorized signatory of M/s _____, do hereby solemnly affirm and declare as under:

1. I have read and understood the Domestically Manufactured Iron & Steel Products (DMI&SP) Policy, 2025, issued vide Notification No. _____ dated _____. I agree to abide by all terms and conditions of the said policy and the tender in which this affidavit is submitted.

2. This affidavit pertains to the following iron & steel product(s)/capital good(s):-

   Name of product (s):.....
   HS Code (s):.....
   Appendix classification: Appendix-A / Appendix-B (select as applicable)
   Procuring agency: .....

3. Melt & Pour - Applicable only for Appendix-A items with Melt & Pour condition
   I hereby declare that the above product(s) satisfy the Melt & Pour in India requirement as notified in Appendix-A. Specifically: The steel was melted and poured in India.

   The first solid shape (slab/billet/ingot/other) was produced at the following location(s): as specified below / as per Form-1A *(strike through which is "Not Applicable")*.
   Steelmaking facility: .....
   Location: .....
   Heat numbers:.....
   Batch details: .....

   I undertake to produce mill test certificates, heat records, and any other documentary proof to substantiate this declaration whenever required by the procuring agency. *(If not applicable, write "Not Applicable".)*

4. Domestic Value Addition - Applicable for Appendix-A DVA items and Appendix-B capital goods:
   I hereby declare that the Domestic Value Addition (DVA) for the product(s) is: _____% / as per Form-1A *(strike through which is "Not Applicable")*. The DVA has been computed as per DPIIT guidelines and the formula specified in the DMI&SP Policy, 2025.

   4A. For Appendix-B Capital Goods (Mandatory): A certificate issued by the statutory auditor / cost auditor / chartered accountant is enclosed herewith, confirming the DVA of the capital good package in accordance with the policy. (If Appendix-A item only, strike this clause out.)

5. I confirm that: All information furnished is true and correct. All input steel costs, imported content, and domestic content calculations have been verified. All manufacturing, purchase, and pricing records are available for examination.
   If any information is found incorrect or misleading: The procuring agency may disqualify me / my firm from Government tenders as per the procuring agency norms. I agree to pay all assessment costs and penalties, including forfeiture of EMD, as per policy and tender conditions.

6. I undertake to maintain the relevant records, and make them available to any statutory authority.

7. Declaration: I do hereby declare that the statements made above are true to the best of my knowledge and belief. I understand that any misrepresentation shall attract penalties under the DMI&SP Policy, applicable laws, and tender conditions.

For and on behalf of M/s _____

(Authorised Signatory)
(Place &
Date)

Note: Bidder may submit information sought against clause no 2, 3 and 4 in Form-1A if required. In that case, Form-1A also shall be part of Affidavit.

FORM-1A

(Applicable for the iron and Steel products specified in Appendix-A only)

BIDDER:	
TENDER / RFQ NO:	
PROCURING AGENCY:	
APPENDIX CLASSIFICATION:	Appendix-A

MR Item No	Name of product (s):	HS Code (s)	Steelmaking facility:	Location:	Heat numbers	Batch details:	Domestic Value Addition (DVA) for the product(s) in %.
shall be referred from MR		These columns shall be filled for items with required condition as "Melt & Pour"					This column is applicable for items "condition" with specific DVA.
							.....%
							.....%
							.....%
							.....%
							.....%

Note –

a. Bidder to refer "Condition" and "Domestic Value Addition" specified in Appendix-A while certification of the above Form-1 and Form-1A.
b. Form-1A shall form part of Affidavit (Form-1)

APPENDIX-V TO ITB

Bharat Petroleum
energising lives

Policy for holiday listing of vendors in BPCL

1. Introduction :

Works and procurement contracts have become a major activity for corporate in current times. In course of such contracting Oil sector PSEs deal with various "Agencies" (which shall include vendors/parties/contractors/suppliers/ consultants/Licensors/bidders). These entities are expected to adopt ethics of highest standards and a very high degree of integrity, safety and quality consciousness, commitments and sincerity towards the work undertaken and dealing with BPCL in such matters. However, in few occasions, the terms are found to be infringed and deviations from expected behavior are observed. It is not in the interest of BPCL to deal with Agencies who commit deception, fraud or other misconduct including compromising quality and safety in the tendering and execution process.

Also, while participating in the tender and performing the contract, vendors are required to meet certain basic performance criteria and adherence to the terms and conditions of the tender/contract. In case the vendor fails to meet the above parameters, it is prudent to put the vendor on holiday list for specific periods in order to deter the vendors form committing such defaults. Such decisions shall be taken based on the gravity of the default and after following a laid down process, on case to case basis.

Holiday Listing from business dealings involves civil consequences for the "Agency" concerned. Hence, the same requires adherence to the Principles of Natural Justice. Therefore, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case. The meaning of "Black listing", "Holiday Listing" and "Banning" is considered one and the same and shall hereafter be referred to only as "Holiday Listing" and the term Holiday Listed Companies is used accordingly in this document.

2. Scope :

2.1 The information for Bidders/Instruction to Bidders and even the General Conditions of Contract (GCC) or General Purchase Conditions (GPC) generally provide that BPCL shall have the rights to remove from list of approved suppliers / contractors or to ban business dealings if any Agency has been found to have committed misconduct or fraud or poor performance or anything unethical not expected from a reputed agency.

2.2 The procedure of Holiday Listing of Agencies from Business Dealings with BPCL has been laid down in these guidelines.

2.3 These guidelines are applicable across BPCL and shall form part of all the tenders. These guidelines shall be published as a separate document in BPCL website and the General Conditions of Contract (GCC) or General Purchase Conditions (GPC) shall have a clause expressly stating that the Guidelines and Procedures for Holiday Listing as adopted by BPCL and available separately in BPCL website shall be applicable in the context of all tenders floated and consequently all orders/ contracts / purchase orders placed by BPCL.

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2.4 The Holiday Listing shall be with prospective effect, i.e. for future business dealings.

3. Definitions :

In these Guidelines, unless the context otherwise requires

(i) Agency; "Party/Contractor/Supplier/Vendor/Consultant/Bidder/Licensor" in the context of these guidelines is indicated as 'Agency'.;

"Party/Contractor/Supplier/Vendor/Consultant/bidders/Licensor" shall mean and include a public limited company or a private limited company, a joint venture. Consortium, HUF, a firm whether registered or not, an individual, co-operative society or an association or a group of persons engaged in any commerce, trade, industry etc.

(ia) Allied Agency means: All concerns which come within the sphere of effective influence of the debarred firms shall be treated as allied firms. In determining this, the following factors may be taken into consideration:

a. Whether the management is common
b. Majority interest in the management is held by the partners or directors of banned / suspended firm
c. Substantial or majority shares are owned by the banned / suspended firm and by virtue of this it has a controlling voice
d. Directly or indirectly controls, or is controlled by or is under common control with another bidder
e. All successor firms will also be considered as allied firms.

(ii) Appellate Authority: "Appellate Authority" shall mean the concerned functional Director of BPCL or any other authority nominated by the C & MD. The Appellate authority shall be higher than the "Competent Authority".

(iii) Competent Authority: "Competent Authority" shall mean the authority, who is competent to take final decision for Banning of business dealings with Agencies, in accordance with these guidelines:

The Competent Authority for a Procurement Department which is initiating the Holiday Listing process should be the Regional head (or) SBU / Entity head as the case may be relevant to the said Procurement Department, but not below the level of General Manager

(iv) Corporation: "Corporation" means Bharat Petroleum Corporation Ltd. with its Registered Office at Bharat Bhavan-I, 4&6 Currimbhoy Road, Ballard Estate, Mumbai-400001.

(v) Corrupt Practice: "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly, anything of value to improperly influence the actions in selection process or in contract execution. Corrupt Practice" also includes any omission for misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.

(vi) Fraudulent Practice: "Fraudulent Practice" means and include any act or omission committed by a agency or with his connivance or by his agent by misrepresenting/ submitting false documents and/ or false information or concealment of facts or to deceive in order to influence a selection process or during execution of contract/ order;

(vii) Collusive Practice : "Collusive Practice" amongst bidders (prior to or after bid submission)" means a scheme or arrangement designed to establish bid prices at artificial non-

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competitive levels and to deprive the Employer of the benefits of free and open competition.

(viii) Coercive Practice: "Coercive practice" means impairing or harming or threatening to impair or harm directly or indirectly, any agency or its property to influence the improperly actions of an agency, obstruction of any investigation or auditing of a procurement process.

(ix) Officer-in-Charge: "Officer –in-Charge (OIC)" or "Engineer-in-Charge (EIC)" shall mean the person (s) designated to act for and on behalf of BPCL for the execution of the work as per requirement of the concerned department.

(x) Malpractice : Malpractice means any Corrupt Practice, Fraudulent Practice, Collusive Practice or Coercive practice as defined herein;

(xi) Mis-Conduct : "Mis-conduct" means any act or omission by the Agency, making it liable for action for Holiday Listing as per these guidelines

(xii) Nodal Department: "Nodal Department" means the Department primarily assigned with the role of overseeing the Holiday Listing Process to ensure adherence to guidelines, maintaining, updating and publishing the list of Agencies with whom BPCL has decided to ban business dealings and shall be the Corporate Finance Department.

(xiii) Vendor De-listment Committee: "Vendor De-listment Committee" relevant to the procurement department which initiates the holiday listing process would the same as the vendor enlistment Committee as per DR&A of the concerned SBU/Entity.

4. Holiday Listing:

4.1 Reasons for Holiday Listing : An Agency may be placed in Holiday List for any one or more of the following circumstances:

4.1.1. If the Agency , in the context of its dealings with the Corporation:

a. has indulged in malpractices ;
b. has submitted fake, false or forged documents / certificates
c. Has substituted materials in lieu of materials supplied by BPCL or has not returned or has unauthorized disposed off materials / documents / drawings / tools or plants or equipments supplied by BPCL.
d. Has deliberately violated and circumvented the provisions of labor laws/ regulations / rules, safety norms, environmental norms or other statutory requirements.
e. has deliberately indulged in construction and erection of defective works or supply of defective materials
f. Has not cleared previous dues to BPCL if applicable.
g. Has committed breach of contract or has abandoned the contract.
h. Poor performance of the Agency in one or several contracts;
i. Has not honored the fax of award / letter of award / Contract / Purchase order after the same is issued by BPCL.
j. Withdraws/ revises the bid upwards after becoming the L1 bidder.
k. Has parted with, leaked or provided confidential / proprietary information of BPCL to any third party without the prior consent of BPCL.

4.1.2.The following additional grounds can also be reasons for Holiday listing of an agency:

a. If a communication is received from the Administrative Ministry of the Corporation (i.e. MOP&NG) to ban Agency from dealing with the Corporation ;

b. If the Agency Is or has become bankrupt , OR is being dissolved OR has resolved to be wound up OR if proceedings for winding up or dissolution has been instituted against the Agency;

c. Any other ground, including transgression of Integrity Pact, which, in the opinion of the Corporation, makes it undesirable to deal with the Agency; In the case of transgression of Integrity Pact, the same should be substantiated by the verdict of the Independent External Monitor.

4.2 Procedure :

4.2.1. Proceedings for Holiday Listing shall be initiated against an Agency when a prima facie case for Holiday Listing comes up, under any of the above mentioned circumstances; before taking a decision, a fair opportunity of hearing the party should be given by means of a Show Cause notice. The show cause notice should indicate clearly and precisely the charges/misconduct which should be based on facts as can be proved as distinct from mere allegations. Statement containing the imputation of misconduct or misbehavior may be appended to the show-cause notice and the "Agency" should be asked to submit within 15 days a written statement in its defense. A proforma of Show Cause notice is attached at Annexure-I. ;

4.2.2. The proceedings shall start with a proposal for initiating action against the Agency, to be raised by the Procurement Department which, in the first instance, is to be cleared by the relevant Vendor De-listment Committee.

4.2.3. The proposal shall state a brief background of the case, the action proposed and all supporting documents, including a note from the Engineer / Officer – In –Charge or the designated incharge or the department responsible for execution of a work, in the case the proposal is related to the performance of a contract. A draft show cause notice is also to be attached to the proposal.

4.2.4. On preliminary examination of the proposal with attached documents, if the vendor delistment committee is of the opinion that action is to be initiated against the Agency, the committee will approve the proposal along with the proposed Show Cause Notice.

4.2.5. Thereupon the Show Cause Notice, as approved, will be issued by the concerned Procurement Department. Before issuing the Show Cause Notice, concerned procurement department should give intimation to the Nodal Department regarding the proposed action against the Agency, along with a copy of the Show Cause notice for record. The Nodal Department, shall in turn publish this information in BPCL website for information and reference of all procuring departments across the corporation

4.2.6. On receipt of the explanation from the Agency, the procurement Department will put up the proposal for holiday listing, to the competent authority, through the vendor de-listment committee & the Nodal Department; This proposal would consist of a background of the case, copy of initiation proposal approved by vendor de-listment committee, copy of the Show Cause Notice issued and Agency's reply received and the procurement departments' comments on the same. The period for which holiday listing is recommended should also be clearly mentioned in the proposal. All relevant supporting documents should also be attached; In case no explanation is received from the Agency within the stipulated time, the case shall be preceded with ex-parte.

4.2.7. The proposal along with the reply from the Agency would be examined by the Vendor de-listment Committee; thereafter, with the recommendation from the vendor de-listment Committee, the proposal would be put up through the Nodal Department to the Competent Authority for final decision on banning or otherwise.

4.2.8. The competent authority, after examining all the materials on record, including the explanation from the Agency, will give their decision on the proposal. Competent Authority in its decision may :

- Approve the proposal for Holiday Listing as such, OR
- Approval the proposal for holiday listing for a period higher than that was recommended, in case the competent authority is of the opinion that banning for a longer period is required in view of the gravity of the case, OR
- Approve the proposal for holiday listing for a period lesser than that was recommended, in case the competent authority is of the opinion that lesser period would meet the requirement, considering the gravity of the case, OR
- Reject the proposal, in case, based on explanation furnished by the Agency, the Competent Authority is of opinion that the alleged misconduct / malpractice was either not substantiated or has happened on account of circumstances on which Agency had no control.

4.2.9. The decision of the Competent Authority regarding Holiday Listing of business dealings should be communicated to the 'Agency' concerned, by the concerned procurement department. A draft proforma for intimation of Holiday Listing to Agency is at Annexure II.

4.2.10. The Holiday Listing process should be completed at the earliest, and in any case within 45 days from initiation of case by concerned Engineer / Officer – In-Charge /Department responsible for invitation of bids.

However, if any agency , which is under holiday listing process with BPCL, has participated in a tender by submitting bid, the department responsible for initiating the holiday listing process shall expedite completion of the same within 21 days of technical bid opening , based on which the tender can be proceeded with.

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4.2.11. Competent Authority shall decide on the period of holiday listing, on case to case basis, depending on the gravity of the case and considering the implications for BPCL on account of the Act/Omission on the part of the Agency, intentions of the Agency as established from the circumstances of the case, frequency of tendering for work of similar nature etc.

4.2.12. Ordinarily the period for which as Agency is Holiday listed should not be less than 1 year (6 months in less serious cases with proper justification) and should not exceed 3 years. However, in extraordinary circumstances as mentioned below, banning of 15 years can be done. The broad guidelines for the period of holiday listing based on the circumstances under which they were put on holiday listing is as under :

S.No	Reasons for holiday listing	Period of holiday listing
1	Indulged in malpractices resulting in financial loss to the Corporation	15 years
2	Submitted fake, false or forged documents / certificates	3 years
3	has substituted materials in lieu of materials supplied by BPCL or has not returned or has unauthorisedly disposed off materials / documents / drawings / tools or plants or equipment's supplied by BPCL	15 years
4	Has deliberately violated and circumvented the provisions of labour laws/ regulations / rules, safety norms, environmental norms or other statutory requirements	3 years
5	has deliberately indulged in construction and erection of defective works or supply of defective materials	3 years
6	has not cleared BPCLs previous dues if applicable	1 year
7	has committed breach of contract or has abandoned the contract	3 years
8	Poor performance of the Agency in one or several contracts	1 year
9	has not honoured the fax of award / letter of award / Contract / Purchase order after the same is issued by BPCL	1 year
10	Withdraws/ revises the bid upwards after becoming the L1 bidder	1 year
11	has parted with , leaked or provided confidential / proprietary information of BPCL to any third party without the prior consent of BPCL	15 years
12	If the Agency Is or has become bankrupt , OR is being dissolved OR has resolved to be wound up OR if proceedings for winding up or dissolution has been instituted against the Agency	3 years
13	Transgression of Integrity Pact , which, in the opinion of the Corporation, makes it undesirable to deal with the Agency;	3 years

4.2.13. In cases where Holiday Listing is proposed based on advice from the Administrative Ministry, .no show cause or formal decision by competent authority will be required. The Nodal Department will directly intimate the Agency that they have been placed in Holiday Listing by BPCL based on the Ministry's advice

4.2.14. Provision for Appeal;

(i) An agency aggrieved with the decision of the Competent Authority shall have the option of filing an appeal against the decision of the Competent Authority within a maximum of 15 days from the date of receipt of intimation of holiday listing.

(ii) Any appeal filed after expiry of the above period shall not be considered by the Appellate Authority;

(iii) On receipt of the Appeal from the Agency, the Appellate Authority, if it so desires , may call for comments from the Competent Authority;

(iv) After receipt of the comments from the Competent Authority, the Appellate Authority , if it so desires , may also give an opportunity for personal hearing, to the Appellant Agency;

(v) After examining the facts of the case and documents available on record and considering the submissions of the Appellant Agency, the Appellate Authority may pass appropriate order by which the Appellate Authority may either :

a) Uphold the decision of Competent authority with or without any variation /lesser period of Holiday Listing; OR

b) Annul the order of the Competent Authority.

(vi) Appellate Authority shall pass its order within a maximum period of 45 days from the date of receipt of Appeal.

(vii) Order of the Appellate Authority shall be communicated to the Agency by the Procurement Department copy of which shall be given to the Competent Authority and also to the Nodal Department as well. A draft proforma for communicating the decision of the Appellate Authority is at Annexure III

(viii)No Appeal is permitted in case an Agency is placed in Holiday List by BPCL, based on Ministry's advice.

4.2.15. Effect of Holiday Listing

(i) No enquiry / bid / tender shall be entertained with an Agency (including Allied Agency) as long as the 'Agency' name appears in the Holiday list.

(ii) If an 'Agency' is put on the Holiday list during tendering :

a) If an 'Agency' is put on Holiday List after issue of the enquiry / bid / tender but before

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opening of the un-priced bid, the un-priced bid of the 'Agency' shall not be opened and BG/EMD , if submitted by the 'Agency' shall be returned . If an 'Agency' is put on Holiday List after un-priced bid opening but before price bid opening, the price bid of the 'Agency' shall not be opened and BG/EMD submitted by the 'Agency' shall be returned .

b) If an'Agency'is put on Holiday List after opening of price bid but before finalization of the tender, the offer of the 'Agency' shall be ignored and will not be further evaluated and the BG/EMD if any submitted by the 'Agency' shall be returned, The 'Agency' will not be considered for issue of order even if the 'Agency' is the lowest (L1). In such situation next lowest shall be considered as L1;

bb) In case, any debarred firms has submitted the bid, the same will be ignored. In case such firm is lowest (L-1), next lowest firm shall be considered as L-1. Bid security submitted by such debarred firms shall be returned to them.

c) If contract with the 'Agency' concerned is in operation, (including cases were contract has already been awarded before decision of holiday listing) normally order for Holiday Listing from business dealings cannot affect the contract, because contract is a legal document and unless the same is terminated in terms of the contract, unilateral termination will amount to breach and will have civil consequences.

(iii) In cases where holiday listing proposal has been initiated by some procurement department in the Corporation, but the process is yet to be completed and order of Competent Authority is awaited, the tendering process may be taken forward till price bid opening and after price bid opening, decision on the tender may be kept on hold till such time order of Competent Authority is issued.

5. **Declaration by Bidders regarding Holiday Listing status:**

Tenders invited for purchase of Goods and Services for both Open Tenders as well as Limited Tenders, should have the provision that the bidder should submit a declaration to the effect that they are not currently serving any Holiday Listing orders issued by BPCL or MOPNG debarring them from carrying on business dealings with the BPCL/MOPNG. Offers not accompanied with a declaration should be incorporated in rejection criteria. Any wrong declaration in this context shall make the Agency liable for action under this Holiday Listing procedure.

Bidder should submit a declaration to the effect that he has not been convicted of an offence–

(a) under the Prevention of Corruption Act, 1988: or

(b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

6. **Revocation of Holiday Listing:**

6.1 An order for Holiday Listing once passed for a certain specified period shall be revoked as under:

6.1.1. An order for Holiday Listing passed for a certain specified period shall be revoked on the expiry of that specified period, subject to the Agency giving a request in writing clearly mentioning the corrective action which has already been taken / proposed to be taken, to avoid recurrence Specific order of revocation shall be issued by the concerned Procurement Department Vendor Enlistment Committee, which had recommended the Holiday Listing , after considering the Vendor's request, with copy to the Nodal Department.

6.1.2. A Holiday Listing order may, on a review during its currency of operation, be revoked by the competent authority if it is of the opinion that the disability already suffered is adequate in the circumstances of the case, and the Agency has taken appropriate action to avoid recurrence.

7. **Publishing of holiday listing information in BPCL Web-site:**

7.1 Once an order of Holiday Listing of an Agency is passed by a Competent Authority, the said information shall be published in the BPCL web-site, by the Nodal Department;

7.2 All Procurement Agencies, should before issue of tender in limited tender cases and before opening of price bids in all cases, verify with this published information that the bidder concerned is not currently serving any Holiday Listing orders issued by BPCL; suitable declarations to this effect shall be incorporated in the concerned approval notes/TEC Note.

7.3 All orders of revocation of holiday listing shall, immediately on revocation, be made available to the Nodal Department, who in turn shall update the information in the web-site accordingly.

7.4 To take cognizance of the holiday listing process in the initiation stage itself, the Nodal Department should update the information in the BPCL web site, as soon as they get intimation from the Procurement Group, along with copy of proposed show cause notice.

7.5 If any Communication is received from the Administrative Ministry (i.e. MOP&NG) advising banning of business dealings with any Agency, the Nodal Department should take immediate action to circulate the same to all Procurement Departments within the Corporation, update the website and also send intimation to the concerned Agency in format Ann. IV

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FORMAT for Declaration of Holiday Listing orders issued by BPCL or MOPNG debarring us from carrying on business dealings with BPCL/ MOPNG.

(On Company Letter Head, to be signed by the duly authorized person)

Date: _____

TENDER NO. : .....

TITLE OF TENDER: .....

To,
Bharat Petroleum Corporation Ltd

Dear Sir/Madam,

I /We declare and confirm that we are currently not serving any Holiday Listing orders issued by BPCL or MOPNG debarring us from carrying on business dealings with BPCL/ MOPNG or convicted of an offence –

(a) under the Prevention of Corruption Act, 1988: or

(b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

(Signature and Stamp of the Bidder)

Bidder Name:

Date :

Address:

APPENDIX-VI TO ITB

Subject : Verification of MSE Registration certificate by Chartered Accountant

Bidders who are Micro & Small Enterprises (MSEs), MSEs owned by SC/ST and MSEs owned by Women Entrepreneurs are allowed Purchase Preference as per the government guidelines / instructions in force from time to time.

Currently as per the public procurement policy for MSEs (MSME Order 2012), participating MSE vendors quoting price within the band of L1+15% in tenders are allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than MSE. Orders are placed on such MSEs, to supply atleast 25% of total tendered value. Further out of the 25% order earmarked for MSE vendors who match L1 price, a minimum of 3% to be reserved for "Women owned MSEs" and 4% to be reserved for "MSEs owned by SC/ST Entrepreneurs".

MSE bidders are also exempted from submission of EMD and tender related fees.

To be eligible for the privileges as mentioned above, MSE vendors are required to submit MSE Registration Certificate issued by the NSIC or any of the authorities specified under the Public Procurement Policy for MSEs.

Office of the Development Commissioner (Ministry of MSME) has recently issued a clarification stating that MSE Registration on the UAM portal is done by the firms on the basis of self-declaration. Ministry of MSME does not carry out verification of the information uploaded by the MSE. Therefore, it is the responsibility of concerned CPSE to verify/ascertain the veracity of the claim of any MSE regarding any particular enterprise satisfying the criterion of the Investment limits as mentioned in the MSMED Act, 2006 before giving any benefit under Public Procurement Policy. Further they have clarified that
CA certificate issued by Chartered Accountants may be accepted as supporting document for verification of the MSE Registration Certificate during the tender evaluation process.

Thus in the process of verification of original documents required for Bid Qualification Criteria, MSE certificate forms an extremely important document that needs to be verified since it leads to passing of benefits like EMD exemption and extending Purchase Preference to the party.

In view of the above, all bidders quoting as MSE would be required to submit CA certificate along with MSE Registration Certificate/document **(not applicable in case of NSIC)** to avail the benefits under Public Procurement Policy as per MSMED Act 2006 / Public Procurement Policy Order 2012. The CA certificate should be dated after the date of floating of tender and

shall be specific to the tender for which bid is being submitted. Format of the CA certificate is attached for reference (Annexure – A).

Further above mentioned CA certification process need not be done in case vendor submits valid NSIC (National Small Industries Corporation) Certificate, since same is issued after due inspection.

Bidder shall have to submit copy of MSE Registration certificate along with CA certificate. In case CA certificate is not submitted, bid of the vendor shall be rejected at EMD stage (for open tenders).

Annexure : A

Date:_____

CERTIFCATE CONFIRMING ELIGIBILTY FOR BENEFITS OF PUBLIC PROCUREMENT POLICY

Ref: Tender No…….. for……

This is to confirm that we have verified the investment limits and other details of Unit _____ pertaining to *M/s* _____ and certify that they satisfy the eligibility criteria as per MSMED Act, 2006 and other notifications/circulars issued from time to time in this regard. Accordingly, M/s _____ is a Micro/Small enterprise under the said Act and are eligible to claim the benefits of public procurement policy for the tender mentioned above.

In case applicable:

Based on our verification of share holding pattern and other details, it is certified that M/s _____ meets the eligibility criteria under SC/ST provision of Public Procurement Policy Order 2012 and other notifications/circulars issued from time to time in this regard and are hence eligible to claim benefits pertaining to SC/ST under the act.

In case applicable:

Based on our verification of share holding pattern and other details, it is certified that *M/s* _____ meets the eligibility criteria under Women Entrepreneur provision of Public Procurement Policy Order 2012 and other notifications/circulars issued from time to time in this regard and are hence eligible to claim benefits pertaining to Women Entrepreneur under the Act.

(**Membership No. of CA along with certification / stamp**)

APPENDIX – VII TO ITB

ACKNOWLEDGEMENT CUM CONSENT LETTER

To

Engineers India Limited,
R&D Complex, Sector-16 (On N.H.-8),
Tower-1 (1st Floor), Gurugram -122 001, Haryana (India),

Kind Attn. Mr. Jaydip Purkayastha, GM (SCM),

Contact No: 0124-289-1287;1307;1367;1366
Email: jaydip@eil.co.in ; bapi.baidya@eil.co.in ; aritra.de@eil.co.in ; sushant.behera@eil.co.in

NAME OF WORK	**:**	**COMPOSITE WORKS FOR UTILITIES & OFF-SITES (PART-A & PART-B)**
BIDDING DOCUMENT NO.	**:**	**JP/B957-999-PK-T-9501/1031**

Dear Sir,

We hereby acknowledge receipt of a complete set of Bidding Document along with enclosures for subject works, downloaded from website as per the Master Index for our use in preparing the Bid.

We undertake that the contents of the above Bidding Document shall be kept confidential and further that the drawings, specifications and documents shall not be transferred and that the said documents are to be used only for the purpose for which they are intended.

A. We intend to bid as requested for the subject works and furnish following details with respect to our quoting office:

i. POSTAL ADDRESS : _____

_____

_____

ii. TELEPHONE NUMBER : _____

iii. TELEFAX NUMBER : _____

iv. CONTACT PERSON : _____

v. E-MAIL ADDRESS : _____

vi. MOBILE NO. OF BIDDER : _____

B. Contact person at Delhi, if any:

i. POSTAL ADDRESS : _____

_____

_____

ii. TELEPHONE NUMBER : _____

iii. TELEFAX NUMBER : _____

iv. CONTACT PERSON : _____

v. E-MAIL ADDRESS : _____

vi. MOBILE NO. OF BIDDER : _____

C. We are unable to bid for the reasons given below and we are returning back the entire set of Bidding Documents.

Reasons for non-submission of Bid:

_____

_____

_____

AGENCY'S NAME : _____

SIGNATURE : _____

NAME : _____

DESIGNATION : _____

DATE : _____

NOTE: Bidder is requested to furnish the details mentioned at A and B or C immediately after receipt of Bidding Document.

(SIGNATURE OF BIDDER)

APPENDIX-VIII TO ITB

E-PROCUREMENT GUIDELINES

1.0 INSTRUCTIONS TO BIDDERS FOR E-TENDERING

The bidders are required to submit soft copies of their bids electronically on the CPP Portal (URL: http://eprocure.gov.in) only, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

Various links such as “Help for Contractor”, “Information about DSC”, “FAQ”, “Resources Required”, “Bidders Manual Kit” etc. are available on home page of http://eprocure.gov.in/eprocure/app facilitating vendors to participate in the bidding process. Bidder are advised to download & utilize the available information/documents under these links for activities like Registration in CPPP, obtaining User ID & Password, uploading & submission of e-bids etc. Bidders are advised in their own interest to carefully go through Instructions for E-tendering and other related document available against various help links so as to ensure that bids are uploaded in E-tendering website well before the closing date and time of bid submission.

More detailed information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app**.**

2.0 REGISTRATION

2.1 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link “Click **here to Enroll**” on the CPP Portal is free of charge.

2.2 As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

2.3 Bidders are advised to register their valid email address and mobile numbers as part of the registration process and submit in EIL tender portal for updation of records (http://tenders.eil.co.in) . These details would be used for any communication from the CPP Portal.

2.4 Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (DSC) (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.

2.5 Foreign Bidders have to refer “DSC details for foreign Bidders” for Digital signature Certificates requirements which comes under Download Tab at https://eprocure.gov.in/eprocure/app and the remaining part is same as above and below.

2.6 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.

2.7 Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

3.0 SEARCHING FOR TENDER DOCUMENTS

3.1 There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.

3.2 Once the bidders have selected the tenders they are interested in, the same can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

3.3 The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

4.0 PREPARATION OF BIDS

4.1 Bidder should take into account any corrigendum published on the tender document before submitting their bids.

4.2 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

4.3 To avoid Network congestion, Bidder is recommended to upload file size of up to Maximum 35 MB per part. However, in case file size exceeds 35 MB, bidder may compress the files by scanning with 75 dpi setting as per s.no 4 below and can use additional 25 MB space ("My Documents") provided to the bidder as per s.no 5 below.

4.4 Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option. However, Price Schedule / SOR shall be strictly in RAR format without altering any contents of the formats uploaded by EIL in their Bidding Document.

4.5 To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

5.0 SUBMISSION OF BIDS

5.1 Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

5.2 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

5.3 Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.

5.4 Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the Tender Processing Section, within the final bid due date & time. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.

5.5 A Price Bid format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the Price Bid file, open it and complete the 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 Price Bid file is found to be modified by the bidder, the bid will be rejected.

5.6 The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

5.7 All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.

5.8 The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

5.9 Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

5.10 The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

6.0 RETENDER

6.1 Please note that if Tender has been retendered, than it is mandatory for the bidder to submit their offer again on CPP Portal.

7.0 WITHDRAWAL OF BID

7.1 It may please be noted that bidders now have an additional feature of withdrawing their bids before due date and time. After submitting the bid on the CPP Portal, if the bidder wishes to withdraw his bid, he can do so. However, if the bidder withdraws his bid, he will be exempted from further participation in the tender and won’t be able to submit his bid again for that particular tender.

8.0 ASSISTANCE TO BIDDERS

8.1 Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the

relevant contact person indicated in the tender.

8.2 Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315.

Bank Guarantee Clause

As per BPCL Standard policy on acceptance of Bank Guarantee (BG) , BG's as per following criteria will be accepted:

Criteria for Acceptance of BG

BG Value	Stipulation
Upto INR 1 Crores	Bank Guarantees from any Scheduled bank (including nationalised banks, other scheduled commercial banks, scheduled cooperative banks and scheduled regional rural banks) as appearing in the second schedule to the RBI Act 193 Shall be acceptable.
Greater than INR 1 Crores	Bank Guarantee which are issued by banks having long term issuer rating of "A2" from Moody's or equivalent from Fitch and S&P in case of the foreign bank and long-term issuer rating of at least "AA" from CRISIL or equivalent from CARE, ICRA and Indian rating in case on Indian Bank, shall be acceptable. In case rating for a bank is available from more than one rating agency, the lowest such rating shall be considered. Illustrative list of banks meeting the stipulated criteria as on 02.06.2025 are attached as annexure 1.

Annexure I

List of banks meeting the stipulated criteria as on 02.06.2025

Sr No.	Name of Bank	Category of Banks
1	AU Small Finance Bank Ltd	Indian Bank
2	Axis Bank Ltd	Indian Bank
3	Bank of Baroda	Indian Bank
4	Bank of India	Indian Bank
5	Bank of Maharashtra	Indian Bank
6	Canara Bank	Indian Bank
7	Federal Bank Ltd	Indian Bank
8	HDFC Bank Ltd	Indian Bank
9	ICICI Bank Ltd	Indian Bank
10	IDBI Bank Ltd	Indian Bank
11	IDFC First Bank Ltd	Indian Bank
12	Indian Bank	Indian Bank
13	Indian Overseas Bank	Indian Bank
14	IndusInd Bank Ltd	Indian Bank
15	Karur Vysya Bank Ltd	Indian Bank
16	Kotak Mahindra Bank Ltd	Indian Bank
17	Punjab National Bank	Indian Bank
18	State Bank of India	Indian Bank
19	UCO Bank	Indian Bank
20	Union Bank of India Ltd	Indian Bank
21	Abu Dhabi Commercial Bank PJSC	Foreign Bank
22	Bank of America NA	Foreign Bank
23	Bank of Nova Scotia	Foreign Bank
24	MUFG Bank Ltd	Foreign Bank
25	BNP Paribas SA	Foreign Bank
26	Shinhan Financial Group Co Ltd	Foreign Bank
27	Citibank NA	Foreign Bank
28	DBS Group Holdings Ltd	Foreign Bank
29	Hongkong & Shanghai Banking Co	Foreign Bank
30	JPMorgan Chase & Co	Foreign Bank
31	Mizuho Bank Ltd	Foreign Bank
32	Westpac Banking Corp	Foreign Bank
33	Industrial & Commercial Bank of China	Foreign Bank
34	Credit Agricole SA	Foreign Bank
35	Cooperative Rabobank UA	Foreign Bank
36	Doha Bank QPSC	Foreign Bank
37	Qatar National Bank QPSC	Foreign Bank
38	United Overseas Bank Ltd	Foreign Bank
39	KEB Hana Bank	Foreign Bank
40	Industrial Bank of Korea	Foreign Bank
41	First Abu Dhabi Bank PJSC	Foreign Bank
42	Emirates NBD Bank PJSC	Foreign Bank
43	NatWest Markets PLC	Foreign Bank
44	Bank of China Ltd	Foreign Bank
45	CTBC Bank Co Ltd	Foreign Bank

Note:

1. The above list of banks is based on the credit rating as on date (Source: Bloomberg)
2. In case of any discrepancy/subsequent upgrade in credit rating, user department can contact Treasury for clarification.

BID DATA SHEET
(BDS)

BID DATA SHEET		
S.NO.	**CL. NO.**	**CONTENT**
1.	**ITB 1.1** **SCOPE OF BID**	**As per Bidding Document No.: JP/B957-999-PK-T-9501/1031**
2.	**ITB 2.1** **ELIGIBLE BIDDERS**	**Enquiry Basis is Domestic Competitive Bidding** **Only Class-I Local Suppliers are eligible to bid as per PPP-MII Policy.** **Bids received from Class-II and/or Non-Local Supplier shall not be considered for evaluation. Non-compliance shall be ground for rejection of offer.**
3.	**ITB 6.0** **PREBID MEETING**	**Applicable (Refer IFB for details)**
4.	**IFB 6. , ITB 18.0, ITB 22.2** **BID SECURITY/EMD**	**Applicable (Refer IFB/ITB for details)**
5.	**IFB 7.5 , ITB 17.0** **PERIOF OF BID VALIDITY**	Bid shall remain valid for **04 (Four) months from the Bid Due Date or Extended Bid Due Date whichever is later.**
6.	**ITB 5.4,6.9** **SITE VISIT**	**Location:** BR Petrochemical Unit, Bharat Petroleum Corporation Limited Administration Building, Refinery complex, Petrochemical Unit, Post BR residential complex- 470124 Bina, District- Sagar, Madhya Pradesh, India **Contact Person from BPCL:** 1. **Mr. R H Panchal CGM-BPCL U&O (Project Manager)** Mobile : +91 9819141449 Email: panchalrh@bharatpetroleum.in **Contact Person from EIL:** 1. **Mr. K. Suresh, RCM, EIL** Mob No.: +91 9869407762 Email: k.suresh@eil.co.in; 2. **Mr. Akash Gupta, Sr. GM(Projects-EIL)** Email: akash.gupta@eil.co.in 3. **Mr. Shyam Karthik Karthirvel, AGM(Projects) EIL** Mob No.: +91 9871101395 Email: shyam.kk@eil.co.in
7.	**IFB 3.5.5, SCC 34.0** **INTEGRITY PACT**	**Applicable** **Scanned copy of Integrity Pact (as per the format enclosed) (FORM-F to Bidding Forms) to be submitted (i.e. uploaded on E-PROCUREMENT PORTAL).**

<table>
<tr><th colspan="3">BID DATA SHEET</th></tr>
<tr><th>S.NO.</th><th>CL. NO.</th><th>CONTENT</th></tr>
<tr><td></td><td></td><td>Bidder's failure to submit the Integrity Pact duly signed along with the bid documents shall result in the bid not being considered for further evaluation.

<table>
<tr><th>Sr. No.</th><th>Name of IEM</th><th>E-mail ID</th></tr>
<tr><td>1</td><td>Shri Atanu Purkayastha</td><td>dratanu2011@gmail.com</td></tr>
<tr><td>2</td><td>Shri Pradeep Kumar</td><td>pradeepawasthi1981@gmail.com</td></tr>
<tr><td>3</td><td>Shri Javeed Ahmad</td><td>javeed60@yahoo.com</td></tr>
</table></td></tr>
<tr><td>8.</td><td>ITB 15.0
CURRENCIES OF BID AND PAYMENT</td><td>INR (Indian Rupees)</td></tr>
<tr><td>9.</td><td>IFB 3.4, ITB 16.0
AUTHENTICATION OF DOCUMENT/ SPECIAL DOCUMENTATION REQUIREMENT</td><td>Applicable (Refer IFB/ITB for details)</td></tr>
<tr><td>10.</td><td>ITB 19.0, 48.0
POWER OF ATTORNEY</td><td>Applicable</td></tr>
<tr><td>11.</td><td>ITB 21.0
DEADLINE FOR SUBMISSION OF BIDS</td><td>Refer Government of India Central Public Procurement (CPP) Portal (https://eprocure.gov.in/eprocure/app)</td></tr>
<tr><td>12.</td><td>a. ITB 34.0
EVALUATION AND COMPARISON OF BIDS
b. Cl. E ANNEXURE-A TO SCC (EVALUATION METHODOLOGY W.R.T. TAXES)
c. Cl. D ANNEXURE-A TO SCC (APPLICABILITY OF TAX CREDIT)</td><td>For each Part, the evaluation and comparison of bids shall be carried out as per following:

I. To arrive at the evaluated price, the Total amount shall be calculated / established based on the percentages (+/- i.e. increase or decrease) of the prefilled rates indicated in Pre-filled Schedule of Rate (FORM SP-1), quoted in FORM SP-0 by bidder.

II. Present Rate of GST applicable on the Contract price for Works Contract Services is 18%. Same shall be loaded on Total amount quoted in Form SP-0.

III. Input Tax Credit available to the Owner: NIL

IV. Evaluation shall be as per Price Opening, Evaluation & Award Methodology specified in clause no. 5.3 of Invitation for Bids.

V. Arithmetic Correction: In case there is a discrepancy in total amount quoted in summary of prices and the amount arrived after calculating the percentage increase / decrease quoted by the bidder over EIL estimate then the total amount shall be corrected based on the EIL estimated contract amount and the quoted percentage.</td></tr>
<tr><td>13.</td><td>ITB 34.12
REVERSE AUCTION</td><td>Not Applicable</td></tr>
</table>

BID DATA SHEET		
S.NO.	**CL. NO.**	**CONTENT**
14.	**ITB 36.0** **PREFERENCE TO MICRO & SMALL ENTERPRISE**	No Purchase Preference to Micro and Small Enterprises (MSE) Bidders as per Public Procurement Policy for MSEs shall be given being "Works Contract". **EMD/Bid Security exemption shall not be applicable for MSE bidders being "Works Contract".**
15.	**ITB 37.0, SCC 36.0** **POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON AND STEEL PRODUCTS IN GOVERNMENT PROCUREMENT(DMI&SP)**	**Applicable** **Bidder to submit Undertaking as per Annexure-2 of Appendix-IV of ITB.**
16.	**ITB 38.0, SCC 37.0** **PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA)**	**Applicable** **Bidder to submit duly filled in FORM-2 of APPENDIX-II to ITB along with bid for each quoted part separately along-with their bid.** **Document submission towards compliance to PPP-MII, 2017:** **1.1 At the bidding stage:** Bidder shall be required to indicate percentage of local content & details of the location(s) of the local value addition, and also provide self-certification (as per FORM-2) along with their bid. **1.2 During execution stage:** The Contractor shall be required to submit local content certification (as per FORM-3_Rev.1 & 3A) duly certified by Statutory Auditor or Cost Auditor (in the case of companies) or from a Practicing Cost Accountant or Practicing Chartered accountant (in respect of suppliers other than companies). For cases where it is not possible to provide such certification, the Contractor is permitted to provide the certificate after completion of contract but not later than submission of Final Bill. In that case, an amount equivalent to 10% of invoice value shall be retained from each invoice till submission of Form-3_Rev.1 & 3A. In case the Contractor submit False declarations and/or does not meet the stipulated local content requirement and the category of the Supplier changes from Class-/ to Class-II/Non-local or from Class-II to Non-local, default and penalty actions shall be taken as per the provisions of Public Procurement (Preference to Make in India) (PPP-MII) Order 2017 and its subsequent amendments.
17.	**SCC 7.2, NOTE: 8 ANNEXURE-II TO SCC** **MOBILISATION ADVANCE & SECURED ADVANCE**	**Not Applicable.**

BID DATA SHEET		
S.NO.	**CL. NO.**	**CONTENT**
18.	**SCC** **FIRM PRICE**	**Firm And Fixed, except for variations in taxes & duties specified in SCC and Price Variation for Steel mentioned in the bidding document.**
19.	**Defect Liability Period (DLP)** **GCC Cl. 74.0**	**Applicable**
20.	**SCC 27** **LIQUIDATED DAMAGES**	**Applicable** **Liquidated damages shall be applicable for delay in Mechanical Completion of the respective parts.**
21.	**ANNEXURE-II TO SCC 3.10** **PAYMENT TERMS**	**Provision of Heavy Lift Equipment under {Note-1} shall be applicable.**
22.	**SCC 42.0** **ABNORMALLY HIGH UNIT RATES (AHR ITEMS)**	**Not Applicable.**
23.	**SCC 17.0** **PERFORMANCE BANK GUARANTEE (PBG)**	**10% of Total Order Value.** Non-refundable interest (as per Clause 17.2 of SCC) shall be charged at the rate **10.90% <u>(i.e., 9.90% plus 1%)</u>** **Refer Clause 17.0 of SCC for details.**
24.	**SCC 3.0** **LAND, POWER, WATER AND OTHER FACILITIES**	**Applicable**. • Clause No. **3.0** of SCC shall be read in conjunction with Annexure-**XXIV** to SCC (i.e. Special Instructions to Contractors). • Provisions of Clause No. **3.0** of SCC stands modified to the following extent: **<u>PROVISION OF FABRICATION YARD</u>** *Approx. 5 acres area for each package will be allocated to the* contractor for setting up of the prefabrication yard and site office. The location of the fabrication yard is within the BPCL Refinery boundary wall . Fabrication yard will be handover to Contractor in "as it is" condition. Contractor to visit site to assess the location before submitting the bid. Further any grading and other ground preparation as well as shed erection for monsoon preparation as required per SOW to be done by Contractor." Contractor's fabrication yard shall be maintained in good condition. Materials shall be stored off ground, protected from waterlogging and environmental damage, with proper care of handed over material. The area required to be developed by the Contractor by their own and regular housekeeping to be maintained. In case contractor fails to do so the necessary housekeeping will be arranged by deploying other agencies at risk and cost of the contractor as well as vacating the area. Non-availability of space inside refinery from BPCL should not be a case for extra claim or time extension. Therefore, the CONTRACTOR shall, within the quoted price, make alternate arrangement to cope with such eventuality.

BID DATA SHEET		
S.NO.	**CL. NO.**	**CONTENT**
25.	**Annexure-XVIII to SCC (Hydra Ban Policy)**	Applicable.
26.	**SCC 8.2** **Building and Other Construction Workers Cess (BOCW)**	**Building and Other Construction Workers Cess (BOCW) is Applicable**
27.	**SCC 9.2.2 PRICE VARIATION** *for* **STEEL and Annexure-IV** to SCC	**Applicable** Following base rate of steel shall be considered for Price Variation of Steel for COMPOSITE WORKS FOR UTILITIES & OFF-SITES (PART-A & B) (B957-999-69-41-PK-T-9501) • Reinforcement Steel - **INR. 52,200** per MT excluding GST • Structural Steel - **INR. 56,300** per MT excluding GST *M0 (Mentioned in **Annexure-IV** to SCC)* = Price Index for steel reinforcement bars, structural steel shall be the All India Wholesale Monthly Price Index for MILD STEEL: LONG PRODUCTS released by Office of Economic Advisor to Government of India, Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry for Month of **Apr'2026** shall be considered for calculation of Price Variation for Steel. **Refer Appendix-I to BDS for details of items on which the price variation shall be applicable**
28.	**Annexure-XIX to SCC (Labour law Compliance)**	Applicable.
29.	**PAYMENT TERMS** **ANNEXURE-II TO SCC**	Following para. has been to Section 'ON ACCOUNT PAYMENT' In case the Contractor misrepresents the completion of Work in order to avail this down payment facility fully and the certified value is less than the released down payment, the facility will be stopped for next 3 (three) RA Bills at the first instance and will be stopped completely for the second instance of misrepresentation. It shall be the sole responsibility of the Contractor to ensure that GST invoices are raised within timelines as specified in GST Act read with relevant rules therein. Further, any delay/ non-compliance in GST Laws by Contractor which results in loss to Owner, the same shall be duly recovered from the Contractor.
30.	**Value of Free issue material**	Applicable
31.	**Bank Guarantees**	Bank Guarantee(s) shall include e-Bank Guarantees & Insurance Surety Bond.

BID DATA SHEET		
S.NO.	**CL. NO.**	**CONTENT**
32.	**IFB 5.3** **PRICE OPENING, EVALUATION AND AWARD METHODOLOGY [ONE PART TO ONE CONTRACTOR]:**	Following has been added to Clause No. **5.3 e)** of IFB : In an extreme situation, when there is a 'TIE' based on the evaluated prices of least cost combination values (after loadings, if any), recourse shall be taken on the basis of Bidder's maximum average annual turnover during the last 3 years as on BDD. For this purpose, average annual turnover of the bidders having tie, shall be tabulated for the past 3 years and maximum average annual turnover in any of the last 3 years shall be determined for each bidder. The Bidder whose average annual turnover is highest shall be the recommended Bidder for the part higher valued part (i.e. Part-A).
33.	**IFB 5.1.4, GCC 35** **CHANGE OF ELECTRICAL SUB-CONTRACTOR**	**Following provisions have been added to Sub-Contracting of Electrical Works:** The Electrical sub-contractor (based on whose experience the bidder has qualified for this tender shall not be changed over the period of contract duration. However, if the change is warranted under exceptional circumstances, the same may be allowed with the approval of BPCL/EIL. Before making any such change, he must submit proper justification and has to submit the documentary evidence of the work experience (for Electrical Works) as mentioned in the relevant clauses of the IFB to BPCL/EIL for approval. This shall however be without any change in the acceptance rates of the contract agreement and without any time and cost implication to BPCL.

BIDDING FORMS

TABLE OF CONTENTS

FORM NO.	DESCRIPTION
A	FORM OF BID
B	INFORMATION ABOUT BIDDER
C	DELETED
D	DELETED
E	COMPLIANCE TO BID REQUIREMENT
F	INTEGRITY PACT
G	SELF DECLARATION
H	CHECKLIST FOR SUBMISSION OFBID
I	BANK MANDATE FORM
J	DECLARATION CONFIRMING KNOWLEDGE ABOUT WORK SITE VISIT AND SURROUNDING CONDITIONS
K	FORMAT FOR TAX RESIDENCY CERTIFICATE AND FORM NO.10F- ***DELETED[FOR FOREIGN BIDDERS]***
L	FORMAT FOR BIDDERS' PRE-BID QUERIES
M	ANNUAL TURNOVER STATEMENT
N	FORMAT OF BANK GUARANTEE IN LIEU OF EARNEST MONEY DEPOSIT / BID SECURITY
O	AFFIDAVIT OF DMI&SP POLICY AND UNDERTAKING FORMAT
P	VENDOR CODE CREATION FORM
Q	HOLIDAY LISTING DECLARATION OF BPCL/EIL

FORM-A

FORM OF BID

(To be filled by the Bidder)

Serial No. **Date:**

To
Engineers India Limited
Sector-16(OnN.H.-8) Tower-1
(1st Floor), Gurugram-122001 Haryana (India)

Dear Sirs,

Having examined the Bidding Documents consisting of the Letter Inviting Bid / Invitation for Bids, Bidding Data Sheet, Instructions to Bidders, General Conditions of Contract, Special Conditions of Contract, Specifications, Technical requirements, Time Schedule, Form of Agreement, Form of Bid, and Addendum(s) to the Bidding Documents (if any), and having understood the provisions of the said Bid Documents and having thoroughly studied the requirements of BHARAT PETROLEUM CORPORATION LIMITED in connection with the **COMPOSITE WORKS FOR UTILITIES & OFF-SITES (PART-A & B) (Tender Doc No.: JP/B957-999-PK-T-9501/1031) for BINA PETCHEM AND REFINERY EXPANSION PROJECT(BPREP) OF M/S BHARAT PETROLEUM CORPORATION LIMITED (BPCL)** and having conducted a thorough study of the job site(s)involved, the site conditions, soil conditions, the climatic conditions, labour, power, water, material and equipment availability, the transport and communication facilities, the availability and suitability of Site Fabrication Areas, the availability of land and/or premises for temporary office and accommodation quarters and all other factors and facilities and things whatsoever necessary or relevant to the formulation of the Bid and the performance of work, I/we hereby submit our bid/offer for the performance of the proposed services and supplies in accordance with the terms and conditions and within the time mentioned in the Bid Documents at the rates/ prices quoted by me/us in Schedule of Rates/Price included within the Bid Documents and arrived at rates/prices for the services and supplies as per the Schedule of Rates/Price. If the work is awarded to me/us, I/we undertake to perform the work and make the supplies in accordance with the Contract Documents as defined in the Form of Agreement forming part of the bid documents and accept the terms and conditions of Contract as laid down therein and undertake to submit within 15 (Fifteen) days of receipt of Notification of award of Bid for security deposit as specified in the Fax of Acceptance of bid by way of Bank Guarantee from a Scheduled Bank in India and to commence work at the job site and to sign the formal Contract in terms of the Proforma of Memorandum of Agreement (enclosed with GCC) forming part of Bid Documents within 15 (Fifteen) days of receipt of the Letter of Award / Fax of Acceptance from BHARAT PETROLEUM CORPORATION LIMITED

I/We further undertake to keep my/our Bid/offer open for a period as mentioned in Bid Data Sheet
from the date of opening of bids.

Yours faithfully,

(Signature(s) of the Bidders(s))

Name & Designation of authorized person signing the Bid on behalf of the Bidder
Bidder(s) Full Name and address of the Bidder(s).

FORM-B

INFORMATION ABOUT BIDDER

To

BPCL

S.NO.	DESCRIPTION	BIDDER'S REPLY
1.1	Legal Name of the Bidder (Company)	
1.2	Date of Business (Company) Establishment	Day Month Year
1.3	Country of registration and Registration Number:	
1.4	Address of Registered Office:	_____ _____ City:_____ District:_____ State:_____ PIN/ZIP:_____
1.5	Operation/Working Address if different from above:	_____ _____ City:_____ District:_____ State:_____ PIN/ZIP:_____
1.6	Telephone Number (Incl. ISD & Area code, as applicable)	
1.7	Fax Number:	
1.8	Name & Mobile no. of Concerned person(s)	
1.9	E-mail address:	
1.10	Internet Website(If applicable)	
1.11	ISO Certification, ifany	

S.NO.	DESCRIPTION	BIDDER'SREPLY
2	GENERAL	
2.1	Income Tax PAN No.(In India) of the firm.	
2.2	Whether Registered as MSE bidder or not.	
2.3	Detail of MSE Registration & MSE Registration No.	
2.4	GST Registration No. of the firm	
3.0	**Change of Ownership:** has there been any major change of Ownership of the establishment over the past five (5) years. If so, kindly provide details and if not, please affirm by" NONE".	

FORM-C

DELETED

FORM–D

DELETED

FORM-E

COMPLIANCE TO BID REQUIREMENT

(TO BE SUBMITTED ON THE LETTER- HEAD OF BIDDER)

TITLE OF WORKS: ……

BIDDING DOCUMENT NO.: ……

We …… *(*)*hereby agree to fully comply with, abide by and accept without variation, deviation or reservation all technical, commercial and other conditions of the Bidding Document and its Technical & Commercial Amendments.

We further hereby waive, withdraw and abandon any and all assumptions, deviations, variations, objections or reservations whatsoever hereto set out, given or indicated in our offer, clarifications, correspondence, communications, or otherwise with a view that the price bid and price implication (if any) submitted maybe treated to conform to, in all respects, with the terms and conditions of the said Bidding Document including all Technical and Commercial Amendments.

***For and

on behalf of

Authorized signatory

Date:

*Here fill in the name of bidder.

**The Compliance to Bid Requirement must be signed by the person(s) authorized to sign.

FORM–F

INTEGRITY PACT

(Refer Appendix-III of ITB)

FORM G

SELF DECLARATION

BINA PETCHEM AND REFINERY EXPANSION PROJECT(BPREP)

FORM-G

SELF DECLARATION

(AS PER ITB ON LETTER HEAD OF BIDDER)

Bidder's declaration as furnished herein shall supersede the stipulations mentioned elsewhere in their bid.

SL. NO.	DESCRIPTION	BIDDER'S DECLARATION
1.	We confirm that we are not on Holiday/Negative list of EIL/BPCL as on date of submission of our bid.	☐ **We confirm** ☐ **We do not confirm**
2(a).	We confirm that we are not under insolvency, liquidation, court receivership or similar proceedings.	☐ **We confirm** ☐ **We do not confirm**
2(b).	We confirm that we are not undergoing insolvency resolution process or liquidation or bankruptcy proceeding as on date.	☐ **We confirm** ☐ **We do not confirm**
3.	We confirm that we are not involved in any Litigation/ Arbitration. (or) We confirm that the current Litigation / Arbitration, in which bidder is involved will not have any impact in work being tendered or in entering into contract during the validity of offer and performing the contract till all the contractual obligations Under contract are performed.	☐ **We confirm** ☐ **We do not confirm** **(OR)** ☐ **We confirm** ☐ **We do not confirm**
4.	Whether any of the directors of bidder is a relative of any director of BPCL/EIL or the bidder is a firm in which any director of BPCL/EIL or his relative is a partner of the bidder or a private company in which any director of BPCL/EIL is a director.	☐ **No relation** ☐ **Yes (Provide details)**
5.	We confirm that the content of the Enquiry Document including Price Schedule and Corrigendum/ Addendum (if any) have not been altered or modified.	☐ **We confirm** ☐ **We do not confirm**
6.	We confirm that we are not under a declaration of ineligibility by OWNER for Fraudulent practices as defined at clause no. **44 of ITB.**	☐ **We confirm** ☐ **We do not confirm**
7.	We confirm that we are not affiliated with a firm or entity: i) that has provided consulting services related to the work to the Owner during the preparatory stages of the works or of the project of which the works form a part, or ii) That has been hired by the Owner as engineer/consultant for the contract.	☐ **We confirm** ☐ **We do not confirm**

SIGNATURE OF BIDDER : _____
NAME OF BIDDER : _____
COMPANY SEAL : _____

FORM H

CHECKLIST FOR SUBMISSION OF BID

FORM-H

CHECKLIST FOR SUBMISSION OF BID

Bidder is requested to fill this check list and ensure that all details/documents have been furnished as called for in the Bidding Document.

Please tick the box and ensure compliance:

(A) **PART-III-ORIGINAL DOCUMENTS**

S.No.	Documents	Submitted
1.	Earnest Money Deposit (EMD) / Bid Security in accordance with Clause no. 6 of IFB (In case of exemption MSE Certificate duly authenticated as per the requirement of ITB & IFB, wherever applicable)	

(B) PART-I-TECHNO-COMMERCIAL/UNPRICED BID

√whichever is applicable

S.No.	Documents	Submitted
1.	Scanned Copy of Earnest Money Deposit (EMD) /Bid Security (In case of exemption, MSE certificate as per the requirement of IFB)	
2.	MSE Verification (if applicable) in line with clause no.44.0 of ITB	
3.	Bid forwarding letter	
4.	Table of Contents of the Bidding Document and Amendment/ addendum	
5.	Integrity Pact (in the prescribed format **Appendix-III of ITB** with the name of work & Bidding Document number duly filled signed & stamped) in accordance with Clause No.**12.5 of ITB.**	
6.	Scanned copy of certified documents towards proof of meeting Bidder Qualification Criteria.	
7.	Scanned Copy of Power of Attorney in favour of person (s) digitally signing the bid that such person (s) is/are authorised to sign the bid on behalf of the bidder and any consequence resulting due to such signing shall be binding on the bidder in line with clause **48.0 of ITB.**	
8.	Format of undertaking for authentication **Appendix-I to IFB**	
9.	Details of Specific Experience fulfilling Qualification Criteria as per **Appendix-II A to IFB**	

S.No.	Documents	Submitted
10.	Past experience along with details and supporting documentation as called for in the Bidder Qualification Criteria (BQC) as per **Appendix-II B to IFB**	
11.	**PROFORMA OF DECLARATION TOWARDS "CONFLICT OF INTEREST" Appendix – III to IFB**	
12.	Detailed Financial Statement for the preceding three financial year.	
13.	Copies of documents defining constitution or legal status, place of registration and principal place of business of the Company	
14.	Bid Form as per **Bidding Form-A**	
15.	Information about Bidder in accordance with **Bidding Form-B**	
16.	Compliance to Bid Requirement (**Bidding Form-E)**	
17.	Self-Declaration as per **Bidding Form-G**	
18.	Checklist for submission of bid **Bidding Form-H**	
19.	Bank Mandate Form duly signed and stamped with the Banker's certification as per **Bidding Form-I**	
20.	Declaration confirming knowledge about worksite Visit and surrounding conditions **Bidding Form-J**	
21.	ANNUALTURNOVER STATEMENT **Bidding Form-M**	
22.	Affidavit/undertaking of DMI&SP POLICY **Bidding Form-O**	
23.	Vendor code creation form **Bidding Form-P**	
24.	Format for declaration of holiday listing orders issued by BPCL/MoPNG or EIL debarring us from carrying on dealings with BPCL/MoPNG / EIL. **Bidding Form-Q**	
25.	PAN NO.	
26.	Signed and stamped copy of Undertaking (on Company's Letter head) attached with Appendix-I of ITB in line with Government guidelines regarding procurement from bidders from a country or countries sharing Border with India	
27.	Certificates under PPP-MII Order, 2017 towards mandatory minimum Local Content (attached **with Appendix-II of ITB**), if applicable as per BDS.	

28.	GST registration details	
29.	Signed & stamped copy of List of Key Construction Manpower and Key Construction Equipments as enclosed in Annexure-V and Annexure-VIII to SCC.	
30.	Signed & stamped **Unpriced Copy of FORM-SP0 (excel BOQ file), FORM-SP1** (Pre-filled Detailed SOR), ~~**FORM-SP2**(Un-filled Detailed SOR), **FORM-SP3** (Details of Taxes & Duties)~~	

(C) PART-II-PRICE BID

S.No.	Documents	Submitted
1.	FORM SP-0 (Schedule of Rates)	

FORM–I

BANK MANDATE FORM

1. Bidder Name :
2. Bidder Code :
3. Address of the Bidder :
4. Particulars of Bank Account of Bidder :
   a. Name of the Bank :
   b. Name of the Branch and Address of the Branch :
   c. Branch Code :
   d. 9-Digit MICR code Number of the Bank & Branch :
   (As appearing in the MICR Cheque issued by the bank)

   (Please do not give multi-city cheque book code Number)

   e. Type of account(Saving Bank, Current or Cash Credit):
   f. Account Number :
   g. RGTS/IFSC Code(11digit) :
   h. NEFT Code No. :
5. E-mail address of the Bidder :
6. Contact Person(s) of the Bidder :

I/we declare that the particulars given above are correct and complete and I/we accord our consent

For receiving all our payments through Electronic Mechanism.

_____

(Signature and designation of the Authorised person(s) of Bidder)

Official seal of the Bidder

Place:

Date :

BANK CERTIFICATION

Certified that the particulars furnished above are correct as per our records.

Place :

Date :

_____

Signature of the Authorised Official of the Bank

Bank's Stamp

BIDDER TO ENSURE SUBMISSION OF CANCELLED CHEQUE WITH THIS MANDATE FORM

FORM–J

DECLARATION CONFIRMING KNOWLEDGE ABOUT WORKSITE VISIT AND SURROUNDING CONDITIONS

DECLARATION CONFIRMING KNOWLEDGE ABOUT WORK SITE-VISIT AND SURROUNDING CONDITIONS

To,

BHARATPETROLEUM CORPORATION LTD.

Dear Sir,

Sub: **Declaration confirming knowledge about Work Site visit and surrounding conditions**

Ref:

1) Tender Name:
2) Tender Reference No:
3) All other pertinent addendum/corrigendum/amendment

I/We, _____hereby declare and confirm that we have visited the Project work Sites and its surrounding as referred in BPCL Tender Specifications and acquired full knowledge and information that may be necessary for preparing the bid and entering into the Contract if selected.

Yours faithfully,

(Signature, Date & Seal of

Authorized Representative of

the Bidder)

FORM–K1

DELETED

Form–K2

DELETED

FORM–L

FOR BIDDERS' QUERIES

SL. NO.	REFERENCE OF BIDDING DOCUMENT				BIDDER'S QUERY	EIL REPLY
	PART/VOL.	PAGE NO.	CLAUSE NO.	SUBJECT		

NOTE: The Pre-Bid Queries to be uploaded on e-Tendering Portal as per instructions in NIT/ITB.

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

FORM–M

ANNUALTURNOVER STATEMENT

The bidder shall indicate herein his annual turnover during preceding 3 years based on the audited balance sheet/profit & loss account statement.

A.FINANCIAL DETAILS

1.	**FINANCIALYEAR/YEAR ENDING**	**ANNUAL TURNOVER (RS.)**
	YEAR( )	
	YEAR( )	
	YEAR( )	
2.	**AVERAGE ANNUALTURNOVER DURING THE IMMERDIATELY PRECEEDING THREE FINANCIAL YEARS:**	
3.	**NETWORTH FOR LATEST FINANCIALYEAR:**	

NOTE:

Bidder to submit the audited annual report including balance sheet and profit & loss account for above three years.

FORM–N

FORMAT OF BANK GUARANTEE IN LIEU OF EARNEST MONEY DEPOSIT / BID SECURITY

REFER RELEVANT FORMAT ENCLOSED IN THE GCC

FORM O

AFFIDAVIT/UNDERTAKING OF DMI&SP POLICY

REFER FORMAT ENCLOSED WITH THE POLICY AS APPENDIX OF ITB

FORM-P

VENDOR CODE CREATION FORM

BPCL VENDOR MASTER - CREATION/ UPDATION FORM

SEC 1.0 ORGANIZATION AND TAX RELATED DETAILS

Sr. No	Description	Vendor Response	Remarks
1	Type of Company (Nature of Entity or Business Concern (Please tick the appropriate Value)	01 Individual ☐ 02 HUF ☐ 03 Association of Persons (AOP) ☐ 04 Body of Individuals (BOI) ☐ 05 Co-op. Society ☐ 06 Trust ☐ 07 Partnership Firm ☐ 08 Sole Proprietorship Firm ☐ 09 Public Ltd. Company ☐ 10 Private Ltd. Company ☐ 11 Central PSU ☐ 12 State PSU ☐ 13 Central Govt. Authority/Department ☐ 14 State Govt. Authority/Department ☐ 15 Limited Liability Partnership(LLP) ☐ 16 Foreign Vendor ☐ *17 Others, pl Specify:*	*1.Pl tick wherever applicable.* *2.Pls. attach self attested and stamped copy of relevant Registration Certificate/Partnership/Trust Deed/lease deed* ***3. For foreign vendors , details mentioned in Sl. no.6 is optional and Sl.no. 7 to 11 are not applicable.***
2	E-mail ID E-mail ID (alternate)		*Pls. indicate e-mail Id to be used by us for sending updates,information, etc.*
3	Mobile No. Mobile No. (alternate)	+ 9 1 - [redacted] + 9 1 - [redacted]	*Pls. indicate mobile No to be used by us for sending updates,information*
4	Telephone No.	STD Landline	*Pls. indicate STD code followed by Telephone No.*
5	Communication Address as per GST registration address	Building Street Village/City District/Taluka/Zilla State PIN	*Pls provide address details*
6	PAN Number	[redacted]	*Please attach self attested Copy of Pan Card*
7	GST Registered Status	Registered ☐ Unregistered ☐ Composition ☐	*Pl tick wherever applicable.*
8	GST Regn No. / Composition Registration No.	[redacted]	*Please attach the self attested registration Certificate*
9	Whether unit for which GST no. is provided is located in SEZ	YES ☐ NO ☐	*Pl tick wherever applicable.*
10	Whether having multiple GST registration in a state	YES ☐ if Yes, Business Division ☐ NO ☐	*Pl tick wherever applicable.* *If Yes, specify business Division*
11	Whether registered under MSME	YES ☐ NO ☐	*Pl tick wherever applicable.*
	MSME Category	MSME Women (Yes/ No) ☐ SC/ST MSME (Yes/ No) ☐	

I/We confirm that all the information provided above is correct and belongs to my organization/ business.

(Vendor Name)	(Vendor Code in BPCL) [applicable in case details to be updated for existing vendor code]	(Name & Signature of Authorized Signatory)	(Company Seal)

Date (dd-mm-yyyy)	

FORM-Q

Format for declaration of holiday listing orders issued by BPCL/MoPNG or EIL debarring us from carrying on dealings with BPCL/MoPNG / EIL.

(On company letter head, to be signed by the duly authorizes person)

DATE:_____
BIDDING DOC. NO. : ……..
TITLE OF TENDER: …….

To,

Bharat petroleum corporation Ltd

Dear Sir/Madam,

I/we declare and confirm that we are currently not serving any holiday listing orders issued by BPCL or EIL or MoPNG debarring us from carrying on business dealings with BPCL/ EIL or convicted of an offence-

(a) Under the prevention of corruption act,1988: or

(b) The Indian penal code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

(Signature and stamp of the bidder)

Bidder Name:

Date:

Address:

Date:10.11.2025

GENERAL CONDITIONS OF CONTRACT (GCC)

BHARAT PETROLEUM CORPORATION LIMITED

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GENERAL CONDITIONS OF CONTRACT

SECTION - I

DEFINITION OF TERMS

In the contract documents as herein defined where the context so admits, the following words and expressions will have following meanings :

1) "The Owner/Company/BPCL" means the Bharat Petroleum Corporation Limited, incorporated in India having its registered office at 4 & 6, Currimbhoy Road, Ballard Estate, Mumbai - 400 038 or their successors or assigns

2) "The Contractor" means the person or the persons, firm or Company whose tender has been accepted by the Owner and includes the Contractor's legal representative, his successor and permitted assigns.

3) The "Managing Director" shall mean the Chairman and Managing Director of the Bharat Petroleum Corporation Limited or his successor in office designated by the Owner.

4) The "Engineer-in-Charge" shall mean the person designated as such by the Owner and shall Include those who are expressly authorised by the Owner to act for and on his behalf for operation of this contract.

5) The "Work" shall mean the works to be executed in accordance with the contract or part thereof as the case may be and shall include extra, additional, altered or substituted works as required for purpose of the contract.

6) The "Permanent Work" means and includes 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) The "Construction Equipment" means all appliances, Tools/Tackles and equipment of whatsoever nature for the use in or for the execution, completion, operation or maintenance of the work unless intended to form part of the Permanent work.

8) The "Site" means the areas on which the permanent works are to be executed or carried out and any other places provided by the Owner for purpose of the contract.

9) The "Contract Document" means collectively the Tender Document. Designs. Drawings or Specifications, agreed variations, if any, and such other document constituting the tender and acceptance thereof.

10) The "Consultant" means the consulting engineers Nominated/appointed by the Owner for this Project / job.

11) The "Sub-Contractor" means any person or firm or Company (other than the Contractor) to whom any part of the work has been entrusted by the Contractor, with the written consent of the Engineer-in-Charge, and the legal personal representatives, successors and permitted assigns of such person, firm or company.

12) The "Contract" shall mean the Agreement between the Owner and the Contractor for the execution of the works including therein all contract documents.

13) The "Specification" shall mean the various technical specifications attached and referred to in the tender documents. It shall also include the latest editions, including all addenda/corrigenda, of relevant Indian Standard Specification, specifications of the other country published before entering into Contract.

14) The "Drawings" shall include maps, plans and tracings or prints thereof with any modifications approved in writing by the Engineer-in-Charge and such other drawings as may, from time to time, furnished or approved in writing by the Engineer-in-Charge.

15) The "Tender" means the tender submitted by the Contractor for acceptance by the Owner.

16) The "Alteration Order" means an order given in writing by the Engineer-in-Charge to effect additions to or deletion from and alterations in the works.

17) The "Completion Certificate" shall mean the certificate to be issued by the Engineer-in-Charge to the contractor when the works have been completed to his satisfaction.

18) The "Final Certificate" in relation to a work means the certificate issued by the Engineer-in-Charge after the period of liability is over for releasing the retention money/ PBG /Insurance Surety Bond .

19) The "Period of Liability" in relation to a work means the specified period during which the Contractor stands responsible for rectifying all defects that may appear in the works.

SECTION - II

GENERAL INFORMATION ABOUT SITE

2.1 LOCATION OF SITE &ACCESSIBILITY:

The site location is described in the Special Conditions of Contract. The intending tenderer should inspect the site and make himself familiar with site conditions and available facilities.
Entry into the BPCL areas is restricted depending on location/site. Only pass holders as also vehicles with special permits are permitted in such restricted areas. Inside the premises access to various work spots is also further regulated by permits issued for each area. Non-availability of access roads or permits for entry of vehicles/equipment to any specific area shall in no case be the cause to condone any delay in execution of works or be the cause for any claims or extra compensations.

2.2 SCOPE OF WORK

The scope of work is defined in the Special Conditions of Contract and specifications. The Contractor shall provide all necessary materials, equipments / Tools and Tackles / Supervision / labour etc. for the execution and maintenance of the work till completion unless otherwise mentioned in these tender documents. All materials that go with the work shall be approved by Engineer-in-Charge prior to procurement and use.

2.3 LAND FOR CONTRACTOR'S FIELD, GODOWN AND WORKSHOP:

The tenderer should visit the site and acquaint himself with site conditions, availability of water, electricity, approach roads, construction materials as per specifications, shelter for his staff, etc. since these are to be provided/arranged by the tenderer (unless otherwise specified) at his cost.
The owner will, at his discretion and convenience based on availability for the duration of the execution of the work, make available, land for construction of contractor's field office, go-downs, workshop and fabrication yard required for the execution of the contract. The contractor shall at his own cost construct all these temporary buildings and provide suitable water supply and sanitary arrangement approved by the Engineer-in-Charge.
On completion of the works undertaken by the Contractor, he shall remove all temporary works/ shed 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 material, dispose off 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 claim in respect of any such surplus materials disposed off as aforesaid. But the Owner reserves the right to ask the Contractor any time during the pendency of the contract to vacate the land by giving seven days notice on security reasons or on material interest otherwise.

2.4 SAFETY STANDARDS FOR TEMPORARYBUILDINGS

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

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SECTION - III

GENERAL INSTRUCTION FOR THE TENDERER

3 SUBMISSION OF TENDER:

3.1 The quotation should be submitted only in the manner and the form prescribed in the Request For Quotation (RFQ)/Tender enquiry.

3.2 Addenda/Corrigenda to this tender document if issued must be signed and submitted along with the tender document. The tenderer should consider the Addenda/Corrigenda and should price the work based on revised quantities when amendments for quantities are issued in addenda.

3.3 Tenders should always be placed in double sealed covers, superscribing Tender No_____Tender for _____(name of job), Bharat Petroleum Corporation Limited, due for opening on _____

The full name, postal address and telegraphic address of the tenderer shall be written on the bottom left hand corner of the sealed cover. (This will not be applicable in the case of e-tenders) Tenders received in open condition (priced bid) are liable to be rejected.

3.4 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 like extra taxes, duties etc.
   c. Copy of price bid with prices blanked off.
   d. Any other relevant information.
iii) Price Bid shall have only prices as per schedule of Rates.
iv) Techno-commercial bid and price bid shall be enclosed in two separate envelopes with the subject job, type of bid, bidders name super-scribed on top. Both these envelopes shall be sealed in a common envelope and submitted as specified above and in covering letter. (This will not be applicable in the case of e-tenders)

4 DOCUMENTS:

4.1 The tenders, as submitted shall include all documents/details asked for by BPCL in the RFQ/Tender enquiry.

4.2 All pages to be initialed:

Wherever signed tender documents are submitted, all signatures in the documents shall be dated, as well as all the pages of the documents 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 authorizing him to sign on behalf of the tenderer before submission of tender. Tenders without signatures as stated above are liable to be rejected.

4.3 Rates to be in Figures and Words:

The tenderer should quote the rates in English both in figures as well as in words. Offers received without the rates in figures and in words are liable for rejection. In case of discrepancy exists between the rate quoted in figures and in words, the rates quoted in words will prevail.

4.4 Corrections and Erasures:

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.
In case of priced bids containing overwriting/cuttings/erasures in the quoted rates and in case these are not attested by the signatory of the bid, such priced bids are liable to be rejected without giving any further notice.

4.5 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 with company stamp. Partnership firms shall furnish the full names of all partners in the tender. It should be signed in the partnership name by all the partners or by duly authorized representative followed by the name and designation of the person signing with company stamp.
Tender by Company or Corporation registered under the relevant companies act, shall be signed by the authorized representative and a power of attorney in that behalf shall accompany the tender.Transfer of tender documents issued to one intending tenderer to another is not permissible.

5 PURCHASE PREFERENCE:

Owner reserves its right to allow Public Sector Enterprises (Central/State), purchase preference as admissible/applicable from time to time under the existing Govt. policy. Purchase preference to a PSE shall be decided based on the price quoted by PSE as compared to L1 Vendor at the time of evaluation of the price bid.

Owner reserves its right to allow Micro and Small Enterprises (MSEs), MSEs owned by Women Entrepreneurs and MSEs owned by Scheduled Caste (SC) or the Scheduled tribe (ST) entrepreneurs, purchase preference as admissible/applicable from time to time under the existing Govt. policy. Purchase preference to a MSE, a MSE owned by women entrepreneurs and a MSE owned by SC/ST entrepreneurs shall be decided based on the price quoted by the said MSEs as compared to L1 Vendor at the time of evaluation of the price bid.

6 (a) EARNEST MONEY:

The tenderer must submit/ deposit earnest money, if specified in the RFQ/Tender enquiry, failing which the tender is liable to be rejected. Earnest Money Deposit shall be submitted in the form of crossed Demand Draft in favour of "Bharat Petroleum Corporation Ltd." / Electronic Funds Transfer to BPCL Bank Account / Bank Guarantee executed by any Scheduled Bank approved by Reserve Bank of India (as per Proforma provided in Annexure) / Insurance Surety Bond (as per Proforma provided in Annexure). Earnest Money Deposit (EMD) shall be valid for a period of 6 (Six) months from the due date of opening of Techno-commercial Bids and shall be submitted from any Indian Scheduled Commercial Bank / Indian Branch of Foreign Bank. EMD submitted by foreign vendors shall be in USD / EURO only.
In case of limited tender, Earnest Money deposit (EMD) is not applicable for registered contractors of BPCL.

NOTE : Exemption of Bidding Document fee and EMD will be applicable for Micro and Small Enterprises (MSEs) registered with District Industries Centres (DIC) or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation (NSIC) or Directorate of Handicraft and Handloom or MSEs having Udyog Aadhaar Memorandum or any other body specified by Ministry of Micro, Small and Medium Enterprises. Such bidder shall submit Self attested copy of the certificate, valid upto validity of the offer, indicating that their registration includes the items/works under tender. The registration certificate should remain valid during the period of the contract that may be entered into such successful bidder. Such tenderers should ensure validity of the Registration Certificate for the purpose.
NOTE: No interest shall be paid by the Owner on the earnest money deposit by the tenderer. The earnest money of the unsuccessful tenderer will be refunded after the completion of BQC evaluation / Technical Evaluation / Priced Bid Evaluation as applicable.

(b) CONVERSION OF EMD TO SECURITY DEPOSIT:

The earnest money deposit (EMD) of the contractor whose tender may be accepted, if paid in forms other than Bank Guarantee / Insurance Surety Bond, can be converted to security deposit for due performance of the contract if the contractor so desires. The "performance security deposit/retention money" vide clause 18 shall also be applicable limiting to a maximum of 10% of the contract value.

7 (a) BID VALIDITY:

Tender submitted by tenderers shall remain valid for acceptance for a period of four months from the date of opening of the tender (Technical Bid in the case of two bid). The tenderer shall not be entitled during the said period of four months, without the consent in writing of the Owner, to revoke, or cancel his tender or vary the tender given or any term thereof. In case of tenderer revoking or canceling his tender, varying any terms in regard thereof without the consent of Owner in writing, appropriate penal action will be taken by BPCL as deemed fit including putting the tenderer/contractor on 'Holiday listing'/'Delisting' barring the tenderer/contractor from participating in future tenders for an appropriate period from the date of revocation/cancellation/varying the terms. Further in the case of contractors who are not registered with BPCL, the earnest money deposited by him will be forfeited. Once the quotation is accepted the rates quoted shall be firm till the entire work is completed.

(b) LANGUAGE OF BID:

The Bid, all correspondence and documents relating to the bid, between Bidder and BPCL, shall be written in English language only. Any supporting document furnished by Bidder may be written in other language provided that this literature is accompanied by an authenticated English translation in which case, for purpose of interpretation of the Bid, the English translation shall govern.

8 ADDENDA / CORRIGENDA:

Addenda/ Corrigenda to the tender documents may be issued prior to the date of opening of the tenders to clarify documents or to effect modification in the design or tender terms. All addenda/corrigenda issued shall become part of tender Document.

9 RIGHT OF OWNER TO ACCEPT OR REJECT TENDER:

9.1 The right to accept the tender will rest 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.

9.2 The whole work may be split up between two or more contractors or accepted in part and not entirely if considered expedient.

9.3 Tenders in which any of the particulars and prescribed informations are missing or are incomplete in any respect and/or the prescribed conditions are not fulfilled are liable to be rejected.

9.4 Canvassing in connection with tenders is strictly prohibited and tenders submitted by the tenderer who resort to canvassing will be liable to rejection.

9.5 Tender containing uncalled remarks or any additional conditions are liable to be rejected.

10 (a) INTEGRITY PACT (IP):

Vendors are requested to sign & return our pre-signed IP document, if applicable. This document is essential & binding. Vendor's failure to return the IP document duly signed along with Bid Document may result in the bid not being considered for further evaluation.

(b) HOLIDAY LISTING:

The vendors / contractors are expected to adopt the ethics of highest standards and a very high degree of integrity, safety and quality consciousness, commitment and sincerity towards the work undertaken and dealing with BPCL in such matters. Also, while participating in the tender and performing the contracts, Contractors are required to meet certain performance criteria and adherence to the terms and conditions of the tender / contract. BPCL shall have the right to remove from the list of approved suppliers / contractors or to ban business dealings, if any agency has been found to have committed misconduct or fraud or poor performance or anything unethical not expected from a reputed agency. The guidelines and procedures for Holiday Listing as adopted by BPCL and available separately in BPCL website shall be applicable in the context of all tenders floated and consequently, all Orders / Contracts / Purchase Orders placed, by BPCL. It can be accessed using the following link: https://www.bharatpetroleum.in/pdf/Holiday-Listing-Policy-2024.pdf

(c) 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:

(i) 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.

(ii) Tax Residency Certificate (TRC)

TRC containing prescribed particulars as per the Annexure 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.

(iii) Form 10F

In additional to TRC, in order to claim the benefits of DTAA, bidder shall also submit additional information in form no. 10F as per Annexure. 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.

11 COLLECTION OF DATA TENDERER'S RESPONSIBILITY & TIME SCHEDULE:

The tenderer shall visit the site and acquaint himself fully of the site and no claims whatsoever will be entertained on the plea of ignorance or difficulties involved in execution of work or carriage of materials.

The time period allowed for carrying out the job shall be as shown in tender document. Request for revision for time schedule after tenders are opened will not be received for consideration.

12 RETIRED GOVERNMENTS OR COMPANYOFFICER:

No Engineer of Gazetted rank or other Gazetted Officer, employed in Engineering or Administrative duties in an Engineering Department of the States/Central Government or of the Owner is allowed to work as a Contractor for a period of two years after his retirement from Government service or from the employment of the Owner without the previous permission of the Owner. 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 as aforesaid before submission of tender, or engagement in the Contractor's service as the case may be.

13 SIGNING OF THE CONTRACT:

The successful tenderer shall be required to execute an agreement in the proforma attached with tender enquiry within a period of one month of the receipt by him of the notification of acceptance of tender. The payment will not be processed till the time the agreement is executed.

14 (a) FIELD MANAGEMENT:

The field management will be the responsibility of the Engineer-in-Charge, who will be nominated by the Owner. The Engineer-in-Charge may also authorize his representatives to perform his duties and functions.
Coordination of Work - The Engineer-in-Charge shall coordinate the work 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 strictly in accordance with the site instructions to avoid hindrance to the works being executed by other agencies.

14 (b) CONSULTANCY CONTRACTS:

This General Conditions of Contract (GCC) will be binding for Consultancy jobs only to the extent of its applicability to the context of consultancy jobs.

SECTION - IV
INTERPRETATION OF CONTRACT DOCUMENTS

15 INTERPRETATION OF CONTRACT DOCUMENT:

15.1 Except if and to the extent otherwise provided by the Contract, the provisions of the General Conditions of Contract and special conditions 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 matter may be referred to Engineer-in-Charge, who shall give his decisions 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.

15.2 Works shown upon the drawing but not mentioned in the specifications or described in the specification without being shown on the drawings shall nevertheless be held to be included in the same manner as if they had been specifically shown upon the drawings and described in the specifications.

15.3 Headings and marginal notes to the clauses of these General Conditions of Contract or to specifications or to any other tender document are solely for the purpose of giving a concise indication and not a summary of the content thereof, and they shall never be deemed to be part thereof or be used in the interpretation or construction thereof of the Contract.

16.4 Singular and Plural:

In these contract documents unless otherwise stated specifically, the singular shall include the plural and vice-versa wherever the context so requires. Words indicating persons shall include relevant incorporated companies/ registered as associations/ body of individual/ firm or partnership.

16 SPECIAL CONDITIONS OF CONTRACT:

16.1 Special Conditions of contract shall be read in conjunction with the General Conditions of Contracts, specification of work, Drawings and any other documents forming part of this contract wherever the context so requires.

16.2 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.

16.3 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 provision of the General Conditions of Contract and shall to the extent of such repugnance or variations, prevail.

16.4 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.

16.5 The materials, designs and workmanship shall satisfy the relevant Indian Standards, the Job specifications contained herein and codes referred to. Where the job specifications stipulate requirements in addition to those contained in the standard codes and specifications, these additional requirements shall also be satisfied.

17 CONTRACTOR TO OBTAIN HIS OWN INFORMATION:

The contractor in fixing rate shall for all purposes whatsoever be deemed to have him self independently obtained all necessary information for the purpose of preparing his tender. The contractor shall be deemed to have examined the Contract Documents, to have generally obtained his own information in all matters whatsoever that might affect the carrying out the works at the scheduled rates and to have satisfied himself to the sufficiency to his tender. Any error description of quantity or omission there from shall not vitiate the contract or release the Contractor from executing the work comprised in the contract according to drawing and specifications at the scheduled rates. He is deemed to have known the scope, nature and magnitude of the works and the requirements of materials and labour involved etc. and as to what all works he has to complete in accordance with the contract documents whatever be the defects, omissions or errors that may be found in the Contract Documents. The Contractor shall be deemed to have visited surrounding 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 to and regress 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 building as may be necessary for executing and completing the works, to have made local independent enquiries as to the sub-soil water and variations thereof, storms, prevailing winds, climate conditions and all other similar matters affecting these works. He is deemed to have acquainted himself as to his liability for payment of Government taxes, customs duty and other charges.

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 risk or liabilities or the entire responsibility from completion of the works at the scheduled rates and time in strict accordance with the contract documents.

No verbal agreement or inference from conversation with any officer or employee of the owner either before or after the execution of the contract agreement shall in any way affect or modify any of the terms or obligations herein contained.

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18 PERFORMANCE SECURITY DEPOSIT/RETENTION MONEY:

18.1 To ensure performance of the contract and due discharge of the contractual obligations, the successful contractor will have to provide security deposit of 10% of the basic value of contract unless otherwise specified in the Special Conditions of Contract. Amount received/retained towards this clause will be considered as security deposit.
This Security deposit may be furnished in the form of an Account payee Demand Draft payable to BPCL or Bank Guarantee / Insurance Surety Bond in the prescribed format. The contractor shall have the option to adjust any Earnest Money Deposit- (EMD) if paid by demand draft towards security deposit if he so desires or otherwise if submitted by way of bank guarantee / Insurance Surety Bond the validity of the same to be extended suitably as advised by BPCL.
In the case of security deposit submitted in the form of Bank guarantee / Insurance Surety Bond, the Bank Guarantee / Insurance Surety Bond shall be valid and remain in force till the contractual completion period (expiry of the defect liability period- refer clause-74, if applicable) and with a claim period of six months thereafter. The Bank Guarantee / Insurance Surety Bond shall be in the form prescribed.
In case the successful contractor is not furnishing the performance security deposit as referred above on award of the job, the same shall be deducted from each running account bills at the rate of 10% of bill value till overall security deposit of 10% as mentioned above is collected.
The security deposit will be retained till the successful completion of the work and thereafter till the expiry of the defect liability period (refer clause-74), if applicable. This retention money / Bank guarantee / Insurance Surety Bond held shall be released after the expiry of the defect liability period provided that any defects appearing during that period are corrected by the contractor and subject to Clause 18.2 below.
In the case of value/rate/quantity contracts, the security deposit shall be based on individual release orders issued. In case of LSTK (Lump Sum Turnkey Contracts) / EPC: PBG / Insurance Surety Bond @ 10% within 15 days of notification of award. In case of Annual Rate Contracts (ARCs): Submission of PBG / Insurance Surety Bond @ 10% of Total Contract Value (TCV) or submission of initial security deposit @ 2.5% of TCV within 15 days of notification of award. In cases where only 2.5% of TCV has been submitted, 7.5% of individual release order shall be subsequently deducted from RA bills.
Vendors/contractors shall be asked to submit the SD within 15 days from the date of notification of award and in the event of delay in submission of SD, the contract can be terminated. However, if termination of contract is not in the interest of the work/ BPCL, an additional time up to 30 days can be allowed for submission of SD depending on merits of each case, beyond which the contract may be terminated with subsequent actions following termination as per tender/procedure.

18.2 If the contractor/ sub-contractor or their employees shall break, deface or destroy any property belonging to the Owner or other agency 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). These expenses can be recovered from the security deposit/retention money if recovery from other sources is not possible.

18.3 All compensation or other sums of money payable by the contractor to the Owner under terms of this contract may be deducted from his security deposit/retention money or from any sums which may be or may become due to the contractor by the Owner on any account whatsoever and in the event of his security deposit/retention money being reduced by reasons of any such deductions. The contractor shall within ten days thereafter make good any sum or sums, which may have been deducted from his security Deposit/retention money. No interest shall be payable by the Owner from sum deposited as security deposit/retention money.

18.4 The security deposit shall be held by the Owner, as security for the due performance of the Contractor's obligations under the contract, provided that nothing herein stated shall make it incumbent upon the Owner to utilize the security deposit/retention money in preference to any other remedy which the Owner may have, nor shall be construed as confining the claims of the Owner against the contractor to the quantum of the Security Deposit/retention money.

18.5 The Bank guarantee if submitted shall be from any Indian scheduled bank or an international bank of repute having a branch in India or a corresponding banking relationship with an Indian scheduled bank. The security deposit/retention money shall be in Indian Rupee in the case of domestic bidders and in US Dollars/EUROS in the case of foreign bidders. In case of Insurance Surety Bond, the same shall be from the Insurance company as approved by Insurance Regulatory and Development Authority of India (IRDAI).

18.6 Process for submitting Bank Guarantee / PBG under SFMS (Structured Financial Messaging System) mode as follows:

Vendors shall insist their Bank for issuance of SFMS Bank Guarantee for faster payments. Vendors shall provide BPCL's Bank Account No. & IFSC Code (Details given below) to their Bank as beneficiary at the time of application for Bank Guarantee in favor of BPCL. Issuing Bank shall issue the Bank Guarantee & send SFMS message to BPCL's Bank confirming the authenticity of Bank Guarantee who in turn shall send the confirmation to BPCL.
Vendor should ensure the following for issue of E- bank guarantee:

a. The issuing bank is on SFMS platform
b. SFMS Message type used is 760 COV and SFMS Delivery report/ Message copy is sent along with original BG
c. For BG amendment, message type 767COV is to be used.
d. SFMS contains following details:
i. Beneficiary's bank name: ICICI Bank
ii. IFSC Code: ICIC0000393

iii BPCL'S Customer 1D: 8PCL583493800

e. BG Issuing Bank should send the BG Issuance advice through SFMS to BPCL's designated Banker: ICICI Bank, Backbay Branch, Mumbai (IFSC: 1CIC0000393).

f. BG Issuance advice should mention applicable Unique Identifier Code (U1C) in row/ field number 7037 of SFMS Delivery Report.
   a. BPCL Location : Kharghar , Navi Mumbai
   b. Head office : Ballard Estate
   c. UIC : BPCL583493800

g. The Original BG should be submitted along with print out of SFMS Delivery report from the BG Issuing Bank Branch.
h. SFMS BG will help in faster verification of BGs and prompt release of payments to Vendors.

19 TIME OF PERFORMANCE:

19.1 The work covered by this contract shall be commenced as detailed in the purchase order or as per the instructions of the Engineer in charge and be completed in stages on or before the dates as mentioned in the time schedule of completion of work. The contractor should bear in mind that time is the essence of this agreement unless such time be extended pursuant to the provision of clause No. 21. Request for revision of Completion time after tenders are opened will not receive consideration.

19.2 Time Schedule of Completion: The general time schedule of completion is given in the tender document. Contractor should prepare a detailed monthly and weekly execution programme, jointly with the Engineer-in-Charge within two weeks of receipt of Letter of Intent or acceptance of tender. The work shall be executed strictly as per the time schedule given in this document. The period of completion given includes the time required for testing, rectifications, if any, retesting and completion in all respects to the entire satisfaction of the Engineer-in-Charge.

20 FORCE MAJEURE

Circumstances leading to force majeure

(a) Act of terrorism;

(b) Riot, war, invasion, act of foreign enemies, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection of military or usurped power;

(c) Ionising radiation or contamination, radio activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive assembly or nuclear component;

(d) epidemics, earthquakes, flood, fire, hurricanes, typhoons or other physical natural disaster, but excluding weather conditions regardless of severity; and

(e) freight embargoes, strikes at national or state-wide level or industrial disputes at a national or state-wide level in any country where Works are performed, and which affect an essential portion of the Works but excluding any industrial dispute which is specific to the performance of the Works or the Contract.
For the avoidance of doubt, inclement weather, third party breach, delay in supply of materials (other than due to a nationwide transporters' strike) or commercial hardship shall not constitute a Force Majeure event.

- **Notification of Force Majeure**

Contractor shall notify within [10(ten)] days of becoming aware of or the date it ought to have become aware of the occurrence of an event of Force Majeure giving full particulars of the event of Force Majeure and the reasons for the event of Force Majeure preventing the Affected Party from, or delaying the Affected Party in performing its obligations under the Contract.

- **Right of either party to terminate**

If an event of Force Majeure occurs and its effect continues for a period of 180 (one hundred eighty days) or more in a continuous period of 365 (three hundred sixty five) days after notice has been given under this clause, either Party may terminate the Contract by issuing a written notice of 30 (thirty) days to the other Party.

- **Payment in case of termination due to Force Majeure**

The Contract Price attributable to the Works performed as at the date of the commencement of the relevant event of Force Majeure.

The Contractor has no entitlement and Owner has no liability for:

a) Any costs, losses, expenses, damages or the payment of any part of the Contract Price during an event of Force Majeure; and

b) Any delay costs in any way incurred by the Contractor due to an event of Force Majeure. Time extension for such cases will be worked out appropriately.

21 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 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 / Insurance Surety Bond if submitted, towards security Deposit/retention money suitably.

22. LIQUIDATED DAMAGES FOR DELAY:

22.1 Time is the essence of the contract. In case the contractor fails to complete the whole work within the stipulated period, he shall be liable to pay liquidated damages of 0.5% of the basic value of contract per week and or part thereof of the delay subject to a maximum of 5% of the value of the contract. The parties 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 and 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/breach. The owner shall be at liberty to adjust or deduct the said amount of liquidated damages from any amount due to the contractor including Security Deposit. In case where the concluded contract value is different from the original contract value due to the change orders/variation in executed quantities/extension of time, etc., the concluded contract value should be considered for recovery of Liquidated Damages for late delivery/delayed completion.

22.2 The owner shall be at liberty to deduct or retain from any amount payable to the contractor periodically, the proportionate or full amount of liquidated damages as the case may be for the delay periodically caused by the contractor.

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

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

24 TERMINATION/OFFLOADING:

24.1 The contractor fully understands that timely completion of the work as per the schedule is of paramount necessity as otherwise it would lead to adversely affecting the schedules of other works/project with resultant financial and other losses to the Company/owner. In view of this, the contractor unconditionally agrees and binds himself to be liable for all the consequences for non-completion of the work within the stipulated time.

24.2 In case a situation is brought about by the contractor warranting termination/off-loading of the whole or any part of the work for any reason whatsoever, the Company/owner shall have the liberty and right to entrust/engage/award the work so terminated/off loaded at the risk and cost of the contractor to any other agency/contractor by adopting any mode of inviting tenders, i.e. open/limited/single party/negotiation basis etc. in order to ensure completion of the work as per the schedule or at the quickest possible time.

25. FORFEITURE OF SECURITY DEPOSIT:

Whenever any claim against the Contractor for the payment of a sum of money arises out of or under the contract, the Owner shall be entitled to recover such sum by appropriating in part or whole, security deposit of the contractor, forming whole or part of such security being insufficient or if no security has been taken from the Contractor then the balance or 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.

26 ACTION WHEN WHOLE OF SECURITY DEPOSIT IS FORFEITED:

In any case in which, under any clause or clauses of this contract, the contractor shall have forfeited the whole of his security deposit (whether paid in one sum or deducted by installment) 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 rescission notice in writing to the contractor under the hand of the owner shall be conclusive evidence) in which case the security 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 any part of the work, debiting contractor with the labour cost of tools and plants and equipment charges, the cost of the materials for which a certificate of the Engineer-in-Charge shall be final and conclusive against the Contractor and 10% of costs as above to cover all departmental charges and crediting him with the value of the work done

in all respects in the manner and at the same rates as if it had been carried out by the Contractor under the term of his contract. The certificate of Engineer-in-Charge as to the value of the work done shall be final and conclusive against the contractor.

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 the original contractor, if the whole work had been executed by him (of the amount of which excess, the certificate in writing of the Engineer-in-Charge shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by the Owner under the contract or otherwise or from his security deposit 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 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.

27 CONTRACTOR REMAINS LIABLE TO PAY COMPENSATION IF ACTION NOT TAKEN UNDER CLAUSE 26:

In any case in which any of the powers conferred upon the owner by clause 26 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 exercised in the event of any further case of default by the contractor for which any clause of hereof he is declared liable to pay compensation amounting to the whole of his security deposit 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 proceeding clause he may, if he so desires takes possession of all or any tools and plants materials and stores in or upon the works 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 for the same in account at the contract rates or in 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 clerk of the works, supervisor or other authorized 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 contractors 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 proceeds and any expenses of any such sale shall be final and conclusive against the contractor.

28 NO COMPENSATION FOR ALTERATION IN OR RESTRICTION OF WORK:

If at any time from the commencement of the work the owner shall for any reasons whatsoever, not require the whole or part thereof as specified in the tender to be carried out, the Engineer-in-Charge shall give notice in writing of the fact to the contractor, who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out, neither shall he have any claim for compensation by reason of any alterations having been made in the original specifications, drawings, designs and instructions which shall involve any curtailment of the work as originally contemplated.

29 CHANGES IN CONSTITUTION:

Where the contractor is a partnership firm, the 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 sub-contractor enters into any agreement with other parties, where under the reconstituted firm would have the right to carryout 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 clauses 35 hereof and the same action may be taken and, the same consequence shall ensure as provided in the said clause.

30 IF THE CONTRACTOR DIES

Without prejudice to any of the rights or remedies under his contract, if the contractor dies, the Owner shall have the option of terminating the contract without compensation to the contractor.

31 EMPLOYEES OF THE OWNER NOT INDIVIDUALLY LIABLE:

No director or official or employee of the Owner shall in any way be 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 of any of the acts, matters or things which are herein contained.

32 OWNER NOT BOUND BY PERSONAL REPRESENTATIONS:

The contractor shall not be entitled to any increase on the item rates of the contract or any other right or claim whatsoever by reason of representation, explanation or statement or alleged representation, promise or guarantees given or alleged to have been given to him by any person.

33 CONTRACTOR'S OFFICE ATSITE:

The contractor shall provide and maintain an office at the site, if space provided by the owner, for the accommodation of his agent and staff and such office shall be open at all reasonable hours to receive instruction, notices, or other communications.

34 CONTRACTOR'S SUBORDINATE STAFF AND THEIR CONDUCTS:

34.1 The contractor, on or after award of the work shall name and depute a qualified personnel having sufficient experience in carrying out work of similar nature to whom the equipments materials, if any, shall be issued and instructions for works given. The contractor shall also provide to the satisfaction of the Engineer-in-Charge sufficient and qualified staff to supervise the execution of the-works, competent sub-agents, supervisor 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, expeditious working. Whenever in the opinion of the Engineer-in-Charge, additional properly qualified supervision staff is considered necessary, they shall be employed by the contractor without additional charges 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.

34.2 If and whenever any of the Contractor's or sub-contractor's agents, sub-agents, assistants supervisor 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 Engineer-in-Charge, it is undesirable for administrative or any other reason for such person or persons to be employed in the works, the contractor, if so directed by the Engineer-in- Charge, shall at once remove such person or persons from employment thereon. Any person or persons so removed from the works shall not again be employed in connection with the works without the written permission of the Engineer-in-Charge. Any person so removed from the works 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 works he shall do so and shall bear all costs in connection herewith.

34.3 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 neighborhood and in the event of such employee 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 activities.

34.4 All contractor's personnel entering upon the Owner's premises shall be properly identified by badges issued by owner which must be worn all times on Owner's premises.

35 SUB-LETTING OF WORK:

Sub letting of contracts shall not be generally permitted. However owner may permit sub letting of work on specific cases subject to the following:-

i) No part of the contract nor any share of interest there shall in any manner or degree be transferred assigned sublet by the contractor directly or indirectly to any firm or corporation whosoever except as provided for in the succeeding sub-clause, without the consent in writing of the Owner.

ii) Sub Contractors for Temporary Works Etc.:- The Owner may give written consent to sub-contract for execution of any part of the works at the site, being entered into by the contractor provided each individual sub-contract is submitted to the Engineer-in-Charge before being entered into and is approved by him.

iii) List of Sub-Contractors to be supplied: - At the commencement of every month the contractor shall furnish to the Engineer-in-Charge list of all sub-contractors or firms engaged by the contractor and working at the site during the previous month with particulars of the general nature of the sub-contract or works.

iv) Contractor's Liability Not Limited By Sub-Contractors:- 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 works 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.

v) Owner may Terminate Sub-Contracts:- If any sub-contractor engaged upon the works at the site executes any work which in the opinion of the Engineer-in-Charge is not in accordance with the Contract documents, the owner may by written notice to the contractor request him to terminate such sub-contract and the contractor

upon the receipt of such notice shall terminate such sub contract and the latter shall forthwith leave the works, failing which the owner shall have right to remove such sub-contractors from the Site.

vi) No Remedy For Action Taken Under This Clause:- No action taken by the owner under the clause shall 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 right to remove such sub-contractors from the Site.

36 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 carryout the works in conformity with the contract documents, or
ii. Fail to carryout the works in accordance with the time schedule, or
iii. Substantially suspend work or the works for a period of Fourteen days without authority from the Engineer-in-Charge, or
iv. Fail to carryout and execute the works to the satisfactions of the Engineer-in-Charge, or
v. Fail to supply sufficient or suitable constructional equipments, temporary works, labour materials or things, or
vi. Commit or suffer or permit any other breach of any of the provisions of the contract on his part to be performed or observed or persist in any of the above mentioned breaches of the contract for the fourteen 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. Abandon the works, or
viii. During the continuance of the contract, 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 works and take possession thereof and of the materials, temporary works, constructional equipment, and stock thereon, and to revoke the contractor's license to use the same, and to complete the works, by his agents, other contractor 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 authorize the use of any materials, temporary works constructional equipment, and stock as aforesaid without making payment or allowances to the contractor for the said materials other than such as may be certified in 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 equipments and stock or being liable for any loss of damage thereto, and if the Owner shall by reason of his taking possession of the works or of the works being completed by other contractors (due account being taken of any such extra work or works which may be omitted) then the amount of such excess 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 equipment, materials etc. belonging to and to recoup and retain the said deficiency or any part thereof out of the proceeds of the sale.

37 CONTRACTORS RESPONSIBILITY WITH OTHER AGENCIES:

Without repugnance to any other condition, it shall be the responsibility of the contractor executing the work of civil construction, to work in close co-operation and co-ordinate the works with other contractors or their authorized representatives and the contractor will put up a joint scheme, showing the arrangements, with other contractors / agencies for carrying his portion of work to the Engineer-in-Charge, and get the approval. The contractor before finally submitting the schemes to the Engineer-in-Charge shall have the written agreement of the other agencies. The Engineer-in-Charge before communicating his approval of 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 any statutory regulations, ordinances or by laws of any local or duly constituted authorities or public bodies which may be applicable from time to time to the works 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.

38 OTHER AGENTS AT SITE:

The contractor shall have to execute the work in such place and condition where other agencies might also be engaged for other works such as site grading, filling and leveling, electrical and mechanical engineering works etc. No claim shall be entertained to works being executed in the above circumstances.

39 NOTICES:

Any notice hereunder may be served on the contractor or his duly authorized representative at the job site or may be served by registered mail direct to the address furnished by the Contractor. Proof of issue of any such notice could be conclusive of the contractor having been duly informed of all contents therein.

40 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 contractors reasonable opportunity for access to the works for the carriage and storage of materials and execution of their works.

ii) Whenever the work being done by any department of the Owner or by other contractors employed by the Owner is contingent upon work covered by the 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.

41 RIGHT OF OWNER TO DETERMINE / TERMINATE CONTRACT

i) 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, in which case, the cost of approved materials at the site at current market rates as verified and approved by Engineer-in- Charge and of the value of the work done to date by the contractor shall be paid for in full at the rates specified in the contract. A notice in writing from the Owner to the contractor of such determination and termination and the reason thereof, shall be the conclusive proof of the fact that the contract has been so determined and terminated by the Owner.

ii) Should the contract be determined under sub-clause (i) of this clause and the contractor claims payments to compensate expenditure incurred by him in the expectation of completing the whole of the work, the Owner shall consider and admit such claim as are deemed fair and reasonable and are supported by vouchers to the satisfaction of the Engineer-in-Charge. The Owner's decision on the necessity and propriety of any such expenditure shall be final and conclusive and binding on the contractor.

42 TERMINATION FOR CONVENIENCE :

BPCL shall, in addition to any other right enabling it to terminate the contract, have the right to terminate the contract at any time by giving prior written notice of at least 14 days to the contractor. Such termination shall be without prejudice to the rights of the parties that have accrued on or before the date of termination of the contract.

If the contract is terminated under this provision, the contractor is entitled to be compensated as under:-

a. the contract price attributable to the works performed as at the date of termination

and

b. the reasonable costs incurred by the contractor for termination of subcontractors or the repatriation of the contractors' and subcontractors' employees

less

the aggregate of all previous payments allocated to the works.

Any sums due to BPCL from the contractor accruing prior to the date of termination will be deducted from the amount to be paid to the contractor under the contract.

If, as a result of any such deductions, there is a negative amount payable to the contractor, then the contractor must pay an amount equal to such negative sum to BPCL within 15 days of BPCL intimating the contractor.

43 PATENTS AND ROYALTIES:

43.1 The 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 practiced 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 or composition matters, to be used or supplied or methods and process to be practised or employed in the performance of this contract, is covered by a patent under which 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 royalties and licence fees as may be necessary for performance of the contract. In the event, the contractor fails to pay any such royalties 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 expenses 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, and process methods to be supplied hereunder. The 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 employee in or as a result of the performance of the work under the contract.

The Owner shall indemnify and save harmless the contractor from any loss on account of claims on contractor for the contributory infringement of patent rights arising out and based upon the claim that the use by the Owner of the process included in the design prepared by the Owner 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 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.

43.2 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.

43.3 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.

44 LIENS:

44.1 If, at any time, there should be evidence or 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 in discharging such lien or claim including all costs and reasonable expenses.

44.2 Contractor will not disclose details of the work to any person or persons except those engaged in its performance, and only to the extent required for the particular portion of the work being done.
Contractor will not give any items concerning details of the work to the press or a news disseminating agency without prior written approval from Engineer-in-Charge. Contractor shall not take any pictures on site without written approval of Engineer-in-Charge

45 OPERATION OF CONTRACT:

45.1 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.

45.2 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.

SECTION - V

PERFORMANCE OF WORK

46 EXECUTION OF WORKS:

46.1 All the works shall be executed in strict conformity with the provisions of the contract documents 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 works 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 following all safety requirements of BPCL and as stipulated in work permits as per the directions and to the entire satisfaction of the Engineer-in- Charge.

46.2 Wherever it is mentioned in the specifications that the Contractor shall perform certain work or provide certain facilities/materials, it is understood that the contractor shall do, so at his cost unless otherwise specified.

46.3 The materials, design and workmanship shall satisfy the relevant Indian Standards, the Job specification contained herein and codes referred to. Where the job specification stipulate requirements in addition to those contained in the standards codes and specifications, these additional requirements shall also be satisfied.

47 COORDINATION AND INSPECTION OFWORK:

The coordination and inspection of the day-to-day work under the contract shall be the responsibility of the Engineer-in-Charge. The written instructions regarding any particular job will be normally be passed by the Engineer-in-Charge or his authorized representative. A work order book / logbook will be maintained by the Contractor for each job in which the aforesaid written instructions will be entered. These will be signed by the contractor or his authorized representative by way of acknowledgment within 12 hours. The non maintaining of the order book or non signing by the contractor shall not preclude the contractor from complying with the instructions.

48 WORK IN MONSOON ANDDEWATERING:

48.1 The completion of the work may entail working in the monsoon also. The contractor must maintain a minimum labour force as may be required for the job and plan and execute the construction and erection according to the prescribed schedule. No extra rate will be considered for such work in monsoon.

48.2 During 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.

49 WORK ON SUNDAYS ANDHOLIDAYS:

For carrying out work on Sundays and Holidays if needed, the contractor will approach the Engineer-in-Charge or his representative at least two days in advance and obtain permission in writing. No special compensation on this account will be payable.

50 GENERAL CONDITIONS FOR CONSTRUCTION AND ERECTION WORK:

50.1 <u>Place of Work:</u>

The work has to be executed at specified premises as per the tender. Contractor should apprise himself of all the conditions prevailing in such 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 complied with, by the contractor will also be provided along with the tender. No idle time wages or compensation for temporary stoppage of work or restrictions would be paid, and the rate quoted for the various items of work should cover the cost of all such contingencies and eventualities. Substantial structures and utilities exist both above ground and underground, adjacent to the work site. (The construction activity gets restrained by the existence of such structures and utilities). Special care is necessary in transportation, storage, working on equipments and other construction activities to protect the existing features and prevent damage to any facility. Necessary protective structures barricades etc. have to be erected at various places as directed by Engineer-in-Charge. No extra payment of such protective works will be made unless specially provided in the tender.

50.2 The working time or the time of work is 48 hours per week normally. Overtime work is permitted in cases of need and the Owner will not compensate the same. Shift working at 2 or 3 shifts per day may become 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.

50.3 The contractor must arrange for the placement of workers in such a way that the delayed completing of the work or any part thereof for any reasons whatsoever will not affect their proper employment. The Owner will not entertain any claim for idle time payment whatsoever.

50.4 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.

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51 DRAWINGS TO BE SUPPLIED BY THE OWNER:

51.1 Where drawings are attached with tender, these shall be for the general guidance of the contractor to enable him to visualize the type of work contemplated and scope of work involved. The contractor will be deemed to have studied the drawings and formed an idea about the work involved.

51.2 Detailed working drawings on the basis of which actual execution of the work is to proceed will be furnished from time to time during the progress of the work. The 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.

51.3 Copies of all detailed working drawings relating to the works 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 works. Reference is also invited to clause 43.2 and 43.3 above regarding drawings and other documents.

52 DRAWINGS TO BE SUPPLIED BY THE CONTRACTOR:

52.1 Where drawings/data are to be furnished by the contractor, they shall be as enumerated in the special conditions of contract, and shall be furnished within the specified time.

52.2 Where approval of drawings before 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 the 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 the certification stamps duly signed by both the contractor and the Engineer-in-Charge.

52.3 A period of 3 weeks from the date of receipt shall be required normally for approval of drawings by the Engineer-in-Charge.

53 SETTING OUT WORKS:

53.1 The Engineer-in-Charge shall furnish the contractor with only the four corners of the work site and a level bench mark and the contractor shall set out the works and shall provide efficient staff for the purpose and shall be solely responsible for the accuracy of such setting out.

53.2 The contractor shall provide, fix and be responsible for the maintenance of all stacks, templates, level marks, profiles and other similar things and shall take all necessary precaution to prevent their removal or disturbance and shall be responsible for the consequence of such removal or disturbance should the same take 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 in setting out the work shall not relieve the contractor of any of his responsibilities.

53.3 Before beginning the works, the contractor shall at his own cost, provide all necessary reference and level posts, pegs, 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.

53.4 Pillars bearing geodetic marks located at the site of work under construction should be protected and fenced by the contractor.

53.5 On completion of works, the contractor must submit the geodetic documents according to which the work was carried out.

54 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 the work and shall rectify effectually any errors or imperfections therein. Such rectifications shall be carried out by the contractor, at his own cost, when instructions are issued to that effect by the Engineer-in-Charge.

55 MATERIALS TO BE SUPPLIED BY CONTRACTOR:

55.1 The contractor shall procure and provide the whole of the materials required for construction including tools, tackles, construction plant and equipment for the completion and maintenance of the works 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 materials procured by the contractor shall be BPCL approved/specified quality.

55.2 All materials procured should meet the specifications 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.

55.3 Manufacturer's 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.

56 MATERIALS SUPPLIED BY OWNER:

56.1 If the specifications of the work provides for the use of any materials of special description to be supplied from the Owner's stores, price for such material to be charged therefore as herein after mentioned being so far as practicable for the convenience of the contractor but not so as in any way to control the meaning or effect of the contract. The contractor shall be bound to purchase and shall be supplied such materials as are from time to time required to be used by him for the purpose of the contract only. The sums due from the contractor for the value of the actual materials supplied by the Owner will be recovered from the running account bill on the basis of the actual consumption of materials in the work covered and for which the running account bill has been prepared. After the completion of the works, however, the contractor has to account for the full quantity of materials supplied to him as per relevant clauses in this document.

56.2 The value of the materials as may be supplied to the contractor by the Owner will be debited to the contractor's account at the rates shown in the schedule of chargeable materials and if they are not entered in the schedule, they will be debited at cost price, which for the purpose of the 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 the Owner's stores. All materials so supplied to the contractor shall remain the absolute property of the Owner and shall not be removed on any account from the site of the work, and shall be at all times open for inspection to the Engineer-in-Charge. Any such materials remaining unused at the time of completion or termination of the contract shall be returned to the Owner's stores or at a place as directed by the Engineer-in- Charge in perfectly good condition, at contractor's cost.

57 CONDITIONS FOR ISSUE OF MATERIALS:

i) Materials specified to be issued by the Owner will be supplied to the contractor by the Owner from his stores/location. It shall be the responsibility of the contractor to take delivery of the materials and arrange for its loading, transport and unloading at the site of work at his own cost. The materials shall be issued between the working hours and as per the rules of the Owner 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 to be issued by the Owner shall be issued in standard sizes as obtained from the manufacturer.

iv) The contractor shall construct suitable godown at the site of work 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 duty of the contractor to inspect the material 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 the Owner, it shall be the responsibility of the 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) The Owner shall not be liable for delay in supply or non-supply of any materials which the 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 the Owner. In no case, the contractor shall be entitled to claim any compensation or loss suffered by him on this account.

vii) It shall be the responsibility of the contractor to arrange in time all materials required for the works other than those to be supplied by the Owner. If, however, in the opinion of the Engineer-in-Charge the execution of the work is likely to be delayed due to the 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 the Owner or procure the materials from the market or elsewhere and the 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 the 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 the work.

viii) None of the materials supplied to the contractor will be utilized by the contractor for manufacturing item, which can be obtained from standard manufacturer in finished form.

ix) The contractor shall, if desired by the Engineer-in-Charge, be required to execute an indemnity bond for safe custody and accounting of all materials issued by the Owner.

x) The contractor shall furnish to the Engineer-in-Charge sufficiently in advance a statement showing his requirements of the quantities of the materials to be supplied by the Owner and the time when the same will be required by him for the works, so as to enable the Engineer-in-Charge to make necessary arrangement for procurement and supply of the material.

xi) A daily account of the materials issued by the Owner shall be maintained by the 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. requisition, issues etc. and shall be always available for inspection in the contractor's office at site.

xii) The contractor should see that only the required quantities of materials are got issued. The contractor shall not be entitled to cartage and incidental charges for returning the surplus materials, if any, to the stores/location 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 utilized for any other purpose(s) than issued for.

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58 MATERIALS PROCURED WITH ASSISTANCE OF OWNER:

Notwithstanding anything contained to the contrary in any or all the clause of this document where any materials for the execution of the contract are procured with the assistance of Owner either by issue from Owner's stock or purchase made under orders or permits or licences issued by Government, the contractor shall hold the said materials as trustee for the Owner and use such materials economically and solely for the purpose of the contract and not dispose them off without the permission of the 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 the contract or at its termination for any reason, whatsoever on his being paid or credited such prices as the Engineer in-Charge shall determine having due regard to the condition of the materials. The price allowed to the 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, the contractor shall in terms of the licenses or permits, and/or for criminal breach of trust, be liable to compensate the Owner a double rate or high 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 and his decision shall be final and conclusive.

59 MATERIALS OBTAINED FROM DISMANTLING:

If the contractor in the course of execution of the work is called upon to dismantle any part for reasons other than those stipulated in clauses 66 & 70 hereunder, the materials obtained in the work of dismantling etc. will be considered as the Owner's property and will be disposed off to the best advantage of the Owner.

60 ARTICLES OF VALUE FOUND:

All gold, silver and other materials, of any description and all precious stones, coins, treasure relies, antiquities and other similar things which shall be found in, under or upon the site, shall be property of the Owner and the 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 person indicated by the Owner.

61 DISCREPANCIES BETWEEN INSTRUCTIONS:

Should any discrepancy occur between the various instructions furnished to the contractor, his agents or staff or any doubt, arise as to the meaning of any such instructions or should there be any misunderstanding between the contractor's staff and the Engineer-in-Charge's staff, the 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, or doubts, or misunderstanding shall in any event be admissible.

62 ALTERATIONS IN SPECIFICATIONS AND DESIGNS AND EXTRA WORK:

A) The Engineer-in-Charge shall have power to make any alterations in, omissions from, additions to of 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 the work and the contractor shall be bound to carry out such altered / extra / new items of work in accordance with any instructions which may be given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall not invalidate the contract and any altered additional or substituted work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respect on which he agree to do the main work. The time for completion of work may be extended for the part of the particular job at the discretions of the Engineer-in-Charge, for only such alteration, additions or substitutions of the 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:

a) If the rates for the additional, altered or substituted work are specified in the 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 the contract.

b) If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for similar class of works as specified in the contract for the work. The opinion of the Engineer-in-Charge as to whether the rates can be reasonably so derived from items in the contracts will be final and binding on the contractor.

c) If the rates for the altered, additional or substituted work cannot be determined in the manner specified in sub-clause (a) and (b) above, then the contractor shall inform the Engineer-in-Charge of the rate which 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 rates on the basis of the prevailing market rates of materials, labour cost at schedule of labour plus 10% to cover contractor's supervision, overheads 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 the contractor.

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d) Provisions, contained in sub-clause (a) to (c) above shall not, however, apply:

Where the value of alterations / additions / deletions or substitutions exceeds beyond plus or minus 25% of the estimated contract value (i.e. quoted item rates of contractor shall hold good for variations etc. within plus or minus 25% of estimated contract value)

B) In the event and as a result of such alternatives / additions / substitutions / deletion, the scope of contract work exceed the value stipulated in the contract by more than the limits given in clause (d) above, the Contractor shall claim revision of the rates supported by the proper analysis in respect of such items for quantities in excess of the above limits, notwithstanding the fact that the rates for such items exist in the tender for the main work or can be derived in accordance with the provision of sub-clause (b) of Clause 62 A, and the Engineer-in-Charge may revise their rates having regard to the prevailing market rates, and the contractor shall be paid in accordance with the rates so fixed. But, under no circumstances the contractor shall suspend / stop / slowdown the work on the plea of non-settlement of rates of items falling under this clause.

63 VARIATION IN CONTRACT VALUE :

Compensation for Reduction in Contract value due to change in quantity:

- Upto & inclusive of (-) 25% of Total Contract Value (TCV): No cost compensation.
- Beyond (-) 25% of TCV: Cost compensation @ 10% of reduction in the contract value from (-) 25% of TCV (i.e. 75% of TCV).

Discount to be obtained for Increase in contract value due to change in quantity:

- Upto & inclusive of (+) 50% of TCV: No discount.
  Beyond (+) 50% of TCV: Reduction @ 10% of increase in the contract value beyond (+) 50% of TCV.

64 ACTION WHERE NO SPECIFICATIONS ISSUED:

In case of any class of work for which there is no such specification given by the Owner in the tender documents, 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.

65 ABNORMAL RATES:

The contractor is expected to quote rate for each item after analysis of cost involved for the completion of item/work, 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 rates for any item, quoted by the tenderer are unusually high or unusually low, it will be sufficient cause for the rejection of the tender unless the Owner is convinced about the reasonableness of the rates on scrutiny of the analysis for such rate to be furnished by the tenderer on demand.

66 INSPECTION OF WORK:

66.1 The Engineer-in-Charge will have full power and authority to inspect the works at any time wherever in progress either on the Site or at the contractor's premises / workshop where situated premises /workshops of any person, firm or corporation where work in connect with the contract may be in hand or where materials are being or are to be supplied, and the contractor shall afford or procure for the Engineer-in-Charge every facility and assistance to carry out such Inspection. The contractor shall at all time during the usual working hours and at all other time for which reasonable notice of the intention of the Engineer in-Charge or his representative to visit the works have been given to the contractor, either himself be present to receive order and instructions or post a responsible agent duly accredited in writing 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 the contractor himself. The contractor shall give not less than seven days, notice in writing to the Engineer-in-Charge before covering up or placing any work beyond reach of inspection and measurement 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 carrying out such measurement or inspection.

66.2 No materials shall be dispatched by the contractor before obtaining the approval of Engineer-in-Charge in writing. The contractor is to provide at all times during the progress of the work and the 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 the works by the Engine in-Charge.

67 ASSISTANCE TO THE ENGINEERS:

The contractor shall make available to the Engineer-in-Charge, free of cost necessary instruments and assistance in checking of setting out of works and taking measurement of work.

68 TESTS FOR QUALITY OF WORKS:

68.1 All workmanship shall be of the respective kinds described in the contract documents 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 place of manufacture or fabrication or on the site or at all or any such places. The contractor shall provide assistance, instruments, labour and materials as are normally required for examining, measuring and testing any workmanship as may be selected and required the Engineer-in-Charge.

68.2 All the tests necessary in connection with the execution of the work as decided by Engineer-in-Charge shall be carried out at the field testing laboratory of the Owner by paying the charges as decided by the Owner from time to time. In case of non-availability of test facility with the 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.

68.3 If any tests are required to be carried out in connection with the work or materials workmanship not supplied by the contractor, such tests shall be carried out by the contractor as per the instructions of Engineer-in-Charge and cost of such tests shall be reimbursed by the Owner.

69 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 the work. Such samples shall be submitted before the work is commenced and in ample time to permit tests and examinations thereof. All materials furnished and finishing applied in actual work shall be fully identical to the approval samples.

70 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 the contractor for the execution of the work are unsound or of a quality inferior to that contracted for, or otherwise not in accordance with the contract, the 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 have been inadvertently passed, certified and paid for forthwith shall rectify or remove and reconstruct the works 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, the contractor shall be liable to pay compensation at the rate of one percentage of the estimated cost of the whole work, for every week limited toa maximum of 10 per cent of the estimated cost of the whole 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 expenses of the contractors in all respects. The decision of the Engineer-in-Charge as to any question arising under this clause shall be final and conclusive.

71 SUSPENSION OF WORKS:

The contractor shall, if ordered in writing by the Engineer-in-Charge or his representative, temporarily suspend the works or any part thereof for such period and such time as so ordered and shall not, after receiving such written order, proceed with the 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 the works aforesaid. An extension of time for completion, corresponding with the delay caused by any such suspension of the works as aforesaid will be granted to the contractor, should he apply for the same, provided that suspension was not consequent to any default or failure on the part of the contractor.

72 OWNER MAY DO PART OF WORK:

Upon failure of the contractor to comply with any instructions given in accordance with the provisions of the contract, the owner has the alternative right, instead of assuming charge for entire work to place additional labour force, tools, equipments and materials on such parts of the work, as the owner may designate or also engage another contractor to carry out the work. In such cases, the owner shall deduct from the amount which otherwise might become due to the contractor, the cost of such work and materials with ten percent added to cover all departmental charges and should the total amount thereof exceed the amount due to the contractor, the contractor shall pay the difference to the owner.

73 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 the work. Such possessions or use shall not be deemed to be an acceptance of any work completed in accordance with the contract agreement. If such prior possession or use by the Engineer-in-Charge delays the progress of work, suitable adjustment in the time of completion will made and contract agreement shall be deemed to be modified accordingly.

74 PERIOD OF LIABILITY FROM THE DATE OF COMPLETION OF WORK:

74.1 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. In case the defect arises within the abovementioned Defect Liability Period (DLP) and the same is repaired/replaced, the DLP for the repaired/replaced job/item will be extended suitably so as to cover the original DLP. However, in no case, such extension will exceed 24 months from date of start of initial DLP.

74.2 If the contractor feels that any variation in work or in quality of materials or proportions would be beneficial or necessary to fulfill the guarantee called for, he shall bring this to the notice of the Engineer-in-Charge in writing. The work will not be considered as complete and taken over by the Owner until all the temporary works etc., constructed by the contractor is removed and work site cleaned to the satisfaction of Engineer-in-Charge.

74.3 Care of Works:

From the commencement to completion of works, the contractor shall take full responsibility for the care of all works including all temporary works, and in case any damage, loss or injury happens to the works or to any part thereof or to any temporary work, from any cause whatsoever, he shall at own cost repair and make good the same, so that at completion, the work shall be in good order and in conformity in every respect with the requirements of the contract and the Engineer-in-Charge's instructions.

74.4 Effects prior to taking over:

If at any time, before the work is taken over, the Engineer-in-Charge shall

a) Decide that any work done or materials used by the contractor or any sub-contractor is defective or not in accordance with the contract or that the works or any portion thereof are defective or do not fulfill the requirements of contract (all such matters being herein after called 'Defects' in this clause) and

b) As soon as reasonably practicable, notice given to the contractor in writing of the said decisions specifying particulars of the defects alleged to exist or to have occurred, then the contractor shall at his own expenses and with all speed make good the defects so specified.

In the case contractor shall fail to do so, the Owner may take, at the cost of the contractor, such steps as may in all circumstances, be reasonable to make good such defects. The expenditure, so incurred by the Owner shall be recovered from the amount due to the contractor. The decision of the Engineer-in-Charge with regard to the amount be recovered from the contractor will be final and binding on the contractor. As soon as the works have been completed in accordance with the contract (except in minor respects that do not affect their use for the purpose for which they are intended and except for maintenance thereof provided in clause 74.1) and have passed the tests on completion, the Engineer-in-Charge shall issue a certificate (hereinafter called completion certificate) in which he shall certify the date on which the work have been so completed and have passed the said tests and the Owner shall be deemed to have taken over the works on the date so certified. If the works have been divided into various groups in the contract, the 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 as taken over only.

74.5 Defects after taking over:

In order that the contractor could obtain a completion certificate, he shall make good with all possible speed, any defect arising from the defective materials supplied by the Contractor or workmanship or any act of omission of the contract that may have been noticed or developed after the works or group of the works has been taken over. The period allowed for carrying out such work will be normally one month. If any defect be not remedied within a reasonable time, the Owner may proceed to do the work at the contractor's risk and expense and deduct from the final bill such amount as may be decided by the Owner. If by reason of any default on the part of the contractor a completion certificate has not been issued in respect of every portion of the work within one month after the date fixed by the contract for the completion of the works, the Owner shall be at his liberty to use the works or any portion thereof in respect of which a completion certificate has been issued provided that the works or the portion thereof so used as aforesaid shall be afforded reasonable opportunity for completing these works for the issue of completion certificate.

74.6 The Security Deposit/retention money deducted / furnished as per clause 18 of GCC shall be retained for the period of liability as given in clause 74.1 above. This Retention amount / Bank Guarantee / Insurance Surety Bond furnished against Security Deposit / retention money 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.

74.7 Performance of contractor shall be evaluated on each job by Engineer-in-Charge and recorded. Review of performance will be carried out at appropriate intervals by BPCL.

SECTION VI

BILLS / MEASUREMENT / PAYMENT

75 SCHEDULE OF RATES AND PAYMENTS:

i) Contractor's Remuneration

The price to be paid by the Owner to contractor for the whole of the work to be done and the performance of all the obligations undertaken by the contractor under the contract documents shall be ascertained by the application of the respective item 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 the contractor under the contract and no further payment whatsoever shall be or become due or payable to the contractor under the contract.

ii) Schedule of rates to be inclusive:

The prices/rates quoted by the contractor shall remain firm till the issue of final completion certificate and shall not be subject to escalation. Schedule of rates shall be deemed to include and cover all costs, expense and liabilities of every description and all risk of every kind to be taken in executing, completing and handing over the work to the Owner by the Contractor. The Contractor shall be deemed to have known the nature, scope, magnitude and the extent of the works and materials required, though the contract document may not fully and precisely furnish them. He shall make such provision in the item 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 the works. The opinion of the Engineer-in- Charge as to the items of work which are necessary and reasonable for completion of work shall be final and binding on the contractor, although the same may not be shown on or described specially in contract documents.

Generality of this present provision shall not be deemed to cut down or limit in any way because in certain cases it may and in other cases it may not be expressly stated that the contractor shall do or perform a work or supply articles or perform services at his own cost or without addition of payment or without extra charges 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 equipment, temporary work (except as provided for herein), pumps, materials, labour, the insurance, fuel, stores and appliances to be supplied by the contractor and other matters in connection with each item in the schedule of rates and the execution of the works or any portion thereof, finished, complete in every respect and maintained as shown or described in the contract documents or may be ordered in writing during the continuance of this contract.

iv) Schedule of Rates to cover Royalties, Rents and Claims:

The Schedule of Rates shall be deemed to include and cover the cost of all royalties and fees for the articles and processes, protected by letters, or otherwise incorporated in or used in connection with the works, also all royalties, rents and other payments in connection with obtaining materials of whatsoever kind for the works and shall include an indemnity to the Owner which the contractor hereby gives against all actions, proceedings, claims damages, costs and expenses arising from the incorporation in or use on the works of a such articles, processes or materials, Octroi or other municipal or local Board charges levied on materials, equipment or machineries to be brought to site for use on work shall be borne by the contractor.

v) Schedule of Rates to Cover Taxes and Duties:

No claim or exemption or reduction of customs duties, GST, quarry 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 Risk of Delay:

The schedule of Rates shall be deemed to include and cover the risk of all possibilities of delay and interference with the contractors conduct of work which occur from any cause including orders of owner in the exercises of his powers and on account of extension of time granted due to various reasons and for all other possible or probable cause 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

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which have been fixed by the contractor and agreed to the 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 workwise, Schedule of rates shall be furnished, suitable for evaluating the value of work done and preparing running account bills.

76 PROCEDURE FOR MEASUREMENT / BILLING OF WORK IN PROGRESS:

i) Measurements:

All measurements shall be in metric system. All the works in progress will be jointly measured by the representative of the Engineer-in-Charge and the Contractor's authorise agent progressively. Such measurement will be got recorded in the measurement book by the Engineer-in-Charge or his authorised representative and signed in token of accepted by the contractor or his authorised representative.
For the purpose of taking joint measurement the 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 measurement will be taken by the Engineer-in-Charge or his representative and this will be deemed to be correct and binding on the contractor.

ii) Billing:

The contractor will submit a bill to the Engineer-in-Charge of the work giving abstract and detailed measurements for the various items executed during a month, before the expiry of the 1st 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 10 days from presentation of the bill.

iii) Dispute in Mode of Measurements:

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

77 LUMPSUMS IN TENDER:

For the items in tender where it includes lumpsum in respect of parts of work, the 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 part of the work in question is not In the opinion of the Engineer-in-Charge capable of measurement of determination, the owner may at his discretion pay the lumpsum 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 the contractor with regards to any sum or sums payable to him under the provisions of the clause.

78 RUNNING ACCOUNT PAYMENTS TO BE REGARDED AS ADVANCES:

All running account payments shall be regarded as payment by way of advance against the final payment only and not as payments 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 the contract, or any part thereof in this respect, or of the accruing of any claim by the contractor, nor shall it conclude, determine or affect in any way the powers of the Owner under these conditions or any of them as to the final settlement and the adjustments of the accounts or otherwise, or in any other way vary or affect the contract.
The final bill shall be submitted by the contractor within one month of the date of physical completion of the work, and settled immediately but not later than 60 days otherwise the Engineer-in charge's certificate of the measurement and of total amount payable for the work accordingly shall be final and binding on all parties. 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.

79 EXTRA WORK:

Should the contractor consider that he is entitled to any extra payment for extra job carried out whatsoever in respect of the works, he shall forthwith give notice in writing to the Engineer-in-Charge that he claims extra payment for the extra work. Such notice shall be given to the Engineer-in-Charge within one week from the ordering of any extra work or happening of any event, upon which the 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 part of the contractor to put forward any claim with the necessary particulars as above within the time above specified shall be an absolute waiver thereof. No omission by the owner to reject any such claim and no delay in dealing therewith shall be waiver by the owner of any rights in respect thereof.

80 PAYMENT OF CONTRACTOR'S BILL:

Generally no payment shall be made for works estimated to cost less than Rs. 50,000/- till the whole of the work shall have been completed. But in case of works estimate to cost more than Rs. 50,000/- the contractor on submitting the bill thereof be entitled to receive a monthly payment proportion to the part thereof approved and passed by the

Engineer-in-Charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. This payment will be made after making necessary deductions as stipulated elsewhere in the contract document for materials, security deposit or any moneys due to the Owner etc.
75% payment of the Running Account bill (RA bill) shall be released within 15 calendar days of receipt of RA bill duly certified by Engineer-in-charge (EIC) and the balance payment shall be released within 30 days of receipt of RA bill by EIC after detailed scrutiny.

81 CONCLUSION OF CONTRACT:

In a situation where the L1 bidder is not lowest for some specific line items and the L1/L2 parity is likely to be affected during the execution of the contract, due to variation in quantities of individual line items in contract based on site conditions, then the final payment could be restricted to ensure that the overall total payment of the executed work does not exceed the overall amount that would have been payable to the then L1 as per the latter's quoted rates.

82 MODE OF PAYMENT:

Payment will be made to the contractor normally through NEFT mode.

82A Bill discounting through TreDs

The eligible MSME bidders can avail discounting Facility as follows:

Trade Receivables Discounting System (TReDS) is an institutional mechanism set up in order to facilitate discounting of trade receivables of MSMEs from corporate buyers through invoice discounting by multiple financiers. Bharat Petroleum Corporation Limited (BPCL) is registered with TReDS platform of the aggregators M/s. Receivables Exchange of India Ltd (RXIL), M/s Invoice mart, M/s. M1 xchange, M/s C2treds and M/s DTX. The eligible MSME bidders can avail the discounting facility by registering either in one or multiple TReDS platform of the aggregators. It enables the sellers (MSMEs) to discount their invoices through the aggregators to the financiers at competitive rates thus unlocking their working capital swiftly.

83 COMPLETION CERTIFICATE:

83.1 Application for Completion Certificate:

When the contractor fulfills his obligation under clause 74.4, he shall be eligible to apply for completion certificate. The contractor may apply for separate completion certificate respect of each such portion of the work by submitting the completion documents along with such application for completion certificate.
The Engineer-in-Charge shall normally issue to the contractor the completion certificate within one month after receiving an application therefore from the contractor after verifying from the completion documents and satisfying himself that the work has been completed in accordance with and as set out in the construction and erection drawings and the contract documents.
The contractor, after obtaining the completion certificate is eligible to present the final bill for the work executed by him under the terms of contract.

83.2 Completion Certificate:

The contractor shall be furnished with a certificate by the Engineer-in-Charge of such completion, but no certificate shall be given nor shall the work be deemed to have been executed until all scaffolding surplus materials and rubbish is cleared off the site completely or until the work shall have been measured by the Engineer-in-Charge whose measurement shall be binding and conclusive. The work will not be considered complete and taken over by the Owner, until all the temporary works, labour and staff colonies etc. constructed are removed and the work site cleaned of all debris etc., as described in clause in 83.3 below and to the satisfaction of the Engineer-in-Charge.

If the contractor shall fail to comply with the requirements of this clause on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expenses of the contractor remove such scaffolding, surplus materials and rubbish and dispose off the same as he thinks fit and clean off such dirt as aforesaid, and the 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 except for any sum actually realised by the sale thereof.

83.3 Clearing the site:

Cart away all debris generated from the work and dispose it off without giving rise to any complaints from local, municipal or government authorities. Metal scraps or any other scrap including wooden packing materials shall be disposed as instructed by the Engineer-in-Charge or as follows:

a) All unused scrap steel bar/ structural steel sections/pipe materials etc., (Free issue by owner) shall be the property of the owner and the same shall be returned by the contractor category-wise at their own cost to Owner's store. The weighment slip issued by the Warehouse (in original) is required to be attached along with the final bill/ material reconciliation statement. In case, the material is supplied by the contractor, as per their scope of work, the scrap material generated out of the same should be taken out at their own cost before the settlement of the final bill.

b) Insulation material (either issued by owner to the contractor or supplied by contractor) shall be kept in the area allocated by owner. During the insulation activities, the contractor should keep the work area clean on day-to-day basis. On completion of insulation job, all debris/packing should be taken out to the designated location or as directed by the Engineer in charge for disposal at their own cost before the settlement of the final bill.

83.4 The financial implication of above, if any, should be taken care of in the quoted rates; and no separate claim shall be entertained on this account. The final bill of the contractor shall be linked with the area cleaning in all respects, including removal of shuttering material, disposal of debris/scrap etc. to the entire satisfaction of Engineer-in- Charge.

84 FINAL DECISION AND FINAL CERTIFICATE:

Upon Expiry of the period of liability and subject to the Engineer-in-Charge being satisfied that the works have been duly maintained by the contractor during monsoon or such period as herein before provided in clause 74 and that the

contractor has in all respect duly made up any subsidence and performed all his obligations under the contract, the Engineer-in-Charge shall (without prejudice to the rights of the Owner to retain the provisions of relevant clause hereof) give a certificate herein referred to as the final certificate to that effect. The contractor shall not be considered to have fulfilled the whole of his obligations under the contract until Final Certificate have been given by the Engineer-in-Charge notwithstanding any previous entry upon the work and taking possession, working or using of the same or any part thereof by the owner.

85 CERTIFICATE FOR PAYMENTS AND EVIDENCE OF COMPLETION:

Except the final certificate, no other certificate or payments against a certificate or on general account shall be taken to be an admission by the Owner of the due performance of the contract or any part thereof or occupancy or validity of any claim by the contractor.

SECTION VII

TAXES/DUTIES/INSURANCE

86. TAXES AND DUTIES:

The contractor agrees to and does hereby accept full and exclusive liability for the payment of any and all taxes, duties, etc. now in force or hereafter Imposed, increased 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 Government authorities which are imposed with respect to or covered by the wages, salaries, or other compensations paid to the persons employed by the contractor and the contractor shall be responsible for the compliance with all obligations and restrictions imposed by the Labour Law or any other law affecting employer - employee relationship and the contractor further agrees to comply and secure the compliance by all sub-contractors, with all 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 of Local Authority by reason of any violation by contractor or sub-contractor of such laws, regulations or requirements and also from all claims, suits or proceeding that may be brought against the Owner arising under, growing out of, or by reason of the work provided for by this contract by third parties, or by Central or State Government authority or any administrative sub-division thereof.

86.1 The vendor shall take steps viz. mention relevant GSTIN of BPCL in GST invoices and returns, uploading invoice in GSTR 1, payment of the tax liability on the said invoices and filing of Returns etc. and comply with all the requirements of applicable laws including GST laws for the time being in force to enable the OWNER to avail tax credit/s including input tax credit.

Deferment of GST Amounts shall be done for those vendors who have got instances of open mismatches due to non-compliance. Open mismatches refer to cases whereby OWNER could not claim the GST Input Tax Credit in the month of payment of invoice due to non-compliance/ delayed compliance by the VENDOR. Accordingly, Over and above any payment term mentioned in the tender including that mentioned in the GPC/GCC, payment to VENDOR by OWNER for the basic amount (i.e. amount excluding GST) shall be made as mentioned in GPC/GCC or as mentioned anywhere else in the tender as applicable. However, GST amount of the Invoices shall be paid only after the amount gets reflected in the return (GSTR-1 Return of outward supplies/GSTR-3B) submitted by the vendor on GSTIN portal (GSTR 2B of OWNER) to the satisfaction of OWNER. Till such time GST amount with correct details is reflected in GSTIN portal to satisfaction of OWNER, amount shall be withheld by OWNER.

Over and above, VENDOR is also required to issue e-invoice if the same is applicable to the OWNER. In absence of GST e-invoice, any loss of Input Tax Credit to the OWNER shall be indemnified by the VENDOR.
Deferment of GST amounts to the vendors are subject to compliance of any applicable Act.

86.2 In case of vendors for whom deferment of GST amounts were not done, any loss or non-availability of input tax credit by the OWNER due to non- compliance of applicable tax law including but not limited to GST laws in force or otherwise, on the part of VENDOR, an amount equivalent to any tax liability accruing to the OWNER and/or to the extent of any loss accrued to the OWNER due to the non-availability of input tax credit or any liability accrued to the OWNER shall either stand cancelled or deducted from the payment due to the VENDOR or shall be reimbursed by the VENDOR as the case may be till such default is either rectified or made good by the VENDOR and the OWNER is satisfied that it is in a position to claim valid input tax credit within the timelines as per applicable laws.

86.3 Any cost, liability, dues, penalty, fees, interest as the case may be which accrues to the OWNER at any point of time on account of non-compliance of applicable tax laws or rules or regulations thereof or otherwise due to default on the part of VENDOR shall be borne by the VENDOR. An amount equivalent to such cost, liability, dues, penalty, fees, and interest as the case may be shall be reimbursed by the VENDOR within 30 days. Any GST as may be applicable on such recovery of amount shall also be borne by VENDOR and same shall be collected by the OWNER.

87 INSURANCE:

Contractor shall at his own expenses carry and maintain insurance with reputable insurance companies to the satisfaction of the Owner as follows:

i) Employees State Insurance Act:

The Contractor agrees to and does hereby accept full and exclusive liability for the compliance with all obligations imposed by the Employees State Insurance Act, 1948, and the 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 Employee State Act, 1948 and also from all claims suits or proceedings that may be brought against the Owner arising under, growing out of or by reason of the work provided for by this contract whether brought by employees of the contractor, by third parties or by Central or State Government authority or any political sub-division thereof.

The contractor agrees to filing, with the Employees State Insurance Corporation, the Declaration Forms and all forms which may be required in respect of the contractor's or sub-contractor's employees whose aggregate remuneration as fixed by the concerned authorities and who are employed in the work provided for or those covered

by ESI Act under any amendment to the Act from time to time. The contractor shall deduct and secure the agreement of the sub-contractor to deduct the employee's contribution as per the first schedule of the Employee State Insurance Act from wages and affix the Employee's contribution Cards at Wages payment intervals. The contractor shall remit and secure the agreement of the sub-contractor to remit to the authorized bank, Employee's State Insurance Corporation Account, the Employee's contribution as required by the Act. The contractor agrees to maintain all Cards and records as required under the Actin respect of employees and the payments and the contractor shall secure the agreement of the subcontractor to maintain such records. Any expenses incurred for the contribution, making contribution or maintaining records shall be to the contractor's or sub-contractor's account.

The Owner shall retain such sum as may necessary, from the total 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 Compensation and Employee's Liability Insurance:

Insurance shall be effected for all the Contractor's employees engaged in the performs of this contract, if any of the work is sublet, the contractor shall require the sub-contractor to provide workman's compensation and employer's liability Insurance for the latter's employees if such employees are not covered under the contractors insurance.

iii) Any other Insurance Required Under Law or Regulations or by Owner:

Owner shall cover Project Material and Equipments under and over all Marine-cum-Erection Insurance Policy. Contractor shall carry and maintain any and all other insurance which be required under any law or regulation from time to time. He shall also carry and main any other insurance which may be required by the Owner.

iv) Automobile Liability Insurance:

Contractor shall take out an Automobile Liability Insurance to cover all risks to Owner for each of his vehicles plying on works of this contract and these insurance shall be valid for the total contract period. No extra payments 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 toss result from unauthorised use of the vehicle.

88. DAMAGE TO PROPERTY:

i) Contractor shall be responsible for making good, to the satisfaction of the Owner any loss of and any damage to all structures and properties belonging to the Owner or being executed or procured or being procured by the Owner or of other agencies within the premise all the work of the Owner, if such loss or damage is due to fault and/or the negligence willful acts or omission of contractor, his employees, agents,representative or \ sub-contractor.

ii) The contractor shall indemnify and keep the 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 results from the fault and/or negligence or willful acts or omission of contractor, his employees, agents, representatives or sub-contractors.

89 LABOUR LAWS:

i) No labour below the age of eighteen years shall be employed on the work.

ii) The contractor shall not pay less than what is provided under the Minimum Wages Act for the applicable trade or category of workman to the worker engaged by him on the work and also ensure that any sub-contractors engaged by him also pay not below the applicable minimum wages under the Act and hold the company, indemnified in respect of any claims that may arise in respect or non-compliance with this requirements.

iii) The contractor shall observe all the formalities required under the provisions of the contract labour (Regulation and abolition) Act 1970 and the rules made thereunder and as may be amended from time to time. 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 him self registered under the Act. He shall produce the certificate of registration granted by the Govt. authority under the Act to the company before commencement of work. The company recognises 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 at least at rates equal to or better than wages provided for under the Minimum Wages Act.

iv) The Contractor will comply with the provisions of the employee's Provident Fund Act and the Family Pension Fund Act as may be applicable and as amended from time to time. Contractor shall obtain their own provident fund account number. Offer of the contractor who does not have provident fund account will be liable for rejection.

v) The Contractor will comply with the provisions of the Payment of Gratuity Act 1972 as may be applicable and as amended from time to time.

90 IMPLEMENTATION OF APPRENTICES ACT 1961:

The Contractor shall comply with provisions of the Apprentices Act 1961 and the Rules/orders issued thereunder from time to time. If he fails to do so, his failure will be breach of the contract and the Engineer-in-Charge may, at his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provision of the act.

91 CONTRACTOR TO INDEMNIFY THEOWNER:

i) The contractor shall indemnity the owner and every member, officer and employee of the 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 86 and all actions/ proceedings, claims, demands, costs and expenses which may be made against the Owner for or in respect of or arising out of any failure by the contractor in the performance of his obligations under the contract documents. The 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 or injury to any workmen or other person in the employment of the contractor or his sub-contractor and contractor shall indemnify and keep indemnified the Owner against all such damages and compensations and against all claims, damage, proceedings, costs, charges and expenses whatsoever, thereof or in relation thereto.

ii) <u>Payment of Claims and Damages:</u>

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

In every case to which by virtue of the provisions of Section 12, sub-section (I) of workmen's compensation Act 1923 or other applicable provisions of workmen's Compensation Act any other Act, the Owner is obliged to pay compensation to a workmen employed by contractor in execution of the works, the Owner will recover from the 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 security deposit or from any sum due to the contractor whether under the contract or otherwise. The Owner shall not be bound to contest any clime made under Section

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12, sub-section (I) of the said Act except on the written request of contractor and upon his giving to the Owner full security for all costs for which the Owner might become liable on consequence of contesting such claims.

iii) Employment Liability:

a) The contractor shall be solely and exclusively responsible for engaging or 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 right to make such payments directly, to such employee or sub-contractor of the contractor and recover the amount in full from the bills of Contractor, and the 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.

b) The Contractor shall advise in writing to all of his employees and the employees of his 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 owner.

92 (a) HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS:

In respect of all labour directly employed in the works for performance of the contractor's par this agreement, the contractor shall comply with or cause to be complied with all the rules and regulations of the local sanitary and other authorities or as framed by the Owner from time to time for the protection of health and sanitary arrangements for all workers.

(b) MEDICAL FITNESS CERTIFICATION :

Contractor shall follow guidelines for medical fitness certification of workers employed for working at height more than 30 metres using temporary structures.

93 SAFETY REGULATIONS:

i) In respect of all labour, directly or indirectly employed In the work for the performance of contractor's part of this agreement, the contractor shall at his own expenses arrange for all safety provisions as per safety codes of C.P.W.D. Indian Standard Institution, the Electricity Act, The Mines Act and any such other acts as applicable.

ii) The Contractor shall ensure that he, his sub-contractor and his, or their personnel or representatives shall comply with all Fire / Safety regulations issued from time to time by the Company or otherwise howsoever and should any injury resulting in death or not or loss / or damage due to Fire to any property or a portion thereof, occurred as a result of failure to comply with such regulations, the contractor shall be held responsible for the consequences thereof and shall keep the company harmless and indemnified.

94 DISPUTE RESOLUTION:

i) In the event of a dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, the parties shall first seek settlement of that dispute by mediation in accordance with BPCL Mediation Scheme, 2025. The venue of mediation proceedings shall be at _____(Region/HQ from where the tender has been floated). BPCL Mediation Scheme 2025 can be accessed at https://www.bharatpetroleum.in/images/files/bpcl-mediation-scheme-2025.pdf

ii) If the dispute is not settled by mediation in terms of BPCL Mediation Scheme, 2025, then the dispute shall be referred for adjudication through a court of competent jurisdiction in India.

iii) The governing law of the contract shall be the substantive laws of India.

iv) Neither party shall be entitled for any pre-filing interest, i.e., from the date of cause of action till the date of filing of civil suit. Parties agree that any claim for any such interest shall not be considered and shall be void. The Civil Court/Commercial Court shall have no right to grant any pre-filing interest to either of the parties.

v) In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/Port Trusts inter se and also

between CPSEs and Government Departments/Organisations (excluding disputes relating to Income Tax, Customs & Excise Departments*), such dispute or difference shall be taken up by either party for its resolution through AMRCD as mentioned in DPE OM no. 05/0003/2019-FTS-10937 dated 14th December, 2022 and the decision of AMRCD on the said dispute will be binding on both the parties.

(* The exclusion would also include disputes concerning GST, State level Sales Tax / VAT etc; though not mentioned explicitly).

95 JURISDICTION:

The contractor shall be governed by the Laws in force in INDIA. The contractor hereby submits to the jurisdiction of the Courts situated at Mumbai/(Ernakulam-in the case of Kochi Refinery), for the purpose of actions and proceedings arising out of the contract and the courts at Mumbai/(Ernakulam-in the case of Kochi Refinery), only will have jurisdiction to hear and decide such actions and proceedings.

96 ORDER OF PRECEDENCE FOR WORKS / SERVICES CONTRACTS:

1. Contract Agreement (in GCC)
2. Detailed letter of Acceptance along with its enclosures
3. Letter of Award / Fax of Acceptance
4. Job Specifications (specific to particular job only)
5. Drawings
6. Special Conditions of Contract (SCC)
7. Technical Specifications
8. Instructions to Bidders
9. General Conditions of Contract (GCC)
10. Other Documents

Additionally, any variation or amendment / change order issued after signing of formal contract shall take precedence over respective clauses of the formal contract and its Annexures.

97 LIMITATION OF LIABILITY

The aggregate total liability of the Contractor to Owner under the Contract shall not exceed the total Contract Price, except that this Clause shall not limit the liability of the Contractor for following:
(a) In the event of breach of any Applicable Law;

(b) In the event of fraud, willful misconduct or illegal or unlawful acts, or gross negligence of the Contractor or any person acting on behalf of the Contractor; or

(c) In the event of acts or omissions of the Contractor which are contrary to the most elementary rules of diligence which a conscientious Contractor would have followed in similar circumstances; or

(d) In the event of any claim or loss or damage arising out of infringement of Intellectual Property; or

(e) For any damage to any third party, including death or injury of any third party caused by the Contractor or any person or firm acting on behalf of the Contractor in executing the Works. Neither Party shall be liable to the other Party for any kind of indirect or consequential loss or damage like, loss of use, loss of profit, loss of production or business interruption which is connected with any claim arising under the Contract.

98 POLICE VERIFICATION OF CONTRACT STAFF AND TRANSPORT CREW AT LOCATION:

The Contract staff should submit the following documents for enabling them to enter the location:
i) Police verification certificate issued by the police (PVC)
ii) Photocopy of Aadhaar Card (Original to be cross checked)
iii) Assurance certificate from the Vendor / Contractor /transporter

99 NUISANCE:

The contractor shall not at any time do, cause or permit any nuisance on site or do anything which shall cause unnecessary disturbance or inconvenience to Corporation, tenants or occupiers of other properties near the site and to the general public.

100 BUILDING AND OTHER CONSTRUCTION WORKERS CESS:

i) Bidders to note that under Building and other Construction Workers Welfare Act (Re&CS) Act 1996, Cess is applicable to contracts executed outside Factory Area (e.g. construction of new industrial installation, office & residential buildings etc.) as per the provisions applicable under 'The Building and Other Construction Workers Welfare Cess Act 1996'.

ii) The contractor must be registered with the concerned authorities under the Building and other Construction Workers" (RE&CS) Act, 1996 or in case of non-registration; the contractor should obtain registration within one month of the award of contract.

iii) The contractor shall be responsible to comply with all provisions of the Building and Other Construction Workers" (RE&CS) Act, 1996, the Building and other Construction Workers" Welfare Cess Act, 1996, the Building and other Construction Workers" (RE&CS) Rules, 1998 and the Building and other Construction Workers Welfare Cess Rules, 1998.

iv) Cess, as per the prevailing rate (presently 1%), shall be deducted at source from bills of the contactors by the Engineer-in-Charge and remitted to the "Secretary, Building and other Construction Workers Welfare Board" of the concerned State.

v) The contactor shall be responsible to submit final assessment return of the Cess amount to the assessing officer after adjusting the Cess deducted at source.

SECTION - IX

MEMORANDUM OF AGREEMENT

An agreement made this_____day_____of_____20 between BHARAT PETROLEUM CORPORATION LIMITED a Company Incorporated in India and having its registered office at Ballard Estate, Mumbai, (herein after referred to as 'the Company' which expression shall include its heirs, legal representatives, successors and permitted assignees) of the one part, and

_____

_____

_____

_____

(herein after referred to as "The Contractor" which expression shall include its heirs, legal representatives, successors and permitted assignees) of the other part, whereby it is agreed:-

1. The Contractor shall carry out and complete the work as mentioned in the Purchase order/Contract No. dated , (hereinafter referred to as "the work") for the Company at its specified site to its complete satisfaction in accordance with the specifications, schedule of rates and plans attached as per Purchase order/Contract and with the instructions given from time to time, by the Company's authorized engineer under whose supervision the work shall be-executed. The parties hereto agree that this agreement shall be effective from the date of the aforesaid Purchase Order/Contract.

2. Inspection of site: The Contractor has been given an opportunity before or at the time of the entrusting of the work to him of making an inspection of the site to set at rest any doubt he may have had about the difficulties attending his offer, and any difficulties which may be met with by him in the course of the execution of the work shall neither relieve him from fulfilling the terms of this Agreement, nor entitled him to claim extra payment or an extension of the period stipulated for the completion of the work, except where it will be agreed by the Company's authorized Engineer that such difficulties could not have been foreseen.

3. Supply of Labour and Materials: The Contractor shall furnish all labour, materials, equipment or tools necessary for the construction of the work, except such materials, equipment or tools as will be supplied by the Company and are detailed in Purchase order/Contract. The contractor will assume full responsibility for the protection and safety of the work during its construction. The details and dimensions shown on the said plans referred to in the Purchase order/Contract shall be strictly adhered to by the contractor and no alterations shall be made therein unless previous sanction thereto has been given in writing by the Company.

   (a) The Contractor shall prepare detailed and shop drawings and any other data required.

   (b) All materials supplied by the Contractor shall be of the best quality. The Contractor shall at his own cost arrange for and/or carry out any test of materials, which the Company's authorized Engineer may require.

   (c) The Contractor shall at the request of the Company's authorized Engineer immediately dismiss from the work any person employed thereon who, in the opinion of the Company's authorized Engineer, is unsuitable or incompetent or who, has been guilty of misconduct, and such person shall not again be employed or allowed on the works without the permission of the Company, in writing.

4. E. & O. E. No advantage is to be taken either by the Company or the Contractor of any clerical error or mistake, which may occur in the specification, schedule of rates, plans, tender or any other papers supplied to or by the contractor in connection with the work.

5. Damage on account of Incomplete work: The Contractor shall commence the work and shall complete the work as mentioned in Purchase order/Contract failing which the Contractor shall pay or allow to the Company to recover as liquidated damages, at the rate of minimum 0.5% per week of delay or part there of up to a maximum of 5% of the total contract value, if Liquidated damages clause is made applicable in the contract. Such damages may be deducted by the Company from any amount due to the contractor; otherwise they shall be recoverable by lawful means.

6. a) Determination of the Agreement: The company shall, at any time, be entitled to determine and terminate the contract, if in the opinion of the company, 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 company'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 company to the contractor of such determination and termination and reasons therefore shall be the conclusive proof of the fact that the contract has been so determined and terminated by the company.

Should the contract be determined as above and the contractor claims payment to compensate expenditure incurred by him in the expectation of completing the work, the company 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 company's decision on the necessity and propriety of such expenditure shall be final and conclusive and binding on the contractor.

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 the above clauses of this article.

b) Termination/Offloading: The contractor fully understands that timely completion of the work as per the schedule is of paramount necessity as otherwise it would lead to adversely affecting the schedules of other works/project with resultant financial and other losses to the Company. In view of this, the contractor unconditionally agrees and binds himself to be liable for all the consequences for non-completion of the work within the stipulated time.

In case a situation is brought about by the contractor warranting termination/off-loading of the whole or any part of the work for any reason whatsoever, the Company shall have the liberty and right to entrust/engage/award the work so terminated off loaded at the risk and cost of the contractor to any other agency/contractor by adopting any mode of inviting tenders, i.e. open/limited/single party/negotiation basis etc. in order to ensure completion of the work as per the schedule or at the quickest possible time.

7. Defective Work / Materials: If the work done by the Contractor or any part there of shall be found defective in workmanship or by reason of bad or inferior materials used, then in such case he shall at his own risk and cost without delay, demolish all such defective work and rebuild or replace the same in a satisfactory manner. The Company may, if necessary, at the cost and risk of the Contractor, temporarily stop all other activities by the Contractor in connection with the work until such time as the defective work has been rebuilt or replaced at the Contractor's cost. In case of default on the part of the contractor to remove defectives work and rebuild or replace the same without delay and in a manner satisfactory to the Company, the Company shall be entitled to employ another Contractor or its own workman to carry out the removal and rebuilding or replacing at the risk and cost of the contractor.

8. Substitution of Contractor : If the Company finds it necessary to employ a person or persons for the purposes provided in clauses 6 (b) and 7 above, then the Company may deduct and retain from out of the sums due to the contractor all such amounts as they may require to pay or to reimburse themselves there from in respect of the costs and expenses which they have incurred in completing the work and or in removing defective work and rebuilding or replacing the same in a manner satisfactory to the Company and if such amounts be more than the sums due or thereafter becoming due to the Contractor, than the balance, shall be a debt recoverable from the Contractor by the Company. The Contractor shall not in any manner do or cause to be done any act, matter or things whatsoever to prevent the person or persons so employed by the Company from removing defective work and re-building or replacing the same in a manner satisfactory to the Company and/or from, completing the work in the manner aforesaid.

9. Removal of Material: On the Determination of the Agreement as referred to in Clause 6, the Contractor shall at his own risk and cost remove from site within Seven days all his materials, equipment and tools. It is agreed that in case of such determination the company shall be entitled to purchase from the Contractor such materials as will be approved by the Authorized Engineer of the Company at the prices then current. If the Contractor does not remove the other materials, equipment and tools which he has been asked to remove within the time prescribed as aforesaid, the Company may remove and sell the same holding the proceeds less the cost of storage, removal and sale to the credit of the Contractor. Should Company incur any loss in respect of the sale, it shall be entitled to recover same from the Contractor.

10. Inspection of work: Inspection will be made periodically during the progress of the work by the authorized Engineer of the Company and all work performed must be of acceptable quality of which the said Engineer-in-Charge will be the sole judge.

11. Supervision: The Contractor shall during the whole time the work is in progress, employ one or more competent and technical English speaking Supervisors acceptable to the Company's authorized Engineer, one of whom at least shall be in constant attendance at the site while persons are at work there. Any directions, explanations, instructions, or notices in connection with the work given by the Company's authorized Engineer to these Supervisors shall be deemed to have been given to the Contractor.

12. Payment: The Company, in consideration of the contractor carrying out and completing the said work at the Company's said site, to the satisfaction of the Company, shall pay the contractor as per the said schedule of Rates, subject to deductions, retentions and abatements, if any to be made therefrom in accordance with the provisions of this Agreement. During the progress of the work and provided the work is progressing according to the time-table laid down to the contractor, the contractor shall be entitled once a month to receive advance payment on the above mentioned sum proportionate to such part of the work as shall have been executed during the preceding month but only after such part of the work as has been executed has been inspected and approved by the Company's authorized Engineer. From such interim payments each time 10% will be withheld as Security deposit and this 10% will be paid to the Contractor after the defect liability period, provided that any defects appearing during that period are corrected by him. OR

    100% payment will be made on the basis of actual executed quantities after satisfactory completion and due certification by BPCL Engineer-in-charge. In lieu of 10% Retention money towards Security deposit, contractor shall submit bank guarantee / Insurance Surety Bond of equivalent amount of retention money (10% of contract value) before submission of 1st Running Account (RA) bill valid for defects liability period specified. Further, the Bank Guarantee / Insurance Surety Bond shall have a claim period of six months beyond the date of expiry, and the same shall be mentioned clearly in the Bank Guarantee / Insurance Surety Bond.

13. Defects after Completion: Any defects which may appear within the defect liability period specified shall, upon the directions in writing of the Company and within such reasonable time as shall be specified therein be amended and made good by the Contractor, at his own cost unless the Company shall decide that the Contractor will be paid for such amending and making good, and in case of default on the Contractor's part, the Company may amend and make good or have amended and made good such defects and all damages, losses and expenses consequent thereon, incidental to those shall be borne by the Contractor and such damages, losses and expenses shall be recoverable from him by the Company or may be deducted by the Company from any moneys due to or thereafter becoming due to the Contractor. Alternatively, the Company may, in lieu of such amending and making good by the Contractor elect to deduct from any moneys due or thereafter becoming due to the Contractor a sum to be determined by the Company sufficient to cover the cost of amending and making good such defects, and in the event of the amount withheld in accordance with Clause 12 being insufficient, recover the balance from the Contractor together with any expenses the Company may have incurred in connection with such recovery. Should any defective work have been done or bad inferior materials supplied by any Sub-Contractor employed on the work, has been approved by the Company as provided in Clause 15, the Contractor shall be liable to amend and make good in the same manner as if such work or materials had been done or supplied by the Contractor. The Contractor shall remain liable under this Clause notwithstanding the signing by the Company's authorized Engineer of any certificate or the passing of any account.

14. Alterations: The Company reserves the right at any time to alter any quantities of any item indicated in the Purchase order/Contract, in which case the total amount payable to the Contractor shall be less or higher, proportionate with the reduction or increase in quantity of such item, allowance for which will be made at the Contractor's agreed rates.

15. Subletting Agreement: The Contractor shall not sublet or assign the work or any part thereof to another party without the written consent of the company and no such subletting or assignment shall relieve the contractor from the full and entire responsibility of his obligation under this Agreement.

16. Cancellation: The Company shall at any and all times during the period stipulated for the work, has the right forthwith to cancel this agreement by giving written notice thereof to the Contractor and in such case the Contractor shall be paid for such part of the work as has been executed by him up to the date of cancellation, on the basis of schedule of rates as per Purchase order/Contract and shall be reimbursed by the Company for the cost and expenses incurred by him but which would now be wasted as a direct consequence of the cancellation of the Agreement.

17. Workmen's Compensation Liability: The Contractor shall hold the Company harmless and indemnified from and against all claims, costs and charges for which the Company shall be liable under the Workmen's Compensation Act, 1923 and any amendments thereof and the expenses to which it shall be put thereunder, both in respect of personal injuries (within the meaning of the said Act) to the employees and servants of the Contractor or Sub-Contractors, (if any), arising out of, or occasioned during the currency of this agreement through the acts or omissions, whether due to negligence or not of the Contractor, Sub-Contractor and/or Company and/or their respective servants and employees and also in respect of the personal injuries (within the meaning of the said Act) to the servants and employees of the Company arising out of, or occasioned through the acts and omissions whether due to negligence or not of the Contractor, Sub-Contractor and or their servants and employees in carrying out any of the provisions of this Agreement. This indemnity shall be in addition to and not in lieu of any indemnity to which the Company shall be entitled in law. The Contractor shall at his own expense effect and

maintain, until the completion of the work, with an approved office a Policy of Insurance in the joint names of the Company and the Contractor, against such risks and deposit such Policy or policies with the Company from time to time during the currency of this Agreement. The Contractor shall be responsible for anything not included in the Insurance Policies above referred to and also for all other damage to person or property arising out of or incidental to the negligent or defective carrying out of this agreement and shall keep the Company harmless and indemnified. He shall also indemnify the Company in respect of any costs, charges or expenses arising out of any claim or proceedings and also in respect of any award of compensation or damages arising therefrom. The Company shall be entitled to deduct the amount of any damages compensation costs, charges and expenses arising or accruing from or in respect of any such claim or damages from any sum or sums due or thereafter becoming due to the Contractor.

18. Safety Regulation: The Contractor shall ensure that he/his Sub-Contractor and his, or their personnel or representatives shall comply with all safety regulations issued from time to time by the Company or otherwise howsoever and should any injury resulting in death or not or damage to any property occur as result of failure to comply with such regulations the Contractor shall be held responsible for the consequences thereof, shall keep the Company harmless and indemnified.

19. Dispute Resolution:

19.1 In the event of a dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, the parties shall first seek settlement of that dispute by mediation in accordance with BPCL Mediation Scheme, 2025. The venue of mediation proceedings shall be at _____(Region/HQ from where the tender has been floated). BPCL Mediation Scheme 2025 can be accessed at https://www.bharatpetroleum.in/images/files/bpcl-mediation-scheme-2025.pdf

19.2 If the dispute is not settled by mediation in terms of BPCL Mediation Scheme, 2025, then the dispute shall be referred for adjudication through a court of competent jurisdiction in India.

19.3 The governing law of the contract shall be the substantive laws of India.

19.4 Neither party shall be entitled for any pre-filing interest, i.e., from the date of cause of action till the date of filing of civil suit. Parties agree that any claim for any such interest shall not be considered and shall be void. The Civil Court/Commercial Court shall have no right to grant any pre-filing interest to either of the parties.

19.5 In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/Port Trusts inter se and also between CPSEs and Government Departments/Organisations (excluding disputes relating to Income Tax, Customs & Excise Departments*), such dispute or difference shall be taken up by either party for its resolution through AMRCD as mentioned in DPE OM no. 05/0003/2019-FTS-10937 dated 14th December, 2022 and the decision of AMRCD on the said dispute will be binding on both the parties.

(* The exclusion would also include disputes concerning GST, State level Sales Tax / VAT etc; though not mentioned explicitly)."

20. Jurisdiction:

The contractor shall be governed by the Laws in force in INDIA. The contractor hereby submits to the jurisdiction of the Courts situated at Mumbai/(Ernakulam-in the case of Kochi Refinery), for the purpose of actions and proceedings arising out of the contract and the courts at Mumbai/(Ernakulam-in the case of Kochi Refinery), only will have jurisdiction to hear and decide such actions and proceedings.

21. Minimum Wages:

The Contractor, his executors and administrators (and in the case of a Limited Company, its successors and assigns) shall hold the Company harmless and indemnified from and against all claims, costs and charges, for which the Company shall be liable under the Minimum Wages Act, 1948, the Contract Labour (Regulation and Abolition) Act, 1970 and any amendments or modifications thereof, and all expenses it shall be put thereunder through the acts or omissions whether willful or not on the part of the Contractor. This indemnity shall be in addition to and not in lieu of, any indemnity to which the Company shall be entitled in law.

22. Employees State Insurance: This Contractor hereby admits that he is fully aware of his responsibilities under the

Employees State Insurance Act, 1948, as an immediate employer of the employees engaged by him for the execution of this contract which he agrees to discharge. The Contractor acknowledge the statutory right of the company (as a Principle Employer) to recover the amount of the contributions, paid by it in the first instance in respect of the employees employed by or through him (the Contractor), as well as the employee's contribution, if any, either by deduction from any amount payable to him by the Company under any contract or as debt payable by him to the Company.

In witness where of the said contracting parties have set their hands.

Witness _____

For Bharat Petroleum Corporation Ltd.

_____

For Bharat Petroleum Corporation Ltd.

Witness _____

Contractor's witness - Signature

Name & Address:-

_____

Contractor's Signature

Name & Address:-

PROFORMA OF BANK GUARANTEE

(On non-judicial paper of appropriate value)

FOR EARNEST MONEY / SECURITY DEPOSIT TOWARDS PERFORMANCE

To

Bharat Petroleum Corporation Ltd.

Dear Sirs,

M/s._____have taken tender for the work_____CRFQ No/PO No

_____for Bharat Petroleum Corporation Ltd.

The tender Conditions of Contract provide that the Contractor shall pay a sum of Rs._____ (Rupees_____) as earnest money/security deposit in the form therein mentioned. The form of payment of earnest money/security deposit includes guarantee executed by Scheduled Bank, undertaking full responsibility to indemnify Bharat Petroleum Corporation Ltd. in case of default.

The said_____have approached us and at their request and in consideration of the premises we_____having our office at_____have agreed to give such guarantee as hereinafter mentioned.

1. We_____hereby undertake and agree with you that if default shall be made by M/s._____in performing any of the terms and conditions of the tender or in payment of any money payable to Bharat Petroleum Corporation Ltd. We shall on demand pay to you in such matter as to you may direct the said amount of Rupees_____only or such portion thereof not exceeding the said sum as you may from time to time require.

2. You will have the full liberty without reference to us and without effecting this guarantee postpones for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said_____and to enforce or to for bear from endorsing any power of rights or by reason of time being given to the said which under law relating to the sureties would but for provision have the effect of releasing us.

3. Your right to recover the said sum of Rs._____(Rupees_____) from us in manner aforesaid will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said M/s._____and/or that any dispute or disputes are pending before any officer, tribunal or court.

4. The guarantee herein contained shall not be determined or affected by the liquidation or winding up, dissolution or change of constitution or insolvency of the said_____but shall in all respects and for all purposes be binding operative units payment of all money due to you in respect of such liabilities is paid.

5. Our liability under this guarantee is restricted to Rupees_____Our guarantees shall remain in force until_____unless a suit or action to enforce a claim under_____Guarantee is filed against us within six months from _____(which is date of expiry of guarantee) all our rights under the said guarantee shall be forfeited and shall be relieved and discharged from all liabilities thereunder.

6. We have power to issue this guarantee in your favour under Memorandum and Articles of Association and the undersigned has full power to do under the Power of Attorney dated_____granted to him by the Bank.

Yours faithfully

_____Bank by its Constituted Attorney Signature of a person duly authorized to sign on behalf of the bank.

Proforma of Insurance Surety Bond towards Bid Security (EMD) / Performance Security

[To be stamped in accordance with Stamp Act of India]

Insurance Surety Bond No. Date

To

[Bharat Petroleum Corporation Limited]

Dear Sirs,

In accordance with Invitation for Bids under your Tender No. & date……, M/s.....[Bidder's Name] ..... having its Registered / Head Office at ..... (hereinafter called the 'Bidder') wish to participate / have been awarded [as the case may be] in the said tender for ..... [Procurement description / Tender Title].

As an irrevocable Insurance Surety Bond against Bid Security (EMD) / Performance Security [as the case may be] for an amount of ..... [EMD / Performance Security amount] and remain in full force for a period of …… (days) i.e. up to [Validity Date] from the Bid Due Date and with an additional claim period of ……(days) i.e. up to [Claim Period Validity Date] required to be submitted by the Bidder as a condition precedent for participation in the said bid / award of contract [as the case may be] which amount is liable to be forfeited on the happening of any contingencies as mentioned under the Bidding Documents / Contract / LoA.

We, the ..... [Name of the Insurer] registered under IRDAI having our Head Office at .....[Address of the Insurer] guarantee and undertake to pay immediately on demand by Bharat Petroleum Corporation Limited (hereinafter called the 'Beneficiary') the amount of ..... [EMD / Performance Security amount] without any reservation, protest, demand and recourse. Any such demand made by the Beneficiary shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder and / or any right / remedy available to the bidder in terms thereof.

This Insurance Surety Bond shall be unconditional as well as irrevocable and shall remain valid up to ..... [Claim date]. If any further extension of this Insurance Surety Bond is required, the same shall be extended to such required period on receiving instructions from M/s ..... [Bidder's Name] on whose behalf this Insurance Surety Bond is issued.

The Insurer declares that it has power to issue this Surety Bond and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Surety Bond for and on behalf of the Insurer.

The Surety Bond shall not be affected by any change in the constitution or winding up of the Bidder or the Insurer or any absorption, merger or amalgamation of the Bidder or the Insurer with any other person.

In witness where of the Insurer, through its authorised officer, has set its hand and stamp on this.....day of.....20.....at.....

.....
(Signature)
.....
(Name)
.....
(Designation with Insurer Stamp)

Contact Details & Address of Surety Insurer for verification:

Name (Official): ……

Branch Address:……

Telephone No.:……

Mobile No:……

E-mail:……

TAX RESIDENCY CERTIFICATE

TRC obtained by the Non-resident from Government of foreign country shall contain the following particulars:

a.Name of the assessee
ii. Status (individual, company, firm, etc.) of the assessee
iii. Nationality (in case of individual)
iv. Country or specified territory of incorporation or registration (in case of others)
v. Assessee's tax identification number in the country or specified territory of residence or in case of no such number, then, a unique number on the basis of which the person is identified by the Government of the country or the specified territory
vi. Residential status for the purpose of Tax
vii. Period for which the certificate is applicable
viii. Address of the applicant for the period for which the certificate is applicable

FORM NO. 10 F

[See sub-rule (1) of rule 21AB of the Income-tax Act, 1961]
Information to be provided under sub-section (5) of section 90 or sub-section (5) of section 90A of the Income-tax Act, 1961

1. I_____*son/daughter of Shri_____in the capacity of_____(designation)do provide the following information, relevant to the previous year_____,*in my case/in the case of_____for the purposes of sub-section (5) of *section 90/section 90A:-

Sl. No.	Nature of information		Details #
(i)	Status (individual, company, firm etc.) of the assessee	:	
(ii)	Permanent Account Number (PAN) of the assessee if allotted :	:	
(iii)	Nationality (in the case of an individual) or Country or specified territory of incorporation or registration (in the case of others)	:	
(iv)	Assessee's tax identification number in the country or specified territory of residence and if there is no such number, then, a unique number on the basis of which the person is identified by the Government of the country or the specified territory of which the assessee claims to be a resident	:	
(v)	Period for which the residential status as mentioned in the certificate referred to in sub-section (4) of section 90 or sub-section (4)of section 90A is applicable	:	
(vi)	Address of the assessee in the country or territory outside India during the period for which the certificate, mentioned in (v) above, is applicable	:	

2. I have obtained a certificate referred to in sub-section (4) of section 90 or sub-section (4) of section 90A from the Government of _____(name of country or specified territory outside India).

Signature:_____
Name:_____
Address:_____
Permanent Account Number :_____

Verification

I_____do hereby declare that to the best of my knowledge and belief what is stated above is correct, complete and is truly stated.

Verified today the_____day of _____

_____
Signature of the person providing the information

Place:_____

Notes:
1. * Delete whichever is not applicable.
2. #Write N.A. if the relevant information forms part of the certificate referred to in sub-section (4) of section 90 or sub-section (4) of section 90A.".

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BHARAT PETROLEUM CORPORATION LTD

ACKNOWLEDGEMENT

We, M/s._____having office at_____received the copy of GENERAL CONDITIONS OF CONTRACT and confirm our acceptance to all the terms and conditions as mentioned herein in this General Conditions of Contract and we are hereby returning this copy of Acknowledgement duly signed.

For & on behalf of M/s._____

Signature :
Name : _____

Designation : _____

(Seal / Stamp)

Place :

Date :

BPCL MEDIATION SCHEME, 2025

An effective dispute resolution process has a significant impact on the ease of doing business. Towards the said objective, the Government of India has been at the forefront in promoting Alternate Dispute Resolution (ADR) mechanisms for resolution of disputes between parties. The latest initiative of the Government of India towards promoting ADR is the enactment of Mediation Act, 2023.

The Mediation Act, 2023 defines "mediation" to include pre-litigation mediation, online mediation, conciliation or an expression of similar import, whereby parties attempt to reach an amicable settlement of their dispute with the assistance of an outside expert referred to as mediator. Mediation is a legally permitted informal but structured means of settling commercial disputes outside of the courtroom. It is time and cost efficient method of dispute resolution, which is a win-win situation for both parties involved.

With the impetus provided by enactment of Mediation Act, 2023 and considering the advantages of mediation in amicable resolution of disputes, BPCL has come up with this Mediation Scheme, 2025 to put in place a procedure to be adopted for resolution of disputes involving BPCL through mediation.

BPCL Mediation Scheme, 2025 shall come into effect on 30.05.2025. It is pertinent to mention here that only a few provisions of the Mediation Act, 2023 have been notified till date. Notwithstanding anything to the contrary stated in this Scheme, until the provisions of the Mediation Act, 2023 which are required for successful implementation of this Scheme are notified by the Government of India, the mediation proceedings as envisaged under the BPCL Mediation Scheme, 2025 shall be treated and considered as conciliation proceedings under the Arbitration and Conciliation Act, 1996.

I. Scope and applicability:

1. This scheme shall apply to any dispute(s) arising out of or in relation to a contractual relationship involving BPCL, where it has been agreed in writing that the parties shall attempt amicable resolution of dispute(s) through mediation in accordance with BPCL Mediation Scheme, 2025. However, absence of a mediation agreement shall not render the mediation proceedings conducted under this scheme void, provided the parties mutually agree (in writing) to refer the dispute to mediation in terms of this scheme.
2. This scheme shall not apply to the disputes involving the following:
   a) Any dispute not involving monetary claims;
   b) Disputed amount is not more than Rs. 10 lakhs;
   c) BPCL's decision to terminate a contract and consequential recovery from the terminated party;
   d) BPCL's decision to Holiday list/blacklist and related recovery of damages/penalty;
   e) MS/HSD/SKO Dealership Agreement, LPG Distributorship Agreement, Lubes Distributorship Agreement, Bank Guarantee, Letter of Credit, Real Estate Agreement and Transportation Agreements ;
   f) Policy related matters;
   g) Specific Performance of contract;
   h) Pre-award tender cases; and
   i) Breach of Integrity Pact.

   The decision of BPCL shall be final with respect to whether or not a dispute referred to mediation falls under any of the above categories.

II. Commencement of mediation proceedings

1. Before resorting to mediation, parties must explore the option of amicable resolution of dispute(s) as per the provisions of the contract, if any. If the dispute(s) remains unresolved, then the parties may prefer settlement of dispute(s) through mediation under the provisions of this Scheme.
2. When the contractor or vendor (hereinafter referred to as "Other Party") wishes to refer a dispute to mediation under this scheme, then he shall submit Notice for Mediation alongwith the Statement of Claim in the Online Mediation Portal (www._____.co.in). The Notice for Mediation and the Statement of Claim must be in the format as provided in Annexure A.
3. Based on the documents uploaded in the Online Mediation Portal, BPCL will examine the claims of Claimant. If BPCL is of the opinion that the dispute in question is not a dispute that can be

referred to mediation under this scheme, then a reply to that effect shall be issued by BPCL within a period of 30 days from receipt of such notice. If in the opinion of BPCL, it is a fit case for settlement through mediation, then within a period of 30 days from the receipt of such notice, BPCL may give its consent in writing for the dispute to be referred to mediation.

4. Whenever a dispute is referred to mediation by BPCL, a copy of the mediation notice alongwith the Statement of Claim (as per the format provided in Annexure A) will be issued by BPCL to the Other Party. The Other Party may send its consent, in writing, to BPCL within a period of 30 days from the date of receipt of Notice for Mediation.

5. The parties shall not, during the pendency of mediation proceedings, initiate any judicial or similar proceedings in respect of the dispute(s) which is the subject matter of mediation. If any such judicial or similar proceedings have been initiated prior to the commencement of mediation proceedings, the parties shall inform the court/forum/tribunal about the referral of the dispute(s) to mediation under this scheme and ensure that such judicial or similar proceedings are kept in abeyance.

6. Until the Online Mediation Portal is in place, the process as envisaged above shall be carried out in offline mode. The Other Party wishing to refer the dispute(s) to mediation under the BPCL Mediation Scheme, 2025 may send the Notice for Mediation and the Statement of Claim as per format provided in Annexure A to Legal HQ, 3rd Floor, Bharat Bhavan I, Ballard Estate, Fort, Mumbai- 400001.

III. Constitution of Mediation Tribunal:

1. For the purpose of this scheme, BPCL shall prepare and maintain a Panel of Mediators. The Panel of Mediators shall include mediators from Technical, Commercial and Legal streams, who shall be available for appointment in the Mediation Tribunal for settlement of dispute(s) under this scheme.
2. Mediation Tribunal shall comprise of 3 members. Depending on the nature of the claims and counter claims, if any, BPCL shall appoint the members of the Mediation Tribunal from the Panel of Mediators. To the extent possible, it is to be ensured that the 3 mediators are from different streams.

   However, for disputes involving claim amount up to Rs. 10 crores, the dispute shall be referred to a Sole Mediator as appointed by BPCL from the Panel of Mediators.[1]

[1] For the sake of brevity, the expression "Mediation Tribunal" as used in this document shall mean "Sole Mediator" when the claim amount involved is less than Rs. 10 crores

3. The Mediation Tribunal is to be constituted within a period of 20 days from the date of consent given by the Respondent.
4. BPCL is empowered to reconstitute the Mediation Tribunal to fill any vacancy or if any member of the Mediation Tribunal is not available to attend the mediation meetings.

IV. Procedure for mediation:

1. Upon constitution of the Mediation Tribunal, BPCL shall issue appointment letter to the members of the Mediation Tribunal within 7 days with a copy to the Other Party. Along with the letter of appointment, a copy of the Notice for mediation and the Statement of Claim are also to be shared with the members of the Mediation Tribunal by BPCL.
2. After receipt of appointment letter, members of the Mediation Tribunal shall give a declaration of independence and impartiality (as per the format provided in Annexure B) to both parties within 7 days.
3. On receipt of declaration of independence and impartiality from the members of the Mediation Tribunal, the Respondent shall submit its reply and counter claim, if any, to the Mediation Tribunal with a copy to the Claimant within 30 days from the date of appointment of the members of Mediation Tribunal.
4. The Mediation Tribunal shall commence its meetings within a period of 10 days from the receipt of reply. The maximum number of meetings and the fee payable to mediators will be in accordance with Annexure C of this Scheme.

V. Mediation proceedings:

1. The language to be used in the mediation proceedings shall be English.
2. No frivolous or baseless claims/counterclaims of parties shall be entertained by the Mediation Tribunal. Mediation Tribunal, in its discretion, may impose cost on parties for raising frivolous claims.
3. In case of Mediation Tribunal comprising 3 members, 2 will constitute a valid quorum and the meeting can take place to proceed in the matter after seeking consent from the member who is not available.
4. The parties shall be represented by their employees or representatives only. No party shall be allowed to bring any advocate or outside consultant/subcontractor/advisor/agent to present the case on their behalf. Similarly, ex-employees of either party who might have handled the

disputed matter in any capacity shall not be allowed to present the case of the other party before the Mediation Tribunal.

5. Parties to rely only upon documentary evidence in support of their claims and not to seek for any oral evidence in the mediation proceedings.
6. Mediation Tribunal will give full opportunity of hearing to the parties before giving its Settlement Proposal.
7. If at any time during the proceedings under this Scheme, it appears to the Mediation Tribunal that no settlement is likely to be reached between the parties or if either of the parties write to the Mediation Tribunal seeking for termination of mediation proceedings, then the Mediation Tribunal may give a duly signed non-settlement report to the parties. However, even in cases of such non-settlement, the fee payable to the members of the Mediation Tribunal is to be paid in terms of Annexure C.
8. Unless otherwise agreed in the tender/contract, the venue of the mediation proceedings shall be at BPCL office/installation/plant/depot/refinery, etc. At locations where BPCL does not have any of its offices, the Mediation Tribunal after consulting the parties may decide to hold the proceedings at any other place/venue, as agreed by the parties. The cost, including administrative expense, of such venue will be borne by the parties equally. The details of expenses to be shared by parties will be included in the Settlement Proposal report (ref. Annexure E).
9. If mutually agreed between the parties, the mediation meetings under this Scheme can also be held online.

VI. Mediated settlement

1. The Mediation Tribunal after hearing both the parties shall formulate a Settlement Proposal (in the prescribed format as provided in Annexure D) within 60 days from the date of first meeting. Efforts must be made for unanimous recommendations in the Settlement Proposal by all the members of the Mediation Tribunal. In exceptional circumstances such as death/serious illness of Mediation Tribunal member or if any member of the Mediation Tribunal has recused himself from the case during the mediation proceedings, then with the consent of both the parties, two members of the Mediation Tribunal shall formulate and provide the Settlement Proposal.
2. The Settlement Proposal must be in writing and with proper justification and reasons for arriving at such a proposal. Such Settlement Proposal shall be guided by principles of equity, good conscience, objectivity, fairness and justice. The Settlement Proposal must clearly specify the total amount, if any, payable by a party as part of the settlement terms. Before the Mediation

Tribunal gives its signed Proposal, Mediation Tribunal shall ensure that the calculations/figures of the recommended amount may be checked by the representatives of the parties, so that any error in the final recommended amount can be avoided.

3. If any claim/counter-claim pertains to tax, duties, GST, etc., then applicability of rate shall be first discussed or same may be referred to Taxation department of BPCL for confirming the rate of tax/final amount payable as per the Settlement Proposal.
4. The other party to the mediation proceedings must inform BPCL in writing within 7 days regarding acceptance/rejection of the Settlement Proposal. If no such acceptance is received within 7 days, then it shall be deemed that the Settlement Proposal is rejected by the other party.
5. If the other party accepts the Proposal, then BPCL shall place the Settlement Proposal before its Competent Authority for approval. BPCL shall convey its decision on acceptance/rejection of the Settlement Proposal within 30 days from the receipt of acceptance of the Proposal by the other party.
6. Alternatively, BPCL may also propose a revised Settlement Proposal to the other party. If such revised Settlement Proposal is agreeable to the other party, then acceptance to that effect will have to be issued by the other party within 7 days. BPCL shall take necessary approval from the Competent Authority within 7 days from the date of receipt of acceptance from the other party.
7. Once the Settlement Proposal is approved by the Competent Authority, a Settlement Agreement (as per the format provided in Annexure F) will be signed by and between the parties and the same shall be authenticated by the Mediation Tribunal within 7 days from communication of acceptance of Settlement Proposal by BPCL.
8. Payment in terms of the Settlement Agreement will have to be completed within a period of 15 days from the date of signing of the settlement agreement.

VII. Miscellaneous:

1. This scheme is formulated in accordance with section 48 of the Mediation Act, 2023. This scheme shall be interpreted and read harmoniously with the provisions of the Mediation Act, 2023 as may be amended from time to time. The provisions of the Mediation Act, 2023 would prevail over the provisions of this Scheme to the extent of inconsistency, if any.
2. For the purpose of abundant caution, it is hereby clarified that all matters pertaining to mediation proceedings conducted under this scheme are to be kept confidential and shall be considered as privileged information, in terms of section 22 and 23 of the Mediation Act, 2023 or even otherwise. Confidentiality extends also to the Settlement Agreement, except where its

disclosure is necessary for purposes of implementation and enforcement. This stipulation will not apply to disclosure made by BPCL to Government of India, if required.

3. Parties are not entitled to and shall not claim any interest on the disputed amount from the date of cause of action till execution of settlement agreement, if so arrived at. In case, parties are unable to reach a settlement, no interest shall be claimed by either party for the period from the date of notice invoking mediation till the date of termination of mediation proceedings and 30 days thereafter in any further proceeding.
4. Solicitation or any attempt to bring influence of any kind on either Mediation tribunal members or BPCL is completely prohibited in mediation proceedings and BPCL reserves the absolute right to close the mediation proceedings at its sole discretion if it apprehends any kind of such attempt made by the Other Party or its representatives.
5. The parties and the Mediation Tribunal shall ensure that the timelines provided under this scheme (Annexure G) are followed. However, it shall not render any action taken beyond the timeline to be invalid, provided the parties continued to act in terms of this Scheme in good faith.

***

Annexure-A

Format of Notice for Mediation

To

[Party]

Address

Subject: Notice for initiating mediation proceedings under the BPCL Mediation Scheme, 2025.

Dispute(s) have arisen in relation to Agreement/Tender reference no. _____ for the job of _____. As you are aware, as per clause ___ of the Tender/Agreement dated ____, any dispute arising out of or in connection with this Tender/Agreement, including any question regarding its existence, validity or termination, the parties are to seek settlement of that dispute by mediation in accordance with BPCL Mediation Scheme, 2025.

In light of the above, you are hereby invited to provide your consent in writing to refer the dispute for mediation in terms of the BPCL Mediation Scheme, 2025.

Copy of the Statement of Claim in the prescribed format is enclosed along with this Notice.

Yours sincerely,

_____

Format for Statement of claim(s)/counter claim(s)

1. Reference of the Agreement/Tender document

2. Synopsis in the below format

S. no.	Date	Event

3. Brief of the dispute

4. Details of Claim(s)/Counter Claim(s) as under:

S. no.	Description of claim(s) / Counter Claim(s)	Amount (in INR)

5. Basis/Ground/Justification for claim(s)/counter claim(s)

6. List of all relevant documents in support of the claim(s)/counter claim(s)

7. Details of the Claimant including name, address and contact details.

Note: Statement of Claim/Counter claim should be limited to 20 pages only.

Annexure -B

Format for declaration of independence and impartiality by a member of Mediation Tribunal

To,

1. Claimant
   (Full address)

2. Respondent
   (Full address)

Subject: Declaration of Independence and Impartiality in the dispute between _____ and _____ in relation to Agreement/Tender document ref. no._____

I, the undersigned, hereby accept to act as member of the Mediation Tribunal for conducting mediation proceedings in terms of the BPCL Mediation Scheme, 2025 for the disputes under reference between the parties abovenamed.

I confirm that I am aware of the requirements of law particularly of the Mediation Act, 2023, to act as a mediator. I can act as mediator and am available to act as member of the Mediation Tribunal.

I hereby declare that I am independent of each of the parties and there are no circumstances or potential circumstances, personal, professional, financial, or otherwise, that may constitute any conflict of interest or that is likely to give rise to justifiable doubts as to my independence or impartiality as a mediator. I also declare that I have no interest in the outcome of the dispute or its settlement.

I hereby affirm that I shall act with honesty, integrity, diligence, and will remain independent and impartial while discharging my duties as a member of the Mediation Tribunal. I will disclose any interest or relationship with the parties

or the subject matter which might compromise in any manner my ability or capacity to remain impartial and independent in the matter.

I hereby agree that I will follow the timelines mentioned in the terms of the appointment letter and I will remain available for the conduct of mediation meetings in terms of the BPCL Mediation Scheme, 2025.

The fees and other facilities offered to me in terms of the BPCL Mediation Scheme, 2025 are acceptable to me.

(Signature) :

Name :

Address :

Phone :

Email :

Date :

Annexure C

Fees and facility to the members of the Mediation Tribunal

A. Lump sum Fees payable for members (irrespective of number of hearings):

Mechanism of payment of Fees:

Sl.	Amount in dispute (claim + counter-claim)	Max. no. of meetings	Fees payable to member(s) of Mediation Tribunal	To be arranged / paid by
1.	**Upto Rs. 50 Lakhs** (including matters of MSME upto above limit)	4	Total Lump sum fees of Rs. 75000 will be payable to Single Member. Online meetings only. At the end of each meeting, Rs. 15,000/- per meeting will be paid by the Other Party Balance amount of fees will be paid after submission of Settlement Proposal. Additionally, secretarial fees of Rs. 5,000/- will be payable for drafting of Settlement Proposal.	Other Party
2.	**Above Rs. 50 Lakhs upto Rs. 1 Crore (**including matters of MSME upto above limit)	6	Lump sum fees of Rs. 1.5 Lakhs will be payable to Single Member. Online meetings only. At the end of each Meeting, Rs. 20,000/- per meeting will be paid by the Other Party. Balance amount of fees will be paid after submission of Settlement Proposal.	Other Party

			Additionally, secretarial fees of Rs. 5,000/- will be payable for drafting of Settlement Proposal.	
3.	**Above Rs. 1 Crores upto Rs. 10 Crores (**including matters of MSME utpo above limit)	8	Lump sum fees of Rs. 3 Lakhs will be payable to Single Member. At the end of each Meeting, Rs. 30,000/- per meeting will be paid by the Other Party. Balance amount of fees will be paid after submission of Settlement Proposal. Additionally, secretarial fees of Rs. 10,000/- will be payable for drafting of Settlement Proposal.	Other Party

4.	**Above 10 Crores**	10	Lump sum fees of **Rs. 3 Lakh** will be payable to **each member of the Mediation Tribunal**. At the end of each Meeting, Rs. 30,000/- per meeting per member will be paid by the Other Party. Balance amount of fees will be paid after submission of Settlement Proposal. Additionally, secretarial fees of Rs. 30,000/- will be payable for drafting of Settlement Proposal, who writes the Report.	Other Party

B. Facilities to member(s) of the Mediation Tribunal:

(Note: Facility of Hotel Accommodation & Air-Ticket will be provided to the member(s) of the Mediation Tribunal as per the last position / level held by the member at the time of retirement)

Sl	**Facility**	**Entitlement**	**To be arranged / paid by**
1.	Transportation in the city of the meeting	Premium car or Rs. 3,000/- per day	Other Party
2.	Conference Room / Virtual Hearing Link	BPCL office	BPCL

Facilities to be provided to the out-stationed member (level wise) (Not Applicable for disputes upto 1 crore)			
3.	Travel from the city of residence to the city of meeting	Business/Economy class air tickets/first class train tickets/ Luxury car/ reimbursement of actual fare *as per level wise.* However, entitlement of air travel by Business class shall be subject to austerity measures, if any, ordered by Govt. of India.	Other Party
4.	Transport to and from airport / railway station in the city of residence	Premium car or Rs. 4,000/- per day	Other Party
5.	Stay for out stationed members	5 Star Hotel	BPCL

Note:

i. All the expenditure incurred in the mediation proceedings shall be shared by the parties in equal proportion.

ii. The parties shall maintain account of expenditure and present to the other for the purpose of sharing on conclusion of the mediation proceedings. The details shall be attached with Settlement as per Format (Annexure-E) attached herewith.

Annexure D

Template of Settlement Proposal

Dated: _____

To

1. Head of Legal Entity
   BPCL

2. Other Party
   (Full address)

Subject: Settlement Proposal on the dispute between _____

Dear Sir,

This is in furtherance to the Letter No. _____dated _ _____for the constitution of Mediation Tribunal to resolve the dispute between _____ _____.

The Committee had __ **meetings** on different dates and heard the presentation, arguments and counter arguments from both the parties.

The recommendations of the Mediation Tribunal is enclosed for your kind perusal and further necessary action as deemed appropriate.

(_____) - (_____) - (_____) -

Settlement Proposal in the matter of mediation between

ABC ...Claimant

and

XYZ ...Respondent

REF.: CONTRACT NO. _____DATED _____

IN RELATION TO THE JOB OF_____

A. BRIEF BACKGROUND OF PRESENT DISPUTE:

B. CONSTITUTION OF MEDIATION TRIBUNAL & A SUMMARY OF ITS PROCEEDINGS

C. CHRONOLOGY OF FACTS OF THE DISPUTE

D. RELEVANT CONTRACT PROVISIONS

E. BRIEF SUMMARY OF CLAIMS/ COUNTERCLAIMS

1. Claims of Claimant:

S. No.	Nature of Claim	Amount (in INR)	Relevant Contract Clause
1.			
2.			
	Total		

2. **Counter-Claims of Respondent:**

S. No.	Nature of Claim	Amount (in INR)	Relevant Contract Clause
3.			
4.			
	Total		

F. MEDIATION TRIBUNAL DELIBERATIONS AND RECOMMENDATIONS ON CLAIMS:

i. Claim No. 1: _____

a) Claim and Arguments/Contentions of Claimant (including supporting evidence)

b) Stand/Reply of Respondent: (including supporting evidence)

c) Mediation Tribunal Findings and recommendations (with reasoning)

ii. Claim No. 2: _____

a) Claim and Arguments/Contentions of Claimant: (including supporting evidence)

b) Stand/Reply of Respondent: (including supporting evidence)

c) Mediation Tribunal Findings and recommendations (with reasoning)

G. BRIEF SUMMARY OF MEDIATION TRIBUNAL RECOMMENDATIONS

Summary of Recommendation of the Mediation Tribunal				
Sl. No.	**Description**	**Amount Claimed in INR**	**Amount Recommended in INR**	**Observations of Mediation Tribunal**
1.		-	-	
2.		-	-	
3.		-	-	
4.		-	-	
5.		-	-	

6.		-	-	
7.		-	-	
8.		-	-	
	Total	-	-	

Financial Implications (in exact figures): Mediation Tribunal recommends that a sum of Rs. _____ will be payable to _____ by _____ without any interest and cost.

However, the cost incurred for Mediation proceedings are to be shared equally and the final payment to _____ will be subject to adjustment of cost, if any. (Details of cost incurred by parties attached herewith)

H. <u>ACKNOWLEDGEMENT</u>

1. The Mediation Tribunal has adopted a fair and equitable approach in conciliating this matter taken into the consideration in the facts and circumstances of the case.
2. Mediation Tribunal acknowledges the wholehearted participation and cooperation of both the parties in providing information and data as required and in actively taking part in the proceedings.

(_____) (_____) (_____)

Place:

Dated: ____day of _____ (Month), _____ (Year)

Annexure E

Format for Maintaining Details of Expenses incurred in the Case (To be part of the Settlement Proposal)

Name of the case:

Details of expenses incurred by BPCL

Sl.	Date of meeting	Head towards which expenses incurred	Total amount (Rs.)
1.			
2.			
3.			
4.			

Sd/

(Nodal Officer of BPCL)

Details of expenses incurred by the Other Party:

Sl.	Date of meeting	Head towards which expenses incurred	Total amount (Rs.)
1.			
2.			
3.			
4.			

Sd/

(Nodal Officer of the Other Party)

Mediation Tribunal's Settlement Report must contain following details

Sl.	Expenses incurred in the Matter	
1.	Expenses incurred by BPCL	
2.	Expenses incurred by the Other Party	
3.	**Total**	
4.	**Share of each Party (50%)**	
5.	**Amount receivable by ……**	

Annexure F

Settlement Agreement

This agreement is entered into this …….day of …….' 2020 (**"Settlement Agreement"**) between Bharat Petroleum and Corporation Ltd. registered under the Companies Act 1956, having its registered office at Bharat Bhavan, 4 & 6, Currimbhoy Road, Ballard Estate, Mumbai-400 001 (hereinafter referred to as **"BPCL"** which expression shall, unless, repugnant to the context or meaning thereof, include its legal successor, executors, permitted assignees) of the one part

AND

M/s ……..having its registered office at……..(hereinafter referred to as the "**CONTRACTOR"** which expression shall unless, repugnant to the context or meaning thereof, include its legal successor, executors, permitted assignees) of the one part.

BPCL & M/s……. are collectively referred as the 'Parties' and individually as a 'Party'

WHEREAS:

BPCL awarded a contract to M/s…….. 'Contractor' for the job of …….. .

Dispute arose between the parties under the aforesaid contract and the parties referred the dispute for settlement through mediation in terms of the BPCL Mediation Scheme, 2025.

C&MD, BPCL constituted the Mediation Tribunal comprising of (i) Shri……. (ii) Shri……. & (iii) Shri……. for resolution of disputes between the parties.

CONTRACTOR/BPCL made a total claim of Rs…….. before the Mediation Tribunal. The counterclaim of BPCL/CONTRACTOR was for Rs……..

After having heard both the parties and examining all records/documents produced by the parties, Mediation Tribunal gave its Settlement Proposal on …… suggesting terms of settlement of disputes and recommended that _____ pay an amount of Rs…… to _____.

Now both the parties have accepted the Settlement Proposal and agreed to settle the disputes in terms thereof.

The CONTRACTOR has incurred an expenditure of INR……towards fees and conveyance of Mediation Tribunal members and BPCL has incurred expenditures of INR……..towards hospitality during the Mediation Tribunal meetings.

All the expenditure incurred in the mediation proceedings as tabulated below shall be shared by both the parties in equal proportions.

Particulars	Amount (INR)
Total Expenditure incurred by the Other Party	
Total Expenditure incurred by BPCL	
Total Expenditure	
Expenditure share by each party	
Net amount to be paid by ____ to ____ towards mediation proceedings' expenditure	

NOW THIS SETTLEMENT AGREEMENT WITNESSETH AS BELOW:

1. It is agreed between the parties to this agreement that _____ shall pay Rs……. (in words) to _____ towards full and final settlement of all the disputes pertaining to the above mentioned contract. *BPCL shall deduct withholding taxes, if any applicable, before making payment to the CONTRACTOR.* (to be added when the amount is payable by BPCL to the CONTRACTOR)

   _____ shall also pay Rs……..to _____ towards reimbursement of the expenses incurred in mediation.

   Thus, total amount of Rs……will be payable by _____ to _____ within __ days from the date of execution of this Settlement Agreement by the Parties towards full and final settlement of all its claim and disputes whatsoever in reference to the aforesaid Contracts.

2. That both parties hereby agree that all disputes and differences arisen out of the aforesaid Contracts now stand resolved and fully settled on payment of the sum stipulated in **para 1** above and no dispute of any nature whatsoever shall survive. Accordingly, subject to aforesaid both BPCL and CONTRACTOR agree that they shall neither raise any dispute nor they shall initiate any proceedings, legal or otherwise against each other with reference to the aforesaid Contracts.

3. That this settlement agreement shall continue perpetually and shall be binding upon the parties, their successors and assignees.

4. The settlement agreement constitutes the entire agreement and supersedes all prior understandings and writings between BPCL and CONTRACTOR hereto concerning the disputes and/or subject matter of this agreement.

5. BPCL and CONTRACTOR hereby agree that this settlement agreement shall have same status and effect as that of an Award or Decree and shall be capable of execution as such.

6. BPCL and CONTRACTOR hereby agree and undertake that they shall keep confidential all matters relating to the mediation proceedings. They also agree that the confidentiality shall extend also to the settlement agreement, except where its disclosure is necessary for purposes of implementation and enforcement.

7. The two identical counterparts of the settlement are hereby executed by and between BPCL and CONTRACTOR through their authorised signatories and with understanding that each shall be deemed original for all purposes.

8. In view of the aforesaid, all the obligations between the parties stand discharged fully to the satisfaction of both.

9. The persons signing this agreement on behalf of the respective parties represent and covenant that they have the authority to sign and execute this document on behalf of the parties for whom they are signing.

IN WITNESS WHEREOF, the parties here to have hereunto set their respective hands in the day and year first above written.

(Signed for and behalf of BPCL)

Name: ……

Designation: ……..

(Signed for and on behalf of M/s …….)

Name: ……

Designation: ……..

Annexure G

TIMELINES TO BE ADHERED BY ALL CONCERNED

(Entire proceedings to be completed within six months in any event)

BEFORE & DURING MEDIATION PROCEEDINGS		
1.	Reply to the Notice for mediation consenting/rejecting the dispute(s) to be referred to mediation	Within 30 days from the date of receipt of Notice for mediation in the online Mediation Portal
2.	Constitution of Mediation Tribunal	Within 20 days from the date of consent given by the Respondent
3.	Issuance of appointment letter to the member(s) of the Mediation Tribunal	Within 7 days from constitution of Mediation Tribunal
4.	Submission of Declaration of Independence and impartiality by members of the Mediation Tribunal	Within 7 days from the receipt of appointment letter
5.	Submission of reply by the Respondent along with counterclaim, if any, to Mediation Tribunal with a copy to the other side	Within 30 days from issuance of appointment letter to the members of Mediation Tribunal
6.	Commencement of Mediation Tribunal meetings	Within 10 days from receipt of reply.
7.	Mediation Tribunal to submit its Settlement Proposal	Within 60 days from the date of first meeting

PROCEDURE AFTER SUBMISSION OF SETTLEMENT PROPOSAL BY MEDIATION TRIBUNAL		
8.	Other party to communicate its response to BPCL regarding acceptance of Settlement Proposal	Within 7 days from the receipt of Settlement Proposal from the Mediation Tribunal
9.	BPCL to convey its decision regarding acceptance/rejection of Settlement Proposal	Within 30 days from receipt of acceptance from the other side.
10.	Signing of Settlement agreement and authentication by the Mediation Tribunal	Within 7 days from communication of acceptance of Settlement Proposal by BPCL
11.	Payment as per mediated Settlement Agreement	Within 15 days from signing of settlement agreement by parties & authentication by the Mediation Tribunal

Note: The parties and the Mediation Tribunal shall ensure that the timelines provided under this scheme are followed. However, it shall not render any action taken beyond the timeline to be invalid, provided the parties continued to act in terms of this Scheme in good faith.

***

SPECIAL CONDITIONSOF CONTRACT

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1.0 INTRODUCTION

1.1 These Special Conditions of Contract shall be read in conjunction with the General Conditions of Contract, Schedule of Rates/Prices, specifications of work, drawings and any other document forming part of this contract wherever the context so requires.

1.2 Notwithstanding the sub-division of the document into these separate sections and volumes, every part of each shall be deemed to be supplementary of every other part and shall be read with and into the contract so far as it may be practicable to do so.

1.3 Where any portion of the GCC is repugnant to or at variance with any provisions of the Special Conditions of Contract, then unless a different intention appears, the provision(s) of the Special Conditions of Contract shall be deemed to override the provision(s) of GCC only to the extent that such repugnancy of variations in the Special Conditions of Contract are not possible of being reconciled with the provisions of GCC.

1.4 In the absence of any Specifications covering any material, design or work(s) the same shall be performed/supplied/executed in accordance with standard Engg. Practice as per the instructions/directions of the Engineer-in-Charge, which will be binding on the Contractor.

1.5 **Order of precedence**

The documents forming the Contract are to be taken as mutually explanatory of one another. If there is an ambiguity or discrepancy in the Term & Conditions defined in the various documents, the order of Precedence shall be as follows:

- Contract Agreement with its enclosures
- Detailed letter of Acceptance along with its enclosures
- Letter of Acceptance (LOA) / Purchase Order (PO)
- Amendment to Bidding Document, if any
- Invitation for Bids/Notice Inviting Tender (IFB/NIT)
- Bid Data Sheet (BDS)
- Job Specifications
- Drawings
- Special Conditions of Contract (SCC)
- Technical specifications
- Instructions to Bidders (ITB)
- General Conditions of Contract (GCC)
- Other Documents

A variation or amendment issued after the execution of the formal contract shall take precedence over respective clauses of the formal contract and its Annexure.

2.0 LOCATION OF SITE

The Site Location is provided below:

BR Petrochemical Unit,
Bharat Petroleum Corporation Limited Administration building,
Refinery complex, Petrochemical Unit,
Post BR residential complex- 470124
Bina, District- Sagar,
Madhya Pradesh, India

3.0 LAND, POWER, WATER AND OTHER FACILITIES [Also refer BDS for modifications, if any]

3.1 Construction Water and Construction Power supply shall be as per the below modifications of Clause Nos. 2.3 of General Conditions of Contract (GCC) and modified to the following extent as detailed below:

3.1.1. Construction Water

Construction water shall be provided to the CONTRACTOR at one point, free of cost. The CONTRACTOR shall at his own cost arrange for tapping, storage tank & distribution required for his work including supply, installation & calibration of water meters.

Non availability of water through BPCL should not be a case for extra claim or time extension. Therefore, the CONTRACTOR shall, within the quoted price, make alternate arrangement to cope with such eventuality. Additional water, if required, to meet the contractual requirements, shall be arranged by the CONTRACTOR at his own cost.

3.1.2. Construction Power

Construction power shall be provided to the CONTRACTOR at one point, free of cost.

All the works related to laying of cable / distribution panel etc. for construction power shall be arranged by CONTRACTOR at his own cost including supply, installation & calibration of energy meters.

The energy meter to be installed by the CONTRACTOR shall be tested and certified by State Electricity Board or any other agency approved by the BPCL. The construction power shall be made available to the CONTRACTOR subject to grid distribution, and no extension of time or compensation shall be payable on this account. Therefore, the CONTRACTOR shall, within the quoted price, make alternate arrangement to cope with such eventuality. Additional power, if required, to meet the contractual requirements, shall be arranged by the CONTRACTOR at his own cost.

3.2 Land For CONTRACTOR's Field, Godown And Workshop

3.2.1. PROVISION OF FABRICATION YARD

Space for storing contractor's supply items shall be provided by BPCLwithin refinery premises but away from actual site. Contractor shall relocate their facilities as and when required by BPCL. The area required to be developed by the Contractor by their own and regular housekeeping to be maintained. In case contractor fails to do so the necessary housekeeping will be arranged by deploying other agencies at risk and cost of the contractor as well as vacating the area. Non availability of space inside refinery from BPCL should not be a case for extra claim or time extension. Therefore, the CONTRACTOR shall, within the quoted price, make alternate arrangement to cope with such eventuality.

Fabrication yard for activities pertaining to free issue material shall be provided to contractor inside plant boundary.

The land for labour colony to be arranged by Contractor at their own cost.

Barricading, Site grading and development of the allocated area, if required, will be the responsibility of the contractor. The contractor shall remove all temporary buildings/ facilities etc. immediately after completion of works in all respects.

Any additional area required beyond allocated area, shall be arranged by contractor at their own cost. The finalization of additional land by contractor for fabrication/storage etc. should be done keeping in consideration contract schedule requirement.

Additional space, if required, to meet the contractual requirements, shall be arranged by the CONTRACTOR outside refinery premises at his own cost. Contractor is required to vacate the entire fabrication area after carrying out all the housekeeping within 45 days from the date of

overall completion of the job failing which applicable financial penalties, if applicable will be imposed by BPCL.

3.2.2. PROVISION OF PROPER WAREHOUSING

In line with requirements specified in GCC and specifications, materials shall be properly stored by CONTRACTOR in his warehouse to enable easy traceability, handling and preservation with all materials having proper identification marks, colour coding etc. Incase CONTRACTOR fails to follow the specified requirements, next payment due to himshall not be released till he complies with all the requirements to the satisfaction of Engineer-In-Charge.

3.3 **Drinking Water**

Owner will provide drinking water if available within the project battery limit at one point near the site. Further distribution from the location shall be by the CONTRACTOR at their own cost. Based on the Factories act requirement, CONTRACTOR to provide adequate drinking water taps at their own cost along with water coolers etc.

3.4 **Deleted**

3.5 **Utilities for Commissioning/PGTR**

Subject to availability, Client shall provide the following utilities 'Free of Cost' basis for Commissioning/PGTR purpose (if applicable) :

i. Water
ii. Air
iii. Nitrogen
iv. Steam

These utilities may be provided to Contractor at one specified location. Contractor to make their own arrangement for distribution of these utilities from the specified location, at their own cost. Contractor shall not use these utilities for any purpose other than intended herein i.e. Commissioning/PGTR activities. Non availability of utilities from BPCL should not be a case for extra claim or time extension. Therefore, the CONTRACTOR shall, within the quoted price, make alternate arrangement to cope with such eventuality. Additional utilities, if required, to meet the contractual requirements, shall be arranged by the CONTRACTOR at his own cost.

4.0 TIME FOR COMPLETION

4.1 The work shall be executed strictly as per Time for Completion given in Invitation for Bids (IFB)/Letter Inviting Bids (LIB).

4.2 The Work shall be executed strictly as per time schedule given in **Annexure- I to SCC.** The period of completion given includes the time required for mobilisation, demobilisation and completion of work in all respects to the satisfaction of the Engineer-in-Charge.

4.3 A joint programme of execution of work will be prepared by the Engineer-in-Charge/EIL and Contractor. This programme will take into account the time of completion mentioned above.

4.4 Monthly / Weekly execution programme will be drawn up by the Engineer-in-Charge/EIL jointly with the Contractor based on priorities and the joint programme of execution as referred to above. The Contractor shall scrupulously adhere to the Targets/Programmes by deploying adequate personnel, Construction Equipment, Tools and Tackles and also by timely supply of required materials coming within his scope of supply as per Contract. In all matters concerning the extent of target set out in the weekly/monthly programme and the degree of achievement, the decision of the Engineer-in-Charge will be final and binding on the Contractor.

4.5 If the Contractor fails to achieve the targeted progress schedule of each month as mentioned in the bidding document, BPCLat its option, may terminate the contract due to Contractor's default and get the work completed from other sources at Contractor's risk & cost.

4.6 Contractor shall give every day category-wise labour, Manpower and equipment deployment

report along with the progress of work done on previous day in the format prescribed by the Engineer-in-Charge.

4.7 The Contractor shall submit fortnightly report covering all major activities indicating schedule / actual progress, slippages & its reasons and catch up plan.

4.8 Fronts (i.e., Drawing front / Physical front (Corresponding to drawing)) shall be released to the Contractor as per **ANNEXURE – I TO SCC**. Extension in time of completion due to delay in release of work fronts to the Contractor shall be evaluated as per **ANNEXURE – I TO SCC**.

5.0 SCOPE OF WORK

5.1 The scope of work in general includes scope of work specified in various Technical Specifications provided in Technical portion of the bidding document and Schedule of Rates (SOR) enclosed in the Bidding Document. Further, it includes any other work not specifically mentioned but required to complete the work as per specifications, drawings and instructions of Engineer-in-Charge.

5.2 Scope of work shall be read in conjunction with item description of Schedule of Rates and Contractor's scope shall include all activities of work specified in the item description of Schedule of Rates.

5.3 Rates shall include all cost for the performance of the item considering all parts of the Bidding Document. In case any activity though specifically not covered in description of item under 'Schedule of Rates' but is required to complete the work which could be reasonably implied/ informed from the content of Bidding Document, the cost for carrying out such activity of work shall be deemed to be included in the item rate.

6.0 SCOPE OF SUPPLY

6.1 The scope of supply is as mentioned in Job Specifications/ Technical Specifications, Schedule of Rates etc. of Bidding Document. All materials, equipment, labour & consumables required for successful completion of work as per the description of item in Schedule of Rates shall be supplied by the Contractor and the cost of such supply shall be deemed to be included in the quoted rates without any additional liability on the part of Owner except for the material specifically covered under Owner's Scope of Supply.

7.0 TERMS OF PAYMENTS

Clause No.75,76,77 and 80 of GCC regarding Terms of Payment is partially modified to following extent:

7.1 The basis and Terms of Payments for various items of schedule of rate, for making "On Account Payments" shall be as set out in **ANNEXURE-II to SCC**.

7.2 **Mobilization Advance and Secured Advance is not payable for works covered under this Tender.**

7.3 For all payment purposes, measurement shall be as set out in **ANNEXURE-III to SCC**.

7.4 Invoice Instructions:

Contractor shall submit the following documents along with the monthly invoices:

7.3.1 Copies of challans/receipt of payments of contributions for their employees to the Authorities Employees' Provident Fund and Miscellaneous Provisions Act, 1952 and the Employees' State Insurance Act, 1948 prescribed under the said Acts such payments along with the list showing persons employed together with emoluments paid for the purpose of provident fund deductions shall be submitted to BPCL before the end of every calendar month.

7.3.2 Undertaking by the Contractor regarding compliance of all statutes.

7.3.3 Certificate by the Contractor stating labour have been paid not less than minimum wages (as applicable).

7.3.4 Contractor shall note that 75% of the basic amount of the Running Account bill shall be released as down payment (interest free without BG) within 15 calendar days of receipt of Proforma invoice from Contractor on recommendation of EIL EIC.

The balance amount shall be released within 30 days from the date of down payment after receipt of tax invoice, detailed scrutiny of the RA bill measurements and its recommendation by EIL EIC.

8.0 *TAXES AND DUTIES*

8.1 Provisions of Taxes and Duties of GCC is modified as per **Appendix-A** to SCC and shall be read in conjunction with clause 8.2 below.

8.2 **Applicability of BOCW cess shall be as per GCC clause no 100.**

8.3 ***Contractor has to obtain GSTIN registration at the location where Works Contract Services are to be performed or carried out. In case of other type of services, Contractor shall obtain GSTIN in the state where job is required to be carried out/ executed. The Contractor shall indicate in its bid the Goods & Service Tax registration No.***

8.4 To enable OWNER to avail Input Tax Credit (ITC), the CONTRACTOR/supplier shall furnish/submit any and all certificates, documents and declarations as are required by OWNER.

9.0 FIRM PRICES

The quoted price shall remain firm and fixed and valid until completion of the contract and shall not be subjected to escalation for any reason what so ever, except as specified below:

9.1 **Statutory Variation**

9.1.1 For statutory variation, Refer **Appendix-A** to SCC

9.2 **Escalation/De-escalation on Supply Items in Item Rate Tenders:**

Refer BDS

10.0 SITE ORGANISATION

10.1 The Contractor shall without prejudice to his overall responsibilities and liabilities to provide adequate qualified and skilled personnel on the work as per **Annexure-V to SCC** and shall deploy site organization and augment the same as decided by the Engineer-in-Charge depending on the exigencies of work. Qualification and Experience of key construction personnel shall be as per document no. 7-82-0003 (enclosed as **Annexure-VI to SCC**). In addition to this, Contractor shall deploy Safety Supervisors to ensure safer working conditions at site. In case where the works are Subcontracted by the main Contractors (of BPCL), Safety Supervisors are to be provided by the main Contractor (of BPCL).

11.0 QUALITY MANAGEMENT SYSTEM

11.1 The Contractor shall adhere to the quality assurance system as per EIL Specification No. **6-78-0001** enclosed as per **Annexure-VII to SCC.** After the award of the contract, detailed quality assurance programme to be followed for the execution of contract shall be submitted by Contractor.

12.0 COORDINATION WITH OTHER AGENCIES

12.1 Contractor shall be responsible for proper coordination with other agencies operating at the site of work so that work may be carried out concurrently, without any hindrance to others. The Engineer-in-Charge shall resolve disputes, if any, in this regard, and his decision shall be final and binding on the Contractor.

12.2 If and when required for the coordination of the works with other agencies involved at site, the Contractor shall within the scope of work, re-route and/or prepare approaches and working areas as may be necessary.

13.0 MECHANISATION OF CONSTRUCTION ACTIVITIES AND MOBILISATION OF CONSTRUCTION EQUIPMENT

13.1 MECHANISATION OF CONSTRUCTION ACTIVITIES

13.1.1 The Contractor shall mechanise the construction activities to the maximum extent by deploying all necessary construction equipment/machinery in adequate numbers and capacities.

13.1.2 For speedy execution of work, Contractor shall also ensure use of computer software (Minimum Primavera) for at least the following:

(i) Billing
(ii) Planning & Scheduling
(iii) Progress Reporting
(iv) Material Control & Warehousing
(v) Safety Records
(vi) Resource Deployment
(vii) Communication

13.1.3 Contractor to ensure the use of PRIMAVERA software as minimum requirement.

13.1.4 Contractor further agrees that Contract price is inclusive of all the associated costs, which he may incur for actual mobilization, required in respect of use of mechanized construction techniques and Owner/EIL in this regard shall entertain no claim whatsoever.

13.1.5 MOBILISATION OF CONSTRUCTION EQUIPMENTS

The Contractor shall without prejudice to his responsibilities to execute and complete the work as per the specifications and time for completion, progressively deploy minimum construction equipment& tools and further augment the same depending on the exigencies of work as per **Annexure-VIII to SCC** and as decided by the Engineer-in-Charge so as to suit the construction schedule within scheduled completion date without any additional cost to Owner/EIL.

Modular concepts & prefabrication & pre-cast methods to the extent the same adds value in terms of quality, safety & cost effectiveness & other techniques for fast tracking the implementation during construction shall be adopted with the approval of Engineer-in Charge

13.1.6 CALIBRATION REQUIREMENTS OF MONITORING AND MEASURING DEVICES AT CONSTRUCTION SITE

Calibration Requirements of Monitoring and Measuring Devices at Construction Site shall be as per document no. 7-82-0002 (enclosed herewith as **ANNEXURE-IX of SCC**).

13.1.7 WORK IN MONSOON SEASON'S

In addition to the Section No. V –clause no. 48 of General Conditions of Contract, CONTRACTOR shall submit within 15 days of award of work, to the Engineer-in Charge / OWNER, his contingency plan for work during monsoon clearly stating their methodology/ strategy to progress uninterruptedly during monsoon mentioning the deployment of resources viz, numbers, capacity, category of equipment and manpower on a weekly basis for approval. During monsoon and other periods, it shall be the responsibility of the BIDDER to keep the construction work site free from water at his own cost by deploying suitable dewatering pumps.

CONTRACTOR shall make adequate arrangements for uninterrupted working during monsoon season at site. The CONTRACTOR shall make all provisions for monsoon protection cover to ensure that there shall not be any stoppage/ hindrance in working during monsoon season.

14.0 CONDITIONS FOR ISSUE AND RECONCILIATION OF FREE ISSUE MATERIALS

14.1 Free Issue Materials (FIM), if any, shall be issued as per terms and conditions set forth in the General Conditions of Contract (GCC) from Owner's stores or other issue points of EIL/BPCL

14.2 Every month, Contractor shall submit an account for all materials issued by Owner's in the

Proforma prescribed by the Engineer-in-Charge. On completion of work the Contractor shall submit "Material Appropriation Statement" for all materials issued by the Owner's.

14.3 Wherever materials are under Contractor's scope of supply whether part or in full for any item of work covered under SOR, no allowances towards wastage/scrap etc. shall be accounted for.

14.4 The conditions for issue of materials by Owner's and reconciliation of such materials shall be as per specification No. 7-82-0001 attached herewith as **Annexure-X** to these Special Conditions of Contract. This shall not be applicable for the materials supplied by Contractor.

14.5 Contractor shall arrange to handover piping and cables scrap arising out of civil, structural, mechanical piping and electrical & instrumentation works to OWNER at OWNER's scrap yard. The scrap shall be put in OWNER designated scrap yard properly segregated and weighed. Contractor shall refer **Annexure-X** to SCC for definition of Scrap **(applicable for Free Issue Materials)**

15.0 DISPOSAL OF SURPLUS MATERIALS (INCLUDING SCRAP AND DEBRIS) BY CONTRACTOR

15.1 FOR MATERIALS SUPPLIED BY CONTRACTOR AGAINST SUPPLY ITEMS OF SCHEDULE OF RATES (SOR):

Contractor shall also handover the surplus bulk materials viz. piping materials (such as pipes, fittings, flanges gaskets and valves), electrical cables and instrumentation cables to Owner/EIL along with proper records related to Contractor's material code, item description and inspection test certificates.

Contractor shall provide a list of surplus bulk materials indicating unit rates and landed cost for each item and giving the total value of surplus materials.

15.2 The Contractor shall not dump any material in the vicinity of the existing facilities of the BPCL or the facilities which are being installed under the Contract. Contractor shall dispose the scrap & waste at a place and lead to be identified by EIL/ BPCL at their own cost. Construction waste, surplus earth shall be disposed outside the refinery at a safe / undisputed place. Arrangement for land for disposal of surplus earth and waste shall be in contractor's scope. Contractor to take necessary approvals from the local and statutory authorities for such disposal. All dismantled pipes and steel material shall be transported to EIL/ BPCL stores complex after weighing the same through EIL/BPCL Weigh Bridge by Contractor.

15.3 HOUSEKEEPING & SCRAP MANAGEMENT

The contractor shall maintain good housekeeping on day to day basis at the site/fabrication yard. All construction material brought by the contractor (like sand, coarse aggregate, shuttering material, scaffolding pipes etc.), steel scrap (like structural steel, reinforcement steel etc.) & other debris (like earth, shrubs, rubbish etc.) generated at site shall be stacked neatly in well defined spaces at no extra cost. Additional manpower as & when required for housekeeping shall be arranged by contractor immediately as per direction of Engineer-in-charge.

Cart away all the debris generated from the work outside the Refinery at his own cost and dispose it keeping BPCL indemnified of any liability and without giving rise to any complaints from local, municipal and government authorities. Metal scrap or any other scrap including wooden material shall be disposed at BPCL scrap yard category wise at his own cost as indicated by the Engineer in Charge.

All moveable, salvageable, serviceable material shall be dismantled carefully and transported/ stored within refinery premises/scrap yard as directed by Engineer in charge.

In case the contractor fails to maintain the housekeeping at work site / fabrication yard / office space within refinery complex, the same shall be carried out by EIL/BPCL by deploying other agencies at risk and cost of the contractor. In addition of the same a financial penalty as per

financial deterrent for violation of HSE norms against poor housekeeping will be imposed on the contractor. The financial implication of above, if any should be taken care in the quoted rate and no separate claim shall be entertained on this account.

The final bill of the contractor shall be linked with the area cleaning in all respects including disposal of debris/scrap etc. to the entire satisfaction of Engineer in charge.

15.4 **SURPLUS MATERIALS SUPPLIED BY CONTRACTOR:**

For Return of surplus materials/ scrap materials generated by Contractor, after the completion of the Contract (applicable only for materials procured by Contractor), the following shall govern:

a) An inventory shall be made by the Contractor of all left over/ surplus materials including but not limited to scrap, wastages and unserviceable material supplied and/ or remaining at the project site in possession of the Contractor, upon completion of the contract.

b) Contractor shall be allowed to take back all left over/ surplus project materials (both sourced/ bought from India as well as from abroad on which custom duty has been paid by the Contractor as owner of said materials) from the project site which are not required for the project. Such surplus material shall be allowed to be taken out only after Mechanical Completion.

c) Necessary approval from Owner/EIL will be taken by the Contractor for taking out the leftover/ surplus materials from project site after obtaining due recommendation from the Engineer in Charge / Owner. However, any leftover/ surplus project materials procured under Project import Regulations or any other similar schemes or regulations shall continue to be the property of the Owner/EIL and shall not be allowed to be taken out from project site/ locations by the Contractor whether during or after completion of the contract.

d) Any project left over items, which are no longer required for project and which has insignificant residual value, should be suitably disposed of or be destroyed off by the Contractor, with prior approval of Owner/EIL.

e) If the project left over/ surplus materials are not removed by the Contractor from the Project site, within a period of 2 (two) months after due intimation by Owner/Owner's representative/EIL to Contractor to do so, Owner/EIL shall be free to dispose these left over/ surplus project materials at its sole discretion without any recourse available to the Contractor. Notwithstanding the same, value realized from disposal of project left over/surplus project materials not so removed by Contractor shall be retained by the Owner and Contractor shall not raise any claim in any manner whatsoever for the value so realized by Owner.

f) For any payments released on supply of material in Contractor’s scope for execution of works necessary adjustment in GST paid by owner, if any shall be made before allowing the surplus material to be taken out by Contractor.

16.0 ENTRY PASSES, GATE PASSES AND WORK PERMITS

16.1 The works under this contract are to be carried out in areas within the plant limits adjacent or adjoining to an existing operating Refinery. As such, the CONTRACTOR and its SUB-CONTRACTOR and their employees and agents are required to abide by safety and security regulations of the OWNER in force from time to time.

16.2 To regulate activities in compliance with safety regulations, a permit system shall be followed, the issue of Work Permit will be as below:

a. Within the construction area segregated from operational area where work is to be executed for project completion, contractors shall follow approved permit system which is finalized by BPCL/EIL during construction phase. Decision of BPCL/EIL shall be binding on contractor about work permit system agreed with BPCL.

b. Work permit system for all hook up / tie up jobs and within operational area shall be as per enforced work permit system of BPCL Bina Refinery. Within operational area work permits shall be issued by Bina Refinery to respective contractors and shall be endorsed by EIL.

16.3 **WORKING HOURS**

Contractor shall follow central/ BPCL enactment for working hours and shall obtain due permissions from Owner/ EIL under such enactment wherever required. Contractor shall solely be responsible for any infringements and consequential penalties or payments. The working in operational area shall be allowed between sunrises to sunset hours. Hot / cold work permits against specific safety conditions shall be required to be obtained by Contractor in advance as per guidelines of BPCL Plant authorities. Contractor may be allowed to work for 24 hours to meet project schedule. All necessary arrangements including lighting for working during night shall be in contractor's scope of work.

Normally Contractor shall be allowed to work on 6 days a week. For carrying out work beyond working hours; and on Sunday and holidays, Contractor shall approach the Engineer- In-charge or his authorized representative and obtain his prior written permission and permits.

It shall be clearly understood that such overtime working of Contractor’s personnel and equipment deployment therefore shall solely be to the cost and account of Contractor and Owner/EIL shall in no way be responsible to compensate him for the same. No extra claim shall be entertained by Company on any account.

Contractor shall be ready to arrange for additional manpower and machinery for the work in late evenings / night hours if required and ordered by Owner/EIL for completion of work as per the permissions given by Plant authorities.

16.4 **IDENTITY CARDS**

16.4.1 Contractor shall ensure that the proper identification card are issued by Contractor or its Sub-Contractor totheir employees/ workers to be deputed by him for the work, duly signed by the Contractor or an authorized person on behalf of the Contractor.

16.5 **ENTRY PASSES**

16.5.1 The CONTRACTOR has to apply for photo Entry Passes for its workers and staff and the workers and staff of its SUB-CONTRACTOR in a prescribed proforma provided by the OWNER. The Application shall be accompanied by a Statement and Declaration in the form prescribed by the OWNER signed by the employees for whom the Entry Passes are sought and confirmed by the employer. The photo Entry Passes shall be issued by the OWNER for a maximum period of 3 (three) months, which will be extendable upon application of the CONTRACTOR.As a special case Temporary Passes may be issued for a maximum period of 7 (seven) days. Necessary administration charges for above as applicable to be absorbed by the CONTRACTOR.

16.5.2 Unutilized / expired Entry Passes/ Identity Cards shall have to be immediately surrendered to the OWNER.

16.5.3 In case of the loss of an Entry Pass/Identity Card the CONTRACTOR shall immediately lodge an FIR with the local police station and inform the Engineer-in-Charge of the loss and shall pay a charge as per BPCL guidelines against Entry Pass / Identity Card lost. The CONTRACTOR is required to keep an account and track of all Entry Passes issued and surrendered.

16.5.4 Employees of the CONTRACTOR or SUB-CONTRACTOR while working inside the Plant should always display gate Passes/Identity Cards issued by the Security Section. Entry inside BPCL Refinery premises is allowed only with all necessary PPE’s required for execution of works at site.

16.5.5 It shall be the responsibility of the Contractorto fully comply with the following Security

Provisions:

(i) Entry/Access to any field / facility is governed by rules & regulations formulated from time to time by the Government of India and / or its concerned departments / agencies, which are binding on the EIL/ BPCL and Contractors, etc. All such rules and regulations (including amendments if any) are to be complied without any time and cost impact to the EIL/ BPCL. The present requirements in this regard are as follows:

For all the personnel (Indian/Foreigners) of Contractor and/or their subcontractors (of Contractor), the Procedure for security clearance as listed below will have to be strictly followed/complied with before entering the Work Site. Any subsequent changes/modifications as may be issued from time to time in this regard shall also have to be duly complied without any time and cost impact to the EIL/ BPCL.

BPCL Security Section has right to deny permission to any personto go to the Site in case either the required procedures are not complied with or any personcomes without stipulated advance notice, and in that case the EIL/ BPCL will not be liable for any cost and time impact.

Duty/ Entry Passes for all the personnel are to be obtained well in advance from the Security Section of the EIL/ BPCL after providing the prescribed Declaration Forms along with 2 stamp size photographs in respect of each person.

(a) Indian nationals: Before mobilising/deputing Contractor's persons (Indian nationals) at Site and/or its subcontractor/ vendor representative (of Contractor), etc. Contractor will submit minimum 2 weeks in advance a complete list of the persons along with necessary police verification to enable BPCL's Security Section to issue necessary non employee duty (NED) passes without which no person of Contractor/subcontractor or vendor (of Contractor)is allowed to proceed to Site.

(b) For Foreign nationals : At least 4 weeks in advance the Contractor will submit for obtaining necessary clearances from Ministry of Home Affairs (MHA) etc. a list of all foreign nationals required to be mobilised to site. Following information shall be provided:

i. Full Name
ii. Passport No. date and place of issue
iii. Nationality
iv. Date of Birth
v. Parentage
vi. Present Address
vii. Permanent Address
viii. Validity of the passport
ix. Details of the visa
x. Date visited India last
xi. Purpose
xii. Duration of the last visit and
xiii. Occupation.

Contractor is to ensure that only such expatriates who are having valid passports and valid business visas are deployed for work under the Contract. Expatriates having Tourists visas are not permitted to work at site.

Contractor's personnel (crew/workers) should not be in possession of any personal camera/photography materials, Arms/ ammunition, liquor, prohibited drugs etc.

All duty/ entry passes issued for the Construction activities should be surrendered to security section of the EIL/ BPCL promptly after construction activities are over in a particular working season.

Contractor is to ensure that all the personnel engaged by them abide by the Security & Discipline Rules prescribed from time to time by the Security Section of the EIL/ BPCL.

(ii) The schedule(s) prescribed in the foregoing paras for advance submission of details regarding personnel clearance is indicative only as the clearances are to be accorded by the concerned departments of the Govt. of India. Hence EIL / BPCLwill not be liable for any time & cost impact due to any delays on this account or due to change of procedures etc. in this regard.

16.6 **Gate Passes**

16.6.1 To bring materials, equipment, tools and tackle and other things inside the Refinery for construction work, the CONTRACTOR has to produce proper documents of title or authority relative there to for inspection by personnel of the OWNER at gate. These shall be checked thoroughly by personnel of the OWNER at the Gate and recorded in their Register before permitting the same to be brought inside the Refinery limits. It is the responsibility of CONTRACTOR to see that the entry is duly recorded in the Register with proper Entry Number, date and signature of authorized representative of OWNER and that the supporting challans/documents are stamped and signed by personnel of OWNER at the gate at the time of entry.

16.7 **WORK PERMIT**

16.7.1 In order to keeps the OWNER informed of the various jobs being undertaken within the Refinery and to enable the OWNER to regulate the same to ensure the observance of safety regulations relative thereto. When work is to be carried out in hazardous areas, a Hot Work Permit is to be obtained by the CONTRACTOR from the OWNER before start of work on jobs which are capable of generating a flame, spark or heat e.g. gascutting, grinding, welding, use of any electrical, diesel, petrol or battery operated prime mover, machine, tool or equipment or generator set, mixer machine, drilling machine; pump, crane, forklift or hand truck or trailer or chipping or breaking of rocks or concrete or hacksaw cutting and drilling. Similarly the CONTRACTOR is to obtain a Cold Work Permit from the OWNER for jobs which do not come under the category of hot work and in respect of which there is no risk of fire e.g. transportation, backfilling of ordinary soil by manual process, pile testing, hydrotesting, shuttering, fixing of reinforcement, hand mixed concreting, plastering and brick work.

16.7.2 Depending on the nature of the work and the equipment and tools involved the CONTRACTOR shall apply for Cold/Hot Permit in a prescribed format at least 7 (seven) days before the work is planned to start. No Work Permit shall be issued by OWNER unless proper arrangement is made by the CONTRACTOR to ensure safe performance of the work inside the Refinery limit. Job-wise and area wise permits shall be issued to the CONTRACTOR and for work against each permit the CONTRACTOR shall post at site at least one Construction Supervisor and one Safety Supervisor of required level to ensure the due observance of all safety requirements. Proper barricading as per BPCL requirement shall be installed by Contractor.

16.8 **Vehicle Permit**

16.8.1 Permits are to be obtained separately for entry/use of vehicles / trailers and other mobile equipment inside the Refinery limits. All the vehicles of CONTRACTOR should have a valid PUC certificates. The following requirements are to be met to obtain vehicle permit:

a. Vehicle/Equipment shall be in good condition and fitted with spark arrestor.

b. Vehicles should carry, wherever applicable, Valid Road tax certificate and fitness certificate from the competent authority and insurance policy.

c. Valid operating/driving license of driver/operator.

d. Type of vehicle which is allowed inside the plant shall be as per the directions given by OWNER.

16.9 **Validity of the Permit**

a. Any Hot or Cold Work Permit issued is issued as per BPCL Project /Operation shift rotation

b. Thereafter clearance must be renewed for each shift (Morning & Evening) by the shift in-charge/ shift representative of the OWNER.

c. The permit for defined project areas may be renewed for a maximum period of one week from the date of issue and if extension is required, the CONTRACTOR has to apply for a fresh permit.

d. The permit is not valid for work on holidays unless special permission of the OWNER is obtained for the purpose. The information given above is general in nature. Prevailing work permit system will be applicable.

16.10 **Safety Regulations**

16.10.1 **Regarding Work Permit**

a. The work shall be carried out inside the Refinery limits to conform to the OWNER'S safety section and in accordance with any instructions of Engineer-in-Charge issued from time to time. Sometimes working hours may be drastically reduced or increased to satisfy safety requirements and the CONTRACTOR shall meet these requirements without any time and cost implications. No claim for idling of machinery, plant, manpower or equipment shall be entertained for reason of delay in the issue of a Work Permit and it shall be the exclusive responsibility Of the CONTRACTOR to apply for, pursue and obtain the requisite Work Permit(s) well in advance of the relative requirement(s).

b. The CONTRACTOR shall abide by all safety regulations of the plant and ensure that safety equipment for specific jobs as stipulated in the Factories Act Safety Handbook is issued to all employees during the execution of work, failing which all the works at site shall be suspended.

16.11 **Regarding Hot Work**

a) When doing hot work inside the plant the CONTRACTOR must ensure that the fire hose is hooked up with a fire water system and extended to the work spot. In addition, at least one fire extinguisher must be kept near the working spot .The area around and below the place of hot work must be adequately protected from sparks and hot metals by a booth made of asbestos, cloth/sheet and by wetting with water. In addition, depending on the location and hazard of the work, the CONTRACTOR shall at its own cost arrange sufficient number of additional fire hoses and such firefighting equipment of approved quality as may be required at his own cost to carry out hot job inside the plant.

b) Welding & electrical cables should be of approved quality and no jointing or loose connection shall be permitted.

c) At the end of the working day the CONTRACTOR must inform the electrical section to switch off power at sub-station end.

d) The CONTRACTOR must provide cotton clothes, safety shoe, safety helmet, safety belt, and hand gloves of approved quality to his workers to meet the safety requirement of various jobs to be carried out inside the Plant.

16.12 **LABOUR COMPLIANCES & SPECIFICATIONS/ GUIDELINES FOR LABOUR WELFARE FACILITIES AT CAMP AND AT PROJECT SITE**

The contractor shall at his own cost provide temporary accommodation as the regulatory requirement to all workers engaged in this project. The detailed specifications/guidelines w.r.t. Labour Camp for BREP Project & Welfare facilities for labour at site along with penalty matrix is enclosed as **Annexure-XIX to SCC**.

17.0 CONTRACT PERFORMANCE GUARANTEE (CPBG) / SECURITY DEPOSIT (SD)

Provisions of CPBG shall be as per GCC. Clause No. 18 of GCC has been modified to the following extent:

17.1 Contract value for purpose of Security deposit shall include all taxes & duties included in the Contractor's contract value (excluding GST).

17.2 **In context of para. 4 of Clause No. 18.1 of GCC, it is clarified here that, balance % of security deposit, pursuant to adjustment of Initial Security Deposit (submitted in the form of EMD) if applicable, shall be deducted @ 10% from each RA bill and not the total security deposit in one go from initial RA bill, till the balance Security Deposit is recovered.**

In case CPBG is not received by BPCL within **45 (Forty-Five) days** from the date of Award, non-refundable interest shall be charged at the rate (SBI base rate prevailing on the date of issue of enquiry plus 1%), from the date the BG towards security deposit becomes due (i.e. 15 days from the date of Award) and shall be chargeable on the reducing balance left after apportioning the SD amount accumulated from each running bill, till complete SD amount of 10% is recovered from the bills.

17.3 In the event, if Contract Price is increased during the Contract Validity Period for any reason whatsoever, the value of the Bank Guarantee towards SD shall be increased proportionately by the Sub-Contractor within 7 (Seven) Days to ensure that it remains valid for an amount which is equivalent to 10% of the revised Contract Price, as determined by the engineer-in-Charge, else amount equivalent to the 10% of such differential between estimated original contract price and executed contract price shall be withheld/ deducted from the RA bills on account of increase in the extent of Security Deposit.

17.4 Bank Details in Clause No. 18.6 of GCC modified as below:

Name of Bank: State Bank of India
Branch : SARVODAYA CHAURAHA ,BINA, DIST. SAGAR (MP) - 470113
Account No: 32182313019
IFSC Code: SBIN0001427
MICR Code: 470002101

17.5 In case of BG towards security deposit, list of eligible banks is as per enclosed **Annexure-XVI to SCC.** Contractor shall furnish BG towards security deposit issued by bank accordingly.

17.6 Submission of CPBG /SD in form of e-BG is acceptable to BPCL.

17.7 The proforma of CPBG/SD is per format enclosed in the GCC.

18.0 REQUIREMENTS FOR DOCUMENTATION

18.1 The Contractor shall adhere to the requirements for Documentation as per Specification no**. 6-78-002** attached as **Annexure- XI** to Special Conditions of Contract.

18.2 Record Maintenance which are essential as part of CTE requirements are as per following:

- Daily Progress Report
- Maintenance of Hindrance Register
- Cement Consumption Register
- Pile Bore Logs
- Pour cards
- Gate Passes for Steel & Other material entry
- Scrap Reconciliation report
- Survey Field Note Books certification
- Maintenance & Certification of Cube test reports
- Safety Register
- Measurement Book
- Lab Test reports
- Drawings Control register

- Deviation Permits / Cost Benefit calculation, review of contractor documents & recommendation
- Seigniorage records maintenance, reconciliation, Follow up with contractors for MRC, etc.
- Bar Bending Schedule
  - Daily Attendance Register
  - Records of payments of ESI, EPF, Insurance, etc.
  - Details of Safe Manhours "

18.3 **HINDERANCE REGISTER:**

Hinderances in Hinderance Register is to be registered as and when it has occurred and same needs to be signed and mutually agreed by contractor, EIL and BPCL on weekly basis.

Mutually agreed Hinderances to be submitted by contractor along with monthly progress report.

19.0 OTHERS

19.1 **SITE CLEANING**

In addition to the provisions of relevant clause of General Conditions of Contract (GCC) and associated provisions thereof, the Contractor shall also comply with the following:

- The Contractor shall clear the site of work simultaneously as the work proceeds on daily basis failing which the same shall be get cleared by the Owner / EIL at the risk and cost of Contractor by giving him one day notice.
- If the work involves dismantling of any existing structure in whole or part, care shall be taken to limit the dismantling up to the exact point and/or lines as directed by the Engineer-in-Charge and any damage caused to the existing structure beyond the said line or point shall be repaired and restored to the original condition at the Contractor's cost and risks to the satisfaction of the Engineer-in-Charge, whose decision shall be final and binding upon the Contractor.
- The Contractor shall be the custodian of the dismantled materials till the Owner / EIL takes charge thereof.
- The Contractor shall dispose off the unserviceable materials, debris etc. to any area as decided by the Engineer-in-Charge.
- The Contractor shall sort out, clear and stack the serviceable materials obtained from the dismantling/renewal at places as directed by the Engineer-in-Charge.
- No extra payment shall be paid on this account.

19.2 **General Environment Requirement**

The Contractor has to ensure efficient use of natural resources like water, fuel oil and lubricants. The Contractor should ensure proper awareness to workers to maintain a green and clean environment inside/outside the plant.

The Contractor shall be responsible to arrange for the fuel requirement of his workers and staff without resorting to cutting of trees and shrubs. Cutting of trees and shrubs is strictly prohibited for this purpose.

20.0 ELECTRICAL CONTRACTOR'S LICENSE

20.1 The Contractor or its nominated Subcontractor(s) (of Contractor), as the case may be, shall have a valid electrical contractor's license for working in the State in which the job site is located. The Contractor shall furnish a copy of the same to Engineer-in-charge before commencement of any electrical work or work pertaining to Electrical System.

20.2 No electrical work or work pertaining to electrical system(s) shall be permitted to be executed without a valid Electrical Contractors License being produced by the Contractor or his nominated Contractor, as the case may be, intending to execute the work.

21.0 PROCUREMENT OF TMT BARS, STRUCTURAL STEEL AND CEMENT

21.1 The Contractor shall purchase TMT Bars, Structural Steel and Cement as per the provisions defined in **ANNEXURE-XII of SCC**.

22.0 DELETED

23.0 DELETED

24.0 Facilities for Workmen:

24.1 The Contractor shall make his own arrangements for the engagement of all workmen, local or otherwise, and for their transport, housing, feeding and payment.

24.2 The Contractor shall provide at Site adequate supply of drinking water and other water for use at Site.

24.3 If any illness of an epidemic nature breaks out, the Contractor shall comply with and carry out whatever regulations, orders and requirements that are imposed by the Government or the local medical or sanitary authorities for the purpose of promptly dealing with and overcoming it.

24.4 The Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst the persons deployed for the works at site and for the preservation of peace and the protection of persons and property in the neighbour-hood of the work.

24.5 The Contractor shall ensure that the provisions of this Clause 24 are complied with by his Contractors also.

25.0 FURTHER SUB-CONTRACTING

25.1 **Provisions for further Sub-Contracting shall be as per Clause no. 35 of GCC.**

Contractor will submit to Owner/EIL for approval the details of nominated Sub-Contractors as per **ANNEXURE- XIII of SCC**.

26.0 INSURANCE

26.1.1 Insurance as per clause no. 87 of GCC stands modified to the following extent:

26.1.1.1 Owner shall take Comprehensive Project Insurance covering all aspects of the Project construction including Procurement, Fabrication, Construction, Offsite storage, Testing & commissioning and contractor and sub-contractor of any tier shall be covered for on-site activities only with respect to Project Value. Contractor is not supposed to take any Project Insurance nor Marine policy. This policy will also cover Third Party Liability arising out of bodily injury and/or property damage to Third Party only.

26.1.1.2 Owner's policies will absolutely exclude the following for which contractor shall take adequate insurance:

- Cover for Contractor's Plant & Machinery used for construction
- Liability arising out of above equipment
- Cover for Employees/ workers of the Contractor
- Any statutory insurance like motor insurance for the vehicles used by contractors
- Cover for any vessels used for construction activities by the contractor including any associated liabilities
- Cover for any aircraft or helicopter and/or aviation assets used for construction activities by the contractor including any associated liabilities
- Cover for Professional Liability Insurance for design, project management, detailed engineering, design & build activities by the contractor and/or any consultant

26.1.2 **Contractor shall ensure that all its personnel deployed under this contract have obtained additional insurance coverage under the Pradhan Mantri Suraksha Bima Yojna (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY) through the participating banks and submit the proof of such insurance coverage to the satisfaction of Owner. The cost of the insurance premium amount for both the above schemes shall be borne by the contractor giving evidence / proof to EIL in this respect and Contractor shall suitably consider the same in their bid.**

Details of these schemes are to be regulated continuously on yearly basis and the same should be renewed on each successive relevant date in the subsequent years.

26.1.3 **Contractor shall submit to BPCL /EIL copies of all insurance policies taken by them for the contract.**

27.0 OTHERS MODIFICATIONS TO GCC

27.1 Liquidated Damages due to delay in completion

Clause No. 22. of GCC stands modified to the following extent:

27.1.1 Liquidated Damages (LD) due to delay in completion shall be 0.5% of the Contract value per week or part thereof, subject to a maximum of 5% of the Contract value.

27.1.2 For the purpose of LD, part of the week in clause **27.1.1** shall be considered as one week.

27.2 Following clauses shall be superseding GCC **Clause No. 94** :
Mediation & Arbitration:

i) In the event of a dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, the parties shall first seek settlement of that dispute by mediation in accordance with the Mediation Act, 2023.

ii) If the dispute is not settled by mediation within [90] days of the appointment of the Mediator, or such further period as the parties shall mutually agree in writing, the dispute shall be referred to and finally resolved by arbitration as per India International Arbitration Centre (Conduct of Arbitration Proceedings) Regulations for the time being in force, which Regulations are deemed to be incorporated by reference into this Clause

iii) The language to be used in the mediation and in the arbitration shall be English.

iv) The governing law of the contract shall be the substantive law of India.

v) In any arbitration commenced pursuant to this clause:
(i) The number of arbitrator/s shall be:
(a) One - if the total claim including counterclaim, if any, under arbitration is Rupees 50 Crores or less; or
(b) Three – if total claim including counterclaim, if any, is of more than Rs. 50 Crores.
(ii) The seat of arbitrationshall be Mumbai, India

(i) The cost of the proceedings shall be equally borne by the parties, unless otherwise directed by the arbitrator/s.

(ii) Neither party shall be entitled to and claim for any pre-reference or pendente-lite interest, i.e. form the date of cause of action till date of Award by Arbitral Tribunal and claim for any such interest shall not be entertained by Arbitral Tribunal and be void. Further, Arbitral Tribunal shall have no power or authority to award pre-reference or pendent-lite interest in the matter.

vi) In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs) / Port Trusts inter se and also between CPSEs and Government Departments / Organizations (excluding disputes relating to Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 05/0003/2019-FTS-10937 dated 14th December 2022 and the decision of AMRCD on the said dispute will be binding on both the parties

28.0 GENERAL REQUIREMENTS FOR RADIOGRAPHY & OTHER NDT

28.1 Contractorshall appoint radiography/ NDT agency(ies) only after acceptance of such agency(ies) by OWNER/EIL. However, acceptance of radiography/ NDT agency by OWNER/EIL shall not absolve the Contractor of his responsibility to execute radiography work as per requirements of the Contract.

28.2 Contractor shall mobilize Radiography/ NDT agency at site along with adequate number of radiography resources/ NDT equipment & appliances, commensurate with the welding activity and quantum of Radiography/ NDT work load to avoid delays in Radiography/ NDT and consequent generation of back log. In the event of generation of back log leading to Delay/ Holdup of subsequent, activities OWNER/EIL has right to engage additional agency for carrying out the radiography at the risk and cost of Contractor including 100% overhead charge.

28.3 Date and extent of mobilization of radiography/ NDT agency/resources shall be agreed by the Contractor and the Engineer-in-Charge at the start of work.

28.4 Radiography Check Shots

a) To verify that radiographs are being taken on the prescribed / selected welds /spots only, 5% of already radiographed spots shall be selected by the Engineer-in-Charge or his designated person for check shots. The check shots shall be taken up before any further radiography work.

b) The Contractor will be paid for the check shots at the quoted rates if no variation is found. If mismatch / variation is found in any of the check shot as per para 28.4a), Contractor shall have to take re-radiography of the entire lot represented by mismatched check shot (a days production or more as decided by Engineer In-Charge). In such cases, no payment will be made for the checkshots as well as the re-radiography of the entire lot represented by the checkshot.

c) In the event of any non-matching / variation is observed in re-radiography of the entire lot as per para 28.4 b) above with reference to the earlier radiographs taken, the radiography agency shall be forthright debarred from site. Contractor shall then carryout re-radiography up to maximum of 100% ofall the prescribed / selected welds/ spots radiographed by the debarred radiography agency (as per direction of the Engineer In-Charge) at his own cost by engaging a separate Radiography agency acceptable to OWNER/EIL. The process for verification of radiographs through check shots shall be continued as per clause 28.4a) above from the lots selected by the Engineer In- Charge till 2(two) consecutive lots are found with matching check shot radiographs to the satisfaction of EIL/ OWNER.

29.0 OTHER REQUIREMENTS

29.1 The Contractor shall not use or occupy any part of the Works unless its use or occupation has been agreed to by the EIL/BPCL in writing.

29.2 Hydrocarbons (other than lubricating oils and the like) shall not be introduced to the Work until Contractor has received EIL approval in writing to do so.

29.3 EIL / Owner (BPCL) shall have the right to instruct the work at site / fabrication yard at site and shall be entitled to ascertain whether the work is carried out in accordance with the requirements of the contract, including the right to inspect the work at all stages of its performance.

30.0 STATUTORY APPROVALS

30.1 Obtaining statutory approvals, required as defined in Contractor's scope under Technical Scope of work, shall be the responsibility of the Contractor. Contractor shall arrange the inspection of the works by the authorities and necessary co-ordination and liaison work in this respect. The application on behalf of the EIL for submission to relevant authorities along with copies of required certificates complete in all respects shall be prepared and submitted by the Contractor well ahead of time so that the actual construction/ commissioning of the work is not delayed for want of the approval/inspection by concerned authorities.

30.2 Statutory fees paid, if any, for all such inspections and approvals by authorities shall be deemed to be included in the quoted prices, if not specified otherwise.

30.3 Any change/ addition required to be made to meet the requirements of the statutory authorities shall be carried out by the Contractor free of charge. The inspection and acceptance of the work by statutory authorities shall however, not absolve the Contractor from any of his responsibilities under this contract.

30.4 All statutory approvals other than specified under 30.1above shall be obtained by EIL and provided to the Contractor.

31.0 TEMPORARY FIXTURES

Before erecting temporary shelters like sheds or tents anywhere within the plant premises, written permission of the concerned be obtained. Temporary fixtures like; sheds, tents, etc. shall be erected in conformity with normal safety standards. Thatched roof to such fixtures will not be permitted.

Temporary piping, hose connections and electrical wiring must be laid in such manner that they may not cause tripping or hitting hazard. All precautions should be taken to ensure that any temporary electrical wiring used within the Project Area would not cause spark or shock.

All necessary / required precautions shall be taken and all HSE norms of Company shall be complied with.

32.0 HEALTH, SAFETY AND ENVIRONMENT (HSE) MANAGEMENT

32.1 HSE Compliance

32.1.1 Safety is to be given prime importance. During construction, Contractor shall strictly follow the safety procedures, precautions & norms as per SAFETY CODE, specifications on Health, Safety and Environment (HSE) Management (enclosed as **ANNEXURE-XIV**) and requirement of OISD-192 & OISD-207 (enclosed as **Annexure-XV**).

32.1.2 The Contractor shall also be responsible to comply with code requirements of International Standard Organization (ISO), Occupational Safety & Health Administration (OSHA), ISO-14000 series, American Petroleum Institute (API) RP and other relevant international practices. In case of conflict between the requirements of the various specifications, HSE documents and/or the requirements specified in the bidding document, the more stringent requirement shall be followed.

32.1.3 In case of noncompliance, Engineer-In-Charge shall give notice to the Contractor. In case of repeated failure of the Contractor, Engineer- In- Charge is free to take actions such as withholding of bills, heavy penalty etc. The quantum of such actions will be decided by the Engineer- In- Charge, considering the contract conditions.

32.1.4 The Contractor shall establish document and maintain an effective Health, Safety and Environment (HSE) management system. After the award of the contract, detailed Health, Safety and Environment (HSE) programme to be followed for execution of contract under various divisions of works will be mutually discussed and agreed to.

The Contractor should be required to:

- Have in place a Safety Management System, approved by a recognized, approved authority.
- Prepare a project-specific Safety Plan for each Site
- Implement the Safety Plans.
- Ditto the above for Environmental Management

32.1.5 In case, Contractor fails to follow the instructions of Engineer-in-charge with respect to above clauses, next payment due to him shall not be released unless until he complies with the instructions to the full satisfaction of Engineer-in-charge.

32.2 SAFETY/FIRE PROTECTION

32.2.1 Contractor shall take all necessary measures to protect the work and Workmen against accidents and occupational disease. They shall observe and comply with all Governmental

safety regulations as well as EIL's/ BPCL's and accepted industry safety practices as required for this work.

32.2.2 The Contractor will be required to demonstrate that:

i. the management systems and the installation are adequate to ensure that the design and the operation of the installation and the equipment are safe;
ii. the potential hazards of the installation and the risks to personnel and environment have been identified and appropriate controls provided;
iii. adequate provision is made for ensuring, in the event of a major emergency affecting the installation, the safe evacuation and rescue of personnel and
iv. the statutory and Company requirements relating to safety and pollution control measures are complied with.

32.2.3 Contractor shall conduct a Safety Studies Methodology which shall be completed and submitted to Company. Further, the Contractor shall implement the findings of the Safety Studies without impact on Schedule or Contract Price.

32.3 **Rules And Regulations**

Contractor shall observe national and local laws, ordinances, rules and regulations pertaining to the Works and shall be responsible for extra costs arising from violations of same.

The Contractor shall not do any exploratory excavations, including drilling/boreholes, without the previous written permission of the Company's Representative.

32.4 **Watching and Lighting**

The Contractor shall, in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the EIL/ BPCL for the protection of the Works or for the safety and convenience of the Public or others.

32.5 **Safety Audits:**

32.5.1 Contractor shall within 30 days of commencement of Contract and also once every three months thereafter submit a safety report.

32.5.2 In the event of any accident or dangerous occurrence the Contractorshall forthwith send a notice of accident in the proforma (to be provided by EIL/ BPCL).

Contractor shall maintain a record of the relevant statutory and Company requirements relating to safety and pollution control measures and compliance.

The Contractor shall be responsible for following the proper procedures, as outlined below, in reporting accidents or incidence.

1) The EIL/ BPCL safety officer will be immediately notified by fastest means possible (Radio) of any accident which involves the following:

a) Death from any cause whatsoever.
b) A fractured skull, pelvis, arm, thigh or spine, forearm or leg.
c) A dislocated shoulder.
d) The amputation of an arm or hand, or of one or more fingers of the same hand, or of a leg or a foot.
e) The loss of sight of an eye.
f) Any other serious bodily injury, including internal bleeding or burns or asphyxia where such injury is likely to endanger life, cause permanent incapacity, or temporary incapacity of 5 days or more.

2) In case of death, the Contractor shall be responsible for immediately notifying the nearest Indian police so that they can make the proper investigation in accordance with the law.

3) Also in case of death, the Contractor shall immediately notify the Labor Officer of the Federal Ministry of the area in which the death occurred.

32.6 **Safety Procedure:**

Contractor should submit a safety procedure prior to start of the construction activities. The procedure should include the safety measures to be taken during construction work, fire fighting / safety equipment available which will be provided to terminal in case of any emergency, number of safety / fire officers and their role, periodical exercise on awareness of workers towards safety. Familiarization of workers with safety equipment, teams for fire fighting etc. In case of any emergency, Contractor should immediately mobilize all resources to combat the emergency and co-ordinate with BPCL/ EIL suitably.

Contractor should ensure that the contractor's supervisory personnel have undergone the approved basic training on fire fighting and Elementary First Aid before deployment and adequate number of trained personnel to be deployed at all times during execution at site.

In case of any accident at site causing injury to personnel, Contractor shall inform EIL/ BPCL immediately. Contractor shall also arrange for pickup and immediate medical attention for the injured personnel.

32.7 **Safety Audit By Company/Owner**:

EIL/ BPCL may conduct safety Audits at any stage of project execution and before taking over the facilities. The audit shall be based on a protocol that covers elements which can affect the safety during execution or the safe operation of the facilities in the contractor's scope of work. The protocol shall cover documentation, process hazard analysis, fire detection and suppression system, lifesaving appliances and escape routes, operating procedures, pre-startup safety review, safe work practices, safety and shut down devices, management of change, assurances of quality and mechanical integrity, emergency response control investigation of accidents, personnel protective equipments, audit team which could be conducted by the EIL/ BPCL's personnel or any agency appointed by the EIL/ BPCL for the purpose, accord full access to site and provide all relevant information, comply with the observations and recommendations of the audit.

33.0 TERMINATION

33.1 **Termination shall be as per relevant provisions of GCC.**

33.2 The methodology for processing Termination for default shall be as follows:

a) Any material breach in contractual obligations shall be dealt on mutual discussion basis, so as to correct breach. In case of failure to correct the breach, EIL/ Owner shall initiate Termination action as per the contract.
b) In case of non-submission of CPBG within the period stipulated for it, coupled with non-mobilization / non-performance within the period stipulated for the same, the Termination action along with other contractual penal provisions shall be initiated, as per the contract provisions.
c) Further, in case of submission of CBPG within scheduled period, but Contractor being at default in terms of Contract, a) above shall be applicable.
d) In case of occurrence of any of the above specified events, contractor shall be understood to have defaulted and the EIL/ Owner shall have the right to terminate the contract, at its sole and absolute discretion by issuing a Show Cause notice of 15 calendar days to the Contractor, stating the reason and the intention of EIL/ Owner to terminate the Contract and to take other penal actions in terms of the contract including extant policy for Suspension/ Banning of EIL/ Owner.
e) The Contractor may also request for a personal hearing.
f) EIL/ Owner based on the contractor's response to the Show Cause Notice and the personal hearing, shall decide the action regarding Termination and/ or Suspension / Banning or otherwise.
g) EIL, being the PMC/EPCM Consultant for the client in this Project reserves the right to take action against the defaulting supplier/ contractor in this tender/ PO/ Contract including putting the supplier/ contractor on the Suspension/ Banning list of EIL. For this purpose, EIL may decide the same considering the communications carried out by the client with the supplier/ contractor (including show cause notice/ personal hearing, etc).

h) The decision taken as above shall apply to both Termination as well as Suspension / Banning."

34.0 INTEGRITY PACT

34.1 As per clause no. 10 a) of Sec-III of GCC. Format of Integrity Pact is attached **with the Bidding Forms** enclosed with the bidding document.

Refer Integrity Pact for details of Independent External Monitors (IEMs)

35.0 PUBLIC PROCUREMENT POLICY FOR MICRO & SMALL ENTERPRISES (PPP-MSEs), 2012

35.1 Owner is committed to promotion and development of micro and small enterprises Accordingly, Contractors are also encouraged to promote the same by considering MSE sub-suppliers/ contractors to the extent possible under the Orders/ Contracts awarded on them. All efforts shall be made by Contractor to encourage procurement through MSEs (holding valid certificate) through their Sub orders/ Sub contract procurement. The Contractor shall provide the following only for the purpose of reporting.

i) Monthly Reports for purchase of material/services/ sub-contracts (from MSE vendors) shall be submitted by Contractor to Owner (BPCL) / Consultant.

ii) The report shall be signed by authorised person of contractor.

iii) Report shall be submitted in the following format.

Sl. No.	Sub- Supplier/ Subcontractor	Work order no. & date	Item Description	Amount (In Rs)	Category of MSE Gen/ SC/ ST/ Women	MSME Status Micro/ Small with code	Remarks

36.0 POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY (INDIAN) MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT (DMI&SP)

36.1 Policy for Providing Preference to Domestically (Indian) Manufactured Iron & Steel Products in Government Procurement (DMI&SP)shall be as per Appendix – IV to ITB.

37.0 PROVISION REGARDING POLICY OF PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) (PPP-MII)

Provision Regarding Policy of Public Procurement (Preference to Make in India) (PPP-MII) shall be as per Appendix-II to ITB.

38.0 DISTINCTION BETWEEN SUBSTRUCTURE AND SUPERSTRUCTURE

To distinguish between work in substructure and superstructures, the following criteria shall apply:

38.1 For all Equipment pedestals, pipe racks, other foundation and R.C.C. Structures, work done upto 300 mm level above Highest Pavement Point / Finished Floor Level will be taken as work in substructure and work above this level will be treated as work in superstructures and payments would be made accordingly.

38.2 For Buildings only, all works upto level corresponding to finished floor level (Ground Floor) shall be treated as `Work in substructure ' and all works above the finished floor level shall be

treated as "Work in superstructure".

38.3 Irrespective of what has been stated above, all pavements, R.C.C. Retaining wall, all pipe sleepers and any similar item would be taken as work done in substructure irrespective of locations, nomenclature and levels given anywhere.

Where not specifically pointed out all works in Cellars/ sumps, Drains, Manholes, Tank Pads, Cable trenches, or such similar item would be taken as work in substructure.

39.0 ENERGY NOTE

BPCL Bina Refinery is an ISO:50001:2018 certified Refinery and is focused on energy efficiency. In line with the same, all contractors providing services for BPCL Bina Refinery should preferably deploy energy efficient equipment such as energy efficient welding machines, LED / CFL temporary lighting and temporary window AC of BEE 4-star rating and above for execution of the work.
Energy Policy is attached as **Annexure-XVII to SCC.**

40.0 DISCONTINUATION OF HYDRA CRANES WITHIN BINA REFINERY PREMISES - REFER ANNEXURE-XVIII TO SCC

41.0 PLANNING AND DESIGNING IN PURVIEW OF VULNERABILTY ATLAS OF INDIA

Vulnerability Atlas of India (VAI) is a comprehensive document which provides existing hazard scenario for the entire country and presents the digitized State/UT – wise hazard maps with respect to earthquakes, winds and floods for district-wise identification of vulnerable areas. It also includes additional digitized maps for thunderstorms, cyclones and landslides. The main purpose of this Atlas is its use for disaster preparedness and mitigation at policy planning and project formulation stage.

This Atlas is one of its kind single point source for the various stakeholders including policy makers, administrators, municipal commissioners, urban managers, engineers, architects, planners, public etc. to ascertain proneness of any city/location/site to multi-hazard which includes earthquakes, winds, floods, thunderstones, cyclones and landslides, while project formulation, approvals, and implementation of various urban housing, buildings and infrastructures schemes, this Atlas provides necessary information for risk analysis and hazard assessment.
The Vulnerability Atlas of India has been prepared by Building Material and Technology Promotion Council under Ministry of Housing and Urban Affairs, Government of India and available at their website ww.bmtpc.org.
It is mandatory for the bidders to refer Vulnerability Atlas of India for multi-hazard risk assessment and include the relevant hazard proneness specific to project location while planning and designing the project in terms of:

i Seismic zone (II to V) for earthquakes,
ii Wind velocity (Basic Wind Velocity: 55, 50, 47, 44,39 & 33 m/s)
iii Area liable to floods and Probable max. surge height
iv Thunderstorms history
v Number of cyclonic storms/severe cyclonic storms and max sustained wind specific to coastal region
vi Landslides incidences with Annual rainfall normal
vii District wise Probable Max. Precipitation

42.0 ABNORMALLY HIGH UNIT RATES (AHR ITEMS)

Clause No. 65.0 of GCC is modified to the following extent:

In item rate contract where quoted rate for the item exceeds estimated rate by 25% (Twenty five percent), such items quoted by successful bidder will be considered as Abnormally High Rate (AHR) Items. AHR items shall be negotiated before award of work and accordingly bidder shall provide the analysis of rate quoted for AHR items to justify the reasonability, if

requested by Owner. Bidder shall reduce the item rate for AHR items and offer the same to Owner for acceptance. Payment for AHR items shall be based on the agreed rates.

Further, the successful Bidder shall confirm that in a situation where the L1 bidder is not lowest for some specific line items and the L1/L2 parity is likely to be affected during the execution of the contract, due to variation in quantities of individual line items in contract based on site conditions, then the final payment could be restricted to ensure that the overall total payment of the executed work does not exceed the overall amount that would have been payable to the then L1 as per the latter's quoted rates.

43.0 EXTENDED STAY COMPENSATION

Extended Stay Compensation is not applicable.

44.0 OUTBREAK OF PANDEMIC

In case of any outbreak of pandemic during the execution of the contract, sub-contractor to follow all guidelines/SOP's issued by central govt /state govt/local authorities. Sub-Contractor to also submit compliance report to Owner/EIC. Sub-Contractor to note that quoted price isinclusive of this provision & no extra compensation on this account shall be admissible.

45.0 WEATHER CONDITIONS

The Contractor shall bear all cost and delays due to adverse weather conditions /weather down time experienced during the execution period of the works.

46.0 CERTIFICATE OF VERIFICATION AND GOOD CONDITION

The Contractor shall, before supply of material covered within the scope of supply, at his own risks, costs and initiative, undertake or cause to be undertaken all tests, analysis and inspections as shall be required to be undertaken with regard to the materials under the specification and any codes, practices, orders and instructions with respect thereto and shall cause the results thereof to be recorded, reported or certified, as the case may be, and shall not offer for delivery or deliver any material(s) which has / have not passed such tests /analysis or inspection and which are not accompanied by the tests results, reports and / or certificates in this behalf provided in the applicable specifications, code(s) and / or practices.

A certificate of verification and good condition in respect of such material shall be issued by EIL and shall accompany the invoice raised for the respective material. Contractor/sub-Contractor (of contractor) shall ensure that all guarantees or warranties issued by manufacturers of plant, machinery, equipment supplied by Sub-contractor/sub-Contractor (of sub-contractor) and covering the performance of the said material and equipment supplied by them be issued in the joint name of EIL and BPCL so that BPCL enjoys the same benefits and protection.

Notwithstanding any other provisions in the contract documents for analysis or tests of materials and in addition thereto, the Sub-Contractor shall, if so required by the Engineer-In-Charge or inspection agency in writing at his own risks and costs, analyse, test, prove and weigh all materials (including materials incorporated in the works) required to be analysed, tested, proved, and / or weighed by the Engineer-In-Charge or inspection agency in this behalf and shall have such analysis or tests conducted by the agency(ies), or authority(ies) if any specified by the Engineer-In –Charge or Inspection agency. The Sub-Contractor shall provide all equipment, labour, materials, and other things whatsoever required for testing, preparation of the samples, measurement of work and / or proof of weighment of the materials as directed by the Engineer-In-Charge or Inspection agency.

If on inspection of proof, analysis or tests as aforesaid the Engineer-In-Charge or Inspection agency is prima facie satisfied that the material received is in conformity with the material requirements of the Bill of materials and description given in the Shipping documents and in the sub-contractor's invoices in this behalf and that the test reports / results / certificates given

in respect thereof are prima facie in conformity with the relevant result / reports / certificates required in respect thereof in terms of the specifications and / or relevant codes and practices, and that the material appears to be prima facie in good order and condition, the Engineer-In-Charge/TPI agency (in such cases) shall issue to Sub-Contractor, a certificate of verification and good condition in respect of such material.

Such certificate in such cases is only intended to satisfy the EIL/ BPCL that prima facie the material supplied by the Contractor is in order and shall not anyway absolve the Contractor of his / its full responsibility under the contract in relation thereto including in relation to specification fulfilment and / or performance or other guarantees.

All identified capital goods, as specified in the technical part of bidding document, brought for permanent incorporation in site by the Sub-contractor shall be inspected by

EIL or any other agency defined in the technical portion of bidding document and the charges for same shall be included in the quoted prices.

47.0 SOCIAL MEDIA POLICY FOR BUSINESS PARTNER:

Social Media T&C shall be as per **Annexure-XX of SCC**.

48.0 Advisory on Environmental Criteria:

Advisory Guidelines on environmental criteria which contractors to follow shall be as per **Annexure-XXI of SCC**.

49.0 Procedure for Vendor Invoice Processing

Refer **Annexure-XXII to SCC** for procedure for Contractor/vendor Invoice Processing.

50.0 Digitalization:

Client intends to deploy multiple digital solutions to achieve complete transparency in project execution. The digital solutions include Control Tower (dashboards) for monitoring project progress, EPDDMS (Electronic Project Drawings & Documents Management System) for repository of project drawings and documents, PMIS (Project Management Information System) for streamlining Project Monitoring, DQIS (Digital Quality Inspection System) for monitoring shop and site inspections, DSMS (Digital Safety Management System) for monitoring HSE compliance during construction, MANPS (Manpower Productivity Monitoring System) for monitoring and tracking manpower deployment at site, MACPS (Machine Productivity Monitoring System) to monitor location and utilization of Construction equipment, TMS (Transport Management System) for tracking of critical equipment, LLIs, ODC items, Welding Management Solution, Cabling Management Solution, Piping Fabrication Sequencing (Spool Management System) etc. W.r.t. the same contractor has the following obligations:

50.1 It is mandatory for Contractor, their vendor/ subcontractor, personnel and other stakeholders engaged by the contactor to use/ provide input/ support/ implement the digital solutions as per scope documents and as directed by Engineer-in-Charge.

50.2 Contractor shall be required to provide seamless interface with their systems that are used to manage the Project Planning, Scheduling & Monitoring, Engineering, Procurement, Inspections, Expediting, Construction, Pre-commissioning, Material Management, Contract Management, etc (as applicable) through APIs as per scope documents and as per directions of Engineer-in-Charge.

50.3 Multiple Systems deployed by Client shall capture multiple types of data including personal data of the contractor employees by DSMS and MANPS. Contractor shall provide consent for implementation of DSMS and MANPS.

50.4 Frequency of updates to the digital solutions shall be mandatory as per requirements defined in scope documents.

50.5 Failure to provide data/ info on timely basis shall be considered a breach of contract and may lead to contract termination.

50.6 Client will arrange training for the systems for contractor personnel. Contractor shall be required to make their relevant personnel available for the training as per the training schedule.

50.7 Contractor shall be liable for penalties for damaging the digitalization hardware, sensors, devices etc. as per RFQ/ tender documents.

50.8 Contractor shall comply with cybersecurity guidelines/advisories/acceptable use policy issued by BPCL/EIL.

50.9 In case, any of the systems are not deployed, or are stopped during the course of the contract; executing, reporting and monitoring of the work will continue through traditional methods, other platforms as directed by the Engineer-in-Charge.

50.10 Non availability of platforms will not be a reason for seeking time extension, change orders pertaining to time and/ or cost.

50.11 Wherever applicable, the contractor to update the progress, quality and safety through the mobile app.

50.12 For refinery area, the contractor to bring flame-proof mobile devices and to install the SI suggested apps.

For further details on the scope of digitalisation refer technical section of bidding document.

ANNEXURE - A
TO
SPECIAL CONDITIONS OF CONTRACT

[TAXES & DUTIES]

A. Price basis w.r.t inclusion/exclusion of taxes and duties

1. The quoted price(s) shall be inclusive of all the taxes and duties except GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively) and GST compensation cess, (if applicable) leviable on sale of finished goods/services.
2. In case of foreign bidders, bidders shall submit their prices on FOB international sea port of exit basis/CFR on destination port basis *Note-1 (INCOTERM *Note-2), unless otherwise stated in the bid document. FOB/CFR *Note-1 prices quoted shall be inclusive of all applicable taxes up to FOB international sea port of exit/CFR on destination port basis *Note-1.
3. Transportation charges (if applicable) up to respective project site shall be exclusive of GST.
4. Site work prices, if applicable shall be inclusive of all taxes and duties except GST. All necessary registrations, if required, for carrying out the site activities shall be done by the bidder and costs towards the same shall be included in quoted site work prices.
5. Prices of per diem supervision charges, training/AMC, HAZOP Study etc. (as applicable) shall be exclusive of GST. However, GST shall not be applicable on training provided at foreign bidder's work/training facilities in any territory other than India.

B. TAX CLAUSES

1. Goods and Services Tax

a. The supplier/contractor will be liable to register with the respective tax authorities and to submit self-attested copy of such registration certificates and the supplier/contractor will be responsible for procurement of goods/services in its own registration (GSTN).

b. Supplier/Contractor shall be required to issue tax invoice in the form and manner prescribed under GST Act read with Rules thereunder including E-Invoicing provisions so that input tax credit under GST can be availed by Owner. In the event that the supplier/contractor fails to provide the Tax Invoice/E-Invoice in the form and manner prescribed under the GST act read with GST invoicing rules thereunder, Owner shall not be liable to make any payment on account of GST against such invoice.

c. In case supplier/contractor is not subject to E-Invoicing provisions under the GST Laws as amended from time to time, then a declaration to this effect shall be furnished by the supplier/contractor along with the Invoice.

d. GST shall be paid to supplier/contractor against receipt of Tax Invoice/E-Invoice and on auto-population of input tax credit on GSTN portal. In case of non-receipt of Tax Invoice/E-Invoice and/or non-auto-population of input tax credit on GSTN portal, Owner shall with hold the payment of GST.

e. The supplier/contractor shall always comply with the requirements of applicable laws and provide necessary documents as prescribed under the rules and regulations, as applicable from time to time. In particular, if any tax credit, refund or any other benefit Is denied/delayed to Owner or any interest/penalty is charged to Owner due to any non-compliance/ delayed compliance by the supplier/contractor under the GST Law (including but not limited to failure to upload the details of the sale on GSTN portal, failure to pay GST to the government or due to non-furnishing or furnishing of incorrect or incomplete documents, non-filing of GST return by the

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supplier/contractor), the supplier/contractor shall be liable to reimburse Owner for all such losses and other consequences including but not limited to the tax loss, interest and penalty. Owner shall be entitled to recover such amount from the supplier/contractor by way of adjustment from the next invoice, encashment of BG or by way of any other means either of same project or any other project of the Owner.

f. In case of any Advance including Mobilization/Secured/Other Advance is granted to supplier/contractor as per the provisions of Contract, then the supplier/contractor shall issue a Receipt Voucher / GST Invoice in the form and manner prescribed under GST Act read with Rules thereunder including e-invoicing provisions.

g. In case of any Price Variation as per the provisions of Contract, the supplier/contractor shall issue an Invoice in the form and manner prescribed under the GST Act read with Rules thereunder including e-invoicing provisions.

h. GST payable under reverse charge for specified services/goods under GST Act read with Rules thereunder, if any, shall not be paid to the supplier/contractor but will be directly deposited by Owner to the appropriate Government Tax Authority. If the same has already been reimbursed / paid to the supplier/contractor for any reason whatsoever, then Owner shall be entitled to deduct/set off /recover such amount against any amounts paid/payable by Owner to supplier/contractor.

i. Where Owner has the obligation to discharge GST liability under reverse charge mechanism and Owner has paid or is liable to pay GST to the government on which interest/penalty becomes payable as per GST law for any reason which is not attributable to Owner or Input Tax Credit w.r.t. such payment is not available to Owner for any reason which is not attributable to Owner, then Owner shall be entitled to deduct/set off /recover such amount against any amounts paid/payable by Owner to contractor/supplier.

j. TDS under GST, if applicable shall be deducted from supplier/contractor bills at applicable rates and a certificate as per rules for tax so deducted shall be provided to supplier/contractor.

k. The supplier/contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the supplier/contractor shall avail and pass on benefits of all exemptions/concessions available under applicable tax laws.

l. In case bidder is covered under composition scheme under GST law, then bidder shall quote the price inclusive of GST. Further, such bidder should mention “Covered under GST Composition Scheme” in column for GST of relevant price schedule(s). In case subsequently such bidder gets covered under regular GST regime, the prices including GST under regular GST regime shall not exceed the prices quoted by the bidder under composition scheme.

m. Owner prefers to deal with registered supplier/contractor of goods/services under GST. Therefore, bidders are requested to get themselves registered under GST, If not registered yet. However, in case any unregistered bidder is submitting bid, their prices will be loaded with applicable GST while evaluation of bid as per evaluation methodology of tender document. However, where Owner is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

n. In case of foreign bidders, for supervision/site-work/training, services provided by foreign bidder at project site, GST shall be paid by Owner directly to appropriate

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Government Tax Authorities, under Reverse Charge Mechanism, if applicable and prices of such services will be loaded with applicable GST while evaluation of bid as per clause E (Evaluation methodology).

o. Bidder will be required to quote applicable tax rate (along with applicable HSN/SAC Code) as per provisions of GST Laws for all the line items forming part of the enquiry. Any higher rate of tax actually invoiced in excess of quoted rate of tax (except in compliance with provisions of Statutory Variation clauses) shall be adjusted in basic price.

p. In case of delay in supply/execution of contract, supplier/contractor shall be liable to raise invoices for reduced value as per Price Reduction Schedule (PRS) provision of the bidding document. In case the supplier/contractor raises invoices for full value, then supplier/contractor shall issue Credit Note, in the form and manner prescribed under relevant GST Act read with Rules thereunder, towards applicable PRS amount with applicable GST thereon.

In case supplier/contractor fails to submit invoices with reduced value or does not issue Credit Note as mentioned above, Owner shall release payment to the supplier/contractor after giving effect to the PRS clause with corresponding reduction in taxes from invoice(s) of supplier/contractor.

In case any financial implication arises on Owner due to issuance of invoice without reduction in prices or non-issuance of Credit Note by supplier/contractor, the same shall be to the account of supplier/contractor. Owner shall be entitled to recover the amount of such financial implication paid or becoming payable by Owner together with penalty and interest thereon, if any.

q. E-way bills shall be issued directly by supplier/contractor in all cases except in cases of direct imports by Owner where E-way bill shall be issued by Owner.

r. In case of applicability of any recovery as per provisions of the contract, Owner shall raise Invoice on supplier/contractor after charging GST at applicable rates as per prevailing provisions of GST Laws.

2. IMPORT DUTIES

a. Direct supplies by foreign suppliers where, client becomes consignee:

i. Consignee shall be Owner, bill of entry shall be filed by Owner, all import duties, Social Welfare Surcharge, IGST and GST Compensation Cess etc. as applicable in India shall be paid by Owner.

b. Imported supplies by Indian/ Foreign suppliers/Contractors as built in import content where goods are cleared by filing into Bill of Entry in the name of Owner

i. High seas sale shall be effected between, supplier/contractor and Owner.

ii. Bill of entry shall be filed in the name of Owner by supplier/contractor, all import duties, Social Welfare Surcharge, IGST and GST Compensation Cess etc. as applicable in India shall be discharged by Owner.

iii. Custom duties, Social Welfare Surcharge, IGST, GST Compensation Cess, etc. as applicable in India on the imported materials shall not be included in the quoted prices by the bidder. All harbour dues/ pilotage fees, port fees, wharfage, unloading costs, demurrage charges etc. incurred in India in respect of any imported goods shall be to supplier's/contractor's account.

iv. Bidder to indicate CIF value of built-in import content and applicable merit rate,Social Welfare Surcharge on custom in the relevant price schedule.

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v. The supplier/contractor shall be responsible for and shall exercise due diligence in properly classifying the goods and materials, undertaking the payment of custom duties, and/or otherwise complying with all applicable laws w.r.t. import of the goods and materials

vi. If the total custom duties (BCD, SWS & IGST) paid or payable on the import of goods into India exceeds the total value thereof calculated as per the CIF value and rates indicated by supplier/contractor as above as increased or decreased for any increase or reduction in applicable rates or CIF valuation, the Supplier/contractor shall pay and bear and/or reimburse to the Owner such excess custom duties.

c. Imported supplies by Indian suppliers as built in import content where Suppliers/Contractors will become consignee of the goods by filling Bill of Entry for Home consumption

i. Custom duties, Social Welfare Surcharge, IGST, GST Compensation Cess, etc. as applicable in India on the imported materials shall be included in the quoted prices by the bidder (considering the input tax credit of IGST, GST Compensation Cess on imported material) and supplier/contractor shall be responsible for the timely payment of the custom duties to the relevant government authority. All harbor dues/ pilotage fees, port fees, wharfage, unloading costs, demurrage charges etc. incurred in India in respect of any imported goods shall be to supplier's/contractor's account.

ii. Bidder to indicate, in relevant price schedule, CIF value of built-in import content and applicable merit rate of basic custom duty, Social Welfare Surcharge on custom duty (considering the input tax credit of IGST, GST Compensation Cess on imported material) included in quoted price, in the price schedule.

iii. In case merit rate of custom duty is applicable and bids are invited on the basis of same, however at a later stage concessional rate of custom duty becomes applicable, concessional certificate shall be issued towards import of material against the advance request letter submitted by the domestic bidder and the differential custom duties between concessional rate and quoted merit rate of custom duty by supplier/contractor shall be passed on to the Owner or it shall be recovered by the Owner from the supplier/contractor's invoice.

iv. The supplier/contractor shall be responsible for and shall exercise due diligence in properly classifying the goods and materials, undertaking the payment of custom duties, and/or otherwise complying with all applicable laws w.r.t. import of the goods and materials.

v. If bidder does not furnish built in CIF value and rates of custom duty, in that case bidder shall not be entitled to claim any variation in the custom duties even if bidder has quoted their prices considering custom duties.

vi. If custom duty rate actually paid on import of materials and components is found to be lower than the quoted rate of custom duty, then benefit of the same shall be passed on to the Owner.

vii. If bidder has considered Import Duty other than Merit Rate of Import Duty then statutory variation on the Import Duty shall be payable extra on the Merit Rate of Import Duty or the rate of Import Duty considered by the bidder, whichever is lower.

viii. In case, no import is made for execution of the order, clauses related to Imports will not be applicable.

d. General points:

i. In case Owner is exposed to any penal action, interest /penalties by the custom authorities for incorrect declaration and / or valuation of the goods or material by the supplier/contractor, or otherwise on account of any breach of

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applicable laws in the course of the import of the goods and material by supplier/contractor, the supplier/contractor shall indemnify and hold harmless the Owner for any and all costs, expenses or losses suffered or incurred by Owner in this regard

ii. If bidder intends to source import of goods from a country with which India has Free Trade Agreement (FTA) or Comprehensive Economic Partnership Agreement (CEPA) or any such multi-lateral / bi-lateral Agreement or Treaty with India or under Generalized System of Preference (GSP); or under any other notification (allowing lower rate of custom duty), then the bidder is advised to ascertain and confirm its applicability along with supporting documents in the bid and ensure that conditions of such agreement/treaty etc. are strictly complied with.

iii. The bidder shall be liable to provide all documentation to ensure availment of the exemption/waiver. In case the bidder defaults on this due to any reason, whatsoever, he shall be liable to bear the incremental custom duty applicable if any

iv. Any additional custom duty applicability on account of any change in the notification (allowing lower rate of custom duty)/ CEPA/FTA/multi-lateral/bi-lateral trade agreement shall be to bidder's account.

v. Documentation to be furnished for availing the exemption/waiver of custom duty shall be specifically listed in the letter of credit also as a prerequisite for release of payment against shipping documents and this documentation shall necessarily form a part of shipping documents.

vi. Owner will not bear any liability towards payment of Safeguard Duty, Anti-Dumping Duty, Protective Duty and applicable IGST including GST Cess on same or Countervailing Duty on subsidized articles or any other such duties of Customs imposed by Government under Customs Tariff Act, 1975.

vii. In case custom duty rate as quoted by Foreign bidder is less than Actual rate applicable on due date of submission of last price bid and payment of custom duty is on Owner's Account, differential amount on account of above-mentioned rate variation will be recovered from Foreign bidder.

3. INCOME TAX

a. Foreign supervisors/suppliers/contractors

Prices of site work, contracts and other services of foreign supplier/contractor shall be gross of income tax i.e., inclusive of Indian income tax at the applicable prevailing rate as per Indian Income Tax Act and Rules there under.

Owner shall deduct withholding tax at source (TDS) as applicable while making payments against each invoice. Certificate for TDS shall be provided to the supplier/contractor.

In case foreign bidder quotes Prices of site work, contracts and other services "net of Income Tax" i.e., exclusive of Indian income tax, Owner shall deduct and deposit TDS as applicable after grossing up the sums due while making payments against each invoice at the applicable prevailing rate as per Indian Income Tax Act and Rules thereunder.

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Foreign bidder shall furnish the information required in line with the prevalent provisions of Income tax act read with rules thereunder including but not limited to Tax residency certificate, Form 10F, No permanent establishment declaration, No business connection certificate, PAN in India if available.

Failing to provide above documents/information, tax will be withheld at rates applicable as per the provisions of Income Tax Act, 1961 read with rules thereunder and the benefit of reduced rates will not be given.

If the non-resident is unable to obtain & submit Tax Residency Certificate to the Owner within a reasonable time, the bidder should furnish Form 10F along with an undertaking to the effect that the bidder is a tax resident of (the specified country) and that they shall obtain and provide the tax residency certificate (TRC) to the Owner before 30 days of submission of first Invoice by them or within 3 months from the date of entering into contract whichever is earlier.

In case of contracts with term exceeding one financial year, the relevant documents like TRC, Form 10 F, No PE / Business Connection Certificate etc. as applicable, as per Income Tax Act, 1961 must be submitted at the beginning of each financial year and the Owner will not bear additional tax liability (if any) arising from non-submission of documents.

The bidder shall be liable to intimate the subsequent changes (if any) to the information submitted against any of the above particulars, along with full details.

In addition to the above particulars, the bidder should also provide any other information as may be required at a later stage for determining the taxability of the amount to be remitted to the non-residents.

In case, any additional tax liability arises on the Owner due to any action of bidder like delay in submission / non-submission of information / documents required as above or change in residential status post submission of documents or change in any document (like TRC, Form 10F etc.) after its submission shall be recovered from the supplier/contractor.

b. Indian resident supervisors/ suppliers/contractors

Prices for supply and services of Indian suppliers/ contractors shall be inclusive of income tax.

Tax shall be deducted at source (TDS) by Owner on all sums due to supplier/contractor in accordance with the provisions of Indian Income Tax act read with rules thereunder as in force at the relevant point of time.

Owner shall issue a Tax Deduction Certificate to the supplier/contractor evidencing the tax deducted or withheld and deposited by Owner on payments made to the supplier/contractor to enable the supplier/contractor to claim the credit of Tax deducted by Owner.

c. <u>INCOME TAX (General Points)</u>:-

i. The supplier/contractor shall also be responsible for ensuring compliance with all applicable provisions of the Direct Tax Laws of India including, but not limited to, the filing of relevant Tax Returns and shall promptly provide all information required by the Owner for discharging any of its responsibilities/liabilities under such laws in relation to or arising out of the

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Contract. For the lapses/failure, if any, on the part of the supplier/contractor and consequential penal action taken by the Income Tax department, Owner shall not take any responsibility whether financial or otherwise and shall be indemnified by the supplier/contractor.

ii. The Indian Income Tax Act and Rules made thereunder contains provisions permitting deduction of tax at source (TDS) at lesser rate if the supplier/contractor is able to justify to the Income Tax Authorities such lesser rate of deduction. However, a deduction once made has to be deposited by the Owner with the Income Tax Authorities in India and will not be adjustable by the Owner. It is therefore in the interest of the supplier/contractor that prior to release of any payment due to the supplier/contractor under the Contract that the supplier/contractor obtains from the relevant Income Tax Authorities in India, a certificate specifying the rate of deduction/withholding of Income tax at source, failing which, payment to the supplier/contractor shall be made by the Owner after withholding/deduction at the rate as may be applicable to the supplier/contractor as per provisions of Income Tax Act, 1961.

iii. TDS on interest recovered on Mobilization/Other Advance will be deposited by the supplier/contractor and same would be reimbursed by the Owner against submission of Form-16A (TDS certificate).

C. INVOICING METHODOLOGY W.R.T. TAXATION

Ffollowing invoicing methodology shall be followed :

1. In case of domestic / foreign PO's (Other than 2 below) , Invoice/E-Invoice shall be raised by the supplier/contractor in the name of Owner and consignee shall be Owner.
2. In case of package MR's (where title transfer or take over is envisaged to take place at site after completion of site work) and tenders, supplier/contractor shall bring material at project site in their own name and they themselves shall be consignee. As per provisions of contract between Owner and supplier/contractor, Invoice/E-Invoice shall be raised by supplier/contractor to Owner after charging GST.

D. APPLICABILITY OF TAX CREDIT

MR/tender pertaining to PMC-1 scope: 100% GST input credit is available to owner, except for Sec 17(5) disallowances.
MR/tender pertaining to EPCM-1 scope: 100% GST input credit is available to owner, except for Sec 17(5) disallowances.
MR/tender pertaining to EPCM-2 scope: GST input credit is to be considered as NIL

E. EVALUATION METHODOLOGY W.R.T. TAXES

Following shall be loaded for evaluation:

1. Applicable Custom Duty, Social Welfare Surcharge etc (Non-MOOWR cases)/Present value (*Note-5) of deferred import duties (MOOWR cases), (excluding IGST & GST Compensation Cess (if applicable) on imported material which shall be dealt as per bid evaluation methodology given in E2 below) shall be loaded for price bid evaluation in respect of supplies for which bill of entry has to be filed by Owner/in the name of Owner (MOOWR cases).
2. a) GST including GST Compensation Cess (if applicable) on which input credit is not available to Owner [Excluding (b) below]
   b) Present Value of GST deferred under MOOWR scheme
3. Applicable Income tax, in case foreign bidder quotes prices net of taxes.

F. TAXATION TERMS FOR INDIAN SOURCED SUPPLIES (Applicable in case of foreign supplier)

Shall be the same as applicable for Indian bidders.

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G. TAX IMPLICATION WHERE FABRICATION YARD IS OUTSIDE THE FACTORY PREMISES, WHEREVER APPLICABLE

In case of package MRs and tenders, since contractors/suppliers shall bring material at project site in their own name and raise invoice to Owner (as per payment milestone achieved) after charging GST, location of fabrication yard whether inside or outside factory premises will not attract any additional liability.

H. TAX IMPLICATION WHERE OWNER WILL ISSUE FREE ISSUE MATERIAL (FIM) TO CONTRACTORS/SUPPLIERS

Where Owner issues FIM's to suppliers/contractors, material will be released against delivery challan and such FIM shall be received back in factory premises as per provision of GST.

I. STATUTORY VARIATION (IN CASE OF MRS & TENDERS)

No variation on account of taxes and duties, statutory or otherwise, shall be payable to Supplier/Contractor except for the following:

1. GST: If after the due date of submission of last price bid and up to the contractual delivery/completion period (*Note 4), any increase/decrease occurs in the applicable rate of GST, the variation in such GST shall be to Owner's account and shall be adjusted (increase / decrease) to / from the Supplier's/Contractor's invoices based on the documentary evidence.

   Any increase in GST after the contractual delivery/completion period (*Note 4) shall be to Supplier's/Contractor's account. However, any decrease in the rate of GST shall be passed on to Owner.

   For calculating Statutory Variations ceiling amount as declared by the Bidder in price schedule shall only be considered.

2. Basic Custom Duty (BCD) & Social Welfare Surcharge (SWS): If after the due date of submission of last price bid and up to the 2/3rd of contractual delivery/completion period (*Note 4), any increase/decrease occurs in the applicable rate of BCD & SWS on materials imported, the variation in such BCD & SWS shall be to Owner's account and shall be adjusted (increase/decrease) to/from the Supplier's/Contractor's invoices based on the documentary evidence.

   Any increase in rate of BCD & SWS on materials imported after the 2/3rd of the contractual delivery/completion period (*Note 4) shall be to Supplier's/Contractor's account. However, any decrease in the rate of BCS & SWS on materials imported shall be passed on to Owner.

   For calculating Statutory Variations in BCD/SWS, ceiling amount of CIF Value and rate of custom duty as declared by the Bidder in relevant price schedule shall only be considered.

Note: Indian supplier/contractor to consider input tax credit of IGST and GST Compensation Cess if any (in case of import of raw Materials / components) in their quoted prices. Hence, Statutory variations on same in case of imported materials from outside India in Supplier's/Contractor's name (i.e., for Indian Bidders) shall be to Supplier/Contractor account.

3. Any new output taxes, duties, cess, levies notified or imposed after the due date of submission of last price bid but upto the contractual date of delivery/completion (*Note 4) shall be to Owner's account. These shall be reimbursed against documentary evidence. However, in case of delay attributable to supplier/contractor, any new output taxes, duties, cess, levies notified or imposed after Time for Completion, defined as above, shall be to supplier's/Contractor's account.

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J. TAX INDEMNITY

Any omission/ errors of interpretation of applicability of taxes, duties, cesses and levies, whatsoever named, howsoever named, as are payable to any government, local or statutory authority in India or in any country other than India by the supplier/contractor shall be to supplier's/contractor's account.

If any fine/penalty/any other levy is required to be met by the Owner arising out of any non-compliance/fault/fraud/willful suppression/misstatement of facts/information/documents, whatsoever, of any applicable laws of India or any country other than India by the supplier/contractor/their personnel/sub-contractors/agencies, the same shall be recovered from any amount payable to the supplier/contractor under this contract or under any other contract of the Owner.

If any tax is paid / required to be paid by supplier/contractor in pursuance of any demand of any law enforcement agency/Tax Authority on account of non-compliance/fault/fraud/willful suppression/misstatement of facts/information/documents, whatsoever, of any applicable laws of India or any country other than India by the supplier/contractor/their personnel/sub-contractors/agencies, the same shall be to supplier's/contractor's account only.

GENERAL:

1. *Note-1: Mode of Transport i.e. Sea / Air or otherwise and Price Basis i.e. FOB/CFR/CIF or otherwise shall be as indicated elsewhere in bidding document as per applicable guidelines/instructions.
2. *Note-2: Applicable INCOTERM shall be as indicated elsewhere in bidding document.
3. *Note-3:Deleted
4. *Note-4:Contractual delivery/completion period shall include extended contractual delivery/completion period for the reasons attributable to Owner or due to Force Majeure condition.
5. *Note-5: To arrive at present value following shall be considered:
   i. Interest rate for discounting to arrive at the present value of deferred import duties = **12 % (i)**
   ii. Project useful life = **25 years (n)**
   i.e. a factor of $1/(1+i)^n = 1/(1.12)^{25} = 5.88\%$ of deferred custom duties shall be considered to arrive at present value.

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TIME FOR COMPLETION

[ANNEXURE-I TO SPECIAL CONDITIONS OF CONTRACT]

TIME FOR COMPLETION

NAME OF WORK	TIME OF COMPLETION
WORKS: COMPOSITE WORKS FOR UTILITIES & OFF-SITES (PART-A & PART-B) **Bidding Document No.: JP/B957-999-PK-T-9501/1031**	**For each Part i.e. for Part-A and Part-B:** **1.1 Mechanical Completion (For Part-A): 20 (Twenty) Months** from the date of Letter of Acceptance (LOA)**.** **1.2 Mechanical Completion (For Part-B): 18 (Eighteen) Months** from the date of Letter of Acceptance (LOA)**.** **1.3 Pre-Commissioning/ Commissioning Assistance(For Part-A & Part-B): 3 (Three) Months** from Mechanical Completion.

Note:

1. The time for completion shall be reckoned from the date of issue of LOA.
2. The time indicated is for completing all the works in all respects as per scope of work, specifications, codes, drawings and instructions of Engineer-in-Charge.
3. It should be noted that the period of completion of all works given above includes time required for mobilisation at site, carrying out the works as per the requirements Contract Document, demobilisation, preparation of all reports in requisite quantities as mentioned in the Bidding document, rectifications, if any, rework etc. complete in all respects to the entire satisfaction of Engineer-in-Charge.
4. Fronts [i.e., drawing front / Physical front (Corresponding to drawing)] shall be released to the contractor as per enclosed sheets.

(STAMP & SIGNATURE OF BIDDER)

FRONT AVAILABILITY

JOB SPECIFIC INFORMATION ON MAJOR FRONTS AND THEIR PROPOSED AVAILABILITY TO SUCCESSFUL BIDDER(S)

Applicable for both Part-A & Part-B:

Fronts shall be released to the contractor as per the following:

Civil & Structural works:

	Drawing front	Physical front (Corresponding to drawing)	Remarks
On award of work	40% shall be released to Contractor on mobilization at site	30%	
At 25% of time period	65% (However, 100% drawing along with matching material for underground piping to be issued)	50%	Time extension due to non-availability of Drawing and/or Physical front shall be considered only if the progress of work is corresponding to the work fronts released.
At 50% of time period	75%	65%	
At 75% of time period	100%	100%	

Mechanical works:

	Drawing front	Physical front (Corresponding to drawing)	Free Issue Material (FIM)	Remarks
On award of work	40% shall be released to Contractor on mobilization at site	30%	Equivalent matching material	
At 25% of time period	60% (However, 50% ISO drawing (Inch Dia equivalent) shall be issued)	50%	(Piping, Equipment etc.)	Time extension due to non-availability of Drawing and/or Physical front shall be considered only if the progress of work is corresponding to the work fronts released.
At 50% of time period	90% (However, 75% ISO drawing shall be issued)	75%		
At 75% of time period	100%	90%		
At 85% of time period	--	100%		

All other works (Electrical, Instrumentation, Cathodic Protection, Insulation, Painting etc.)

	Drawing front	Physical front (Corresponding to drawing)	Remarks
On award of work	30% shall be released to Contractor on mobilization at site	30%	
At 25% of time period	50%	50%	Time extension due to non-availability of Drawing and/or Physical front shall be considered only if the progress of work is corresponding to the work fronts released.
At 50% of time period	75%	75%	
At 75% of time period	100%	90%	
At 85% of time period	--	100%	

Note: Time extension due to non-availability of Drawing and/or Physical front shall be considered only if the progress of work is corresponding to the work fronts released.

Annexure – II to SCC

Terms of Payment

PAYMENT TERMS FOR TENDERING

ON ACCOUNT PAYMENTS

Progressive payments shall be released to Contractor against monthly running account bills duly certified by Engineer-in-charge after affecting the necessary deductions/recovery, if any. The basis for payment against various items shall be as follows:

75% of the basic amount of the Running Account bill will be released as down payment (interest free without BG) within 15 calendar days of receipt of Proforma invoice on recommendation of PMC/EPCM consultant.
PMC/EPCM to ensure detailed scrutiny including tax invoice from vendor against RA bills within 15 days from the date of recommendation of above specified 75% payment.

Also refer BDS for modifications, if any

S. NO.	NATURE OF WORK	PAYMENT TERMS
1.	**CIVIL**	
1.1	**Soil Investigation/ Geotechnical/ Topographical & route survey**	- 80% on completion of work on prorate basis as certified in monthly progress bill. - 15% on submission of Final Documentation / Reports in Code-1. - 05% on completion of all works in all respects and issuance of completion certificate.
1.2	**Piling – Installation**	- 95% on installation of individual Pile for full length. - 05% on completion of all works in all respects and issuance of completion certificate.
1.3	**Piling - Testing**	- 80% on field testing. - 15% on submission of test reports along with analysis and acceptance thereof. - 05% on completion of all works in all respects and issuance of completion certificate.

1.4	**Sheet Piling**	**Case-I** **Installation of sheet pile with subsequent removal (Incase removal of pile is not possible, Case-II is applicable for payment terms)** - 05% on submission & approval of design - 25% on Design and supply of material at site - 50% on installation of sheet piling - 15% for subsequent removal of sheet piles - 05% on completion of all works in all respects and issuance of completion certificate. **Case-II** **Installation of sheet pile without removal** - 05% on submission & approval of design - 25% on Design and supply of material at site - 60% on installation of sheet piling - 05% on removal of waler beam - 05% on completion of all works in all respects and issuance of completion certificate.
1.5	**U/G PIPING**	**a. CARBON STEEL (PIPES/ PRE-COATED PIPES – FREE ISSUE)** - 25% on fabrication. - 30% on NDT, Pre-testing, tape coating.

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	Measurement in Running Meter	- 30% on laying in position, welding, NDT/Radiography etc. - 10% after flushing, hydro-testing and backfilling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate. **b. CARBON STEEL (CEMENT LINED) (PIPES – FREE ISSUE)** - 20% on completion of Cement lining and receipt of lined pipe at site. - 15% on fabrication. - 25% on NDT, Pre-testing, tape coating. - 20% on laying in position, welding, NDT/Radiography etc. - 15% after flushing, hydro-testing and back filling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate. **Note:** Contractor shall submit the Bank Guarantee for an equivalent amount of Free Issue Material taken outside the Project premises for cement lining purpose with validity till receipt of materials at Project premises plus 03 Months claim period. **c. CARBON STEEL (PIPES – SUPPLIED BY CONTRACTOR)** - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 45% on receipt and acceptance of pipes at site. - 10% on fabrication. - 15 % on NDT, protective coating. - 10% on laying in position, welding, jointing, NDT/Radiography etc. - 10% after flushing, hydro-testing and back filling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate. **d. CARBON STEEL (PRE-COATED PIPES – SUPPLIED BY CONTRACTOR).** - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 55% on receipt and acceptance of pipes at site. - 10% on fabrication. - 05 % on NDT, protective coating. - 10% on laying in position, welding, jointing, NDT/Radiography etc. - 10% after flushing, hydro-testing and back filling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate. **e. CARBON STEEL (CEMENT LINED) (PIPES – SUPPLIED BY CONTRACTOR).** - 05% on issuance of sub-order (for bare line pipes or cemented line pipes) and submission of equivalent bank guarantee valid

		till receipt and acceptance of material at site plus 03 Months claim period - 55% (##) on receipt and acceptance of Cement lined pipe at site. - 10% on fabrication. - 10% on NDT, tape coating. - 10% on laying in position, welding, jointing, NDT/Radiography etc. - 05% after flushing, hydro-testing and backfilling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate. **## Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge.**
1.6	**U/G PIPING Measurement in In-Dia & In-Meter**	**CARBON STEEL (PIPES/ PRE-COATED PIPES – FREE ISSUE)- Incase SOR items are in Inch-dia (fabrication) and Inch-meter (erection).** **Fabrication (ID)** - 65% on welding of joints. - 30% on radiography and other examinations, repair of welds, repeat radiography, extensions and penalty shots, if any, making the spools ready for erection. - 05% on completion of all works in all respects and issuance of completion certificate. **Erection (IM)** - 30% on pre-testing, tape coating of prefabricated pipes. - 45% on trenching, laying in position, field welding, jointing, NDT/radiography and ready for hydrotesting. - 20% on hydrotesting, drying (if applicable) and backfilling of trenches. - 05% on completion of all works in all respects and issuance of completion certificate.
1.7	**Specials / MITRES for U/G Piping**	- 85% after welding of joints & its acceptance. - 10% after completion of tests as per respective piping spec, wrapping/coating, painting (as applicable). - 05% on completion of all works in all respects and issuance of completion certificate.
2.	**CIVIL,STRUCTURAL AND ARCHITECTURAL WORKS**	

2.1	**Structural steel works**	**I. In case of Contractor supplied material.** a. FABRICATION AT SITE - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 50 % on receipt and acceptance of material at site. - 20% on fabrication, surface preparation and application of primer coat. - 08% on erection. - 07% on alignment, bolting / welding, tightening, torquing, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate. b. FABRICATION AT YARD OUTSIDE PROJECT PREMISES - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent rolling bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 50% on receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period. - 20% on fabrication, surface preparation and application of primer and receipt of fabricated structures at site. - 08% on erection. - 07% on alignment, bolting / welding, tightening, torquing, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate. **II. At issue rates (Chargeable basis).** - 05% on finalization of quantity, plan and submission of fabrication drawings. - 50% on transportation of material from storage yard / stores points to fabrication yard and fabrication surface preparation and application of primer coat. - 30% on erection. - 10% on alignment, bolting / welding, tightening, torquing, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate.

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		III. Free Issue. - 05% on finalization of quantity, plan and submission of fabrication drawings. - 50% on transportation from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat. - 30% on erection. - 10% on alignment, bolting / welding, tightening, torquing, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate.
2.2	**Reinforcement steel**	- 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 65% on receipt and acceptance of material at site. - 25% on cutting, laying and acceptance thereof. - 05% on completion of all works in all respects and issuance of completion certificate
2.3	**Precast concrete Item/ Block** **(Contractor supplied material)**	- 60% on completion of casting work duly certified by Engineer-in- charge. - 20% against erection. - 15% against alignment, leveling, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate.
2.4	**Precast concrete Item/ Block** **(Cement Free issue material)**	- 50% on completion of casting work duly certified by Engineer-in-charge. - 30% against erection. - 15% against alignment, leveling, grouting etc. - 05% on completion of all works in all respects and issuance of completion certificate.
2.5	**Structural Steel Painting Works**	- 95% (##) after completion of touch up/repair of primer and intermediate coat/coats and final coat. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge depending on number of intermediate coats.**
2.6	**Composite items.**	Composite items of Reinforced Cement Concrete (RCC) work inclusive of Excavation, shoring, strutting, Plane Cement Concrete (PCC), Centering and shuttering, back filling and disposal of surplus earth in sub-structure: - 35% on completion of earth work in excavation, PCC centering & shuttering - 45% on completion of RCC - 15% on back filling and removal of surplus earth - 05% on completion of all works in all respects and issuance of completion certificate.

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2.7	**Composite items.**	Composite items of RCC work in non-suspended slabs/pavement slabs including pedestals, ramps etc. - 40% on completion of sand filling, centering, shuttering and PCC - 55% on completion of RCC - 05% on completion of all works in all respects and issuance of completion certificate.
2.8	**Composite items.**	Brick works in sub-structure - 50% on completion of excavation and PCC and receipt of Bricks at site - 25% on completion of Brick works - 20% on completion of back filling and disposal of surplus earth - 05% on completion of all works in all respects and issuance of completion certificate
2.9	**Architectural works.**	**I. Steel/ Aluminium/ Glazed Glass/ PVC etc. Doors, Windows & Ventilators.** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 65% on receipt of material at site - 20% on Installation and acceptance - 05% on completion of all works in all respects and issuance of completion certificate. **II. Fire Door** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 05% on approval of Shop drawings. - 60% on receipt and acceptance of material including all accessories at site - 20% on Installation and acceptance - 05% on completion of all works in all respects and issuance of completion certificate. **III. Roofing** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 65% on receipt of material at site - 20% on Installation and acceptance - 05% on completion of all works in all respects and issuance of completion certificate.

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	Architectural works.	**IV. False Ceiling, False flooring,** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 60% on receipt of material at site - 25% on Installation in position and acceptance - 05% on completion of all works in all respects and issuance of completion certificate. **V. Fire Proof Partition/ Aluminum Partition/ Gypsum Partition/ Toughened Glass Partition** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 60% on receipt and acceptance of material at site - 25% on Installation in position and acceptance - 05% on completion of all works in all respects and issuance of completion certificate. **VI. Cladding/ Facades etc.** - 05 % on submission & approval of design & drawings - 10% on issuance of sub-order & submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 60% on receipt and acceptance of material at site - 20% on Fixing/ Installation and acceptance - 05% on completion of all works in all respects and issuance of completion certificate **VII. Modular Furniture** - 10 % on approval of furniture drawings at least in Code II - 60% on receipt of material at site - 25% on Fixing/ Installation and acceptance - 05% on completion of all works in all respects and issuance of completion certificate. **VIII. Internal & External Paint of Building.** - 10% on application of putty/ primer /surface preparation etc. - 45 % (##) on Primer& intermediate coats. - 40% on Final coat. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge.** **IX. Waterproofing cum Over Deck Roof Insulation Works.** - 10% on surface preparation and application of primer. - 50% on intermediate coats / layers. - 35% on Final layer, testing etc. - 05% on completion of all works in all respects and issuance of completion certificate **X. Composite items of Partition works made with Glass Partition & Gypsum Partition.** - 5% on approval of Shop Drawings - 35% on receipt and acceptance of material at site

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	Architectural works.	- 55% on Installation and acceptance. - 05% on completion of all works in all respects and issuance of completion certificate. **XI. Composite items of Acoustical Wall Paneling with fabric wrapped, Green Wall.** - 5% on approval of Shop Drawings - 35% on receipt and acceptance of material at site - 55% on Installation and acceptance - 05% on completion of all works in all respects and issuance of completion The above payment terms will be applicable for similar items in miscellaneous items. the decision of engineer-in-charge on identification of similar items shall be binding on the contractor.
2.10	**Platform, Ladder**	**I. In case of Contractor supplied material.** a. FABRICATION AT SITE - 50% on receipt and acceptance of material at site. - 30% on fabrication, surface preparation and application of primer. - 15% on erection, aligning and welding. - 05% on completion of all works in all respects and issuance of completion - certificate. b. FABRICATION AT YARD OUTSIDE PROJECT PREMISES / VENDOR'S SHOP - 50% on receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor shop with validity till receipt of materials at Project premises plus 03 Months claim period. - 30% on fabrication, surface preparation and application of primer and receipt of fabricated material at site. - 15% on erection, alignment, welding etc. - 05% on completion of all works in all respects and issuance of completion certificate. **II. At issue rates (Chargeable basis)** - 80% on transportation of material from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat. - 15% on erection, alignment, welding etc. - 05% on completion of all works in all respects and issuance of completion certificate. **III. Free Issue** - 65% on transportation from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat.

		- 30% on erection, alignment, welding etc. 05% on completion of all works in all respects and issuance of completion certificate.
2.11	**Hand Railing**	**I. In case of Contractor supplied material.** a. FABRICATION AT SITE - 50% on receipt and acceptance of material at site. - 20% on fabrication, surface preparation and application of primer and galvanizing (if applicable) - 15% on erection, aligning and welding. - 10% after completion of completion of final painting. - 05% on completion of all works in all respects and issuance of completion certificate. **II. At issue rates (Chargeable basis)** - 70% on transportation of material from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat ,galvanizing and painting (if applicable) - 15% on erection, alignment, welding etc. - 10% after completion of completion of final painting. - 05% on completion of all works in all respects and issuance of completion certificate. **III. Free Issue** - 65% on transportation from storage yard / stores points to fabrication yard, fabrication, surface preparation and application of primer coat galvanizing and painting (if applicable) - 15% on erection, alignment, welding etc. - 15% after completion of completion of final painting. - 05% on completion of all works in all respects and issuance of completion certificate. **IV. Contractor supplied handrail (Handrail Fabricated outside refinery with raw material).** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 40% on receipt and acceptance of raw material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period. - 30% on receipt and acceptance of finished handrail at site. - 15% on erection, aligning, welding and completion of final painting or touchup as applicable. - 05% on completion of all works in all respects and issuance of completion certificate.

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	Hand Railing	**V. Contractor supplied pre-fabricated handrail (Handrail in final condition ordered on sub-vendor).** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 70 % on receipt and acceptance of finished handrail at site. - 15 % on erection, aligning, welding and completion of final painting or touchup as applicable. - 05% on completion of all works in all respects and issuance of completion certificate.
2.12	**Gratings**	**I. Contractor supplied gratings (Grating Fabricated outside refinery with raw material).** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 40% on receipt and acceptance of raw material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop/ yard with validity till receipt of materials at Project premises plus 03 Months claim period. - 30% on receipt and acceptance of finished gratings at site. - 15% on erection, aligning, welding and completion of final painting or touchup as applicable. - 05% on completion of all works in all respects and issuance of completion certificate. **II. Contractor supplied gratings (Grating in final condition ordered on sub-vendor)** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 65 %on receipt and acceptance of finished gratings at site. - 20 % on erection, aligning, welding and completion of final painting or touchup as applicable. - 05% on completion of all works in all respects and issuance of completion certificate.
2.13	**Other Civil, Structural & Architectural works**	- 95% (##) on completion of work as certified in monthly progress bill. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge**.
3.	**MECHANICAL WORKS**	
3.1	**Above Ground Piping Works** **(Pipes& *Pipe Components*, Valves, Orifice plates - Free**	**a. Fabrication & Erection of Piping** - 45% after fabrication including NDT, as applicable. - 30% after site erection, field welding, radiographic and other examination. - 10% after providing supports, alignment, providing vents, drains. - 08% after flushing, testing, draining and drying. - 02% after mechanical completion.

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	issue)	- 05% on completion of all works in all respects and issuance of completion certificate. **b.** **<u>Erection of Valves, Orifice Plates</u>** - 85% after transportation and erection. - 08% after flushing and testing. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate.
3.2	**Piping Works-** **Fabrication at site.** **(Pipe & Pipe Components, Valves - Supplied by Contractor)**	**a.** **Fabrication & Erection of Piping** - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim - 45% after receipt and acceptance of material at site. - 20% on fabrication including NDT, as applicable. - 15% after site erection, field welding, radiographic and other examination. - 05% after providing supports, alignment, providing vents, drains - 03% after flushing, testing, draining and drying. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate. **b.** **Erection of Valves** - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 60% after receipt and acceptance of material at site. - 15% after erection, welding, radiographic and other examination. - 08% after hydro-testing and final approval. - 02% after mechanical completion. - 05% on completion of all works in all respects and issuance of completion certificate.
3.3	**Piping Works-** **Fabrication at yard outside the Project premises.** **(Pipe & Pipe Components, Valves – Supplied by Contractor)**	**a.** **Fabrication & Erection of Piping** - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 45% after receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period. - 20% on fabrication including NDT, as applicable, and receipt of fabricated Piping at site. - 15% after site erection, field welding, radiographic and other examination. - 05% after providing supports, alignment, providing vents, drains - 03% after flushing, testing, draining and drying. - 02% after mechanical completion

		- 05% on completion of all works in all respects and issuance of completion certificate.
3.4	**Fabrication of respective piping items in Inch Dia.** **(Free issue materials)**	- 85% after welding of joints & its acceptance. - 08% after completion of tests as per respective piping spec. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate.
3.5	**Erection of piping items to be paid in IM basis.** **(Fabricated in Inch. dia. as above)**	- 70% after site erection, field welding, radiographic and other examination. - 15% after providing support, alignment, providing vents, drains etc. - 08% after flushing, testing, draining and drying. - 02% after mechanical completion. - 05% on completion of all works in all respects and issuance of completion certificate.
3.6	**Specials/ MITRES for A/G piping**	- 85% after welding of joints & its acceptance. - 08% after completion of tests as per respective piping spec, application of shop primer etc. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate.
3.7	**NDT (i.e Radiography, UT, MPT/ DPT etc.)**	- 95% on submission of reports and acceptance thereof. - 05% on completion of all works in all respects and issuance of completion certificate.
3.8	**Stress Relieving**	- 95% after successful completion of stress relieving. - 05% on completion of all works in all respects and issuance of completion certificate.
3.9	**Painting** **Insulation Works**	**a. Painting** - 30% on surface preparation and primer painting at shop / fabrication yard. - 65% (##) on completion of final painting. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further break up of payment schedule, if necessary, shall be recommended / approved by Engineer-in-charge depending on number of intermediate coats.** **b. Insulation Works** - 50% (##) on supply and acceptance of material at site. - 25% after installation at site. - 20% on inspection after installation, its acceptance and removal of scaffolding, if any. - 05% on completion of all works in all respects and issuance of completion certificate.

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		(##) Payment shall be released on Prorata basis on supply & acceptance of major insulation material.
3.10	**Equipment**	**a. Column, Vessels, Filters, Ejectors etc.** - 65% **{Note 1}** after transportation from stores / storage points to erection site and erection on foundation. - 25% after alignment and grouting. - 03% after cleaning, box up of manholes, providing all instruments/ auxiliary of fit ups and making ready for startup. 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate. **{Note 1):** For Heavy lift equipment's, this milestone payment shall be divided in two milestone payments in case of the item is on lump-sum basis: - 20% on mobilization of required capacity crane at site. - 45% after transportation from stores / storage points to erection site and erection on foundation. *Definition of "heavy lift equipment" if applicable shall be as per Bid Data Sheet - **Trays and Internals** - 95% after transportation from stores / storage points to erection site, cleaning, placing, bolting/welding, testing within equipment, testing and inspection. - 05% on completion of all works in all respects and issuance of completion certificate. **b. Heat Exchangers** - 65% after transportation from stores / storage points to erection site and erection. - 20% after alignment and grouting. - 08% after completion of flushing, draining, drying. - 02% after mechanical completion - 05% on completion of all works in all respects and issuance of completion certificate. **d. Testing of Heat exchangers** - 70% after testing. - 23% after completion of flushing, draining, drying by compressed air. - 02% after mechanical completion - 05% after completion of all works in all respects and issuance of completion certificate. **e. Machineries (Compressors, Pumps & Misc.)**

	Equipment	- 45% after transportation from stores / storage points to erection site and placing in position. - 30% after initial alignment, leveling and grouting. - 18% after final alignment, shaft alignment after pipe hook-up, dowelling, initial fill of lubricants, mounting of accessories and completion of piping. - 02% after mechanical completion. 05% on completion of all works in all respects and issuance of completion certificate. **f. EOT Crane (In case of Contractor supplied material).** - 05% on finalization of design, engineering and submission of approved drawings on submission of ABG of equivalent amount. - 50% on receipt and acceptance of material at site. - 30% on installation and completion of EOT crane including Structural, Mechanical, Electrical, instrumentation works. - 02% on receipt of spares at site. - 08 % on completion of testing& acceptance, commissioning. - 05% on completion of all works in all respects and issuance of completion certificate.
3.11	**HVAC, Clean Agent System (CAS), Cathodic Protection (CP), Electrical Heat Tracing System (EHTS)** **Lump Sum**	**HVAC, Clean Agent System (CAS), Cathodic Protection (CP), Electrical Heat Tracing System (EHTS) Lumpsum.** - 05% on finalization of design, engineering and submission of approved drawings. - 50% (##) on receipt and acceptance of material at site. - 30% (##) on installation - 02% on receipt of spares at site. - 08% on completion of testing& acceptance, commissioning. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further billing break up, if necessary, shall be recommended/approved by Engineer-in-charge.**
3.12	**ELEVATOR PACKAGE**	**ELEVATOR PACKAGE** - 5% on issuance of suborder and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus three months of claim period. - 45% on receipt and acceptance of material at site - 15% after erection in M/c room, alignment of all equipment inside shaft including car body. - 15% on completion of installation including doors and other Electrical and Instrumentation work - 15% after testing and acceptance including load test - 05% on completion of all works in all respect and issuance of completion certificate.
4.	**ELECTRICAL WORK**	

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4.1	**For Supply Items**	- 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 5% on vendor drawing submission as per DCI and approval - 70-% on receipt and acceptance of material at site. - 10% on erection completion and submission of as build drawings - 05% on completion of all works in all respects and issuance of completion certificate.
4.2	**For Erection Items**	- 80% on completion of erection / installation. - 15% on testing and acceptance and submission of As build drawings and documents. - 05% on completion of all works in all respects and issuance of completion certificate.
4.3	**For Items involving both Supply & Erection**	- 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 05% on vendor drawing submission & approval and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 55% on receipt and acceptance of material at site. - 20% after erection /installation. - 10% after testing and acceptance and submission of as build drawings. - 05% on completion of all works in all respects and issuance of completion certificate.
5.	**INSTRUMENTATION**	
5.1	**For Supply Items**	- 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 05 % on vendor drawing submission as per DCI and drawing approval - 80 %on receipt and acceptance of material at site - 05% on completion of all works in all respects and issuance of completion certificate.
5.2	**For Erection/ Installation Items**	**a. Items not requiring loop checking.** - 85% on completion of erection / installation. - 10% on testing - 05% on completion of all works in all respects and issuance of completion certificate. **b. Items requiring loop checking.** - 80% on completion of erection/ installation. - 15% on testing and loop checking. - 05% on completion of all works in all respects and issuance of completion certificate.
5.3	**For Items with supply and**	**a. Items not requiring loop checking** - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 60% on receipt and acceptance of materials at site. - 30% on completion of erection / installation and testing. - 05% on completion of all works in all respects and issuance of completion certificate. **b. Items requiring loop checking**

	erection / installation	- 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 55% on receipt and acceptance of materials at site - 25% on completion of erection / installation. - 10% on testing and loop checking - 05% on completion of all works in all respects and issuance of completion certificate.
5.4	**Ducts, Trays and Other Fabricated Materials** **(Supply in Contractor's scope)**	- 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 55% after receipt and acceptance of fabricated materials (Ducts / Trays) at site. - 25% after erection. - 05% after welding and final painting, if any - 05% on completion of all works in all respects and issuance of completion certificate.
5.5	**Calibrations Main Instruments**	- 80% after calibration. - 15% after completion of recalibration during loop test, if any - 05% on completion of all works in all respects and issuance of completion certificate.
5.6 (a)	**Package works (Design, Supply, Installation, testing & Commissioning like CCTV, fire alarm, access control works)** **Lumpsum**	**a. Package works (Design, Supply, Installation, testing & Commissioning like CCTV, fire alarm, access control works) Lumpsum.** - 05% on finalization of design, engineering and submission of approved drawings. - 60% (##) on supply and acceptance of material at site. - 20% (##) on installation and completion of Civil, Structural, Instrumentation works. - 02% on receipt of spares at site. - 08 % on completion of Testing & Commissioning. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further billing break up, if necessary, shall be recommended/ approved by Engineer-in-charge.**
(b)	**Package works (Design, Supply, Installation, testing & Commissioning like IT works, LAN system** **Lumpsum**	**b. Package works (Design, Supply, Installation, testing & Commissioning like IT works, LAN system) Lumpsum.** - 05% on finalization of design, engineering and submission of approved drawings. - 65% (##) on supply and acceptance of all material at site. - 25% (##) on acceptance which includes installation, configuration, checking of technical and functional requirements. - 05% on completion of all works in all respects and issuance of completion certificate including migration (if applicable). **(##) Further billing breakup, if necessary, shall be recommended/ approved by Engineer-in-charge.**

5.7 (a)	**Package works (Supply, Installation, testing & Commissioning like CCTV works) Lumpsum**	**a. Package works (Supply, Installation, testing & Commissioning Like CCTV, fire alarm, access control works) Lumpsum.** - 60% (##) on receipt and acceptance of material at site. - 25% (##) on installation and completion of Civil, Structural, Mechanical, Electrical, instrumentation works. - 02% on receipt of spares at site. - 08% on completion of Testing & Commissioning. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further billing breakup, if necessary, shall be recommended/ approved by Engineer-in-charge.**
(b)	**Package works (Supply, Installation, testing & Commissioning like IT works, LAN system)** **Lumpsum**	**b. Package works (Supply, Installation, testing & Commissioning Like IT works, LAN system) Lumpsum.** - 65% (##) on supply and acceptance of all materials at site. - 30% (##) on Acceptance which includes installation, configuration, checking of technical and functional requirements. - 05% on completion of all works in all respects and issuance of completion certificate including migration (if applicable). **(##) Further billing breakup, if necessary, shall be recommended/ approved by Engineer-in-charge.**
6.	**TANKAGES**	**a. Free issue material** i. Design and plate work of floating roof for both, Open tank floating roof and Covered tank floating roof: - 05% on design of floating roof and approval of drawings. - 20% after fabrication. - 25% after erection. - 35% after welding, NDT / radiography and acceptance thereof. - 10% after testing. - 05% on completion of all works in all respects and issuance of completion certificate. ii. Plate work: - 05% on approval of fabrication drawings. - 20% after fabrication. - 25% after erection. - 35% after welding, NDT / radiography and acceptance thereof. - 10% after hydro-testing, disposal of water after hydro testing and cleaning of tank.

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		- 05% on completion of all works in all respects and issuance of completion certificate. **b. Material supplied by Contractor** i Design and plate work of floating roof for both, Open tank floating roof and Covered tank floating roof - 05% on design of floating roof and approval of drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 35% on receipt and acceptance of material at site. - 10% after fabrication. - 15% after erection. - 20% after welding, NDT / radiography and acceptance thereof. - 05% after testing. - 05% on completion of all works in all respects and issuance of completion certificate. ii Plate work - 05% on approval of fabrication drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - *35%* on receipt and acceptance of material at site. - 10% after fabrication. - 15% after erection. - 20% after welding, NDT / radiography and acceptance thereof. - 05% after hydro-testing, disposal of water after hydro testing and cleaning of tank. - 05% on completion of all works in all respects and issuance of completion certificate. iii Floating roof seals - 05% on design and approval of drawings. - 45% on receipt and acceptance of material at site. - 35% on installation. - 10% on testing and acceptance. - 05% on completion of all works in all respects and issuance of completion certificate. iv Appurtenances, Mixers etc. - 65% after receipt and acceptance of material at site. - 20% after installation, providing reinforcement pads.

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		- 10% after testing and acceptance. - 05% on completion of all works in all respects and issuance of completion certificate. v. Calibration - 95% on submission of duly approved calibration charts. - 05% on completion of all works in all respects and issuance of completion certificate. vi. Painting - 30% on surface preparation and primer application. - 65% (##) on completion of final painting. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further break up of payment schedule, if necessary, shall be recommended / approved by Engineer-in-charge depending on number of intermediate coats.** vii. Tanks pads (including anti-corrosive layers) - 65% on construction of tank pad. - 20% on completion of anti-corrosive layer. - 10% on repair of anti-corrosive layers (if any)/pitching works and after testing of tanks - 05% on completion of all works in all respects and issuance of completion certificate. viii. Cooling Water System / Foam system - 70% on supply and fabrication. - 15% on erection, welding and NDT/Radiography including supports. - 10% on Hydro testing. - 05% on completion of all works in all respects and issuance of completion certificate. ix. Insulation Works - 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 50% on supply and acceptance of material at site. - 15% after installation of material. - 20% on inspection after installation, its acceptance and removal of scaffolding, if any. - 05% on completion of all works in all respects and issuance of completion certificate.

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7.	**SPHERES** **(LUMPSUM BASIS)**	**a. Design & Engineering Cost** - 50% on submission of drawings and engineering details. - 30% on approval under Code 2. - 15% on approval under Code 1. - 05% on completion of all works in all respects and issuance of completion certificate. **b. Supply Cost (Spheres)** **Case-I: Shop Fabrication (Fabrication outside Project premises) & site Erection:** - 05% on issuance of sub-order for plates and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site. - 40% against receipt of materials on prorate basis at contractor's works on certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 30% on fabrication of structural steel/ pressing/forming of petals and crown etc on prorate basis against certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 10% on receipt and acceptance of fabricated items at site on pro rata basis. - 10% on erection, alignment, welding, grouting, NDT on prorate basis - 05% on completion of all works in all respects and issuance of completion certificate. **Case-II: Shop Fabrication-Nil, Total Fabrication & Erection at site:** - 05% on issuance of sub-order for Plate material and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 50% on receipt and acceptance of material at site on prorate basis. - 30% on fabrication of structural steel/ pressing/forming of petals and crown etc on pro rata basis. - 10% on erection, alignment, welding, grouting, NDT on prorate basis. - 05% on completion of all works in all respects and issuance of completion certificate. **c. Site works cost (Site Erection):** - 80% on erection, alignment, welding/grouting, NDT on prorate basis. - 15% on cleaning, testing etc. - 05% on completion of all works in all respects and issuance of completion certificate. **d. For all other items: Procurement & Supply**

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		- 85% on receipt of materials at Site / fabrication yard within Project premises. - 10% on fabrication and erection/installation, alignment and grouting as required including testing where involved and required. - 05% on completion of all works in all respects and issuance of completion certificate. **Construction:** **Appropriate terms of payment for various items of works (civil, structural, mechanical, electrical, instrumentation etc.) shall be selected from the payment terms specified for item rate tenders.**
8.	**MOUNDED BULLETS** **(LUMPSUM BASIS)**	**a. Design & Engineering cost.** - 50% on submission of drawings and design details. - 30% on approval under Code 2. - 15% on approval under Code 1. - 05% on completion of all works in all respects and issuance of completion certificate. **b. Supply Cost (Mounded Bullets)** **Case-I: Shop Fabrication (Fabrication outside Project premises) & site Erection:** - 05% on issuance of sub-order for plates and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site. - 40% against receipt of materials on pro-rata basis at contractor's works on certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 30% on fabrication of shell / Dished Ends etc. on prorate basis against certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 10% on receipt and acceptance of fabricated items at site on prorate basis. - 10% on erection, alignment, welding, grouting, NDT on prorate basis - 05% on completion of all works in all respects and issuance of completion certificate. **Case-II: Shop Fabrication-Nil, Total Fabrication & Erection at site:** - 05% on issuance of sub-order for Plate material and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 50% on receipt and acceptance of material at site on pro rata basis. - 30% on fabrication of shell / Dished Ends etc. on pro rata basis.

		- 10% on erection, alignment, welding, grouting, NDT on prorate basis. 05% on completion of all works in all respects and issuance of completion certificate. **c. Site works cost (Site Erection):** - 80% on erection, alignment, welding, NDT on prorate basis. - 15% on cleaning, testing etc. - 05% on completion of all works in all respects and issuance of completion certificate. **d. For all other items: Procurement & Supply** - 85% on receipt of materials at Site / fabrication yard within Project premises. - 10% on fabrication and erection/ installation, alignment and grouting as required including testing where involved and required. - 05% on completion of all works in all respects and issuance of completion certificate. **Construction:** **Appropriate terms of payment for various items of works (civil, structural, mechanical, electrical, instrumentation etc.) shall be selected from the payment terms specified for item rate tenders.**
9.	**DWST (Double Wall Storage Tank)** **(LUMPSUM BASIS)**	**DWST (Double Wall Storage Tank) (LUMPSUM BASIS)** **a. Design & Engineering Cost** - 50% on submission of drawings and engineering details. - 30% on approval under Code 2. - 15% on approval under Code 1. - 05% on completion of all works in all respects and issuance of completion certificate. **b. Supply Cost (Double wall storage tank)** **Case-I: Shop Fabrication (Fabrication outside Project premises) & site Erection:** - 05% on issuance of sub-order for plates and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site. - 40% against receipt of materials on prorate basis at contractor's works on certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 30% on fabrication of structural steel, shell, roof and bottom plate etc on prorate basis against certification by EIL/TPIA and submission of Bank Guarantee for equivalent amount valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt of fabricated items at site. - 10% on receipt and acceptance of fabricated items at site on pro rata basis.

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		- 10% on erection, alignment, welding, grouting, NDT on prorate basis - 05% on completion of all works in all respects and issuance of completion certificate. **Case-II: Shop Fabrication-Nil, Total Fabrication & Erection at site:** - 05% on issuance of sub-order for Plate material and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 50% on receipt and acceptance of material at site on prorate basis. - 30% on fabrication of structural steel, shell, roof and bottom plate etc. on pro rata basis. - 10% on erection, alignment, welding, grouting, NDT on prorate basis. - 05% on completion of all works in all respects and issuance of completion certificate. **c. Site works cost (Site Erection):** - 80% on erection, alignment, welding/grouting, NDT on prorate basis. - 15% on cleaning, testing etc. - 05% on completion of all works in all respects and issuance of completion certificate. **d. For all other items: Procurement & Supply** - 85% on receipt of materials at Site / fabrication yard within Project premises. - 10% on fabrication and erection/ installation, alignment and grouting as required including testing where involved and required. - 05% on completion of all works in all respects and issuance of completion certificate. **Construction:** Appropriate terms of payment for various items of works (civil, structural, mechanical, electrical, instrumentation etc.) shall be selected from the payment terms specified for item rate tenders.
9.	**HEATERS**	
9.1	**Steel Works**	**a. In case of Contractor's supplied materials:** i. FABRICATION AT SITE - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 35% on receipt and acceptance of material at site.

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		- 20% on fabrication, surface preparation and application of primer coat. - 25% on erection, alignment, welding, grouting etc. - 05% on completion of Final painting. - 05% on completion of all works in all respects and issuance of completion certificate. ii. FABRICATION AT YARD OUTSIDE PROJECT PREMISES - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site. - 35% on receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period. - 20% on fabrication, surface preparation and application of primer and receipt of fabricated items at site. - 25% on erection, alignment, welding & grouting etc. - 05% on completion of Final painting. - 05% on completion of all works in all respects and issuance of completion certificate. **b. At issue rates (chargeable basis):** - 05% on finalization of quantity, plan and submission of fabrication drawings. - 70% on transportation of material to site, fabrication, surface preparation and application of shop primer. - 15% on erection, alignment, welding/grouting etc. - 05% on completion of Final painting. - 05% on completion of all works in all respects and issuance of completion certificate. **c. Free Issue:** - 05% on finalization of quantity, plan and submission of fabrication drawings. - 45% on transportation of material to site, fabrication, surface preparation and application of shop primer. - 35% on erection, alignment, welding/grouting etc. - 10% on completion of Final painting. - 05% on completion of all works in all respects and issuance of completion certificate
9.2	**Coils**	**a. In case of Contractor supplied materials:** - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site.

		- 45% after receipt and acceptance of material at site. - 25% after fabrication, welding & NDT /radiography. - 05% after erection. - 10% after field welding is completed (including NDT/radiography and PWHT). - 05% after hydro-testing. - 05% on completion of all works in all respects and issuance of completion certificate. **b. i. In case of Owner supplied free issue material** - 60% after fabrication, welding, NDT / radiography. - 10% after erection. - 15% after field welding is completed (including NDT/radiography and PWHT) - 10% after hydro-testing. - 05% on completion of all works in all respects and issuance of completion certificate. **ii. Fabrication at Yard outside Project Premises.** - 05% on finalization of quantities, plan and submission of approved fabrication drawings. - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of fabricated items at site. - 35%on receipt and acceptance of material at contractor fabrication yard outside the Project premises against Rolling Bank Guarantee for an equivalent amount of materials at contractor's shop with a validity till receipt of materials at Project premises plus 03 Months claim period. - 20% on fabrication, surface preparation and application of primer and receipt of fabricated items at site. - 20% on erection, alignment, welding & grouting etc. - 05% on completion of Final painting. - 05% after Hydrotesting. - 05% on completion of all works in all respects and issuance of completion certificate.
9.3	**Burners**	**a. In case of Contractor supplied material** - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 65% after receipt and acceptance of material at site. - 25% after erection & alignment in position at site. - 05% on completion of all works in all respects and issuance of completion certificate. **b. In case of Owner supplied free issue material**

		- 95% after erection & alignment in position at site. - 05% on completion of all works in all respects and issuance of completion certificate
9.4	**Air pre-heaters**	**a. In case of Owner supplied material as free issue** - 50% after erection. - 45% after alignment, testing etc. - 05% on completion of all works in all respects and issuance of completion certificate. **b. In case of Contractor supplied material** - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - 65 % after receipt and acceptance of material at site. - 15 % after erection. - 10% after alignment, testing etc. 05% on completion of all works in all respects and issuance of completion certificate.
9.5	**ID/FD Fans**	**a. In case of Owner supplied material as free issue** - 45% after transportation from stores / storage points to erection site and placing in position. - 30% after initial alignment, leveling and grouting. - 20% after final alignment and mounting of accessories etc. - 05% on completion of all works in all respects and issuance of completion certificate. **b. In case of Contractor's supplied material** - 05% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank guarantee shall be released after receipt and acceptance of material at site. - *45*% after receipt and acceptance of material at site. - 20% after transportation from stores / storage points to erection site and placing in position. - 15% after initial alignment, leveling and grouting. - 10% after final alignment and mounting of accessories etc. - 05% on completion of all works in all respects and issuance of completion certificate.
9.6	**Insulation Works**	- 10% on issuance of sub-order and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period - 50% on supply and acceptance of material at site. - 15% after installation of material. - 20% on inspection after installation, its acceptance and removal of scaffolding, if any. - 05% on completion of all works in all respects and issuance of completion certificate.
9.7		- 10% on issuance of sub-order and submission of equivalent bank guarantee valid till completion period plus three months claim period. However, the bank

	Refractory Works	guarantee shall be released after receipt and acceptance of material at site. - 40% on receipt and acceptance of materials at site. - 30% on installation. - 15% on initial dry out and acceptance. - 05% on completion of all works in all respects and issuance of completion certificate
9.8	**Painting Works**	- 30% on surface preparation and primer application. - 65% (##) on final painting. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge depending on number of intermediate coats.**
9.9	**Miscellaneous Works**	- 95% (##) on completion of work on pro-rata basis as certified in monthly progress bill. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge.**
10.	**Laying of Pipeline and Associated Works (On Shore)**	
10.1	**Laying of Pipeline and Associated Works (On Shore)**	**a. PIPELINE LAYING:** **Free issue:** - 5% on completion of site development, stacking, clearing and grading of ROU etc. - 10% on completion of trenching by excavation/ blasting. - 5% on completion of stringing. - 15% on completion of Fabrication, Alignment, Field Welding. - 5% on completion of Radiography, NDT. - 5% on completion of Joint Coating. - 10% on completion of Lowering, laying of HDPE duct - 05% on completion of Tie-ins - 10% on completion of Backfilling. - 10% on completion of hydrotesting - 05% on dewatering, swabbing, magnetic cleaning plus electronic geometry pigging. - 10% on completion of restoration and marker installation etc. - 05% on completion of all works in all respects and issuance of completion certificate. The above payments shall be made subject to the following: a. For the purpose of payments of 10% on account of lowering and laying of HDPE duct, 05% on account of tie- ins and 10% on account of back filling, a minimum continuous stretch of 10 KMs or 5% of spread length whichever is lower, will be considered except for discontinuities on account of listed crossings.

		ii (i) is not applicable in case of city areas and where continuous ROU stretch is not released. iii. For discontinuity on account of major crossings specified in SOR (being paid separately as SOR item) crossing length shall not be taken into account for (i) and (ii) above for payment purposes. iv. All crossings, i.e, Creek, Railway, Road, Horizontal Directional Drilling and River crossings which are not separately listed in SOR items shall be paid on the basis of linear pipeline length laid. **b. OPTICAL FIBRE CABLE / HDPE (Supply)** - 10% on issuance of sub-order against submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - *75* % on receipt and acceptance of material at Project site / yard. - 10 % on Testing after laying as per specification. - 05% on completion of all works in all respects and issuance of completion certificate. **c. Installation of OFC** - 55 % on completion of laying / blowing of OFC through HDPE duct laid in the same Pipeline Trench. - 20 % on Supply & Erection of Jointing Pit, Jointing of OFC as per Specification. - 20% on OFC Testing as per specification. - 05% on completion of all works in all respects and issuance of completion certificate. **d. HDD WORKS** - 10 % on carrying out Geotechnical Survey and design Approval. - 25% on string preparation, NDT clearance, pre testing and Joint coating. - 10% on pilot hole drilling. - 35 % on reaming and Pulling of string. - 10% on Post testing, Tie in and backfilling. - 05% on Restoration including bentonite disposal and obtaining NOC - 05% on completion of all works in all respects and issuance of completion certificate. **e. MICROTUNELLING WORKS** Micro-tunneling and Pipeline installation along with associated works - 05% on submission and approval of drawings - 05% on all type of pre-construction survey required for Design & calculation. - 15% on construction of launching and receiving shaft. - 10% on Mobilization and placement of Micro-tunneling equipment along with all the accessories and consumables at site. - 35% on Supply and Installation of Jacking Pipe at site location.

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		- 05% on Carrier Pipe pre-installation hydro testing / repair. - 08 % on Installation of carrier pipeline & HDPE ducts, MMO wire anode carrying ducts for CP, including provision of supports inside jacking pipe. - 07% on Blowing of OFC, gauging of pipeline, NDT, Post installation hydro-testing, dewatering and swabbing. - 05% on capping of jacking pipe, backfilling, final Clean-up & restoration (complete in all respect), disposal of drilling fluid and waste etc. and acceptance of the system by Owner. - 05% on completion of all works in all respects and issuance of completion certificate. **f. STATION WORKS (Receipt / Dispatch terminals):** Appropriate terms of payment for various items of works (civil, structural, mechanical, electrical, instrumentation etc.) shall be selected from the payment terms specified for item rate tenders. **g. TEMPORARY CATHODIC PROTECTION/ PERMANENT CATHODIC PROTECTION WORKS** The payment for Temporary Cathodic Protection System shall be made based on the actual measurement of Pipeline in KM protected. The lump sum price for Temporary & Permanent Cathodic Protection system shall be considered and payable on prorate basis as per the following break-up - 05% on approval of design Document. - 05% on issuance of sub-order against submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 03 Months claim period. - 40% on receipt and acceptance of material at sites. - 20 % on installation of the system progressively. - 25 % on testing and commissioning of CP system. - 05% on completion of all works in all respects and issuance of completion certificate. Note: Payment against testing and commissioning in case of Permanent Cathodic Protection shall include Post commissioning survey (DCVG/ CAT/ CIPL– as applicable) and interference mitigation.
10.2	**SUBMARINE PIPE LINE LAYING WORK** **(FREE ISSUE MATERIAL)**	Payment terms for pipeline laying are basic guidelines for payment of pipeline laying work. The payment terms need to be suitably modified, if required, depending on work and quantum of work in consultation with Project Manager and GM (C&P): **a. Submarine Pipeline laying on pro-rata basis.** - 05% on completion of pre-construction survey. - 20% on mobilization of Lay-barge and other equipment. - 10% on Receiving, Taking over & Transportation of Coated Line Pipes to Installation site. - 50% on completion of repairs, welding, radiography, NDT, Installation including Trenching, Dredging and backfilling etc. - 05% on completion of hydro testing. - 05% on submission of As Built drawings & all other drawings/ documents. - 05% on completion of all works in all respects and issuance of completion

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		certificate **b. Installation of SPM & PLEM System** - 05% on completion of pre-construction survey. - 20% on mobilization of Lay-barge and other equipments. - 10% on Receiving, Taking over SPM & PLEM etc. - 55% on completion of Installation and Testing. - 05% on submission of As Built drawings & all other drawings/ documents. - 05% on completion of all works in all respects and issuance of completion certificate **c. Pre-Commissioning & Commissioning Assistance.** - 50 % on Flood, Clean, Gauge & Hydro Test of Pipeline. - 30% on after completion of Pre-Commissioning, Integration and acceptance of the SPM system in all respects - 15% on completion of commissioning Assistance. - 05% on completion of all works in all respects and issuance of completion certificate.
10.3	**COATING AND TRANSPORTATION OF COATED PIPES**	- 10% after bare pipes are lifted by coating agency from pipe supplier yard. - 65 % prorate payment along with taxes & duties after coating and acceptance - 20% on receipt of coated pipes at dumpsite including repair charges and transportation charges for coated pipes. - 05% on completion of all works in all respects and issuance of completion certificate.
10.4	**DUMPSITE DEVELPMENT**	- 10% on production of land lease agreement copy - 85% payment after development of dumpsite for receipt of pipes as per specifications. - 05% on completion of all works in all respects and issuance of completion certificate.
10.5	**DUMPSITE MANAGEMENT**	- 85% on completion of work on pro-rata basis as certified in monthly progress bill. - 10% on restoration and obtaining NOC from land owner. - 05% on completion of all works in all respects and issuance of completion certificate.
11.	**MATERIAL HANDLING**	a. As soon as any consignment against a Bill of Lading /AWB is delivered at Project site in full, contractor shall submit his bills in triplicate as per Schedule of Price to Officer-in-Charge. b. If any of the consignments are required to be stored in contractor's godown by EIL / Owner, contractor may raise part bills for the services completed. Note: Further break-up of Lumpsum Prices, if deemed necessary for any progressive payment of individual item may be mutually arrived at between Engineer-in-Charge and the Contractor.
12.	**Miscellaneous Works**	- 95% (##) on completion of work as certified in monthly progress bill. - 05% on completion of all works in all respects and issuance of completion certificate. **(##) Further break up of payment schedule, if necessary, shall be recommended/ approved by Engineer-in-charge.**

13.	**For Lumpsum Rate Item (Not covered above)**	- 95% on completion of total work in all respects. (For all lumpsum item included in Schedule of Rate, Contractor shall furnish price breakup for quoted lumpsum prices for the approval of Engineer-in-Charge. Progressive payment for such items shall be made accordingly. In this regard decision of Engineer- in-Charge shall be final and binding to the Contractor). - 05% on completion of all works in all respects and issuance of completion certificate.
14.	**PEB Buildings (Without Civil Foundation)**	**PEB Buildings (Without Civil Foundation)** - 05% on approval of design, detailed engineering and preparation of drawings & documents and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 3 months claim period. - 65% (##) on receipt and acceptance of pre-fabricated & pre-engineered structures / members with application of primer & painting at project premises. - 25% (##) on erection, alignment, welding, bolting, grouting etc. - 05% on completion of works in all respect and issuance of completion certificate. **(##) Further billing break up if necessary, shall be recommended/ approved by Engineer-in-charge.**
15.	**PEB Buildings (With Civil Foundation)**	**PEB Buildings (With Civil Foundation).** - 05% on approval of design, detailed engineering and preparation of drawings & documents and submission of equivalent bank guarantee valid till receipt and acceptance of material at site plus 3 months claim period. - 45% (##) on receipt and acceptance of pre-fabricated & pre-engineered structures / members with application of primer & painting at project premises. - 45% (##) on Civil Works erection, alignment, welding, bolting, grouting etc. - 05% on completion of works in all respect and issuance of completion certificate. **(##) Further billing breakup if necessary, shall be recommended/ approved by Engineer-in-charge.**
16.	**Marine Cum Erection All Risk Insurance:**	**Marine Cum Erection All Risk Insurance:** Progressive payments shall be released to contractor against running account bills duly certified by Engineer in-charge after affecting the necessary deductions/ recovery, if any . The basis for payment against various items shall be as follows: **a. Premium for Marine Insurance :** 100% upfront premium of premium against Marine insurance coverage after award of work and within a week of receiving the Proforma Premium invoice. The contractor shall submit the tax invoice and proof of payment of GST at the earliest but not later than 3 months of realization of payment. **b. Premium against Erection All Risk (EAR) Cover :** • Premiums are to be released in installment on quarterly basis. • First premium shall be 5 % of the total Premium plus (95% of total premium /No of installments) within a week of receiving of invoice • Subsequent premium shall be of 95% of total Premium /No of installments and payable within due date of payment as specified in the policy. • The last premium shall be released at least six months before expiry of

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		the policy. No of Installment= [1+{Period in months-6} /3] The contractor shall submit the tax invoice and proof of payment of GST at the earliest but not later than 3 months of realization of payment.
17.	**Third Party Inspection services :**	**Third Party Inspection services:** Progressive payments shall be released to contractor against running account bills duly certified by Engineer in-charge after affecting the necessary deductions/recovery, if any a. **Third Party Inspection services for inspection of equipment and materials including package items (Wherein flat percentage rate have been specified):** • Inspection services for the PO item: 90% shall be paid along with IRN of the respective PO item in complete status on prorate basis • 10% shall be paid along with issue of completeness certificate for final documentation as per VDR and on receipt and acceptance of all materials at site. **b. Third Party Inspection services for inspection of equipment and materials including package items based on man-day rate:** • 90% against submission of monthly bills and time sheet certified by the engineer in-charge • 10% shall be paid along with issue of completeness certificate for final documentation as per VDR and on receipt and acceptance of all materials at site. **c. For other services like attending monthly review meetings based on Man day rate 100% against submission of monthly bills and time sheet certified by the engineer in-charge.**

NOTE:

1. The above payment terms commensurate with the work executed.
2. The above progress payments are subject to deductions towards income tax and other deductions as applicable as per terms of the Contract.
3. Withholding Tax at the prevailing rate shall be deducted as per the Indian Income Tax Act. TDS certificate shall be issued by the Owner.
4. Completion certificate is the certificate issued after attending the defects prior to taking over as specified in the General Conditions of Contract. In case separate nomenclature is provided for Completion certificate in GCC for various clients, the same shall be replaced by that certificate accordingly.
5. Conditional Part completion certificate whenever essential (in case of job in multi units, offloading case etc.) shall be issued with due concurrence from competent authorities to facilitate release of Final payment.
6. Where ever milestone payment is linked with sub ordering, EIL Engineer-in-charge shall ensure that the total quantity against which the payment is released towards supply shall not exceed the final installed quantity of the item.
7. Wherever milestone payment has been recommended on receipt and acceptance of material, the same shall be released against "Incoming Material Inspection Report" issued by EIL. Engineer-in-Charge shall release the progressive payment towards supply in such a way ensuring that the total quantity against which the payment is released towards supply shall not exceed the final installed quantity of the item.

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8. Secured Advance [Refer BDS for applicability] shall be paid as per the agreement with Owner. However, no secured advance shall be paid against the material wherever milestone payment has been recommended on receipt and acceptance of material at site.
9. Final payment for each item shall be linked with submission and acceptance of As built drawing/ documentation (wherever applicable)

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ANNEXURE – III to SCC

Measurement of Work

1. GENERAL

The mode of measurement shall be as per the details mentioned in this Annexure.

1.1 In case of discrepancy between measurement of work specified in this Annexure, Standard Specification/ Job Specification, Schedule of Price/Rates etc., precedence shall be given in following order :

1.2 Measurement of works as per this Annexure of SCC.

1.3 Measurement of works as mentioned in Standard Specification/Job Specification.

1.4 Measurement of works in accordance with item description of relevant item mentioned in Schedule of Rates.

1.5 In case the clarity is not in the above documents, then it shall be as per BIS and if it does not exist in BIS also, then Measurement of works shall be as decided by Engineer-in-Charge.

1.6 Payment will be made on the basis of joint measurements taken by Sub-contractor and certified by Engineer-in-Charge. Measurement shall be based on "Approved for Construction" drawings, to the extent that the work conforms to the drawings and details are adequate.

1.7 Wherever work is executed based on instructions of Engineer-in-Charge or details are not adequate in the drawings, Sub-contractor shall take physical measurements in the presence of Engineer-in-Charge.

1.8 Measurements will be made on the basis of following units indicated in unit column of schedule of rates.

Weights	MT or Kg
Length	M (Metre)/ CM (Centimetre)/ MM (Millimetre)
Number	No.
Volume	Cu.M
Area	Sq.M

1.9 Welds, bolts, nuts, washers etc. shall not be measured. No payment for temporary works connected with this Contract or for items such as weld, shims, packing plates etc. shall be made by Owner. Cost of above items shall be included in the unit rates quoted.

1.10 Wherever the unit of items has been indicated as lumpsum, the payment shall be made on lumpsum basis on completion & no mode of measurement shall be applicable.

2. GENERAL CIVIL, STRUCTURAL AND ARCHITECTURAL WORKS

The measurement of works as mentioned in the relevant Technical/Standard Specification shall be followed.

3. PIPING AND RELATED WORK

3.1 PIPING

a) Payment will be made based on linear measurement as per execution drawings.

b) All lines shall be measured along the centre lines of pipes, curvilinear centre lines of bends and elbows, centre line of flanges and all other fittings such as tees, reducers, expansion joints etc. all in line instruments, line mounted fittings, ejectors, eductors, mixers, sight glasses, trays, inline filters, desuperheaters etc. Length of all types of valves (except socket weld and screwed valves upto 1.5" size) shall be excluded in this measurement. However, no separate payment for socket weld valves upto 1-1/2" size shall be made and the quoted rates for piping shall be deemed to include the same.

c) The socket weld fittings shall be supplied to the sub-contractor as per the requirements of the drawings. All other hot/cold bends, reducers etc. for size 1-1/2" and below shall be fabricated and erected as per requirements by the sub-contractor at no additional cost and his rates for piping of size 1-1/2" and below shall be inclusive of this work.

d) The forged tees shall be supplied to the sub-contractor as per the requirement of the drawings. All other branch connections including reinforcement pads shall be accomplished by pipe to pipe connections. The rates quoted for piping shall be inclusive of making branch connections. The reinforcement pads shall be measured separately.

e) Vents and drains shall be measured from O.D. of pipe lines and shall be paid for at the corresponding unit rates for similar sizes of pipe. Other piping attachment such as couplings, earthing lugs etc. shall be supplied & erected by the sub-contractor within his quoted rates for piping. However, vents and drains required temporarily for flushing and testing shall be provided by the sub-contractor at their cost.

f) Fabrication of spool pieces for temporary use to aid Sub-contractor's work such as fabrication, erection, flushing and testing of piping etc. shall be done by Sub-contractor at his cost as part of piping work and no separate payment shall be made for the same.

g) In case of branch piping, the measurement shall be made from outer surface of the main line except in case of equal size branches, in which case measurement shall be made from centre line of the branching header.

h) As regards safety valves, size of valves will be identified by inlet pipe size.

i) Reducers will be paid alongwith piping of larger dia- meter except in the case of funnels where they are welded only to the smaller diameter pipe, for which payment will be made alongwith piping of such smaller dia.

j) All piping attachments such as couplings, orifice plates, steam traps, strainers, earthing lugs etc. shall be provided by the Sub-contractor as part of piping erection work and no separate payment will be made for the same.

3.2 Piping Works

Measurement of above ground and underground piping shall be done in the following manner:

3.2.1 Fabrication of Piping

Measurement for fabrication of pipe shall be done on the basis of Inch. dia (the nominal diameter of pipe in 'Inches' multiplied by number of weld joints). All pre-fabrication work (including transportation of materials to site, fit up, shop weld, fabrication of spool pieces for erection) as well as all piping welding in situ are covered in Inch. dia. of fabrication. This shall include all types of SW/BUTT-welding e.g. GTAW, SMAW.

Payment shall be made based on the unit rate against following diameter range of pipes and type of welds, under the headings of pipe metallurgy (CS/AS/SS etc., separately for IBR/NIBR and thickness upto 10 MM/10-20 MM/20-30 MM/30-40MM etc.).

Butt Welds
Upto 1-1/2" NB
2" to 6" NB
8" to 14" NB
16" to 24" NB
26" to 36" NB
38" to 48" NB
50" to 60" NB
Above 60" NB

Fillet Welds
Upto 1-1/2" NB
2" to 6" NB
8"to14"NB
16" to 24" NB
26" to 36" NB
38" to 48" NB
50" to 60" NB
Above 60" NB

Total welding for slip on flanges shall be accounted as one single joint per flange.
Seal welds, wherever required shall not be counted under weld joints.

No separate payment shall be made for welding involved in pipe supports.

Branch welds shall be considered under butt welds

3.2.2 Erection of Piping

Measurement will be done based on Inch. Meter (the nominal diameter of pipe in 'Inches' multiplied by the installed length of piping in 'Meters') as per execution drawing. Inch. Meter shall include all work pertaining to Erection of Fabricated spools/straight lengths, providing vent, drains, instrument tapings, alignment, hydro-testing and all other activities required as per item description, but not covered in scope under Inch. dia.

Payment shall be made based on the unit rate against following diameter range of pipes:

Upto 1-1/2" NB
2" to 6" NB
8" to 14" NB

16" to 24" NB
26" to 36" NB
38" to 48" NB
50" to 60" NB
Above 60" NB

All lines shall be measured along the centre lines of pipes, curvilinear centre lines of bends and elbows, centre line of flanges and all other fittings such as tees, reducers, expansion joints etc. all in line instruments, line mounted fittings, ejectors, eductors, mixers, sight glasses, trays, filters, desuperheaters etc. Length of all types of valves except socket weld valves upto 1-1/2" shall be excluded in this measurement. However, no separate payment for socket weld valves upto 1-1/2" size shall be made and the quoted rates for piping shall be deemed to include the same.

3.2.3 REMARKS:

Measurement of following flanged/ screwed items shall be in linear Running meter basis/Lumpsum basis, as applicable:

i) Clad steel piping

ii) Cement lined piping

iii) Rubber lined piping

iv) Teflon lined piping

v) Plastic piping (HDPE etc.)

vi) Galvanised piping

vii) Jacketed piping

viii) Steam Tracers

ix) Tubing

Measurement of following items shall be on number basis:

- Piping Specials like Mitres & Fabricated Reducers
- Reinforcement pads

3.3 Fabrication of Specials

For fabrication of mitre bends and reducers (concentric & eccentric) from the pipes/ Steel plates/ fabricated pipes to be supplied by Owner free of cost, payment will be made on numbers of such specials at the rates given separately in Schedule of Rates. The unit rate shall be inclusive of tests such as DP/ MP as mentioned in item description of an item. However, the erection of mitre bends and reducers shall be part of piping erection work and the rates for piping will be inclusive of this work.

3.4 Valves

All types of valves such as gate/ globe / check / plug / needle/ ball/ control/ safety valves/ Gate Valves/ Butterfly valves etc. will be measured and paid on number basis at the rates given in the Schedule of Rates. Dismantling and re-erection of the valves required for the purpose of testing, calibration etc. shall not be considered for measurement as same are to be carried out by the sub-contractor within his quoted rates. The length of such valves along with companion flanges shall be excluded from piping length.

3.5 Fabrication of Supports

Measurement and payment of fabrication of pipe supports shall be on weight basis.

Bolts, nuts and washers including U-bolt will be supplied by sub-contractor. Weight of bolts, nuts and U-bolts etc. shall not be added to the weight of pipe support for payment purpose. Spring supports, if any, shall be supplied by Owner as Free Issue.

Erection of all types of supports, including grouting of supports, if required, shall be carried out by the Sub-contractor as part of piping work and no separate measurement & payment will be made for it. However, for erection of pre-issued support assemblies like spring, strut, snubber etc., payment shall be done separately.

3.6 Post Weld Heat Treatment (Stress Relieving)

Measurement and payment for post weld heat treatment shall be on the basis of per circumferential joint for different diameters of pipes as per the rates quoted. Repeat post weld heat treatment for repaired joints or otherwise due to Sub-contractor's fault will be carried out at Sub-contractor's cost. In case of attachment welding (of support to piping) undergoing PWHT, the weld length shall be considered for payment on the basis of equivalent circumferential weld joint.

3.7 Radiography/ Dye-Penetrate (DP) Test / Magnetic Particle (MP) Test

Measurement and payment for radiography shall be made on the basis of circumferential joints for different pipe diameter. Repeat radiography due to defective films or on repaired joint due to Sub-contractor's fault or for additional radiography necessitated due to poor performance of Sub-contractor's welder will be done at Sub-contractor's cost.

Measurement and payment for magnetic particle and dye penetrate test will be on the basis of weld length tested/ circumferential weld joints as mentioned in schedule of rates.

The cost of DP/MP test included in item description of piping items such as Fabrication of Specials, Reinforcement Pads etc. shall be included in the quoted unit rate and no additional payment for such DP/MP test for such items shall be made. Payment for DP/MP test shall be made only for such items where DP/MP test is not included in item description.

The cost for performing Positive Materials Identification (PMI) using alloy analysers including hiring of such equipment and mobilisation of the same to site shall be included in the unit rate for all such items of piping where PMI is specified in the item description.

4. PAINTING ON EQUIPMENTS/ PIPING/ STRUCTURAL STEEL ETC.

4.1 Painting on Equipments

For columns, vessels, reactors, Exchangers, furnaces, ejectors etc., measurement shall be on square meter basis taken over the painted surface.

For equipment numbering, name, lettering and stencilling (only for Pressure Vessels) separate payment for letter shall be made as per the rates mentioned in Schedule of Rates.

For pumps, motors and compressors measurement shall be made on number basis.

4.2 Painting on Piping, Specials and Fittings

Payment will be made on linear measurement in 'Meters' corrected to the nearest centimetre.

Piping shall be measured along the centre line through all types of fittings and flanges.

Rates for painting of pipes shall be inclusive of painting of all types of pipe supports, flanges, guides, shoes, saddles, clamps, etc. and also all types of fittings except valves which shall be paid separately on number basis.

There will be no separate measurements of the colour bands/ identification signs (line numbering), flow direction etc. on uninsulated and insulated piping, the rates of painting of linear length of piping shall be inclusive of cost of such works.

4.3 Painting on Steel Structure

Payment for steel structures shall be made on the basis of admissible weight of structure painted.

Welds, bolts, nuts, washers etc. shall not be measured and paid as rates for painting of structure are inclusive of painting of such items.

5. THERMAL INSULATION WORKS

The mode of measurement shall be as per the details mentioned in this Annexure.

In case of discrepancy between measurement of work, specified in this Annexure. Standard Specification/Job Specification, Schedule of Price/Rates etc., precedence shall be given in following order :

- Measurement of works as per this Annexure of SCC.
- Measurement of works as mentioned in Standard Specifications/Job Specification.
- Measurement of works in accordance with item description of relevant item mentioned in Schedule of Rates.

In case the clarity is not in the above documents, then it shall be as per BIS and if it does not exist in BIS also, then Measurement of works shall be as decided by Engineer-in-Charge.

Payment will be made on the basis of joint measurements taken by Contractor and certified by Engineer-in-Change. Measurement shall be based on "Approved for Construction" drawings, to the extent that the work conforms to the drawings and details are adequate.

Wherever work is executed based on instructions of Engineers-in-Charge or details are not adequate in the drawings, Contractor shall take physical measurements in the presence of Engineer-in-Charge.

Welds, bolts, nuts, washers etc, shall not be measured. No payment for temporary works connected with this Contract or for items such as weld, shims, packing plates etc, shall be made by OWNER. Cost of above items shall be included in the unit rates quoted.

Wherever the unit of items has been indicated as lumpsum, the payment shall be made on lumpsum basis on completion & no mode of measurement shall be applicable.

Piping

Measurement of piping shall be taken/considered along Curvilinear centre lines of pipe insulated and through all fittings which are insulated but excluding valves, instruments and fittings which are insulated measurements shall be considered as under :

a) For all types of valves, including control valves on which removable box has been provided: payment shall be made per number. This shall be including mating flanges on both side and proper body of valves/control valves.

b) For all type of flange assembly including orifice plate, payment shall be made on number basis.

c) For bends, additional measurement equivalent to single length of curvilinear centre lines of bends shall be added to the respective size of piping.

d) Reducers will be considered with larger diameter.

e) No extra payment shall be made for tees, branch connections and inspection plugs and the rates quoted shall be inclusive of all these items. Branch connections shall be measured from the outer surface of the header.

f) No extra payment shall be made for vents, drains and instrument connections having nozzles length upto 12". However, if the length of such connections exceeds 300mm the same will be paid as per piping measurement in respective sizes.

g) For all fittings measurement along curvature centre line shall be considered.

h) Steam/Refrigerant traced lines and untraced pipelines shall be normally specified and measure separately Steam/Refrigerant traced lines shall also be normally specified and measured separately, according to the number of tracers.

i) For steam/Refrigerant traced pipelines, which are specified and are measured separately, only the diameter of the main pipelines (s) shall be reckoned for measurement of insulation. No. separate measurement shall be made for the insulation of the steam tracer line(s) which shall be deemed to have been covered under the insulation of the main pipeline.

j) For all fittings measurement along curvature centre line shall be considered.

NOTE :

All other mode of measurement not covered in above clauses shall be measured in accordance with relevant BIS codes/Schedule of Rates/Specifications etc. and/or as decided by Engineers-in-Charge. The above measurement of works shall not be applicable for lumpsum items of SOR.

ANNEXURE - IV TO SPECIAL CONDITIONS OF CONTRACT [PRICE VARIATION OF STEEL]

Price Variation Formula for Steel in Item Rate Tenders

1. The Contract Price shall be adjusted for any increase/decrease on account of variation in steel prices as per the formula below:

$$V = P \times Q \times \frac{M - M_0}{M_0}$$

Where,

V = Total Variation in material (steel) cost i.e. increase or decrease in the amount (in Rupees) to be paid or recovered.

P = Base Price (excluding taxes and duties) of Steel, i.e., INR_____

Q = Quantity of steel measured (part or full)

M_0 = Price Index for steel reinforcement bars, structural steel shall be the All India Wholesale Monthly Price Index for **MILD STEEL: LONG PRODUCTS** released by Office of Economic Advisor to Government of India, Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry corresponding to the period of the base price (,i.e., ____ during the month of ____)

M = Price Index for steel reinforcement bars, structural steel shall be the All India Wholesale Monthly Price Index for **MILD STEEL: LONG PRODUCTS** released by Office of Economic Advisor to Government of India, Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry on sub-order date for the purchase of steel under the contract by the contractor.

For TANKAGE TENDERS where supply of plates is prominent, the above indices corresponding to MILD STEEL: FLAT PRODUCTS shall be used.-NOT APPLICABLE for this tender

Bidder while submitting their offer will consider the base price of steel as given above (i.e., the value of P).

The variation payable by Owner / EIL shall be based on the base price of steel (i.e., the value of P) as the reference point. **Therefore, the upward variation is admissible subject to the Purchase Price of Steel being higher than the Base Price (P).**

Notes:

*a) Upward price variation will be payable for the entire approved extended completion period **(*)** considering the applicable indices as per the above formula. Accordingly, in case of delay by the contractor beyond contractual delivery date for reasons attributable to contractor, no upward price variation shall be payable. However, downward/ negative price variation shall be applicable for the entire actual completion period.*

***(*)** Approved extended completion period shall mean the justified extension in completion period which is without any levy of penalty/ LD/ PRS.*
For example: If CDD is May and the actual completion date is December out of which extension upto October is not attributable to the contractor, the upward price variation shall be payable only till October. However,

downward price variation shall be applicable till December.

b) For the purpose of PRS/ Liquidated Damages, the contract value shall be considering inclusive of price variationon account of steel price variation.
c) Even if there is no price adjustment claim, Contractor shall submit all relevant data to prove that there is no downward variation.
d) Old materials (i.e., having corresponding WPI older than WPI for base price mentioned in bidding document) shall not qualify for adjustment.
e) Formula shall be applied whenever the main item is operated for the first time (full or part), and price adjustments immediately effected.
f) Price variation for materials shall be applicable for measured and certified quantity only.
g) Adjustment Bill to be raised after every publication of firm WPI for the corresponding period.
h) Steel escalation formula shall be implemented only when price increase due to variation is more than +2%. However for any decrease, formula will be applicable.

ANNEXURE-V TO SPECIAL CONDITIONS OF CONTRACT

KEY CONSTRUCTION MANPOWER TO BE DEPLOYED BY THE CONTRACTOR DURING EXECUTION

KEY CONSTRUCTION MANPOWER TO BE DEPLOYED BY THE CONTRACTOR DURING EXECUTION OF COMPOSITE WORKS -U & O PART-A (WEST SIDE) OF M/s BPCL BINA

PART A

(TENDER NO. B957-999-69-41-PK-T-9501)

SL. NO.	DESCRIPTION	REQUIREMENT DURING CONSTN.
1.	RCM/SITE-IN-CHARGE	1
2.	LEAD DISCIPLINE ENGINEERS - MECHANICAL - CIVIL / STRUCTURAL - WELDING/NDT - ELECTRICAL - INSTRUMENTATION	 3 1 2 1 1
3.	LEAD QA/QC ENGINEER	1
4.	LEAD PLANNING ENGINEER	1
5.	SAFETY OFFICER & OTHER SAFETY PERSONNEL	AS PER HSE STANDARD SPECIFICATION (6-82-0001)
6.	W/H IN-CHARGE/MATERIALS MANAGER	1
7.	QUANTITY SURVEYOR	2
8.	DISCIPLINE ENGINEERS + SUPERVISORS - MECHANICAL - CIVIL / STRUCTURAL - WELDING/NDT - ELECTRICAL - INSTRUMENTATION - PRE-COMMISSIONING - PLANNING ENGINEER - STORE OFFICER/KEEPER - SCAFFOLDING INSPECTOR	 8+16 2+4 3+9 2+4 2+4 2+0 4+0 2+4 AS PER HSE STANDARD SPECIFICATION (6-82-0001)

NOTES

1) Above key construction manpower is required to be deployed by the contractor to complete the work within schedule. Contractor is required to augment the above list with additional numbers/categories of personnel as required and directed by Engineer-In charge to complete the work within the completion time schedule and quoted price.

2) The Key Construction Personnel identified above shall be well qualified & having adequate relevant experience, as specified in document No. 7-82-0003 enclosed elsewhere in the bidding document. The other manpower shall also be qualified and experienced with their assigned work.

3) Key Construction personnel identified above shall be deployed by contractor as and when relevant activities are required to be carried out for completing the job within completion time schedule and as per direction of Engineer In-charge.

4) CVs of key persons proposed to be deployed shall be submitted to Owner/Engineer-In-charge prior to their mobilization at site. The mobilization of key personnel shall be done at site subject to prior approval of their CVs by Owner/Engineer-In-charge.

(STAMP & SIGNATURE OF BIDDER)

KEY CONSTRUCTION MANPOWER TO BE DEPLOYED BY THE CONTRACTOR DURING EXECUTION OF COMPOSITE WORKS - U & O PART-B (EAST SIDE+ BDT) OF M/S BPCL BINA

PART B

(TENDER NO. B957-999-69-41-PK-T-9501)

SL. NO.	DESCRIPTION	REQUIREMENT DURING CONSTN.
1.	RCM/SITE-IN-CHARGE	1
2.	LEAD DISCIPLINE ENGINEERS - MECHANICAL - CIVIL / STRUCTURAL - WELDING/NDT - ELECTRICAL - INSTRUMENTATION	 2 1 2 1 1
3.	LEAD QA/QC ENGINEER	1
4.	LEAD PLANNING ENGINEER	1
5.	SAFETY OFFICER & OTHER SAFETY PERSONNEL	AS PER HSE STANDARD SPECIFICATION (6-82-0001)
6.	W/H IN-CHARGE/MATERIALS MANAGER	1
7.	QUANTITY SURVEYOR	2
8.	DISCIPLINE ENGINEERS + SUPERVISORS - MECHANICAL - CIVIL / STRUCTURAL - WELDING/NDT - ELECTRICAL - INSTRUMENTATION - PRE-COMMISSIONING - PLANNING ENGINEER - STORE OFFICER/KEEPER - SCAFFOLDING INSPECTOR	 7+14 2+4 3+9 2+4 2+4 2+0 4+0 2+4 AS PER HSE STANDARD SPECIFICATION (6-82-0001)

NOTES

1) Above key construction manpower is required to be deployed by the contractor to complete the work within schedule. Contractor is required to augment the above list with additional numbers/categories of personnel as required and directed by Engineer-In charge to complete the work within the completion time schedule and quoted price.

2) The Key Construction Personnel identified above shall be well qualified & having adequate relevant experience, as specified in document No. 7-82-0003 enclosed elsewhere in the bidding document. The other manpower shall also be qualified and experienced with their assigned work.

3) Key Construction personnel identified above shall be deployed by contractor as and when relevant activities are required to be carried out for completing the job within completion time schedule and as per direction of Engineer In-charge.

4) CVs of key persons proposed to be deployed shall be submitted to Owner/Engineer-In-charge prior to their mobilization at site. The mobilization of key personnel shall be done at site subject to prior approval of their CVs by Owner/Engineer-In-charge.

(STAMP & SIGNATURE OF BIDDER)

ANNEXURE-VI TO SPECIAL CONDITIONS OF CONTRACT

QUALIFICATION & EXPERIENCE REQUIREMENT OF KEY CONSTRUCTION PERSONNEL AND PENALTY FOR THEIR NON-MOBILIZATION

प्रमुख निर्माण कार्मिकों के लिए अपेक्षित योग्यता एवं अनुभव और तैनाती न करने पर जुर्माना

QUALIFICATION & EXPERIENCE REQUIREMENT OF KEY CONSTRUCTION PERSONNEL AND PENALTY FOR THEIR NON-MOBILIZATION

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
					Approved by	
2	25.07.2025	Revised & Updated	DK	SBB	KS	MN
1	01.07.2020	Revised & Updated	DG	RK	AKK	SKS
0	12.06.2015	Doc. No. 9-1940-0001 Rev 1 has been revised and issued as Standard	DJ	RK	MD	SC

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Abbreviations:

CV	:	Curriculum Vitae
EPC	:	Engineering, Procurement & Construction
EPCC	:	Engineering, Procurement, Construction & Commissioning
ISO	:	International Organization for Standardization
NDT	:	Non-Destructive Testing
QA/QC	:	Quality Assurance /Quality Control
RT	:	Radiography Testing
UT	:	Ultrasonic Testing

Construction Standards Committee

Convenor : Sh. K. Swaminathan HOD (Construction)

Members : Sh. DSN Murthy, ED (Projects)
Sh. Udayan Chakravarty, CGM (Piping)
Sh. SB Burman, Sr. GM (Construction)
Sh. Abhijit Chakraborty, GM (Construction)
Sh. Pankaj Kumar Rai, DGM (Construction)
Sh. S. Padmanathan, DGM (SCM)
Sh. Dhananjay, AGM (Construction)

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Qualification & Experience (Post Qualification)

CATEGORY	QUALIFICATION & EXPERIENCE (POST QUALIFICATION) REQUIRED			
Resident Construction Manager/ Resident Engineer/Site-In-Charge	Degree or Diploma in Engineering with minimum following relevant experience in construction:			
	Awarded value (Rs) →	< 10 Cr. Works	10 - 50 Cr. Works	> 50 Cr. Works
	Degree holders	5 yrs	10 yrs	15 yrs
	Diploma holders	8 yrs	13 yrs	20 yrs
Lead Discipline Engineer (Mechanical, Civil, Electrical, Instrumentation)	Degree or Diploma in relevant Engineering discipline with following minimum experience in Construction:			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	3 yrs	5 yrs	10 yrs
	Diploma holders	5 yrs	8 yrs	13 yrs
Lead Welding/ NDT Engineer	Degree or Diploma in Mechanical Engineering/ Metallurgy with the minimum following experience in Welding & NDT (Non-Destructive Testing) and possessing valid Level-II certificate in the relevant NDT methodology (RT/UT)			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	3 yrs	5 yrs	10 yrs
	Diploma holders	5 yrs	8 yrs	13 yrs
Lead QA/QC Engineer	Degree or Diploma in Engineering with following experience (refer Note 1 also) :			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	3 yrs of construction experience of which minimum 1 years in QA/QC	5 yrs of construction experience of which minimum 2 years in QA/QC	10 yrs of construction experience of which minimum 3 years in QA/QC
	Diploma holders	5 yrs of construction experience of which minimum 3 years in QA/QC	8 yrs of construction experience of which minimum 5 years in QA/QC	13 yrs of construction experience of which minimum 6 years in QA/QC
Lead Planning Engineer	Degree or Diploma in Engineering with following experience in Planning & Scheduling			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	3 yrs	5 yrs	8 yrs
	Diploma holders	5 yrs	8 yrs	13 yrs
Safety Officer/ Supervisor	As per HSE Specification enclosed elsewhere in the bidding document.			

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Warehouse- In- Charge/ Materials Manager	Diploma in Engineering or Diploma in Materials Management or Graduate in any stream with min. following experience in Warehousing/ Stores Management:			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Experience	3 years	5 yrs.	10 yrs.
Quantity Surveyor	Degree or Diploma in Engineering with minimum following experience in quantity estimation, field measurement, bill preparation etc. in Construction field:			
	Awarded value (Rs) →	≤ 10 Cr. Works	10-50 Cr. Works	> 50 Cr. Works
	Degree holders	2 yrs	3 yrs	5 yrs
	Diploma holders	4 yrs	6 yrs	8 yrs
Discipline Engineer	Degree in relevant Engineering Discipline with minimum 2 years of relevant experience in construction or Diploma in relevant Engineering Discipline with minimum 4 years of relevant experience in Construction. Welding / NDT engineer shall possess valid Level-II certificate in the relevant NDT methodology (RT/UT).			

NOTES: (For Table)

1. For Civil & Structural, Mechanical, Composite, EPC or EPCC Contracts of value more than Rupees 50 crores, the Lead QA/QC Engineer shall be a qualified internal auditor for ISO 9001.
2. CVs of key construction personnel proposed to be deployed shall be submitted to Owner/Engineer-in-Charge prior to their mobilization at site. The mobilization of key personnel shall be done at site subject to prior approval of their CVs by Owner/Engineer-in-Charge.

PENALTY FOR NON - MOBILIZATION OF KEY CONSTRUCTION PERSONNEL

Penalty for non-mobilization per day per person after the contractual mobilization period / mobilization schedule agreed during Kick off meeting / jointly agreed between contractor and PMC / Owner based on front availability etc.

- Rs. 10000/- for Resident Construction Manager/ Resident Engineer/ Site-in-Charge.
- Rs. 5000/- for Lead QA/QC Engineer, Lead Planning Engineer, Warehouse In-charge, Lead Discipline Engineers, Lead Welding / NDT Engineer and the Quantity surveyor.
- Safety Officer (As per HSE Specification).

NOTES: (For Penalty Clauses)

a) All intervening off days (Sundays etc.) and holidays will be counted for levy of penalty.

b) Mobilized personnel shall not be demobilized till contractual completion or based on consent of Engineer-in-Charge, else penalties as above shall be applied.

c) Total of above penalties shall not exceed 2% of the awarded contract value.

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ANNEXURE-VII TO SPECIAL CONDITIONS OF CONTRACT

SPECIFICATION FOR QUALITY MANAGEMENT SYSTEM REQUIREMENTS FROM BIDDERS

बोलीकर्ता से गुणवत्ता प्रबंधन प्रणाली अपेक्षाओं हेतु विनिर्देश

SPECIFICATION FOR QUALITY MANAGEMENT SYSTEM REQUIREMENTS FROM BIDDERS

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convener	Standards Bureau Chairman
					Approved by	
2	12.06.20	General Revision	QMS Standards Committee	QMS Standards Committee	SKB	SKS
1	12.03.15	General Revision	QMS Standards Committee	QMS Standards Committee	MPJ	SC
0	04.06.09	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND

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Abbreviations:

ISO	-	International Organization for Standardization
MR	-	Material Requisition
PO	-	Purchase Order
PR	-	Purchase Requisition
QMS	-	Quality Management System

QMS Standards Committee

Convener: Mr. S.K. Badlani

Members: Mr. Sanjay Mazumdar (Engg.)
Mr. R.K. Singh (SCM)
Mr. B. Biswas (SCM)
Mr. Ravindra Kumar (Const.)
Mr. Vinod Kumar (CQA)
Mr. Swapnil Vaishnav (Projects)

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1.0 SCOPE

This specification establishes the Quality Management System requirements to be met by BIDDER for following purpose:

- QMS requirements to be met by suppliers / contractors after award of work / during contract execution.

2.0 DEFINITIONS

2.1 Bidder

For the purpose of this specification, the word "BIDDER" means the person(s), firm, company or organization who is under the process of being contracted by EIL / Owner for delivery of some products (including service). The word is considered synonymous to supplier, contractor or vendor.

2.2 Project Quality Plan

Document tailored from Standard Quality Management System Manual of BIDDER, specifying how the quality requirements of the project will be met.

2.3 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

6-78-0002	Specification for Documentation Requirements from Contractors
6-78-0003	Specification for Documentation Requirements from Suppliers

4.0 QUALITY MANAGEMENT SYSTEM – GENERAL

Unless otherwise agreed with EIL / Owner, the BIDDER proposed quality system shall fully satisfy all relevant requirements of ISO 9001 "Quality Management Systems – Requirements." Evidence of compliance shall be current certificate of quality system registration to ISO 9001 or a recent compliance audit recommending registration from a certification agency. The quality system shall provide the planned and systematic control of all quality related activities for execution of contract. Implementation of the system shall be in accordance with BIDDER'S Quality Manual and PROJECT specific Quality Plan.

5.0 QUALITY SYSTEM REQUIREMENTS

5.1 BIDDER shall prepare and submit for review / record, Project Quality Plan / Quality Assurance Plan for contracted scope / job. The BIDDER'S Quality Plan shall address all of the applicable elements of ISO 9001, identify responsible parties within BIDDER'S organization, for the implementation / control of each area, reference the applicable procedures used to control / assure each area, and verify the documents produced for each area. The Project Quality Plan shall necessarily define control or make reference to the relevant procedures, for design and engineering, purchase, documentation, record control, bid evaluation, inspection, production / manufacturing, preservation, packaging and storage, quality control at construction site, pre-commissioning, commissioning and handing over (as applicable) in line with contract requirement and scope of work.

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5.2 BIDDER shall identify all specified or implied statutory and regulatory requirements and communicate the same to all concerned in his organization and his sub contractor's organization for compliance.

5.3 BIDDER shall deploy competent and trained personnel for various activities for fulfillment of PO / contract. BIDDER shall arrange adequate infrastructure and work environment to ensure that the specification and quality of the deliverable are maintained.

5.4 BIDDER shall do the quality planning for all activities involved in delivery of order. The quality planning shall cover as minimum the following:

- Resources
- Product / deliverable characteristics to be controlled.
- Process characteristics to ensure the identified product characteristics are realized
- Identification of any measurement requirements, acceptance criteria
- Records to be generated
- Need for any documented procedure

The quality planning shall result into the quality assurance plan, inspection and test plans (ITPs) and job procedures for the project activities in the scope of bidder. These documents shall be submitted to EIL / Owner for review / approval, before commencement of work.

5.5 Requirements for sub-ordering of outsourced items / sub-contracting / purchasing of services specified in MR / contract / tender shall be adhered to. In general all outsourced items will be from approved vendors of EIL. Wherever requirements are not specified, or approved sub vendors do not exist, the sub-contractor shall establish and maintain a system for purchasing / sub-contracting to ensure that purchased product / service conforms to specified requirements in concurrence with EIL / Owner. Criteria for selection of sub-contractor, evaluation, re-evaluation, maintenance of purchasing data and verification of purchased product (sub-contractor services), constitute important components of this requirement.

5.6 BIDDER shall plan and carry production and service provision under controlled conditions. Controlled conditions shall include, as applicable

a) the availability of information that describes the characteristics of the product
b) the availability of work instructions
c) the use of suitable equipment
d) the availability and use of monitoring and measuring devices
e) the implementation of monitoring and measurement
f) the implementation of release, delivery and post-delivery activities

5.7 BIDDER shall validate any processes for production and service provision where resulting output cannot be verified by subsequent monitoring and measurement. This includes any process where deficiencies become apparent only after the product is in use or service has been delivered.

5.8 BIDDER shall establish a system for identification and traceability of product / deliverable throughout product realization. Product status with respect to inspection and testing requirements shall be identified.

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5.9 BIDDER shall identify, verify, protect and safeguard EIL / Owner property (material / document) provided for use or incorporation into the product. If any Owner / EIL property is lost, damaged or otherwise found to be unsuitable for use, this shall be reported to the EIL / Owner.

5.10 BIDDER shall ensure the conformity of product / deliverable during internal processing and delivery to the intended destination. Requirements mentioned in the MR/ tender shall be adhered to.

5.11 BIDDER shall establish system to ensure that inspection and testing activities are carried out in line with requirements. Where necessary, measuring equipment shall be calibrated at specified frequency, against national or international measurement standards; where no such standard exists, the basis used for calibration shall be recorded. The measuring equipment shall be protected from damage during handling, maintenance and storage.

5.12 BIDDER shall ensure effective monitoring, using suitable methods, of the processes involved in production and other related processes for delivery of the scope of contract.

5.13 BIDDER shall monitor and measure the characteristics of the product / deliverable to verify that product requirement has been met. The inspection (stage as well as final) by BIDDER and EIL / Owner personnel shall be carried out strictly as per the approved ITPs or ITPs forming part of the contract. Product release or service delivery shall not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by relevant authority and where applicable by Owner / EIL.

5.14 BIDDER shall establish and maintain a documented procedure to ensure that the product which does not conform to requirements is identified and controlled to prevent its unintended use or delivery

5.15 All non-conformities (NCs) / deficiencies found by the BIDDER'S inspection / surveillance staff shall be duly recorded, including their disposal action shall be recorded and resolved suitably. Effective corrective actions shall be implemented by the BIDDER so that similar NCs including deficiencies do not recur. The BIDDER shall take appropriate actions to address the Risks and Opportunities in the project.

5.16 All deficiencies noticed and reported by EIL / Owner shall be analyzed by the BIDDER and appropriate corrective actions shall be implemented. BIDDER shall intimate EIL / Owner of all such corrective action implemented by him.

5.17 BIDDER should follow the standards, specifications and approved drawings. Concessions / Deviations shall be allowed only in case of unavoidable circumstances. In such situations Concession / deviation request must be made by the BIDDER through online system of EIL eDMS. URL of EIL eDMS is http://edocx.eil.co.in/vportal.

5.18 BIDDER shall have documented procedure for control of documents.

5.19 All project records shall be carefully kept, maintained and protected for any damage or loss until the project completion, then handed over to EIL / Owner as per contract requirement (Refer Specification Nos. 6-78-0002 - Specification for Documentation Requirements from Contractors and 6-78-0003 - Specification for Documentation Requirements from Suppliers), or disposed as per relevant project procedure.

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6.0 AUDITS

BIDDER shall plan and carry out the QMS audit for the job. Quality audit programme shall cover design, procurement, construction management and commissioning as applicable including activities carried out by sub-vendors and sub-contractors. This shall be additional to the certification body surveillance audits carried out under BIDDER'S own ISO 9001 certification scheme.

The audit programmes and audit reports shall be available with bidder for scrutiny by EIL / Owner. EIL or Owner's representative reserves the right to attend, as a witness, any audit conducted during the execution of the WORKS.

In addition to above, EIL, Owner and third party appointed by EIL / Owner may also perform Quality and Technical compliance audits. BIDDER shall provide assistance and access to their systems and sub-contractor / vendor systems as required for this purpose. Any deficiencies noted shall be immediately rectified by BIDDER.

7.0 DOCUMENTATION REQUIREMENTS

BIDDER shall submit following QMS documents immediately after award of work (Within one week) for record / review by EIL / Owner/ TPIA, as applicable.

- Organization chart (for complete organization structure and for the project)
- Project Quality Plan / Quality Assurance Plan
- Job specific Inspection Test Plans, if not attached with PR
- Job Procedures
- Inspection / Test Formats

In addition to above QMS documents, following documentation shall be maintained by the BIDDER for submission to EIL / Owner on demand at any point of time during execution of the project.

- Quality Manual
- Certificate of approval for compliance to ISO: 9001 standard
- Procedure for Control of Non-conforming Product
- Procedure for Control of Documents
- Sample audit report of the QMS internal and external audits conducted during last one year
- Customer satisfaction reports from at least 2 customers,
- Project QMS audit report
- Technical audit reports for the project
- Corrective action report on the audits

Documents as specified above are minimum requirements. BIDDER shall submit any other document / data required for completion of the job as per EIL / Owner instructions.

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ANNEXURE-VIII TO SPECIAL CONDITIONS OF CONTRACT

KEY CONSTRUCTION EQUIPMENTS TO BE MOBILIZED BY THE CONTRACTOR DURING EXECUTION

KEY CONSTRUCTION EQUIPMENTS TO BE MOBILIZED BY THE CONTRACTOR DURING EXECUTION OF COMPOSITE WORKS -U & O PART-A (WEST SIDE) OF M/s BPCL BINA

PART A

(TENDER NO. B957-999-69-41-PK-T-9501)

SL. NO.	EQUIPMENT DESCRIPTION	CAPACITY	REQUIREMENT DURING CONSTN
1.	CRANE (CRAWLER MOUNTED)	250-300 MT	AS REQUIRED
2.	CRANE (CRAWLER MOUNTED)	150-200 MT	1
3.	CRANE (CRAWLER MOUNTED)	75-100 MT	1
4.	CRANE (TYRE MOUNTED WITH TELESCOPIC BOOM)	150-250 MT	2
5.	CRANE (TYRE MOUNTED WITH TELESCOPIC BOOM)	50-100 MT	2
6.	HYDRAULIC CRANE (MODEL NO: TRX Series- K10, F15 TRX 1651, TRXS 2319, MAC 1214, FX 120, FX150, 15XWE, 15XWF Rhino110 FC, ETC.) WITH AUDIO-VISUAL SIGNALLING DEVICES AND LIMIT SWITHES	10-18 MT	8
7.	TRACTOR TRAILER		2
8.	LOW BED TRAILOR		2
9.	BOOM LIFTS WITH MAN BASKET	24-36 MTR BOOM	5
10.	HYDRAULIC EXCAVATOR WITH REVERSE HORN AND REAR LIGHT/MIRROR WITH ROCK (SOFT AND HARD ROCK) BREAKING/ CHISELLING ATTACHMENT	0.7 M^3	AS REQUIRED
11.	HYDRAULIC EXCAVATOR WITH REVERSE HORN AND REAR LIGHT/MIRROR WITH ROCK (SOFT AND HARD ROCK) BREAKING/ CHISELLING ATTACHMENT	0.3 M^3	2
12.	DUMPER		1
13.	ROCK BODY DUMPER		1
14.	TRACTOR TRAILER WITH HYDRAULIC UNLOADING FACILITY		1
15.	STATIC/ VIBRO ROAD ROLLER		2
16.	READY MIXED CONCRETE (RMC) PLANT WITH TRANSIT MIXURE/ SUPPLIER	15-30 M3/ HR	1
17.	MIXURE MACHINE WITH WEIGH BATCHER		2
18.	NEEDLE VIBRATORS		2
19.	WATER TANKERS		2
20.	PLATE COMPACTOR		3
21.	DUMPY/ AUTO LEVEL		2
22.	BAR CUTTING & BENDING MACHINE		1
23.	TOOLS AND TACKLES REQUIRED FOR CENETRING & SHUTTERING WORKS AS PER SOR		AS REQUIRED
24.	TOOLS AND TACKLES REQUIRED FOR SHORING AND STRUTTING WORKS AS PER SOR		AS REQUIRED
25.	DG SET	(65-125 KVA)	AS REQUIRED
26.	AIR COMPRESSOR	125-250 CFM	4
27.	BLAST CLEANING EQPT. FOR SURFACE PREPARATION WITH DE-HUMIDIFIER		4
28.	AUTO-BLAST CLEANING EQPT. FOR SURFACE PREPARATION WITH DE-HUMIDIFIER		1
29.	SPRAY PAINTING M/C (AIRLESS)		6
30.	PROFILE GUAGE		2
31.	HYGROMETER FOR HUMIDITY MEASUREMENT		1
32.	ELCO METER		5
33.	VIBRATION LESS, SPARK-FREE DIAMOND WIRE SAW CUTTER		AS REQUIRED

34.	AUTOMATIC/SEMI AUTOMATIC WELDING MACHINE		1
35.	WELDING M/C		80
36.	TIG WELDING M/C		12
37.	GRINDING M/C		65
38.	AUTO BEVEL CUTTING M/C		2
39.	POWER HACKSAW		2
40.	GAS CUTTING SET		55
41.	PLAZMA CUTTING SET		1
42.	GAMMA RAY SOURCE FOR RADIOGRAPHY		1
43.	TOOL AND TACKLES FOR RADIOGRAPHY USING SAFE RADIATION (CLOSE PROXIMITY) TECHNIQUE		1
44.	X RAY SOURCE FOR RADIOGRAPHY	250AMP	2
45.	TOOLS, TACKLES AND ACCESSORIES FOR DIGITAL RADIOGRAPHY		1 SET
46.	ULTRASONIC TESTING M/C (PAUT&TOFD)		1
47.	S.R (PWHT) M/C WITH IN-BUILT RECORDER (MICROPROCESSOR BASED)		6
48.	PORTABLE HARDNESS TEST METER		1
49.	TOOLS AND TACKLES FOR MPT & DPT	SET	AS REQUIRED
50.	HYDRO-TEST PUMP (MOTORISED)		8
51.	WATER FILLING PUMP (SUITABLE CAPACITY)		4
52.	DEWATERING PUMP (SUITABLE CAPACITY)		AS REQUIRED
53.	PORTABLE ALLOY ANALYSER (PAA) WITH PRINTOUT FACILITY		1
54.	BOLT TENSIONER FOR ALL SIZES AS PER SOR		2 SET
55.	TORQUE WRENCH FOR BOLT TIGHTENING OF FLANGES	ALL SIZES	3 SET
56.	JACK HAMMER		2
57.	TOOLS AND TACKLES FOR GI PIPING WORKS AS PER SOR		AS REQUIRED
58.	TOOLS AND TACKLES FOR HOT INSULATION AS PER SOR	ALL SIZES	AS REQUIRED
59.	TOOLS AND TACKLES FOR COLD INSULATION AS PER SOR	ALL SIZES	AS REQUIRED
60.	TOOLS AND TACKLES FOR ELECTRIC HEAT TRACING SYSTEM WORKS AS PER SOR		AS REQUIRED
61.	SAFETY VALVE TEST JIG/BENCH		1
62.	TOOLS AND TACKLES FOR FIXING MECHANICAL /CHEMICAL ANCHOR FASTNER		AS REQUIRED
63.	TOOLS AND TACKLES FOR ROCK ANCHORS AS PER SOR		AS REQUIRED
64.	TOOLS AND TACKLES FOR CHEMICAL CLEANING/ PICKLING / DEGREASING/PASSIVATION AS PER SOR		AS REQUIRED
65.	TOOLS AND TACKLES FOR TAPE/HSS COATING		AS REQUIRED
66.	HOLIDAY TESTER ALL SIZE AS PER SOR		2 SET
67.	TOOLS AND TACKLES FOR TUBE CUTTING AND TUBE BENDING MACHINE		AS REQUIRED
68.	TOOLS AND TACKLES FOR FIXING RE-BARS IN ALREADY CAST CONCRETE AS PER SOR		AS REQUIRED
69.	TOOLS AND TACKLES FOR REBAR SCANNER/LOCATOR		AS REQUIRED
70.	TOOLS AND TACKLES FOR MAKING POCKETS/HOLES AS PER SOR		AS REQUIRED
71.	TRANSFORMER OIL FILTER M/C	500 LPH	1
72.	TRANSFORMER OIL BDV TEST KIT	UPTO 120 KV	1
73.	THERMOMETER (FOR CHECKING MOTOR TEMPERATURE)- LASER TYPE	0-4000 C	1
74.	RPM METER (FOR CHECKING MOTOR RPM)- LASER	UPTO 3000	1

	TYPE		
75.	VIBRATION METER (FOR CHECKING MOTOR VIBRATION)		1
76.	GREASE GUN –WITH ADJUSTABLE NEEDLE FOR VARIOUS SIZES		AS REQUIRED
77.	ROLLERS, MECHANSED CABLE PULLING		4
78.	LIFTING JACK, SHAFT SUITABLE FOR CABLE DRUM LIFTING	SET	4
79.	INSULATION RESISTANCE MEGGER	5KV, 2.5KV, 1KV & 500V	1 EACH
80.	3 TERMINAL EARTH TESTER		2
81.	DIGITAL MULTIMETER		2
82.	TONG TESTER	3000A,1000A,500A & 100A	2
83.	HV Hi-Pot KIT	60KV WITH 1Ma/ 10mA Leakage	1
84.	EARTH DISCHARGE ROD		1
85.	RELAY TESTING KIT		AS REQUIRED
86.	VARIACS (1 PHASE)	15 AMP	1
87.	VARIACS (3PHASE)	20 AMP	1
88.	DC CONTACT RESISTANCE (MV Drop) TEST KIT	100A	1
89.	LUX METER		1
90.	MANUAL CRIMPING TOOL		2 SET
91.	HYDRAULIC CRIMPING TOOL		2 SET
92.	PRIMARY & SECONDARY INJECTION KIT		1
93.	LEAKAGE CURRENT DETECTOR		1
94.	24V DC POWER SOURCE		1
95.	0-20 mA CURRENT SOURCE		1
96.	CAPACITANCE METER		AS REQUIRED
97.	PORTABLE DRILLING M/C AND HOLE CUTTER		1 SET
98.	PORTABLE FERRULE WRITING MACHINE		1
99.	TOOLS AND TACKLES FOR CALIBRATION AS PER SOR		AS REQUIRED
100.	ELECTICIAN TOOL KIT		AS REQUIRED
101.	INSTRUMENTATION TOOL KIT		AS REQUIRED
102.	LABORATORY EQPTS		AS REQUIRED
103.	LASER ALIGNMENT KIT		1

NOTES :

1. The details of key construction equipments in good working condition, required to be mobilized by the Contractor, to complete the work within the schedule. The actual deployment schedule of Construction Equipments shall be approved by Engineer-in-charge. Contractor shall augment the above list with additional numbers/categories/capacities of equipments, tools & tackles, as required and directed by Engineer-In charge to complete the work within the completion time schedule and quoted price.

2. Contractor to confirm that the above equipments are available with him in good working condition and shall be timely mobilized on this project site. Contractor has the option to hire some of these equipments form equipment-hiring agencies also.

3. Owner/EIL reserves the right to physically check & verify the availability of these equipments prior to award of work.

4. Contractor shall replace any defective/damaged equipments promptly to complete the work without any time & cost implication to the Owner/EIL.

5. Construction equipment identified above shall be mobilised by contractor as and when relevant activities are required to be carried out for completing the job within completion time schedule and as per direction of Engineer In-charge.

6. Instruments (as applicable) to be made available with valid calibration certificate, issued by NABL accredited laboratory.

(STAMP & SIGNATURE OF BIDDER)

KEY CONSTRUCTION EQUIPMENTS TO BE MOBILIZED BY THE CONTRACTOR DURING EXECUTION OF COMPOSITE WORKS - U & O PART-B (EAST SIDE+ BDT) OF M/S BPCL BINA

PART B

(TENDER NO. B957-999-69-41-PK-T-9501)

SL. NO.	EQUIPMENT DESCRIPTION	CAPACITY	REQUIREMENT DURING CONSTN
1.	CRANE (CRAWLER MOUNTED)	550-600 MT	1
2.	CRANE (CRAWLER MOUNTED)	250-300 MT	1
3.	CRANE (CRAWLER MOUNTED)	150-200 MT	1
4.	CRANE (CRAWLER MOUNTED)	75-100 MT	1
5.	CRANE (TYRE MOUNTED WITH TELESCOPIC BOOM)	150-250 MT	1
6.	CRANE (TYRE MOUNTED WITH TELESCOPIC BOOM)	50-100 MT	1
7.	HYDRAULIC CRANE (MODEL NO: TRX Series- K10, F15 TRX 1651, TRXS 2319, MAC 1214, FX 120, FX150, 15XWE, 15XWF Rhino110 FC, ETC.) WITH AUDIO-VISUAL SIGNALLING DEVICES AND LIMIT SWITHES	10-18 MT	5
8.	TRACTOR TRAILER		2
9.	LOW BED TRAILOR		2
10.	BOOM LIFTS WITH MAN BASKET	24-36 MTR BOOM	4
11.	HYDRAULIC EXCAVATOR WITH REVERSE HORN AND REAR LIGHT/MIRROR WITH ROCK (SOFT AND HARD ROCK) BREAKING/ CHISELLING ATTACHMENT	0.7 M^3	AS REQUIRED
12.	HYDRAULIC EXCAVATOR WITH REVERSE HORN AND REAR LIGHT/MIRROR WITH ROCK (SOFT AND HARD ROCK) BREAKING/ CHISELLING ATTACHMENT	0.3 M^3	2
13.	DUMPER		1
14.	ROCK BODY DUMPER		1
15.	TRACTOR TRAILER WITH HYDRAULIC UNLOADING FACILITY		1
16.	STATIC/ VIBRO ROAD ROLLER		2
17.	READY MIXED CONCRETE (RMC) PLANT WITH TRANSIT MIXURE/ SUPPLIER	15-30 M3/ HR	1
18.	MIXURE MACHINE WITH WEIGH BATCHER		2
19.	NEEDLE VIBRATORS		2
20.	WATER TANKERS		2
21.	PLATE COMPACTOR		2
22.	DUMPY/ AUTO LEVEL		2
23.	BAR CUTTING & BENDING MACHINE		1
24.	TOOLS AND TACKLES REQUIRED FOR CENETRING & SHUTTERING WORKS AS PER SOR		AS REQUIRED
25.	TOOLS AND TACKLES REQUIRED FOR SHORING AND STRUTTING WORKS AS PER SOR		AS REQUIRED
26.	DG SET	(65-125 KVA)	AS REQUIRED
27.	AIR COMPRESSOR	125-250 CFM	3
28.	BLAST CLEANING EQPT. FOR SURFACE PREPARATION WITH DE-HUMIDIFIER		3
29.	AUTO-BLAST CLEANING EQPT. FOR SURFACE PREPARATION WITH DE-HUMIDIFIER		1
30.	SPRAY PAINTING M/C (AIRLESS)		5
31.	PROFILE GUAGE		2
32.	HYGROMETER FOR HUMIDITY MEASUREMENT		1
33.	ELCO METER		4
34.	VIBRATION LESS, SPARK-FREE DIAMOND WIRE SAW		AS REQUIRED

	CUTTER		
35.	AUTOMATIC/SEMI AUTOMATIC WELDING MACHINE		1
36.	WELDING M/C		60
37.	TIG WELDING M/C		10
38.	GRINDING M/C		55
39.	AUTO BEVEL CUTTING M/C		2
40.	POWER HACKSAW		2
41.	GAS CUTTING SET		50
42.	PLAZMA CUTTING SET		1
43.	GAMMA RAY SOURCE FOR RADIOGRAPHY		1
44.	TOOL AND TACKLES FOR RADIOGRAPHY USING SAFE RADIATION (CLOSE PROXIMITY) TECHNIQUE		1
45.	X RAY SOURCE FOR RADIOGRAPHY	250AMP	2
46.	TOOLS, TACKLES AND ACCESSORIES FOR DIGITAL RADIOGRAPHY		1 SET
47.	ULTRASONIC TESTING M/C (PAUT&TOFD)		1
48.	S.R (PWHT) M/C WITH IN-BUILT RECORDER (MICROPROCESSOR BASED)		4
49.	PORTABLE HARDNESS TEST METER		1
50.	TOOLS AND TACKLES FOR MPT & DPT	SET	AS REQUIRED
51.	HYDRO-TEST PUMP (MOTORISED)		6
52.	WATER FILLING PUMP (SUITABLE CAPACITY)		4
53.	DEWATERING PUMP (SUITABLE CAPACITY)		AS REQUIRED
54.	PORTABLE ALLOY ANALYSER (PAA) WITH PRINTOUT FACILITY		1
55.	BOLT TENSIONER FOR ALL SIZES AS PER SOR		2 SET
56.	TORQUE WRENCH FOR BOLT TIGHTENING OF FLANGES	ALL SIZES	3 SET
57.	JACK HAMMER		2
58.	TOOLS AND TACKLES FOR GI PIPING WORKS AS PER SOR		AS REQUIRED
59.	TOOLS AND TACKLES FOR HOT INSULATION AS PER SOR	ALL SIZES	AS REQUIRED
60.	TOOLS AND TACKLES FOR COLD INSULATION AS PER SOR	ALL SIZES	AS REQUIRED
61.	TOOLS AND TACKLES FOR ELECTRIC HEAT TRACING SYSTEM WORKS AS PER SOR		AS REQUIRED
62.	SAFETY VALVE TEST JIG/BENCH		1
63.	TOOLS AND TACKLES FOR FIXING MECHANICAL /CHEMICAL ANCHOR FASTNER		AS REQUIRED
64.	TOOLS AND TACKLES FOR ROCK ANCHORS AS PER SOR		AS REQUIRED
65.	TOOLS AND TACKLES FOR CHEMICAL CLEANING/ PICKLING / DEGREASING/PASSIVATION AS PER SOR		AS REQUIRED
66.	TOOLS AND TACKLES FOR TAPE/HSS COATING		AS REQUIRED
67.	HOLIDAY TESTER ALL SIZE AS PER SOR		1 SET
68.	TOOLS AND TACKLES FOR TUBE CUTTING AND TUBE BENDING MACHINE		AS REQUIRED
69.	TOOLS AND TACKLES FOR FIXING RE-BARS IN ALREADY CAST CONCRETE AS PER SOR		AS REQUIRED
70.	TOOLS AND TACKLES FOR REBAR SCANNER/LOCATOR		AS REQUIRED
71.	TOOLS AND TACKLES FOR MAKING POCKETS/HOLES AS PER SOR		AS REQUIRED
72.	TRANSFORMER OIL FILTER M/C	500 LPH	1
73.	TRANSFORMER OIL BDV TEST KIT	UPTO 120 KV	1
74.	THERMOMETER (FOR CHECKING MOTOR TEMPERATURE)- LASER TYPE	0-4000 C	1

75.	RPM METER (FOR CHECKING MOTOR RPM)- LASER TYPE	UPTO 3000	1
76.	VIBRATION METER (FOR CHECKING MOTOR VIBRATION)		1
77.	GREASE GUN –WITH ADJUSTABLE NEEDLE FOR VARIOUS SIZES		AS REQUIRED
78.	ROLLERS, MECHANSED CABLE PULLING		3
79.	LIFTING JACK, SHAFT SUITABLE FOR CABLE DRUM LIFTING	SET	3
80.	INSULATION RESISTANCE MEGGER	5KV, 2.5KV, 1KV & 500V	1 EACH
81.	3 TERMINAL EARTH TESTER		2
82.	DIGITAL MULTIMETER		2
83.	TONG TESTER	3000A,1000A,500A & 100A	2
84.	HV Hi-Pot KIT	60KV WITH 1Ma/ 10mA Leakage	1
85.	EARTH DISCHARGE ROD		1
86.	RELAY TESTING KIT		AS REQUIRED
87.	VARIACS (1 PHASE)	15 AMP	1
88.	VARIACS (3PHASE)	20 AMP	1
89.	DC CONTACT RESISTANCE (MV Drop) TEST KIT	100A	1
90.	LUX METER		1
91.	MANUAL CRIMPING TOOL		2 SET
92.	HYDRAULIC CRIMPING TOOL		2 SET
93.	PRIMARY & SECONDARY INJECTION KIT		1
94.	LEAKAGE CURRENT DETECTOR		1
95.	24V DC POWER SOURCE		1
96.	0-20 mA CURRENT SOURCE		1
97.	CAPACITANCE METER		AS REQUIRED
98.	PORTABLE DRILLING M/C AND HOLE CUTTER		1 SET
99.	PORTABLE FERRULE WRITING MACHINE		1
100.	TOOLS AND TACKLES FOR CALIBRATION AS PER SOR		AS REQUIRED
101.	ELECTICIAN TOOL KIT		AS REQUIRED
102.	INSTRUMENTATION TOOL KIT		AS REQUIRED
103.	LABORATORY EQPTS		AS REQUIRED
104.	LASER ALIGNMENT KIT		1

NOTES :

1. The details of key construction equipments in good working condition, required to be mobilized by the Contractor, to complete the work within the schedule. The actual deployment schedule of Construction Equipments shall be approved by Engineer-in-charge. Contractor shall augment the above list with additional numbers/categories/capacities of equipments, tools & tackles, as required and directed by Engineer-In charge to complete the work within the completion time schedule and quoted price.

2. Contractor to confirm that the above equipments are available with him in good working condition and shall be timely mobilized on this project site. Contractor has the option to hire some of these equipments form equipment-hiring agencies also.

3. Owner/EIL reserves the right to physically check & verify the availability of these equipments prior to award of work.

4. Contractor shall replace any defective/damaged equipments promptly to complete the work without any time & cost implication to the Owner/EIL.

5. Construction equipment identified above shall be mobilised by contractor as and when relevant activities are required to be carried out for completing the job within completion time schedule and as per direction of Engineer In-charge.

6. Instruments (as applicable) to be made available with valid calibration certificate, issued by NABL accredited laboratory.

(STAMP & SIGNATURE OF BIDDER)

BINA PETCHEM AND REFINERY EXPANSION PROJECT(BPREP)

ANNEXURE-IX TO SPECIAL CONDITIONS OF CONTRACT

CALIBRATION REQUIREMENT OF MONITORING AND MEASURING DEVICES AT CONSTRUCTION SITE

निर्माण स्थलों पर निगरानी और मापने के उपकरणों की आंशांकन आवश्यकताएँ

CALIBRATION REQUIREMENTS OF MONITORING AND MEASURING DEVICES AT CONSTRUCTION SITES

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
					Approved by	
2	25.07.2025	Revised & Updated	DK	SBB	KS	MN
1	02.07.2020	Revised & Updated	DG	RK	AKK	SKS
0	28.04.2015	Doc. No. 9-1940-0030 Rev 0 has been issued as Standard	DJ	SNB	MD	SC

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Abbreviations:

BIS	:	Bureau of Indian Standard
NABL	:	National Accreditation Board for Testing and Calibration Laboratories
CEIL	:	Certification Engineers International Ltd.
LRS	:	Llyod's Register Group Limited
BV	:	Bureau Veritas
ABS	:	ABS Consultancy
DNV	:	Det Norske Veritas
IRS	:	Indian Registrar for Shipping
PMI	:	Positive Material Identification

Construction Standards Committee

Convenor : Sh. K. Swaminathan HOD (Construction)

Members : Sh. DSN Murthy, ED (Projects)
Sh. Udayan Chakravarty, CGM (Piping)
Sh. SB Burman, Sr. GM (Construction)
Sh. Abhijit Chakraborty, GM (Construction)
Sh. Pankaj Kumar Rai, DGM (Construction)
Sh. S. Padmanathan, DGM (SCM)
Sh. Dhananjay, AGM (Construction)

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1.0 SCOPE

The standard covers the calibration requirement of monitoring & measuring devices used by construction contractor during implementation of construction works under their scope.

2.0 Requirement for control of monitoring and measuring devices.

Sl. No.	Description	Calibration requirements	Frequency	Remarks
A.	**Civil-Survey**			
A.1.	Theodolite	To check for permanent adjustments by traversing and observing the closing error. (Refer Note).	Once in a year or project duration whichever is earlier.	Record to be maintained
A.2.	Level Instruments (Auto Level / Dumply Level)	To check by backsight / foresight readings, the temporary adjustments of level. (Refer Note).	Every use.	Record to be maintained
A.3.	Steel measurement tapes	----	----	a. "Freemans" make or BIS approved make shall be used. b. Mutilated, or broken tapes shall not be used. c. Marking on the tape shall be legible.
A.4.	Cross staff	---	---	Same as 3b & 3c above.
A.5.	Distomat	Actual Physical Verification at Site.	Before using first time at site.	Records to be maintained.
A.6.	Total Station	To check for permanent adjustments by traversing and observing the closing error, etc. (Refer Note).	Once in a year or project duration whichever is earlier.	Record to be maintained
B.	**Civil Laboratory**			
B.1.	All balances - Mechanical	Check for zero error	Whenever used.	---
B.2.	Weigh Batcher / Batching Plant	Calibration of scales	Once in three Months.	Records to be maintained.
B.3.	Cube testing machine	Calibration certificate from manufacturers or from calibrating laboratories / agency. (Refer Note).	As per manufacturer specification or once a year whichever is earlier	Records to be maintained.
B.4.	Moisture Meter	Calibration of scales .	6 months.	Records to be maintained.
B.5	Vicat Appratus	Calibration certificate from manufacturers or from calibrating laboratories / agency. (Refer Note).	As per manufacturer specification or once a year whichever is earlier.	Records to be maintained.

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Sl. No.	Description	Calibration requirements	Frequency	Remarks
C.	**Mechanical/ Electrical/Welding**			
C.1	Pressure gauges/ Pressure Safety valve/ Pressure relief valve	Calibration certificate from calibrating laboratories / agencies or calibrate by dead weight testers with standard weights or with master Gauge. (Refer Note)	Once in 6 months	Records to be maintained.
C.2	Dial gauges	Check for Zero error.	Whenever used	---
C.3	Dead weight tester	Calibration from manufacturer or calibrating laboratories / agency. Calibration certificate shall not be older than one month from the date of mobilization. (Refer Note).	As per manufacturer's recommendation or once in a six month whichever is earlier.	Records (Calibration certificate) to be maintained.
C.4	Vernier caliper / screw gauge	Check for Zero error.	Whenever used.	---
C.5	Holiday tester	Calibration from manufacturer or calibrating laboratories / agency or calibration by zeep meter. (Refer Note).	Once in 6 months.	Records to be maintained.
C.6	Elcometer	Check with standard test films supplied by the manufactures.	Before use.	Records to be maintained.
C.7	Universal Testing machine	Calibration Certificate from various third-party inspection agency. Viz. CEIL, LRS, BV, ABS, DNV or IRS etc.	As per manufacturer's recommendation or once a year whichever is earlier.	Records to be maintained.
C.8	Charpy V-notch Impact testing machine.	Calibration Certificate from various third party inspection agency. Viz. CEIL, LRS, BV, ABS, DNV or IRS etc.	As per manufacturer's recommendation or once in a year whichever is earlier.	Records to be maintained.
C.9	Hardness Testing machine.	Check with the standard test block supplied with the machine as per manufacturer's Recommendation.	Before use.	Records to be maintained.
C.10	Chemical Analysis, ex : PMI etc.	Check with the standard samples.	Before use.	Records to be maintained.
C.11	Various Digital and Analog meters.	Calibration Certificate from calibrating laboratories / agencies or the Manufacturer (Refer Note).	Once in Six Months or as per manufacturer's recommendation whichever is earlier.	Records to be maintained.

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Sl. No.	Description	Calibration requirements	Frequency	Remarks
C.12	HIPOT Kit, Multimeter/ Clampmeter, Ohmicron Kit, CT Analyser, CRM Kit, BDV Kit, Tachometer etc.	Calibration Certificate from calibrating laboratories / agencies (Refer Note).	Once in Six months.	Records to be maintained.
C.13	Temperature / Pressure recorders	Calibration from manufacturer or any calibrating laboratories / agency (Refer Note).	Once in Six months.	Records to be maintained
C.14	Temperature gauges	Calibration Certificate from calibrating laboratories / agencies (Refer Note).	Once in Six months.	To be discarded in case of damage or malfunctioning.
C.15	Thermocouples	Manufacturer's Certificate or Chemical Check	---	---
C.16	Vibration probes	Calibration from calibrating laboratories / agencies (Refer Note).	Once in a year.	To be discarded in case of damage or Malfunctioning.
C.17	Decibel-Meter	Calibration from calibrating laboratories / agencies (Refer Note).	Once in a year.	To be discarded in case of damage or Malfunctioning.
C.18	Manual Torque Wrench / Electric Torque Machine	Calibration from manufacturer or any calibrating laboratories / agency (Refer Note).	As per manufacturer's recommendation or once in a year whichever is earlier.	Records to be maintained
C.19	Mother Oven	Calibration from manufacturer or any calibrating laboratories / agency (Refer Note).	As per manufacturer's recommendation or once in a year whichever is earlier.	Records to be maintained.

Note: If an instrument is out of acceptance limit as per instrument data sheet, it has to be sent to manufacturers or their authorized agents (Calibrating laboratories/ agency) or to any other lab/ agency for recalibration/ rectification and certification. The calibrating laboratory/ agency shall be NABL accredited or any other lab accredited as per ISO/IEC:17025 by any of the National/ International accreditation body for relevant testing.

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ANNEXURE-X TO SPECIAL CONDITIONS OF CONTRACT

CONDITIONS FOR ISSUE AND RECONCILIATION OF MATERIALS

सामग्री निर्गम एवं रिकोन्सिलिएशन के लिए शर्तें

CONDITIONS FOR ISSUE AND RECONCILIATION OF MATERIALS

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
					Approved by	
3	30.04.2024	Revised & Updated	DK	AC	RKS	MN
2	12.03.2019	Revised & Updated	SKG	AP	AKK	RKT
1	24.01.2014	Reaffirmed & Issued as Standard	SM	DJ	RKD	SC
0	21.05.2008	Doc. No. 6-10-0001 Rev 0 has been revised and issued as Standard	AS	GKI	SCB	VC

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Abbreviations:

MS	:	Mild Steel
OFC	:	Optical Fibre Cable
OTDR	:	Optical Time Domain Report
FIM	:	Free Issue Material

Convenor: Sh. R K Singh, ED (Construction)

Members:
Sh. D S N Murthy, GGM (Projects)
Sh. Chinmoy Kapuria, CGM (SCM)
Sh. Udayan Chakravarty, CGM (Piping)
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1.0 CONDITIONS FOR ISSUE OF MATERIALS

Whenever any material is issued as FIM by EIL/Owner, following conditions for issue of material in addition to other conditions specified in the contract shall be applicable:

1.1 Necessary indents shall be raised by the Contractor as per procedure laid down by the Engineer-in-Charge from time to time, when the materials are required for incorporation in permanent works.

1.2 Materials shall be issued only for permanent works and not for temporary works, enabling works etc. unless specifically approved by the Engineer-in-Charge.

1.3 The Contractor shall bear all other cost including lifting, carting from issue points to work site/Contractor's store, custody and handling etc. and return of surplus/serviceable scrap materials to Owner's storage points to be designated by the Engineer-in-Charge. No separate payment for such expenditure shall be made.

1.4 No material shall be allowed to be taken outside the plant without a gate pass.

1.5 The Contractor shall be responsible for proper storage, preservation and watch & ward of the materials.

2.0 RETURN OF UNUSED MATERIAL/ SCRAP

2.1 All unused/scrap materials shall be the property of the Owner and shall be returned in good and acceptable condition category wise by the Contractor at his own cost to Owner's Store(s).

2.2 No credit shall be given to the Contractor for return of scrap. The Contractor should quote the rates accordingly. Contractor shall make his own arrangements for weighing the cut offs to be returned to Owner's stores.

2.3 In case the Contractor fails to return unused materials/ accountable scrap, then recovery for such quantity of materials, not returned by the Contractor shall be affected at following penal rates from the Contractor's bills or from any other dues of the Contractor to the Owner:

S. No.	Material		Penal Rates
1.	(a)	Penal rate for non return of accountable scrap	Issue Rate + 25% or Landed Rate + 25% (in case issue rate are not indicated in the contract)
	(b)	Penal rate for return of serviceable materials in excess of permitted % allowances	
	(c)	Penal rate for issuance of unplanned OFC jointing kits	
2.	(a)	Penal rates for non return of Unused material and or penal rate for generating scrap in excess of permitted % allowances	Twice the Issue Rates or Twice the Landed Rates (in case Issue Rates are not indicated in the Contract)
	(b)	Penal rate for using excess amount of materials like cement than permitted % allowances	

NOTE : 1) Landed Rate shall be arrived from the latest Purchase Order of respective material received at site by Owner/EIL.

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2) In case more stringent penal rates have been indicated elsewhere in the Contract (based on Project requirement), the same shall supersede the above rates.

3.0 CEMENT

In all cases where cement is FIM and supplied by EIL/owner, following methodology shall be adopted for issue & reconciliation -

3.1 Cement as received from cement Manufacturer/Stockists shall be issued to the Contractor. The theoretical weight of cement in each bag for issue purpose shall be considered as 50 Kg or 20 bags per MT. However, cement bags weighing upto 4% less shall be accepted by the Contractors and charged for as full bag.

3.2 The Contractor is required to submit the design mix for different grades of concrete, keeping in view the requirements stipulated in IS:456 and IS 10262, specifically regarding durability, slump and water cement ratio and specific gravity of materials brought to site as analyzed in the laboratories. The design shall be based upon absolute volume method and theoretical consumption of cement shall be worked out on this basis. For other than concrete items, the coefficients for consumption of cement shall be adopted as per CPWD practice.

3.3 The permissible variation between Cement actually used on the job and theoretical consumption worked out on the basis stipulated in above para 3.2 and as determined by Engineer-in-Charge shall be 3% (Three percent only).

If the actual consumption is more than 103% of the theoretical consumption, then recovery at the penal rates for the quantity of cement beyond the limit of 103% of theoretical consumption shall be affected as per clause 2.3 above.

3.4 Unused quantity of cement shall be returned by the Contractor to the Owner's stores in good condition only.

3.5 The Contractor shall maintain a good store for storing cement issued to him. The flooring of the storage house, the clearances of cement bags from the side walls/ floor & stack height etc. shall be as instructed by the Engineer-in-Charge.

3.6 The contractor shall maintain a Cement Register in prescribed format and update the entries on daily basis.

3.7 The cement store shall be offered for inspection and verification by the Engineer-in-Charge or his authorized representative at any time when the Engineer-in-Charge feels the need to do so.

3.8 Empty cement bags shall be the property of the Contractor and shall have to be disposed off by him.

4.0 REINFORCEMENT STEEL BARS / STRUCTURAL STEEL / PLATES

In all cases where Reinforcement Steel Bars/ Structural Steel/ Plates is FIM and supplied by EIL/owner, following methodology shall be adopted for issue & reconciliation -

4.1 The scrap allowance for the reinforcement bars/structural steel including steel plate issued by the Owner, shall be total 3% (2.5% accountable and 0.5% unaccountable) of the actual consumption as incorporated in the works.

4.2 All serviceable reinforcement bars/structural steel/steel plates shall be issued in available length/shapes/sizes and no claims for extra payment on account of issue of non-standard

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lengths/shapes/sizes and bending etc. shall be entertained. Reinforcement bars and structural steel shall be issued on weighment basis as per normal warehousing practice. In exceptional circumstances, the reinforcement bars/ structural steel, if issued on linear measurement, the IS coefficients for unit weight shall be considered. For the purpose of billing and accounting, only linear measurements shall be taken and weight shall be calculated as per IS coefficients in three decimals. The difference in unit weight as per IS and actual as issued, if any, shall be to Contractor's account and Contractor is deemed to have considered the same at the time of bidding.

4.3 Reinforcement bars/structural steel/steel plates shall be issued only for those items where Owner's supply has been specifically mentioned in Schedule of Rates/ Scope of Supply. The storage of these items shall be done in such a way so as to avoid rusting/ damage to any kind to the materials.

4.4 All reinforcement bars/structural steel (except M.S. Plates) in length of 2 meters and above shall be considered as serviceable materials provided the material is in good and acceptable condition. Reinforcement bars/structural steel section (except M.S. Plates) in lengths less than 2M shall be treated as scrap.

The contractor shall strive to avoid generation of cut pieces of length 2m and above, as far as practicable, by effectively planning & executing the construction works.

4.5 For the purpose of accounting of the plates, all plates measuring not less than 1 Sq.m in area and having any dimensions not less than 200mm when returned to Owner's store, shall be considered as serviceable material. All other pieces shall be treated as wastage/scrap. The Contractor shall prepare a plate cutting diagram in such a way that the minimum scrap is generated. Also the cut plates should be used at proper places to reduce the scrap.

4.6 The serviceable cut pieces as mentioned in 4.4 & 4.5 above shall be considered as unused material for reconciliation purpose.

4.7 Material appropriation shall be done and wherever applicable, the recovery at penal rates as per clause 2.3 above shall be affected from the contractor.

5.0 PIPING MATERIALS

In all cases where Piping Materials e.g. Pipes and Pipe fittings are FIM and supplied by EIL/owner, following methodology shall be adopted for issue & reconciliation -

5.1 All serviceable pipes shall be issued in available lengths/shapes and no claims for extra payments on account of issue of non-standard length & shape shall be entertained. Pipes shall be issued on linear measurement basis. All valves, flanges, fittings etc. shall be issued on number(s) basis. Contractor shall store the materials in such a way so as to avoid mixing of different types of material and shall maintain complete identification and traceability at all times.

5.2 The scrap allowance for pipes issued by the Owner shall be 3% (2.5% accountable + 0.5% unaccountable) of the actual consumption as incorporated in the works.

5.3 All pipes in length of 2 meters and above shall be considered as serviceable material provided the material is in good and acceptable condition and has clear identification and traceability (Manufacturer's name, heat number/batch number and test certificates). Pipes in lengths less than 2M shall be treated as scrap.

The contractor shall strive to avoid generation of cut pieces of length 2m and above, as far as practicable, by effectively planning & executing the construction works.

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5.4 All unused/scrap pipes, valves, flanges, forged fittings like elbows, reducers tees shall be returned by the Contractor category wise duly cleaned, greased and spec. marked at his own cost to Owner's stores.

5.5 Material appropriation shall be done and wherever applicable, the recovery at penal rates as per clause 2.3 above shall be affected from the contractor.

6.0 EQUIPMENTS/ INSTRUMENTS

In all cases where Equipments/ Instruments are FIM and supplied by EIL/owner, following methodology shall be adopted for issue & reconciliation -

Various equipment/materials intended for the installation shall be received by Owner in unpacked, skid mounted, crated, packed or loose condition and shall be stored in the warehouses and open yards. In general, materials shall be issued to the Contractor in 'as received' condition. It shall be the Contractor's responsibility to draw, load and transport all materials from Owner's designated places of issue to the point of installation and return all packing materials like steel frames, wooden boxes/scrap etc. to Owner's stores.

All materials supplied by the Owner shall be duly protected by the Contractor at his own cost with appropriate preservative like primer, lacquer coating, grease etc. as required.

7.0 CABLES

In all cases where Cables are FIM and supplied by EIL/owner, following methodology shall be adopted for issue & appropriation /reconciliation -

~~Appropriation of cables shall be done as follows:~~

7.1 All the surplus and serviceable cables out of the cables quantity(ies) issued by the Owner to the Contractor shall be returned by the Contractor to the Owner's store in good condition and as directed by the Engineer-in-Charge.

7.2 The Contractor shall be allowed a cutting/wastage allowance (accountable scrap) of 1.5% for power cables and 3% for the control cables. This cutting/wastage allowance shall be computed on the length of cables actually laid, measured and accepted.

7.3 All cables being returned to store should carry Aluminium sheet tags indicating the size & type of cable. Cables of less than 15 meters length shall be termed as scrap. Cables of lengths 15M and above shall be termed as serviceable material & shall be returned size wise and category wise to the Owner's store in wooden drums. Cables of serviceable length being returned to stores in drum(s) shall be accepted only after Megger value continuity test and physical measurement is carried out by the Contractor to the satisfaction of Engineer-in-Charge. Empty cable drums and major packing material (as decided by Engineer-in-charge) shall be Owner's property and shall be returned to Owner's Store/designated place without any additional cost.

The contractor shall strive to avoid generation of cut pieces of length 15m and above, as far as practicable, by effectively planning & executing the construction works.

7.4 While carrying out material appropriation with the Contractor, the above points shall be taken into account. All serviceable materials returned by the Contractor (size wise & category wise) shall be deducted from the quantity(ies) issued to the Contractor for the respective sizes. Scrap generated for power cable and control cable shall also be returned to Owner's store on

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Lot basis. Wherever applicable, the recovery at penal rates as per clause 2.3 above shall be affected from the contractor.

8.0 LINE PIPES

In all cases where Line Pipes are FIM and supplied by EIL/owner, following methodology shall be adopted for issue & appropriation /reconciliation -

8.1 All bare/ coated line pipes as per Line Pipe specifications shall be issued on linear measurement basis. The serviceable line pipes shall be issued in available lengths and shapes and no claim for extra payment on account of issue of non-standard length and shape shall be entertained. Contractor shall store and maintain the line pipes in proper manner to avoid mixing of different classes of pipes. Contractor shall maintain complete identification and traceability at all times. All cut pieces when returned to Owner's storage points after beveling, shall be considered as serviceable material provided:

a) Corrosion Protection Coating is intact.

b) Pipe pieces have pipe specifications, manufacturer's logo/name and heat number duly authenticated with hard stamp of the authorized inspector as per approved procedure.

All cut pieces of pipes measuring less than 2 M shall be treated as wastage/scrap.

The contractor shall strive to avoid generation of cut pieces of length 2m and above, as far as practicable, by effectively planning & executing the construction works.

8.2 For the purpose of accounting of bare/ coated line pipes, following allowances shall be permitted:

a)	Unaccountable wastage	
	- upto 100 Km	0.1%
	- 101 to 500 Km	0.07%
	- beyond 500 Km	0.05%
b)	Scrap (All cut pieces of pipes measuring less than 2 Meter)	0.25%
c)	Serviceable materials (All cut pieces of pipe measuring 2 Meter and above)	0.5%

The percentage allowance shall be accounted on the basis of pipe book chainage for main pipeline.

8.3 Material appropriation shall be done and wherever applicable, the recovery at penal rates as per clause 2.3 above shall be affected from the contractor.

9.0 OPTICAL FIBRE CABLE

In all cases where OFC is FIM and supplied by EIL/owner, following methodology shall be adopted for issue & appropriation /reconciliation -

9.1 For the purpose of accounting of optical fibre cable, all cut pieces measuring in length of 40 m and above when returned to Owner's storage points shall be treated as serviceable materials. All cut pieces of cable measuring less than 40 M shall be treated as scrap.

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For the purpose of accounting of OFC (Optical Fibre Cable) following allowances shall be permitted:

a)	Unaccountable wastage	0.5%
b)	Scrap (All cut pieces of cables measuring less than 40 M)	0.25%
c)	Serviceable material (measuring 40m to 750m)	0.25%

The percentage allowance shall be accounted on the basis of pipe book chainage for main pipeline.

Cables returned in original drum (measuring 750m and above) with Optical Time Domain Report (OTDR) shall be considered as unused material.

9.2 The contractor shall strive to avoid generation of cut pieces of length 40m and above, as far as practicable, by effectively planning & executing the construction works.

9.3 Material appropriation shall be done and wherever applicable, the recovery at penal rates as per clause 2.3 above shall be affected from the contractor.

10.0 OFC JOINTING KITS

The Contractor shall make a schedule for use of Cable jointing kits and get the same approved from Engineer-in-charge. The quantity mentioned in this schedule shall be termed as 'planned' usage quantity which shall be issued to the Contractor. However, any jointing based on site requirements as decided by Engineer-in-charge shall be included in planned quantity.

Any unplanned jointing required to be carried out by the Contractor due to reasons not attributable to Owner/EIL shall be issued from spare quantity, if available with Owner. Such unplanned OFC Jointing Kits shall be charged from the contractor at penal rates as per clause 2.3 above.

11.0 RECONCILLATION OF MATERIALS

While submission of RA Bills, Contractor shall submit material reconciliation report along with each RA bill.

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ANNEXURE-XI TO SPECIAL CONDITIONS OF CONTRACT

SPECIFICATION FOR DOCUMENTATION REQUIREMENTS FROM CONTRACTORS

AND

SPECIFICATION FOR DOCUMENTATION REQUIREMENTS FROM SUPPLIERS

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SPECIFICATION FOR DOCUMENTATION REQUIREMENTS FROM CONTRACTORS

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convener	Standards Bureau Chairman
					Approved by	
2	12.06..20	General Revision	QMS Standards Committee	QMS Standards Committee	SKB	SKS
1	12.03.15	General Revision	QMS Standards Committee	QMS Standards Committee	MPJ	SC
0	04.06.09	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND

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Abbreviations:

DCI	-	Document Control Index
FOA	-	Fax of Acceptance
IC	-	Inspection Certificate
IRN	-	Inspection Release Note
ITP	-	Inspection and Test Plan
LOA	-	Letter of Acceptance
QMS	-	Quality Management System
URL	-	Universal Resource Locator
V Portal	-	Vendor Portal

QMS Standards Committee

Convener: Mr. S.K. Badlani

Members:
Mr. Sanjay Mazumdar (Engg.)
Mr. R.K. Singh (SCM)
Mr. B. Biswas (SCM)
Mr. Ravindra Kumar (Const.)
Mr. Vinod Kumar (CQA)
Mr. Swapnil Vaishnav (Projects)

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Attachments

Format for completeness of Final Documentation : Format No. 3-78-0004

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1.0 SCOPE

This specification establishes the Documentation Requirements from Contractors

All documents / data against the Tender / Contract shall be developed and submitted to EIL / Owner by the contractor for review / records, in line with this specification.

2.0 DEFINITIONS

2.1 Contractor

For the purpose of this specification, the word "CONTRACTOR" means the person(s), firm, company or organization who has entered into a contract with EIL / Owner for delivery of some products and services. The word is considered synonymous to bidder, supplier or vendor.

2.2 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

6-78-0001	Specification for Quality Management System Requirements from Bidders

4.0 DOCUMENTATION AND DATA REQUIREMENTS

4.1 Order Acknowledgement and Assigning Project Manager

After placement of order, Contractor shall acknowledge order through V-Portal within 7 days of receipt of FOA / PO. Contractor shall assign a Project Manager for that order though online portal and provide requisite details. Project Manager details shall include e-mail address, mailing address, mobile / telephone nos., fax nos. and name of Project Manager. All the system generated emails pertaining to that order shall be sent to the assigned Project Manager.

4.2 Documents / Data to be submitted by the Contractor

4.2.1 The contractor shall submit the documents and data against the Tender / Contract as per the list specified in respective Tender / Contract.

4.2.2 Review of the contractor drawings / Documents by EIL would be only to review the compatibility with basic designs and concepts and in no way absolve the contractor of his responsibility / contractual obligation to comply with Tender / Contract requirements, applicable codes, specifications and statutory rules / regulations. Any error / deficiency noticed during any stage of manufacturing / execution / inspection / installation shall be promptly corrected by the contractor without any extra cost or time, whether or not comments on the same were received from EIL during the drawing review / inspection stage.

4.2.3 Unless otherwise specified, submission of documents for Review / Records shall commence as follows from the date of Fax of Intent / Letter of Intent/ Fax of Acceptance (FOA) / Letter of Acceptance (LOA):

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QMS	- 1 week
Document Control Index	- 2 weeks
Other Documents/Drawings	- As per approved Document Control Index

4.2.4 Documents as specified in Tender / Contract are minimum requirements. Contractor shall submit any other document / data required for completion of the job as per EIL / Owner instructions.

4.3 Style and Formatting

4.3.1 All Documents shall be in ENGLISH language and in M.K.S System of units.

4.3.2 Before submitting the drawings and documents, contractor shall ensure that the following information are properly entered in each drawing:

Tender Number
Name of Equipment / Package
Equipment / Package Tag No.
Name of Project
Owner
Main Contractor (if work is sub-contracted)
Drawing / Document Title
Drawing / Document No.
Drawing / Document Revision No. and Date

4.4 Review and Approval of Documents by Contractor

4.4.1 The Drawing / Documents shall be reviewed, checked, approved and duly signed / stamped by contractor before submission. Revision number shall be changed during submission of the revised contractor documents and all revisions shall be highlighted by clouds. Whenever the contractor require any sub- contractor drawings to be reviewed by EIL, the same shall be submitted by the contractor duly reviewed, approved and stamped by the contractor. Direct submission of sub- contractor's drawings without contractor's approval shall not be entertained.

4.5 Document Category

4.5.1 **Review Category**

Following review codes shall be used for review of contractor Drawings / Documents:

Review Code 1	-	No comments. Proceed with Manufacture / Fabrication / Construction as per the document.
Review Code 2	-	Proceed with Manufacture / Fabrication / Construction as per commented document. Revised document required.
Review Code 3	-	Document does not conform to basic requirements as marked. Resubmit for review.
R	-	Document is retained for Records. Proceed with Manufacturing / fabrication as per Tender/ Contract Requirement.
V	-	Void

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4.6 Methodology for Submission of Documents to EIL / Owner

4.6.1 Document Control Index (DCI)

Contractor shall create and submit Document Control Index (DCI) for review based on PO / PR / MR along with schedule date of submission of each drawing / document on EIL Vendor Portal. The DCI shall be specific with regard to drawing / document no. and the exact title. Proper sequencing of the drawings / documents should be ensured in schedule date of submission.

4.6.2 Submission of Drawings / Documents / Data

Drawings / documents, data and DCI shall be uploaded on the EIL Vendor Portal. The detail guidelines for uploading documents on EIL Vendor Portal are available on following URL

http://edocx.eil.co.in/vportal

4.6.3 Statutory Approvals

Wherever approval by any statutory body is required to be taken by Contractor, the Contractor shall submit copy of approval by the authority to EIL.

4.6.4 Schedule and Progress Reporting

Contractor shall submit monthly progress report (MPR) and updated procurement, engineering and manufacturing status (schedule vs. actual) and highlight constraints, if any, along with action plan for mitigation, to the EIL / Owner by 1st week of every month. One month Look-ahead schedule including the mobilization plan shall be submitted within 2 weeks from FOA / LOA. In case of exigencies, EIL / Owner can ask for report submission as required on weekly / fortnightly / adhoc basis depending upon supply status and contractor shall furnish such reports promptly without any price implication. Format for progress report shall be submitted by the contractor during kick off meeting or within one week of receiving FOA / LOA, whichever is earlier.

4.6.5 Quality Assurance Plan / Inspection and Test Plan

Inspection and test plans attached if any, to the tender are generic and indicative only. Immediately after receipt of the order, contractor shall submit within one week of receiving FOA / LOA, job specific ITPs based on the indicative ITPs. Further, contractor shall also submit Quality Assurance Plan for project activities in the scope of contract, starting from manufacturing to handing over / commissioning, these plans shall cover / identify the activities, relevant procedure, if any, code of conformance, resources for performance and checking / monitoring, approval requirements and authority, records to be generated and audit scope by EIL/Owner.

For EPCC / LSTK / Package contracts, the contractor shall prepare a list of items / equipment and their inspection categorization plans for all items included in the scope of supply immediately after receipt of order and obtain approval for the same from EIL. The items shall be categorized into different categories depending upon their criticality for the scope of inspection of TPIA and / or EIL.

4.6.6 Inspection Release Note (IRN)/ Inspection Certificate (IC)

Contractor shall ensure that all documents viz. documents reviewed, manufacture's test certificate etc., mentioned in Inspection Release Note (IRN), issued by EIL / third party against the materials supplied by contractor, are sent to EIL along with the IRN.

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IRN / IC shall be issued by EIL Inspector / third party inspection agency only after all the drawings/documents as per DCI are submitted and are accepted under review code-1 & code R. Material / Equipment dispatch from contractor's / sub vendor's works shall not commence till above condition is met.

Note 1: Non fulfilling above requirement shall result into appropriate penalty or with- holding of payment as per conditions of Tender / Contract.

Note 2: For items where IRN/IC is issued by TPIA, supplier to ensure that following as a minimum must be mentioned by TPIA in IRN/IC

a) Tender document number
b) List of drawings / documents with EIL approval code
c) Tests witnessed, documents reviewed
d) Compliance statement by TPIA that product meets the requirement as specified in EIL standard specifications, Inspection Test Plan / QAP and approved documents.

4.6.7 **Pre Commissioning & Commissioning Activities Management System (PCAMS)**

Pre Commissioning & Commissioning activities management system software shall be followed for Mechanical completion, check listing of loops, punch points, hydro test and issue of Formats during the Pre Commissioning and Commissioning activities and the same can be accessed on following URL

https://pcams.eil.co.in/

4.7 Final Documentation

4.7.1 As built Drawings

Minor Shop / Site changes made by contractor after approval of drawings under 'Code 1' by EIL and deviations granted through online system , if any, shall be marked in hard copies of drawings which shall then be stamped 'As-built' by the contractor. These 'As-built' drawings shall be reviewed and stamped by EIL Inspector / Site engineer / TPIA also, as the case may be. Format for completeness of final documents (Format No. 3-78-0004) is attached with this specification. Contractor shall prepare scanned images files of all marked – up 'As – built' drawings. Simultaneously contractor shall incorporate the shop / site changes in the native soft files of the drawings also.

4.7.2 As built Final Documents

As built final documents shall be submitted as listed in Tender / Contract

4.7.3 Packing / Presentation of Final Documents

Final Documents shall be legible photocopies in A4, A3 size only. Drawings will be inserted in plastic pockets (both sides transparent, sheet thickness minimum 0.1 mm) with an extra strip of 12 mm wide for punching so that drawings are well placed.

Final Documentation shall be bound in hard board plastic folder(s) of size 265 mm x 315 mm ($10^1/_2$ inch x $12^1/_2$ inch) and shall not be more that 75 mm thick. It may be of several volumes and each volume shall have a volume number, index of volumes and index of contents of that particular volume. Where numbers of volumes are more, 90mm thickness can be used. Each volume shall have top PVC sheet of minimum 0.15 mm thick duly fixed and pressed on folder cover and will have 2 lever clips. In case of imported items documents, 4 lever clip shall also be accepted. All four corners of folders shall be properly metal clamped. Indexing of contents with page numbering must be incorporated by contractor. Spiral / Spico bound documents shall not be acceptable. As mentioned above, books should be in hard board plastic folders with sheets punched and having 2/4 lever clips arrangement.

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Each volume shall contain on cover a title block indicating Tender No., name of project, name of customer, package equipment tag no. & name (if applicable). Each volume will have hard front cover and a reinforced spine to fit thickness of book. These spines will also have the title printed on them. Title shall include also volume number (say 11 of 15) etc.

4.7.4 Submission of Soft copies

Contractor shall submit to EIL, the scanned images files as well as the native files of drawings / documents, along with proper index.

In addition to hard copies, contractor shall submit soft copies of all the final drawings and documents in pen drive or any other specified medium with proper identification tag, all text documents prepared on computer, scanned images of all important documents (not available as soft files), all relevant catalogues, manuals available as soft files (editable copies of drawings / text documents, while for catalogues / manuals / proprietary information and data PDF files can be furnished).

All the above documents shall also be uploaded on the EIL Vendor Portal and if applicable on Client Server also.

4.7.5 Completeness of Final Documentation

Contractor shall get the completeness of final documentation verified by EIL / TPIA and attach the Format for Completeness of Final Documentation (Format No. 3-78-0004) duly signed by EIL or TPIA as applicable to the final document folder.

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COMPLETENESS OF FINAL DOCUMENTATION

Name of Supplier/Contractor	:	
Customer	:	
Project	:	
EIL's Job No.	:	
Purchase Order No./ Contract No.	:	
Purchase Requisition No./ Tender No.	:	Rev. No. :
Name of the Work/ Equipment	:	
Tag. No.	:	
Supplier's / Contractor's Works Order No.	:	

Certified that the Engineering Documents / Manufacturing & Test Certificates submitted by the supplier (as per Index sheet mentioned in Annexure-1) are complete in accordance with the Vendor Data Requirements of Purchase Requisition / Tender.

Signature	: …….	Signature	: …….
Date	: …….	Date	: …….
Name	: ……..	Name	: ……..
Designation	: ……	Designation	: ……
Department	: ……	Department	: ……
	Supplier / Contractor		EIL / TPIA

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Annexure-1

Final Documentation Index Sheet			
PR/PO/Tender No.		Rev. No.	
Serial No.	Document Title	Page/ Folder No.	No. of Pages

Signature	: …….	Signature	: …….
Date	: …….	Date	: …….
Name	: ……..	Name	: ……..
Designation	: ……	Designation	: ……
Department	: ……	Department	: ……

Supplier / Contractor

EIL / TPIA

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आपूर्तिकर्ताओं से प्रलेखन अपेक्षाओं हेतु विनिर्देश

SPECIFICATION FOR DOCUMENTATION REQUIREMENTS FROM SUPPLIERS

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committe Convener	Standards Bureau Chairman
					Approved by	
2	12.06.20	General Revision	QMS Standards Committee	QMS Standards Committee	SKB	SKS
1	12.03.15	General Revision	QMS Standards Committee	QMS Standards Committee	MPJ	SC
0	04.06.09	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND

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Abbreviations:

DCI	-	Document Control Index
eDMS	-	Electronic Document Management System
FOA	-	Fax of Acceptance
IC	-	Inspection Certificate
IRN	-	Inspection Release Note
ITP	-	Inspection and Test Plan
LOA	-	Letter of Acceptance
MR	-	Material Requisition
PO	-	Purchase Order
PR	-	Purchase Requisition
PVC	-	Polyvinyl Chloride
QAP	-	Quality Assurance Plan
QMS	-	Quality Management System
RPO	-	Regional Procurement Office
TPIA	-	Third Party Inspection Agency
URL	-	Universal Resource Locator
V-Portal	-	Vendor Portal

QMS Standards Committee

Convener: Mr. S.K. Badlani

Members:
Mr. Sanjay Mazumdar (Engg.)
Mr. R.K. Singh (SCM)
Mr. B. Biswas (SCM)
Mr. Ravindra Kumar (Const.)
Mr. Vinod Kumar (CQA)
Mr. Swapnil Vaishnav (Projects)

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2.0 DEFINITIONS 4
3.0 REFERENCE DOCUMENTS 4
4.0 DOCUMENTATION REQUIREMENTS 4

Attachments

Format for completeness of Final Documentation : Format No. 3-78-0004

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1.0 SCOPE

This specification establishes the Documentation Requirements from Suppliers.

All documents / data against the PO / PR / MR shall be developed and submitted to EIL / Owner by the suppliers for review / records, in line with this specification.

2.0 DEFINITIONS

2.1 Supplier

For the purpose of this specification, the word "SUPPLIER" means the person(s), firm, company or organization who has entered into a contract with EIL / Owner for delivery of some products (including service). The word is considered synonymous to bidder, contractor or vendor.

2.2 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

6-78-0001	Specification for Quality Management System Requirements from Bidders

4.0 DOCUMENTATION REQUIREMENTS

4.1 Order Acknowledgement and Assigning Project Manager

After placement of order, Supplier shall acknowledge order through V-Portal within 7 days of receipt of FOA / PO. Supplier shall assign a Project Manager for that order though online portal and provide requisite details. Project Manager details shall include e-mail address, mailing address, mobile/telephone nos., fax nos. and name of Project Manager. All the system generated emails pertaining to that order shall be sent to the assigned Project Manager.

4.2 Documents / Data to be submitted by the Supplier

4.2.1 The Supplier shall submit the documents and data against the PO / PR / MR as per the list given in respective PO / PR / MR.

4.2.2 Review of the supplier drawings / documents by EIL would be only to review the compatibility with basic designs and concepts and in no way absolve the supplier of his responsibility / contractual obligation to comply with PR requirements, applicable codes, specifications and statutory rules / regulations. Any error / deficiency noticed during any stage of manufacturing / execution / inspection/ installation shall be promptly corrected by the supplier without any time and cost implications, irrespective of comments on the same were received from EIL during the drawing review stage or not.

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4.2.3 Unless otherwise specified, submission of documents for Review / Records shall commence as follows from the date of Fax of Intent / Letter of Intent / Fax of Acceptance (FOA) / Letter of Acceptance (LOA):

QMS	- 1 week
Document Control Index	- 2 weeks
Other Documents / Drawings	- As per approved Document Control Index

4.2.4 Documents as specified in PO / PR / MR are minimum requirements. Supplier shall submit any other document / data required for completion of the job as per EIL / Owner instructions.

4.3 Style and Formatting

4.3.1 All Documents shall be in ENGLISH language and in M.K.S System of units.

4.3.2 Before forwarding the drawings and documents, contractor shall ensure that the following information are properly mentioned in each drawing:

Purchase Requisition Number
Name of Equipment / Package
Equipment / Package Tag No.
Name of Project
Client
Drawing / Document Title
Drawing / Document No.
Drawing / Document Revision No. and Date

4.4 Review and Approval of Documents by Supplier

4.4.1 The Drawing / Documents shall be reviewed, checked, approved and duly signed / stamped by supplier before submission. Revision number shall be changed during submission of the revised supplier documents and all revisions shall be highlighted by clouds. Whenever the supplier require any sub-supplier drawings to be reviewed by EIL, the same shall be submitted by the supplier duly reviewed, approved and stamped by the supplier. Direct submission of sub-supplier's drawings without contractor's / suppliers' approval shall not be entertained.

4.5 Document Category

4.5.1 **Review Category**

Following review codes shall be used for review of supplier Drawings / Documents:

Review Code 1	-	No comments. Proceed with Manufacture / Fabrication as per the document.
Review Code 2	-	Proceed with Manufacture / Fabrication as per commented document. Revised document required.
Review Code 3	-	Document does not conform to basic requirements as marked. Resubmit for review.
R	-	Document is retained for Records. Proceed with Manufacturing / Fabrication as per PR / Tender requirements.
V	-	Void

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4.6 Methodology for Submission of Documents to EIL/Owner

4.6.1 Document Control Index (DCI)

Supplier shall create and submit Document Control Index (DCI) for review based on PO / PR / MR along with schedule date of submission of each drawing / document on EIL Vendor Portal. The DCI shall be specific with regard to drawing / document no. and the exact title. Proper sequencing of the drawings / documents should be ensured in schedule date of submission.

4.6.2 Submission of Drawings / Documents / Data

Drawings / documents, data and DCI shall be uploaded on the EIL Vendor Portal as per approved DCI. The detailed guidelines for uploading documents on EIL Vendor Portal are available on following URL

http://edocx.eil.co.in/vportal

4.6.3 Statutory Approvals

Wherever approval by any statutory body is required to be taken by Supplier, the Supplier shall submit copy of approval by the authority to EIL.

4.6.4 Manufacturing Schedule

Supplier shall prepare manufacturing schedule for the order, with key milestone activities (such as document submission, sub ordering, manufacturing, Inspection, dispatches, etc) to meet delivery as per FOA / PO terms. Supplier shall submit manufacturing schedule to concerned Regional Procurement Office (RPO) of EIL / Owner for review within 2 weeks from date of FOA / PO.

4.6.5 Schedule and Progress Reporting

Supplier shall submit monthly progress (MPR) report and updated procurement, engineering, manufacturing status, Inspection and dispatch status (schedule vs. actual) and highlight constraints, if any, along with action plan for mitigation, to the concerned Regional Procurement Office (RPO) of EIL / Owner by 1st week of every month., First MPR shall be submitted within 2 weeks from FOA / LOA. In case of exigencies, EIL / Owner can ask for report submission as required on weekly / fortnightly / adhoc basis depending upon supply status and supplier shall furnish such reports promptly without any price implication. Format for progress report shall be submitted by the Supplier during kick off meeting or within 2 weeks of receiving FOA / LOA, whichever is earlier.

4.7 Inspection and Testing

4.7.1 Quality Assurance Plan / Inspection and Test Plan

If Inspection and test plans (ITP) are attached with MR / PR same shall be followed along with additional tests requirement (if any) mentioned in MR/ PR. However for cases wherein EIL Standard ITPs not available / have not been attached with MR / PR, Supplier shall submit within one week of receiving FOA / LOA, the Quality Assurance Plan for inspection & testing at various stages of production, quality control records for critical bought out items / materials and site assembly & testing as may be applicable to the specific order and obtain approval from concerned Regional procurement Office of EIL / third party inspection agency, as applicable.

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For Package equipment contracts, the supplier shall prepare a list of items / equipment and their inspection categorization plan for all items included in the scope of supply immediately after receipt of order and obtains approval for the same from EIL. The items shall be categorized into different categories depending upon their criticality for the scope of inspection of TPIA and / or EIL.

4.7.2 **Inspection Requisition:**

Supplier shall perform internal inspection as per ITP/ approved QAP at their works based on approved documents / drawings. Upon satisfactory internal inspection, supplier shall raise inspection call to concerned Regional Procurement Office (RPO) of EIL / TPIA / Owner with advance notice as per contract along with Internal test reports.

All changes w.r.t. PR shall be recorded through agreed variations or Concessions & Deviations. Conflict, if any, between PR / Job specifications and approved drawings, shall be brought to the notice of EIL / owner by the supplier / contractor. Decision of EIL / owner will be binding on the supplier and to be complied without time and cost implications.

Identified bought out items/ raw material shall be procured under TPIA as per ITP.

4.7.3 **Inspection Release Note (IRN)/ Inspection Certificate (IC)**

IRN / IC shall be issued by EIL Inspector / third party inspection agency on successful inspection, review of test reports / certificates as per specifications & ITP / agreed quality plan (as applicable) and only after all the drawings / documents as per DCI are submitted and are accepted under review code-1 or code R. Supplier shall ensure that necessary documents / manufacturing and test certificates are made available to EIL / TPIA as and when desired.

Note 1: Non fulfilling above requirement shall result into appropriate penalty or with- holding of payment as per conditions of PO / PR / MR.

Note 2: For items where IRN/IC is issued by TPIA, supplier to ensure that following as a minimum must be mentioned by TPIA in IRN / IC

a) PR document number
b) List of drawings / documents with EIL approval code
c) Tests witnessed, documents reviewed
d) Compliance statement by TPIA that product meets the requirement as specified in EIL PR, standard specifications, Inspection Test Plan / QAP and approved documents.

4.8 Transportation Plan

Transportation Plan for Over Dimensional Consignments (ODC), if any, shall be submitted within 2 weeks of receiving FOA / LOA, for approval. Consignment with parameters greater than following shall be considered as over dimensional.

Dimensions: 4 meters width x 4 meters height x 20 meters length

Weight : 32 MT

Dimensions and weight provided above are inclusive of all nozzles, attachments, transportation saddles etc.

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Physical Rout survey for ODC movement shall be submitted to EIL within 8 weeks of receiving FOA / LOA.

4.9 Dispatch Details

Upon receipt of IRN / IC from EIL inspector / TPIA, supplier shall dispatch items within 2 days. Supplier shall submit dispatch details to concerned RPO of EIL / Owner within a day of dispatch. Dispatch details shall include Lorry Receipt (LR) number / Dispatch Number, Transporter Name, Date of dispatch, Packing list, Invoice copy etc.

4.10 Final Documentation

4.10.1 Supplier shall prepare final documents in line with VDR (Vendor Document Requirements) attached with PR/Tender. A copy of final document along with filled in Format for Completeness of Final Documentation (Format No. 3-78-0004) to be submitted to EIL Inspector / TPIA for review & approval within 2 weeks from dispatch. Upon receipt of EIL/TPIA endorsement on Completeness of Final Documents, supplier shall submit soft / hard copies of Final documents to EIL / Owner in requisite quantity as per PO / PR details, along with covering letter. A copy of covering letter to be submitted to the concerned Regional Procurement Office (RPO) of EIL/Owner.

4.10.2 **As Built Drawings**

Minor Shop changes made by Supplier after approval of drawings under 'Code 1' by EIL and deviations granted through online system ,if any, shall be marked in hard copies of drawings which shall then be stamped 'As-built' by the supplier. These 'As-built' drawings shall be reviewed and stamped by EIL Inspector / TPIA. Supplier shall prepare scanned images files of all marked – up 'As – built' drawings. Simultaneously Supplier shall incorporate the shop changes in the native soft files of the drawings also.

4.10.3 **Packing / Presentation of Final Documents**

Final Documents shall be legible photocopies in A4, A3 size only. Drawings will be inserted in plastic pockets (both sides transparent, sheet thickness minimum 0.1 mm) with an extra strip of 12 mm wide for punching so that drawings are well placed.

Final Documentation shall be bound in Hard board Plastic folder(s) of size 265 mm x 315 mm ($10^1/_2$ inch x $12^1/_2$ inch) and shall not be more that 75 mm thick. It may be of several volumes and each volume shall have a volume number, index of volumes and index of contents of that particular volume. Where number of volumes are more, 90mm thickness can be used. Each volume shall have top PVC sheet of minimum 0.15 mm thick duly fixed and pressed on folder cover and will have 2 lever clip. In case of imported items documents, 4 lever clip shall also be accepted. All four corners of folders shall be properly metal clamped. Indexing of contents with page numbering must be incorporated by supplier. Spiral/Spico bound documents shall not be acceptable. As mentioned above, books should be in hard board plastic folders with sheets punched and having 2/4 lever clips arrangement.

Each volume shall contain on cover a Title Block indicating package Equipment Tag No. & Name, PO / Purchase Requisition No., Name of Project and Name of Customer. Each volume will have hard front cover and a reinforced spine to fit thickness of book. These spines will also have the title printed on them. Title shall include also volume number (say 11 of 15) etc.

4.10.4 **Submission of Soft Copies**

Supplier shall submit to EIL, the scanned images files as well as the native files of drawings / documents, along with proper index.

In addition to hard copies, Supplier shall submit soft copies of all the final drawings and documents in pen drive or any other specified medium with proper identification tag, all text documents prepared on computer, scanned images of all important documents (not available

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as soft files), all relevant catalogues, manuals available as soft files (editable copies of drawings/text documents, while for catalogues / manuals / proprietary information and data, PDF files can be furnished).

All the above documents shall also be uploaded on the EIL Vendor Portal and if applicable on Client Server also.

4.10.5 **Completeness of Final Documentation**

Supplier shall get the completeness of final documentation verified by EIL / TPIA, as applicable, and attach the Format for Completeness of Final Documentation (Format No. 3-78-0004) duly signed by EIL Inspector or TPIA as applicable to the final document folder.

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COMPLETENESS OF FINAL DOCUMENTATION

Name of Supplier/Contractor	:	
Customer	:	
Project	:	
EIL's Job No.	:	
Purchase Order No./ Contract No.	:	
Purchase Requisition No./ Tender No.	:	Rev. No. :
Name of the Work/ Equipment	:	
Tag. No.	:	
Supplier's / Contractor's Works Order No.	:	

Certified that the Engineering Documents / Manufacturing & Test Certificates submitted by the supplier (as per Index sheet mentioned in Annexure-1) are complete in accordance with the Vendor Data Requirements of Purchase Requisition / Tender.

Signature	: …….	Signature	: …….
Date	: …….	Date	: …….
Name	: ……..	Name	: ……..
Designation	: ……	Designation	: ……
Department	: ……	Department	: ……
	Supplier / Contractor		EIL / TPIA

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Annexure-1

Final Documentation Index Sheet			
PR/PO/Tender No.		Rev. No.	
Serial No.	Document Title	Page/ Folder No.	No. of Pages

Signature	: …….	Signature	: …….
Date	: …….	Date	: …….
Name	: ……..	Name	: ……..
Designation	: ……	Designation	: ……
Department	: ……	Department	: ……

Supplier / Contractor

EIL / TPIA

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ANNEXURE-XII TO SPECIAL CONDITIONS OF CONTRACT

SUPPLY OF STEEL & CEMENT

Annexure-I

CONTRACT CLAUSE FOR ACCEPTANCE OF STRUCTURAL STEEL AND TMT BAR MANUFACTURERS

1. Steel manufacturers having valid BIS certificate and listed in the BIS website as on date of procurement of steel shall be allowed for supply of steel (Structural and TMT bars) and contractor shall procure from them with prior intimation to Engineer-in-charge.

2. Tests after receipt of structural steel at site :
   In addition to availability of valid BIS license and MTC, testing at site shall be conducted by the contractor as per following requirement:

   - For each category/size of structural steel procured, one sample for every 50 MT or part thereof shall be drawn and tested in approved laboratory
   - The charges for such testing shall be borne by the contractor.

3. Tests after receipt of TMT bars at site:

   In addition to availability of valid BIS license and MTC, testing at site in approved laboratory shall be conducted by the contractor as per the following requirement:

   - Under 10 mm bars, one sample (diameter wise) for each 25 MT (or part thereof) for consignment below 100 MT and one sample (diameter wise) for each 40 MT for consignment above 100 MT shall be tested
   - For 10 mm to 16 mm bars , one sample (diameter wise) for each 35 MT (or part thereof) for consignment below 100 MT and one sample (diameter wise) for each 45 MT (or part thereof) for consignment above 100 MT shall be tested.
   - Over 16 mm bars one sample (diameter wise) for each 45 MT (or part thereof) for consignment below 100 MT and one sample (diameter wise) for each 50 MT (or part thereof) for consignment above 100 MT shall be tested.
   - The charges for such testing shall be borne by the contractor

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Page 586 of 5448 : B957-TENDER_DOC-B957-999-69-41-PK-T-9501 : Rev. A

Annexure - I

CONTRACT CLAUSE FOR ACCEPTANCE OF CEMENT MANUFACTURERS.

1. Cement manufacturers having valid BIS certificate and listed in the BIS website as on date of procurement of cement shall be allowed for supply of cement and contractor shall procure cement from them with prior intimation to Engineer-in-charge.

2. **Tests after receipt of cement at site:** Each batch of cement (week wise as mentioned on cement bags) supplied by the contractor after delivery at site shall be subjected to the tests and analysis required by the relevant Indian Standard Codes. The contractor shall carry out and bear the cost of all tests and analysis to ensure quality of cement before using in actual works.

9/4/15

FORMAT FOR APPROVAL OF SUB-CONTRACTOR

[ANNEXURE – XIII TO SPECIAL CONDITIONS OF CONTRACT]

ANNEXURE – XIII TO SCC

APPROVAL OF CONSTRUCTION SUB-CONTRACTOR

1.	NAME OF MAIN CONTRACTOR	:	
2.	NAME OF WORK, LOCATION	:	
3.	NAME OF PROPOSED SUB-CONTRACTOR	:	
4.	SCOPE OF WORK PROPOSED TO BE SUB-CONTRACTED (BRIEF)	:	
5.	**ESTIMATED VALUE OF THE PROPOSED WORK TO BE SUB-CONTRACTED (INR):**	:	
6.	***QUALIFYING CRITERIA FOR SUB-CONTRACTOR:***	:	**------**
6.1	**Similar Work experience :**	:	
i)	**1 (One) Contract of 80% or 2 (two) contracts of 50% or 3 (Three) contracts of 40% each of estimated value of proposed work to be sub-contracted :**	:	
ii)	**Annual Turnover** average annual turnover not less than **30% of estimated value of proposed work to be sub-contracted** during the immediately preceding 3 (Three) financial years	:	
iii)	**Networth shall be positive as per the immediate preceding year's Audited financial results as per latest annual balance sheet/ Profit & loss account:**	:	
7.	EXPERIENCE AND FINANCIAL DETAILS OF PROPOSED SUB-CONTRACTOR	:	
i)	Contract Value of similar work executed (as evidenced by work Order & Completion Certificate) During the last 7 years	:	

ii)	Average Annual Turnover during last 3(three) years (as evidenced by Balance Sheets)	:	
iii)	Networth as per latest annual balance sheet/ Profit & loss account	:	
8	CRITERIA FOR QUALIFICATION OF SUB-CONTRACTOR	:	
i)	Sl.No. 7(i) >6 (i)	:	YES / NO
ii)	Sl.No. 7 (ii) >6 (ii)	:	YES / NO
iii)	Sl.No. 7 (iii) > 6.1 (iii)	:	YES / NO
9	Based on above information, we M/s_____(Name of Main Contractor) propose M/s._____(Name of proposed sub-contractor) as our sub-contractor for the above mentioned works. We understand that notwithstanding above approval, we shall remain fully responsible for the performance of the said sub-contractor and any failure of the sub-contractor shall not absolve/relieve us of our responsibility to complete the works as per the terms and conditions of the Contract.		

NOTE: Contractor to fill all the details in the above proforma. Further Contractor shall also fill-in the details at Sl.No.5 above based on the estimated value of the proposed work to be subcontracted.

(STAMP & SIGNATURE OF CONTRACTOR)

ANNEXURE - XIV
TO
SPECIAL CONDITIONS OF CONTRACT

[HEALTH, SAFETY AND ENVIRONMENT (HSE) MANAGEMENT]

HEALTH, SAFETY AND ENVIRONMENT (HSE) MANAGEMENT

[ANNEXURE - XIV TO SPECIAL CONDITIONS OF CONTRACT]

Bharat Petroleum

Quality, Environmental, Occupational Health and Safety (QEHS) Policy

We at Bharat Petroleum Corporation Limited, Bina Refinery (BPCL-BR) are committed to achieve Customer satisfaction by providing Quality products & services while demonstrating continual improvement in our QEHS performance to meet our stakeholder's expectations. Prevention of harm to human beings, environment and property are intrinsic to our Business philosophy.

To achieve the above objectives, we shall:

- **Proactively** anticipate & assess risks and opportunities, address them through short and long-term objectives and implement mitigation plans.
- **Inculcate** process-based thinking as a core responsibility in all functions to enhance individual ownership, accountability and performance.
- **Comply** with all applicable legislation and other requirements.
- **Focus** on protection of the environment, waste reduction and prevention of injuries and ill-health.
- **Emphasize** on QEHS aspects, technology upgradations, asset integrity, process improvements & cost reduction at planning & operational levels.
- **Ensure** effective Management of Energy and other Resources.
- **Institutionalize** EHS hazard & risk assessment methodologies, safe work practices & behaviors by benchmarking with international practices.
- **Develop** an effective response plan for quick implementation for foreseeable potential emergency situations.
- **Strengthen** awareness, skills, competence of our employees & business associates to continually improve performance standards through consultation and participation.
- **Periodically** review the suitability, adequacy and effectiveness of our Integrated Management Systems.

We shall communicate this Policy to all employees and service providers working in the organization and make it available to the public and other interested parties.

Date : 01st July 2023
Place : Bina

Chacko M Jose
Executive Director - BR

PERSONAL PROTECTIVE EQUIPMENT (PPE) POLICY

We at **Bina Refinery(BR), Bharat Petroleum Corporation Ltd (BPCL)** are committed to achieve safe work environment by providing quality **Personal Protective Equipment (PPE)** as per the identified Hazards. Refinery operation is inherently hazardous in nature due to the processes involved and the large inventories of hydrocarbon stored in the premises. Petroleum Refinery poses great risk of fire, explosion and release of toxic materials due to the characteristics of its raw materials, intermediates and final products and the high operating temperature / pressure involved in the plant operations.

The purpose of the **Personal Protective Equipment Policy** is to protect the employees and service providers of BPCL BR from exposure to workplace hazards and the risk of injury.

To achieve the above objective, everyone shall adhere to the followings:

- ✓ **5–Mandatory PPEs** (Boiler suit / Duster Coat, Safety Shoes, Safety Helmet, Safety Goggle and Safety hand gloves) shall be used by all employees as well as Service Providers / Visitors while entering the operation area which is beyond the car parking area.
- ✓ **Mandatory PPEs** shall be used in **Workshop and Warehouse** storage areas also.
- ✓ **Flame Resistance Clothing** with inherently flame resistance fabrics shall be used for the Boiler suit / Duster Coat for the employees.
- ✓ For Service Providers working inside refinery operation areas like, Maintenance / Electrical / Instrumentation / other O&M service providers should preferably use minimum **Chemically treated flame resistance** boiler suits.
- ✓ Encourage use of **Cotton / Flame resistance Winter wear** by all employees and service providers. Winter wears using woollen / synthetic fabrics to be avoided.
- ✓ Employees in the rank of Chief Manager and above shall wear Duster Coats, while Sr. Manager and below shall wear Boiler suits. Duster Coats shall not be allowed to Service providers.
- ✓ In addition to above, **Job Specific PPEs** shall be used as per Hazard Identification and Risk Assessment. **Job specific PPE matrix** shall be followed as indicated in Common Procedure Manual for PPE.

Date: 08th Sept' 2023
Place: Bina

Chacko M Jose
Executive Director-BR

Chapter 3: Contractor's HSE Guidelines:

1	**PURPOSE:**	The purpose is to outline BPCL's Safety Guidelines for Contractors. These guidelines are not to be considered as a substitute for the applicable government regulations.
2	**SCOPE OF APPLICATON:**	This procedure shall be applicable to all BPCL Facilities. These includes, but not limited to: a) Refinery Complex b) Bina Dispatch Terminal (BDT) c) Crude Oil Terminal (COT Vadinar)
3	**CROSS REFERENCES:**	ISO 45001:2018, Factories Act 1948 & Madhya Pradesh State Factory Rules, 1962
4	**PROCEDURE:**	

PART "A": BPCL OBLIGATIONS

1.0 HSE Consideration in Selection of Contractors:

1.1 The user plant sends request to Commercial about the requirement of the contractor for any work/job. Commercial/User will locate the vendors/ contractors and suitable contractors are short-listed after technical scrutiny/ recommendation as per the prevailing procedures. Commercial will award the work order for the job as per existing SOP.

1.2 Contractor's past HSE record (minimum 2 years) shall be given due consideration, together with the technical competence. Following stages are considered while selecting & registration of new contracting agencies and awarding contract to any job.

1.2.1 Pre-selection stage:

i. During pre-selection stage, contractor's suitability for a specific type of work is assessed in a preliminary way. HSE should be one of the prime considerations in such assessment.

ii. Pre-selection involves establishing a list of approved contractors (the approved list). The contractors who are included in this list can be invited to submit an offer for a contract. HOD User Department / Engineer In Charge or his/her representative shall ensure that the contractor fulfills requirements pertaining to HSE before including his name in approved list.

1.2.2 Tendering and contract award stage:

i. In the tendering process, the contractor will have to include in its cost estimation, all items necessary for complying with health, safety and

environmental aspects. It is therefore essential that while inviting a contractor to submit an offer, he ensures understanding of the scope of work completely including general and specific HSE requirements, so as to enforce the required level of HSE performance during execution stage.

ii. Since all contractors, who have submitted offers, are screened in the pre-qualification stage, they are assumed to be capable of meeting the HSE requirements of the company. However, the aim should always be to achieve a high level of HSE performance in the execution of the contract, and hence the HSE aspects of each of the contractors should weigh equally amongst the other key items like cost, quality and time for making the ultimate choice.

2.0 BPCL Responsibilities

2.1 Responsibilities of BPCL Management:

2.1.1 To provide specific information to contractors and make workers aware of the hazards associated with job assigned.

2.1.2 To provide information about risk mitigation measures available at the workplace.

2.1.3 To provide the contractor with information on BPCL safety procedures, confined space entry, work permit system, Emergency Response & Disaster Management Plan etc.

2.1.4 To ensure training of the contractor workforce, medical examination, and proper usage of safety equipment.

2.1.5 To arrange for a multi-disciplinary safety audit team to conduct regular safety audits and monitor the implementation of the recommendations.

2.2 Responsibilities of Procurement Department:

2.2.1 Procurement will receive the request mentioning all the job details including special HSE requirement, if any from the concerned plant/ Dept. HOD and locate the suitable contractor.

2.2.2 Shall consider the performance of the contractor on compliance of HSE procedures as per the feedback given by the concerned Plant/Department/F&S for floating tender enquiry.

2.2.3 Shall advice / warn and if required terminate and de-list the contractor for violation of HSE procedures on recommendation of the EIC / User.

2.3 Responsibilities of Plant/Dept. HOD:

Although the contractual obligation for HSE of contractor's activity rests with the contractor, the HOD of concerned Plant/ Dept. shall also oversee that the contractor's supervision is in line with the HSE requirements applicable to the work and the hazards associated with that work.

2.4 Responsibilities of F & S Dept.:

2.4.1 Conduct safety induction, mandatory/ special fire & safety training for the contractor's supervisors and workers.

2.4.2 Ensure Investigation of all the incidents.

2.4.3 Conduct audits/inspections and suggest Contractor for improving the HSE standards of Contract employees.

2.4.4 Advises procurement department to warn / terminate the contractor if HSE procedures are violated.

2.5 Responsibilities of Engineer Incharge:

2.5.1 It is the responsibility of engineer incharge to ensure that BPCL HSE requirements are fulfilled by contractors/ sub-contractors.

2.5.2 The engineer in charge must see the past HSE record of all contractors/ subcontractors before awarding the work order.

2.5.3 The engineer in charge must ensure that the contractor employees have undergone safety induction, mandatory/ special F&S trainings.

2.5.4 The engineer in charge shall ensure that contractor's employees must wear mandatory/ job specific personal protective equipment.

2.5.5 The engineer in charge should ensure that incidents are reported/ entered in IRIS portal.

PART "B": CONTRACTOR'S HSE GUIDELINES

1.0 Introduction:

BPCL believes that all the manufacturing and related activities should be conducted in a safe way to ensure the safety of people working in its premises.

It is to be ensured that contractors, who work for BPCL, comply with HSE standards as per the company's policy and observe safe practices & procedures at work to protect health and safety of their employees and others.

Safety of the contract personnel needs enhanced focus due to constant change of persons leading to lack of awareness. Statistics and experience show that an additional benefit from improved HSE performance leads to overall effectiveness in the execution of contract work.

In particular, the contractor has an independent responsibility for his own HSE performance. BPCL is responsible for clearly communicating its HSE requirement to the contractor and for monitoring the contractor's performance with respect to HSE. HSE standards of the contract employees should be in line with the BPCL employees and any violation observed will be dealt with strictly (including termination of the contract).

These guidelines are applicable to all contracting agencies, O&M operators, other service providers, etc. who work for Bharat Petroleum Refineries Limited.

1.1 Definitions:

Owner / Company shall mean Bharat Petroleum Refineries Limited.

Agreement shall mean the contract agreement between owner and contractor for activities assigned to the contractors.

Contractor shall mean the person/persons, firm or company whose tender has been accepted by the Competent Officer of BPCL or contractor's legal Representative/ his successors and permitted assignee/sometimes engaged in job on verbal instructions, due to exigency/emergency etc.

Engineer – in – charge shall mean the person authorized by the Competent Officer of BPCL to whom contractor or his/her employees report to for work instruction.

Contract shall mean the totality of the agreement between the parties as derived from the contract documents.

2.0 HSE Aspects of the Contract:

In addition to the usual features of a contact there shall be a separate clause dealing with the contractor's compliance with Health, Safety and Environmental requirements. The sub-contractors if engaged shall follow all the HSE requirements of BPCL applicable to main contractor.

2.1 HEALTH: OCCUPATIONAL HEALTH REQUIREMENTS

2.1.1 MEDICAL FITNESS

i. Before planning the posting of the worker to BPCL, the concerned supervisor shall have a general overview that the person is not physically or mentally incapacitated for the planned job.

ii. The contractor shall arrange the medical examination of the workers as per the BPCL policy.

iii. The contractor shall produce the certificate of medical fitness of the worker at the time of gate pass application on the format as required by BPCL.

iv. The contractor shall ensure the compliance to the completion of the various specific medical examinations (SME) as per the BPCL policy. At present the SME is required for the following jobs

- Confined space entry (Specify if inert space entry)
- Work at Height
- Work in SRU
- Work in CPP
- Work in High Noise Area
- Canteen work
- Operation of a crane, locomotive or fork-lift truck, or to give signals to them
- Driving (other than specified in clause1.4.7)
- Work at White oil gantry or Railway Gantry of BDT

v. The contractor shall ensure compliance to the Form-32 medical examination for

- Confined space entry ,

- Work at Height (>30 Meters)
- Any specific job as suggested by Fire &Safety dept.

vi. The contractor shall ensure that the posting of the workers in the jobs requiring SME or Form-32 shall be in accordance with the fitness status in the medical examination.

vii. The contractor shall follow-up with the workers for the medical recommendation as suggested on the medical fitness certificate / Form 32.

viii. The contractor shall ensure timely renewal of the medical certificate, that is within one year for:

- Periodic Medical Examination for all the workers (if not specified)
- Confined space entry (Specify if inert space entry)
- Work at Height
- Canteen work
- Operation of a crane, locomotive or fork-lift truck, or to give signals to them (age < 45 years)
- Driving (other than specified in clause 1.4.7)
- Work at White Oil Gantry or Railway Gantry of BDT
- Six months for:
- Work in SRU
- Work in CPP
- Work in High Noise Area
- Operation of a crane, locomotive or fork-lift truck, or to give signals to them (age > 45 years)

ix. The cost of all these medical examinations (if any) should not be directly or indirectly recovered from the workers & shall be borne by the contractor company.

x. In case of any medical related dispute BPCL will be the final authority to arrive at a decision.

2.1.2 WORKPLACE INJURIES / EXPOSURES

i. The contractor shall periodically educate, train, motivate & supervise the workers at the opportunities of tool box talk or during the job on the possible health hazards, risks involved in the job & the good safety practices for prevention of such workplace injuries / exposures.

ii. The contractor shall ensure that in case of any such incident, the person is sent to Occupational Health Centre (OHC) along with his/her supervisor for the treatment & the documentation.

iii. The contractor shall cooperate, arrange & ensure that:

iv. The injured gets the complete treatment as advised,

v. The injured gets the medical attention on the recommended frequency at the govt. approved hospitals / clinics.

vi. The person is brought to the OHC for fitness certificate in all (except the First Aid cases), for the medical examination & fitness, before resuming the duties.

vii. The injured gets all required rehabilitative care.

2.1.3 HEALTH PROMOTION ACTIVITIES

The contractor shall ensure that the workers actively participate in all the health promotional activities as & when organized / supported by BPCL.

2.1.4 Disclosure

The contractor shall disclose any such important medical information he has, to the medical facility at BPCL in writing, if any of his workers has any potential or recognized significant health hazard to the health of the worker / his colleagues.

2.1.5 IMPROVEMENTS

The contractor shall periodically update his supervisors & the workers about the prevailing medical related requirements at BPCL.

2.2 Safety Guidelines for Contractors/ Sub-Contractors:

2.2.1 Responsibilities

i. The contractor shall be fully responsible for supervision of its personnel to ensure that they strictly adhere to all applicable Safety requirements.
ii. The contractor shall appoint one of its personnel on the work site as a Safety Representative.
iii. The contractor's Site Manager on site shall be responsible for coordinating the contractor's safety activities.

2.2.2 Alcohol and Drugs

The contractor shall ensure that any time during the performance of the work his personnel are not under the influence of any alcoholic liquor, drug or other intoxicating substances.

2.2.3 Conduct of Contractor's Personnel

The contractor shall instruct his personnel to comply with the following:

i. No one shall enter any part of the complex, including the work site except for undertaking the work assigned.
ii. Smoking is strictly prohibited. Anybody found smoking would be immediately removed from the complex. Such a person shall be barred from working for any other contractor employed by BPCL.
iii. No fire or naked light, matches, cigarette lighters or any apparatus that can cause ignition, shall be allowed in the complex.
iv. Personal Protective equipment shall be used and worn in accordance with the safety procedure.
v. It is essential that good housekeeping is maintained throughout the period of any work, both at work site and around any temporary building. The working area shall be kept tidy at all times, escape and other access ways shall be kept clear of objects.

vi. Safety equipment shall be kept in an accessible place. Scrap/surplus material shall be removed daily, cleaning up only at the end of the job is not considered sufficient.

vii. Spillage of oil or chemical shall be cleared up immediately in view of the fire hazard, slippery surfaces, toxic substances etc. Appropriate safety precaution shall be taken during the cleaning up. While returning permit, acceptor will certify housekeeping and issuer will check the same before signing the permit.

2.2.4 Equipment supplied by Contractor

The contractor shall provide and operate his equipment in compliance with the BPCL Procedures. Maintenance and use of equipment should be as per the standard practice and it should not create any hazard during the use. Contractor should deploy skilled workmen for operating the machine.

Contractors to inspect tools/tackles at quarterly interval and necessary records are to be maintained as per company format. Engineer In-charge will carry out random audits to ensure system compliance.

2.2.5 Personal Protective Equipment

i. The contractor/ sub-contractor shall supply following mandatory personal protective equipment to its all employees & supervisors:

S No.	PPE Type	Specification	Quantity	Frequency
1.	Safety Helmet	EN:397, IS:2925	1	Yearly
2.	Safety Goggles	EN:166, ANSI: Z 87.1	1	Quarterly
3.	Safety Hand Gloves	Polka Dotted	2 Pairs	Weekly
4.	Boiler Suit	Cotton	3 Sets	Yearly
5.	Safety Shoes	EN-345, IS:15298	1 Pair	Yearly
**Note: No Contractor shall use red colour boiler suits and helmets inside the premises other than the firefighting crew. ***Note: The service provider shall obtain approval from F&S department before selecting colour of coverall and helmets.				

ii. The contractor/ sub-contractor shall also provide following PPEs as per job requirements such as but not limited to:

SN	PPE Type	IS/EN/EU	Quantity	Frequency
1.	Ear Plug (Ear Muff on need base)	EN 352-2, ANSI: Z3.19, EN-352-1	1	Monthly
2.	Dust Mask	IS:9473,EN-149	2	Weekly
3.	Full Body Harness with double lifeline	IS: 3521	Job Specific	Need Base
4.	Face Shield	EN:166.1.B.3.9	Job Specific	Need Base
5.	PVC/Nitrile/Rubber gloves (For Chemical/Civil Jobs)	EN-374-(JKL) AND EN-388-CE, EN-374-CE	1 Pair	Weekly
6.	Gum Boots (Civil Jobs)	EN-345	1 Pair	Half Yearly
7.	Leather Gloves for Welders	CE-0493	1 Pair	Monthly
8.	Leather Apron	EN-398, EN-407	Job Specific	Need Base
9.	Helmet mounted welder's shield	IS:2925 ,EN-166	1	Yearly
10.	Chemical Splash Goggles (need base)	ANSI: Z 87.1	1	Quarterly
11.	Over Spectacles Goggles (need base)	EN-166, EN-170, EN-172	1	Quarterly

iii. The contractor/ sub-contractor shall ensure that the quality of PPE's is maintained as per BPCL guidelines. Contractor/ sub-contractor is responsible for providing personal protective equipment to their employees as per above specifications, quantity & frequency.

iv. The contractor/ sub-contractor shall ensure that personal protective equipment is maintained in good condition and shall be worn as per the requirement.

v. All the PPE should be available while working and proper supply to be ensured by the contractor for routine wear and tear/loss.

vi. Use of PPE is mandatory and any violation of the same shall be penalized.

vii. Contractor shall provide contractor's employees with the mandatory personal protective equipment and the personal protective / safety equipment as specified in the work permits. The contractor shall also provide additional PPE, if instructed for safe execution of the job.

viii. Contractor's PPE and other safety equipment shall conform to BPCL specifications and sample shall be approved by BPCL safety representative before procurement. Sufficient stock of mandatory PPEs shall be kept and maintained at site.

ix. Contractor employees and employees of Subcontractors shall wear safety helmet and coverall of the same color with logo/emblem of the main contractor.

x. Contractor employees should be trained in proper use and maintenance of PPE.

xi. The damaged PPE shall be periodically replaced with new ones.

2.3 ENVIRONMENT:

2.3.1 The contractor shall perform their jobs in an eco-friendly manner and in consonance with the objective of BPCL Environment Management System. The contractor shall inculcate environmental awareness among their workmen/personnel and strive for enhancement of systems and skills for minimizing the environmental impact out of their activities/services.

2.3.2 The contractor shall avoid wastage of water, compressed air, electric power, steam, etc. supplied to them from owner's source of supply for execution of the job.

2.3.3 The contractor shall ensure that while carrying out Modification/Repair/Replacement jobs of any equipment or pipeline, the spillage of Hydrocarbon, Oily Sludge etc. are cleaned and routed to nearby OWS, at regular interval as well as after completion of jobs.

2.3.4 Before attending any blinding/de-blinding jobs, during pipeline transfer operation all tools, tackles &spares shall be kept ready at site in order to minimize Hydrocarbon spillage.

2.3.5 Should there be a discharge or escape of appreciable quantity of pollutants or contaminants during performance of its obligations under this Contract which occurs as a result of activities of Contractor or its sub-Contractor, the Contractor shall immediately take all action necessary to contain, control, recover or disperse the substance and to eliminate the safety and environmental risks and correct the damage resulting there from.

2.3.6 The contractor shall clear and level the work site and remove all metallic and nonmetallic surplus materials, scrap, debris and other waste materials generated out of his job, from time to time as well as after completion of job. The contractors shall not throw away cut gaskets, used electrode pieces, hand gloves, cotton bags, polythene bags, etc., into open channel drains or pipelines system. They are to be collected and to be deposited in bins/waste collectors earmarked for the purpose or disposed off in the areas as per the direction of Engineer-in-Charge. The contractor is responsible for keeping his place neat and clean. Also all temporary office shall be maintained in a healthy and hygienic condition.

2.3.7 Contractor shall return all surplus materials & scrap to the owner's stores.

2.3.8 Contractor's vehicles, trucks, tractor, cranes and other portable equipment e.g. Air Compressor, DG Set, Dewatering Pumps etc. used inside refinery premises (where Hydrocarbon is used as fuel) for execution of the job must be mechanically sound and have an exhaust complying pollution norms. The contractor shall ensure to avoid idle running of vehicles and equipment used for execution of the job.

2.3.9 Contractor shall comply all the applicable rules and regulations as per MoEF guidelines while working/ handling equipment inside refinery premises.

2.3.10 Special precautions and personal protection shall be taken as per refinery HSE procedures during the following jobs:

i. Handling of Hazardous Chemicals, Gases & Materials etc. (e.g. Spent Catalyst/Clay/Carbon/Resins, Acids, Chlorine, Ammonia, Pyrophoric Iron, etc.).

ii. Working in presence of Suspended Solids (e.g. Catalyst, Refractory, Sand, Dust, etc.)

iii. Cleaning/handling of Oily Sludge.

2.3.11 BPCL, Bina is having **"QUALITY, ENVIRONMENT, OCCUPATIONAL HEALTH AND SAFETY (QEHS) POLICY." Please refer Annexure I.** Contractor/ Sub-contractor will educate their personnel working inside the refinery w.r.t. QEHS Policy of the refinery and all out efforts shall be made for compliance to the above policy.

2.3.12 For contracts related to construction related activities, the contractor to use only fly-ash based products for building materials and road embankment, such as cement or concrete, fly-ash bricks/blocks/tiles, clay fly-ash bricks/blocks/tiles or cement fly-ash bricks/blocks/tiles or similar products in combination or in aggregate of them in every project in line with MoEF gazette notification.

2.3.13 For contracts related to solid material handling such as fly ash, pet-coke, coal, limestone, sulfur, etc., the contractor is required to take all necessary precautions so as avoid the dusts getting air borne or spillages on roads & drains, etc. during transportation and handling of the same. Precaution during transportation may include use of enclosed vehicles, proper covering of the consignment with tarpaulin, water sprinkling, etc. as suitably directed by Engineer-in-charge.

2.3.14 For activities related to generation & handling of E-Waste, spent lead acid batteries & contaminated chemical drums the contractor is required to ensure the handling of the same is carried out in line with related refinery Environment dept. guidelines.

3.0 ADMISSION TO BPCL PREMISES

3.1 ENTRY IN REFINERY PREMISES

CONTRACTOR shall allow only its employees, Subcontractors, and suppliers directly connected with the work, to enter BPCL premises only after attending necessary safety induction training endorsed by F&S.

3.2 VEHICLES AND PARKING

3.2.1 Contractor shall furnish transportation for all of Contractor’s employees from the designated entry gate to the job site and return. The BPCL Representative will designate the routes and parking areas to be used by Contractor's vehicles in BPCL premises. Contractor shall observe all of the BPCL’s traffic regulations at all times while in the refinery and other BPCL premises.

3.2.2 All Contractors owned, rented, or leased vehicles or equipment (i.e. air compressors, generators, welding equipment, forklifts, cranes, etc.) entering the Refinery and other BPCL premises shall be properly identified and has a valid Safety Certificate and Gate Pass. Only vehicles required for execution of work are allowed in the Refinery and other BPCL restricted premises; all other vehicles shall be parked outside the Refinery or BPCL restricted premises.

3.2.3 A safety clearance from F&S dept. is required to all the vehicles entering in BPCL operational area. The timings of vehicle inspection is from 09:00 AM to 11:00 AM.

3.2.4 The contractor shall comply with all points of checklist given in **Annexure II** of safety inspection of vehicles before coming for inspection.

3.3 TRAFFIC REGULATIONS

All traffic signs, signals, and road markings must be obeyed. Unless otherwise posted, the speed limit in BPCL facilities is 30 KMPH. In all cases, the low posted speed limit shall govern.

4.0 SAFETY RULES AND PROCEDURES

4.1 SMOKING AND CARRYING OF MATCHES / LIGHTERS

Smoking is prohibited in all BPCL Areas. Carrying of matches and lighters into Refinery premises is prohibited. Violators will be refused entry into the restricted area and shall be dealt administratively as violation. Contractor shall be responsible for strict adherence to these regulations by contractor's employees or the employees of contractor's sub-contractors.

4.2 BATTERY OPERATED AND ELECTRICAL ITEMS

Non-intrinsically safe battery operated items e.g. flashlights, mobile phone, pagers, personal monitors, etc. are not permitted inside the operational area. Electrically operated tools & equipment should be suitable for use as per the area classification and should be certified by BPCL electrical dept.

4.3 FIRE FIGHTING EQUIPMENT

Contractors shall furnish all portable fire extinguishers and safety equipment required at construction sites during construction. The fire extinguishers shall be certified by BPCL Fire & Safety dept. and proper tag / sticker shall be provided by the contractor. The firefighting equipment shall be regularly inspected & maintained.

Contractors shall not use, alter, or move BPCL firefighting equipment. Firefighting equipment shall be accessible at all times.

4.4 SCAFFOLDING AND LADDERS

4.4.1 All scaffolds shall be erected by competent and qualified personnel and shall conform to requirements of BPCL guidelines and safe work practices for scaffolds and ladders. These requirements include the mandatory inspection, tagging, approval, and certification of erected scaffold before use.

4.4.2 Contractor's scaffold material samples shall be approved by BPCL prior to procurement. Scaffolding should be regularly inspected by competent person & provided with inspection tag.

4.5 USE OF RADIOACTIVE MATERIAL

4.5.1 Only authorized personnel holding valid 'Radiation Work Permit License' issued by BARC shall handle radioactive material.

4.5.2 Contractor shall comply with all safety precautions and requirements as specified in relevant clauses of BPCL procedures and guidelines.

4.5.3 Contractor shall ensure that the following basic rules are strictly enforced:

i. The ionizing radiation source shall not be left unattended.
ii. Radiation film badge dose meter shall be used.
iii. The exposure area shall be clearly identified, barricaded by rope or other effective means and radiation warning signs posted.
iv. Contractor shall coordinate with BPCL Inspection\ Instrumentation Representative to ensure that, the Dose Rate at the barricade does not exceed 0.25 milirems per hour.
v. Contractor shall ensure availability of radiation meter at work site of radiography
vi. Contractor shall give 12 hours' prior notice to Engineer incharge Inspection \ Instrumentation before starting any radiography work inside refinery.

4.6 COMPRESSED GAS CYLINDERS

4.6.1 Contractor shall comply with the BPCL requirements for storing, handling and using of compressed gas cylinders.

4.6.2 Cylinders which are approved by PESO should only be allowed to use in refinery complex.

4.7 ROAD CLOSURES

4.7.1 No roads shall be barricaded or blocked in any way without written approval from the BPCL's representative & F&S dept. Use of a flag man is required to direct traffic around congested areas. Road workers and workers on roadsides shall wear reflective coverall or jacket.

4.7.2 Barricades, temporary walkways, signs, etc. should be provided for the safety of pedestrians and roadside facilities. Barriers shall be equipped with reflectors or lights so that it is readily visible at night.

4.8 VEHICLE / EQUIPMENT SAFETY CERTIFICATE

4.8.1 All vehicles and engine driven equipment entering BPCL premises require a 'Safety Certificate' as such, contractor should meet the following general requirements:

4.8.2 CONTRACTOR'S Vehicle or mobile equipment shall be in good condition and meet the requirements of 'Vehicle and Equipment Safety'. The number of vehicles/ mobile equipment shall be kept to the minimum essential for the site personnel and work requirements.

4.8.3 Contractor's vehicle or equipment shall be provided with the appropriate type and size of fire extinguisher certified by BPCL Fire & Safety dept.

4.8.4 An approved type of spark arrestor shall be fixed to the exhaust of equipment and vehicles entering hazardous area. Pool cars or buses shall not be allowed to enter hazardous area. Mobile equipment, lifting appliances and vehicles to load or unload material shall only be allowed with work permit and prior authorization.

4.8.5 In addition, contractor's lifting equipment shall have a valid load test certificate from a BPCL approved third party. Safety valves on mobile equipment shall also be third party certified.

4.9 WELDING AND CUTTING

4.9.1 Contractor should obtain a Hot Work Permit prior to any welding works in BPCL premises and all requirements pertaining to hot work shall be strictly enforced. Only a BPCL approved type of Welding Blanket shall be used.

4.9.2 When welding work is carried out in a workshop or any similar location classified as a permit free area, which is approved by CGM (Mfg.), a work permit is not required but the work shall be adequately supervised. The work area shall at all times be kept clean of combustible and flammable material.

4.10 WORK PERMITS

4.10.1 As a general principle, no work in the BPCL premises can be carried out unless authorized by appropriate work permit, except those specified in the BPCL Guidelines and Procedures for Work Permit System. The nature of work may also require additional permission, such as permission for radiography & Excavation.

4.10.2 Contractor shall obtain appropriate written work permit (and additional permission if required) through its BPCL representative before starting any work and an approved copy of the permit must be available at the job site.

5.0 CONTRACTOR'S EQUIPMENT / MATERIALS

i. Contractor's engine driven equipment shall be equipped with BPCL approved type of spark arrestor and should be in good operating condition before it can enter the Refinery and other BPCL premises.

ii. All battery boxes shall be covered and all gasoline lines and carburetors free from leakages.

iii. A current and valid BPCL Safety Certificate shall be attached to all engine driven equipment entering the Refinery.

iv. Operation of engine driven equipment must comply with BPCL Rules and Regulations.

5.1 THIRD PARTY 'TEST CERTIFICATE'

5.1.1 Contractor shall secure BPCL approved Third Party 'Test Certificate' (before using any) of the following contractor's equipment / equipment accessories:

i. Lifting appliances (crane, boom truck, truck, jig lift, forklift, pulley, D shackle etc.)

ii. Safety valves on mobile equipment, e.g. air compressor, hydro test machine, vacuum truck etc.

iii. Cargo tank of tank vehicles, e.g. fuel tanker, vacuum tank or pressurized tank, etc.

iv. All pressure vessels, e.g. compressor's air receiver, SMPV, etc.

5.1.2 And also produces test certificate once in year for all lifting appliance, valve vacuum tank, pressure vessel, & once in six month for lifts, hoist, man basket etc.

5.2 FORKLIFTS, INDUSTRIAL TRUCKS AND CRANES

Only persons holding appropriate Driving License may operate forklifts, industrial trucks and cranes. Personnel are not permitted to ride/travel on forklifts, industrial trucks and cranes.

5.3 STORING FUEL AND REFUELING ON BPCL PREMISES

5.3.1 Contractor should not store fuel for refueling (vehicles & equipment) inside BPCL premises without BPCL Representative approval.

5.3.2 Contractor should not transport fuel on vehicles or containers not approved for that purpose.

6.0 On-the job Control:

Following tools are useful to ensure the safe practices on the job.

6.1 Safety Supervision:

6.1.1 It is the duty of the contractor to supervise his workmen during the job. The concerned plant personnel shall oversee the supervision of safety, health and environmental matters.

6.1.2 It is mandatory that contractor's supervisor is present within the plant premises till the job continues. The contractor's supervisor will be in the close contact with BPCL Engineer in charge.

6.2 Safety Inspections and Safety Audits:

6.2.1 Safety inspection and auditing are important means for monitoring contractor safety. Contractor's Supervisor must discourage unsafe practices by contractor employees through regular inspection at the work site. The compliance with work permit system, mandatory PPE's of personnel, the operational condition of safety equipment and the reliability, use of tools appropriate for the job**,** serviceability
and maintenance of work tools and equipment should be established by spot checks. Concerned contractor's safety supervisors shall carry out audit of their facilities and equipment. It is the responsibility of Contractors to ensure that necessary action is taken to rectify in a time bound manner.

6.2.2 Contractor should participate in half yearly HSE audit conducted by F&S department of BPCL. The result of these audits should be used for setting goals for future improvements and winners should be awarded accordingly. A written Inspection report shall be prepared and distributed to top management of the same. The checklist for half yearly audit is as per **Annexure III.**

6.3 Non Compliance/ Safety Violation:

6.3.1 Whenever the contractor is found to be working unsafe, he shall be advised accordingly by the concerned plant management and F&S person to take corrective

action. If needed work shall be stopped until the situation is rectified. Delay in work as a result of such stoppages shall be regarded as a breach of contractual obligations.

6.3.2 Non-compliance / violation of safety standards by the contractor shall be viewed seriously by the HOD of concerned plant/ Dept. / HOD F&S.

7.0 Contract Employees Safety Training:

It is the policy of BPCL to provide systematic safety training and education to Company's contractors and transporters personnel for observing safe work practices.

7.1 Safety Induction, Mandatory and Job Specific Fire & Safety Training:

As a minimum requirement, all the contractor's personnel working at refinery Complex are required to be trained in HSE aspects as detailed below:

7.1.1 Every person will be provided safety induction prior to deployment on work.

7.1.2 Permanent contractor has to fulfill the requirements of *mandatory* fire & safety trainings.

7.1.3 Contractor employees will also attend job specific training on need basis.

7.1.4 Further, Contractor nominated safety representative also to train their workmen and keep a systematic records of training as per details given below:

i. Date and time of training given

ii. Name and Signature of Safety Representative

iii. Name and Signature of individual taken the training

iv. Periodically contractor workmen training activities will be audited by record checking and validation at random by Fire & Safety Dept.

7.2 Toolbox talks:

The toolbox talks as a part of continuous training for effective use of safety tips on the job planned for that day. The Supervisor-in-charge of the Contractor should give a ten to fifteen minutes talk to the Contract employees. This is the most effective channel of communication as it takes less time, it is at the work place and it is covering the immediate job they are handling so they can precisely correlate the training while working. Toolbox talk is the right tool to boost the safety awareness and to improve the Contract employees' participation as it involves a small group where direct contact is established to make the safety message more effective. Records are to be maintained by Contractor Supervisor of Tool Box talks. This should also reflect in monthly HSE report.

8.0 EMERGENCY RESPONSE AND INCIDENT REPORTING

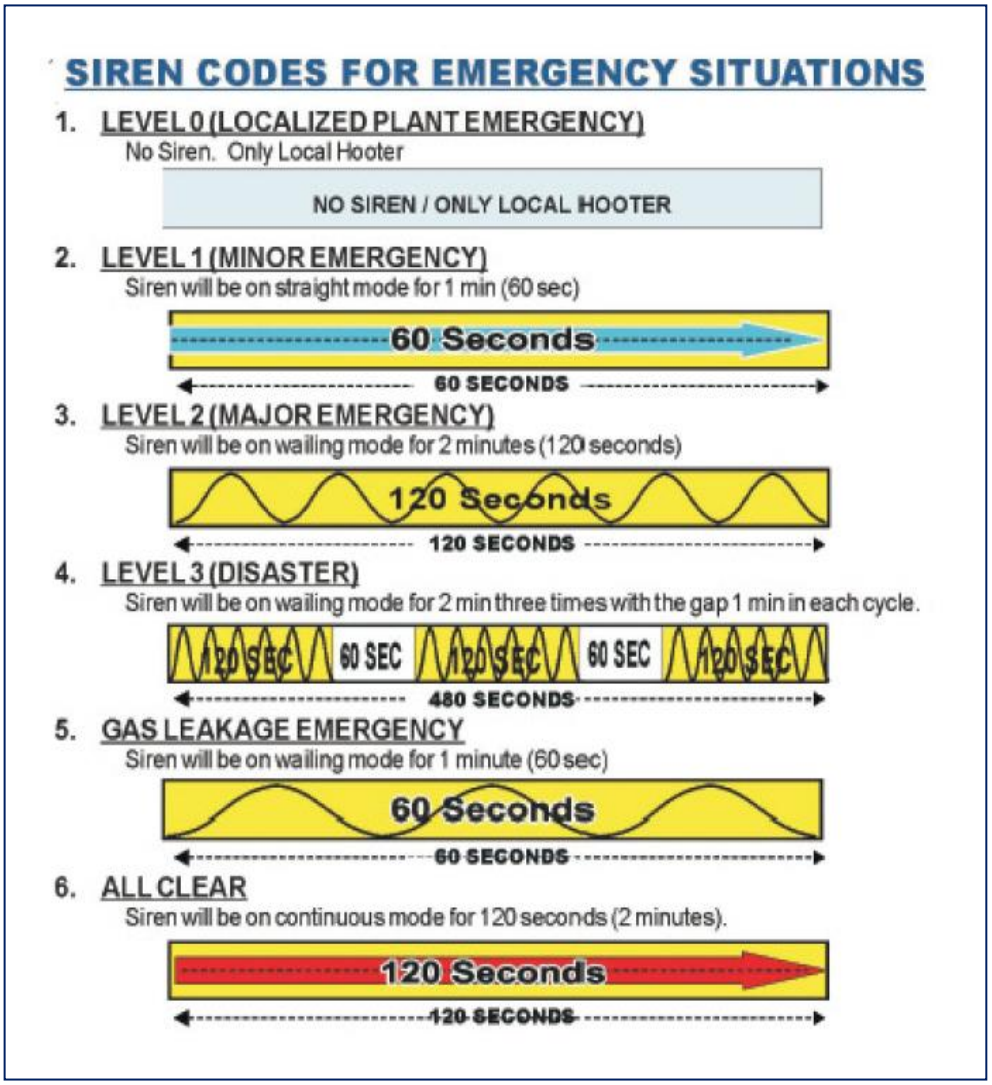
8.1 EMERGENCY RESPONSE

8.1.1 Contractor shall ensure that contractor employees clearly understand their responsibility for an appropriate emergency response as per the BPCL Emergency Response & Disaster Management Plan through awareness / refresher training and Safety Talks.

8.1.2 In the event of a major fire/ evacuation, contractor shall move contractor's employees away from the vicinity of the fire and out of the way of firefighting activities in an orderly manner.

8.2 EMERGENCY SIRENS

There are various sirens to indicate emergency situation in the refinery, as tabulated below. Proceed upwind, or crosswind if gas release is upwind of your location, as indicated by wind socks/steam plumes. Proceed to the appropriate emergency assembly area by the evacuation route as indicated/ communicated.



8.3 Incidents Reporting:

8.3.1 All incidents, property damage and near miss cases pertaining to contractor activities shall be reported by Contractor to the engineer in charge and Fire & Safety department.

8.3.2 Contractor employee, in case of any injury shall report to the plant personnel and if nobody is available, should rush to the Occupational Health Centre for the treatment. If further treatment is required outside company, contractor will arrange for the further treatment. In case of lost time injury or fatality, contractor is responsible for the treatment and compensation of the affected workmen. The contractor will not only give information during the investigation of the Incident to the investigation team but also arrange the witness of the same.

9.0 Responsibilities:

9.1 Responsibilities of Contractor:

9.1.1 To ensure that all tools and equipment used by his working crews are maintained in good working condition and have been tested by the competent authority.

9.1.2 Contractor is required to make safety documents and records available to BPCL Representative upon request. These include, but are not limited to work procedures, training records, performance records, environmental records, licenses, permits, registrations and compliance plans.

9.1.3 To employ adequately qualified, trained, skilled and experienced persons for specified activities.

9.1.4 To appoint adequate number of supervisors, who will be responsible for implementing their HSE program.

9.1.5 To take immediate action to correct any violation of safety rules observed or reported.

9.1.6 To ensure that appropriate warning signboards or tags are displayed on site.

9.1.7 To comply with safety norms lay down from time to time as per requirement of job.

9.1.8 To keep a constant liaison with Engg-in-charge /BPCL representative on safety issues.

9.1.9 Photography is prohibited in all BPCL controlled areas unless authorized. Contractor shall not take photographs without approval of the BPCL representative. Contractor shall obtain permission from BPCL representative. Appropriate Work Permit shall be obtained.

9.1.10 To ensure that his personnel are provided with mandatory personal protective equipment. Also, contractor should ensure that job specific personal protective equipment is available to his personnel.

9.1.11 The contractor has to give an undertaking before start of contract on HSE related aspects as per annexure IV.

9.2 Responsibilities of Contractor Supervisor / Site In-charge of Contractor:

9.2.1 Contractor supervisor is the key person to comply with the HSE standards at work site. He is responsible for overall coordination of the HSE procedures prescribed herein:

i. To facilitate AE/SIC, Fire & safety representative or any other person from BPCL to carry out safety inspections of his site.

ii. To comply with recommendations given by concerned BPCL Officer. All Contractor's Safety Personnel, including designated Safety Representatives, should make daily inspection of the work area. The inspection should be routine, planned, and designed to include communications with specific people in the work place, and not just a visual site visit.

iii. To get information from the concerned BPCL personnel on hazards associated with a particular job and to ensure that necessary precautions are taken during the execution of that job accordingly.

iv. Contractor's job supervisors also should make daily inspection of their work areas for the specific purpose of correcting unsafe acts or hazardous conditions.

v. To take action in consultation with concerned BPCL personnel to rectify the unsafe conditions at work site prior to start of the work.

vi. When work is in restricted area, to select personnel adaptable to the work at hand and will ensure that all safety requirements are being adhered to.

vii. To ensure the use of mandatory PPEs by working crew under his control.

viii. To review the work area for unsafe practices and conditions and initiate corrective actions as required.

ix. To maintain a constant awareness of fire hazards in their area of work responsibility and to take action to eliminate the fire hazards if possible. Matters beyond his ability to handle shall be reported to the concerned engineer in charge.

x. To know the plant emergency procedures. This will broaden the leadership base, which may be required to scope up with serious incidents, personal injuries, fires or evacuation.

xi. To provide all relevant information to incident investigation team for any incident resulting in personal injury, property/ environmental damage.

10.0 HEALTH, SAFETY AND ENVIRONMENTAL PROGRAM

Besides meeting BPCL and other regulatory safety provisions, contractors must have a written safety Program and shall be approved by Fire & Safety department. The actual program that shall be developed will depend on variables such as size of the firm, size of the project, nature of activities and the location & number of contract employees.
The Contractor Management shall commit resources and all necessary support to ensure the program is implemented to the satisfaction of the BPCL. Contractor shall ensure adherence to all laws, rules, regulation, and notification of various government departments pertaining to health, safety and environment.

10.1 SITE SAFETY ORGANIZATION AND RESPONSIBILITIES

10.1.1 The contractor's safety program should establish responsibilities for managers, engineers, supervisors, safety representatives, and the employees.

10.1.2 The contractor's safety program should also include site safety organization with respect to the overall site organogram. The contractor's employee in-charge of safety should be among the top in the organogram and should have authority over other activities. There should be at least one dedicated, qualified and experienced contractor's safety Engineer or Supervisor exclusively responsible for safety implementation / co-ordination. He shall be free from any other responsibility and no compensation will be made by the BPCL for the deputation of contractor's safety staff. The details of the safety officer/supervisor shall be submitted to BPCL F&S dept. in a format given in **annexure V**. Depending upon the nature and size of the job, minimum strength of the contractor's safety personnel shall be as indicated in the table below.

Employee Strength (including sub-contractor)	Minimum Strength of Safety Staff
Max. No. of employees 30	One discipline (Engr./ Supvr.) with safety experience can function on part time basis
No. of employees: 30 – 100	One Safety Supervisor on full time responsibility
No. of employees: 101 – 250	One Safety Engineer on full time responsibility + One Safety Supervisor on full time responsibility
No. of employees: 251 – 500	Two Safety Engineer on full time responsibility + Two Safety Supervisor on full time responsibility
No. of employees: > 500	One Safety Engineer + One Safety Supervisor (for each 250 employees) on full time responsibility

10.1.3 The number of employees mentioned above represents the maximum number of contractor employees estimated to be engaged at the site on any day by the contractor and their subcontractor. In case of block shutdown or turnaround when the contractor is required to bring in additional manpower, the number of contractor safety personnel shall be increased as per above table.

10.1.4 Contractor's safety personnel shall possess the requisite qualification and experience as given below:

10.2 Safety Engineer

Shall be a graduate engineer (Mechanical / Chemical / Electrical/ Civil/ IP/ CTM/ Safety) having a minimum of Two (2) years working experience in the field of Safety. He should possess a recognized degree or diploma in industrial safety. He must be able to speak, read and write English very well.

10.3 Safety Supervisor

10.3.1 He shall be a diploma holder in engineering or science graduate having five (5) years' experience in handling construction or maintenance projects in process Plant. He should possess a recognized degree or diploma in industrial safety. He must be able to speak, read and write English well.

10.3.2 Curriculum Vitae of contractor's safety personnel along with copies of all certificates shall be submitted for BPCL's review and approval before posting at BPCL site. The BPCL reserves the right to evaluate the candidate based on review of CV and verification of original certificates and/or personal interview.

10.4 SAFETY ORIENTATION

10.4.1 New contractor's key personnel (i.e. supervisors, engineers and managers) along with the workforce shall receive safety induction training from BPCL F&S department, as per applicable safety training procedure. In turn, these trained Contractor's key personnel shall conduct orientation to their respective employees prior to job site mobilization / beginning work in form of tool box talks on regular basis and generate record for the same. Such orientation should include provisions of the written safety program and procedures applicable to the contractor's scope of work, and also should include the following:

i. Clarification of the HSE responsibilities for contractor, subcontractor, employee and all construction/project site personnel.

ii. Clarification of HSE expectations of the contractor employees.

iii. HSE rules& regulations within BPCL.

iv. The procedure / responsibilities on Incident reporting for personal injuries, occupational illnesses, fire incidents, property damage incidents, environmental incidents, traffic incidents and near-miss incidents.

v. Toolbox meeting schedule, agenda and attendance mandatory requirement.

vi. The mandatory use of personal protective equipment on various specific activities

vii. Prompt reporting of unsafe acts or conditions.

viii. Overview of BPCL's emergency response plans and the contractor employees action in case of an emergency/drill

ix. Waste Handling and Disposal.

10.5 CONTRACTOR'S HSE MEETINGS AND TRAINING

Contractor site in charge along with the safety officer/ supervisor shall attend monthly HSE meeting conducted on every second Tuesday of the month by BPCL. The meeting agenda should include HSE records and activities, statistics, incidents, personal protective equipment and other employees' concern on HSE at work. Minutes of meeting shall be prepared by F&S dept. and circulated to top management and participants. The format of the monthly report is given in **annexure VI.**

10.6 SAFETY COMMUNICATION AND COORDINATION

For all practical purposes, it should be the responsibility of the contractor to have all its employees & sub-contractors etc. informed and involved in various safety communication and coordination activities.

10.7 RECORDKEEPING AND DOCUMENTATION

10.7.1 Records are required to support activities of contractor safety programs for both control and audit purposes. Records that shall be maintained and retained within the contract duration at the job site should include the following:

i. Log of all injury cases reported and treated, showing date, name of injured, job nature of injury and type of treatment given.

ii. All incident investigation report (i.e. injury, illness, traffic, property damage, environmental incident and as well as Near Miss Incidents).

iii. Safety meetings or toolbox meeting records or minutes showing date of meeting, who attended, the subjects discussed and who conducted the meeting.

iv. Job site inspection / audit reports and status of the action plans.

v. Records to show dates, name of participants and subject of training programs.

vi. Lifting Tackles and crane or equipment inspection records, 3rd party certificate.

vii. PPE's stock & distribution records shall be maintained

11.0 SAFETY REPORTS & RECORD REQUIREMENTS.

The Contractor shall prepare and submit the monthly safety reports in prescribe format given as Annexure II (through BPCL representative) to Fire & Safety department within the first five working days of the month.

12.0 COMPLIANCE WITH STATUTORY REQUIREMENT

Consultants, contractors/ sub-contractors or other third parties working in the field shall abide by:

i. The safety procedures for working in areas of the work as defined in scope of work.
ii. All requirements under The Factories Act 1948 and the rules framed there-under in the M P Factories Rules& Gujarat Factory Rules, as applicable.
iii. Applicable Environment Regulations in force and also the systems and procedures in M.P/Gujarat state of work.
iv. Contractor shall follow complete HSE (Health, Safety and Environmental Policy) guidelines of BPCL.

13.0 SAFETY INFRINGEMENT AND PENALTY SCHEME

All contractors/ sub-contractors and their employees working in BPCL premises shall comply with the BPCL safety procedures, guidelines and safe work practices. Violation of these BPCL procedures / guidelines / safe work practices shall be dealt according to penalty system as follows:

13.1 PENALTY STAGES

VIOLATION	FIRST	SECOND	THIRD	FOURTH
MINOR	**Caution Notice**	**Penalty Rs. 500/-**	**Penalty Rs. 1000/- ***	**Multiplied**
MAJOR	**Penalty Rs. 1000/-***	**Penalty Rs. 2000/- ***	**Penalty Rs. 5000/- ***	**Multiplied**

* The BPCL reserves the right to impose more severe penalty, i.e. suspend/terminate the employee, his supervisor or the site manager.
Note: - The penalties may be revised from time to time by BPCL management.

BPCL employee is authorized to charge the infringement note to contractor for any violation observed at site in prescribe format (Annexure- II) with the copy to safety dept. In case of any disagreement, BPCL SAFETY representative shall be the final authority to decide whether an infringement is minor or major for violations which are not listed in the penalty system. Fire & Safety Department is authorized to issue infringement report to the BPCL representative. The format of the penalty is as per **annexure VII**. The Engineer in Charge of the Contract shall take necessary action and provide feedback to Fire & Safety Department with copy of receipt from bank.

13.2 Minor Violation (Examples but not limited to)

i. Not wearing personal protective equipment (PPE) at work site.

ii. Minor traffic violation (wrong parking)

iii. Blocking of emergency equipment or exits.

iv. Using unapproved scaffolding.

v. Not keeping proper housekeeping

vi. Not providing shoring for the excavations.

vii. Over speeding

13.3 Major Violation (Examples but not limited to)

i. Smoking, carrying matches or lighter.

ii. Working without valid work permit.

iii. Non-compliance to work permits condition.

iv. Repeating minor violations more than twice.

v. Major traffic violation.

vi. Found guilty of negligent driving resulting in a vehicle incident.

Annexure II

VEHICLE / EQUIPMENT SAFETY CHECKLIST

Vehicle/Equipment type : _____ Vehicle Reg./Serial No.:_____ **☐ BPCL ☐ Contractor Company Name: _____ Re-validation: Six Month**			**Date**
Sr. No	**ITEM**	**REQUIREMENT**	**Y / N / NA**
1.	Fire Extinguisher	Approved type and size, properly mounted, easily retrievable	
2.	Exhaust System	Should not leak	
3.	Spark Arrestor	Fitted with approved spark arrestor	
4.	All Lights	Operable and covered with standard lens (includes reverse, brake, hazard lamps & turn indicators), not cracked or broken	
5.	Reverse Beeper/ Horn	Available in vehicles where driver cannot see the rear, horn loud enough, activated by gear lever	
6.	Seat Belt	Seat Belt with seat belt assembly in proper working condition	
7.	Tyres	Good condition	
8.	Battery	Secured by clamp, terminals covered	
9.	Fuel/Hydraulic System	Good condition and not leaking	
10.	Engine/Rotating part guards	Guards in place where applicable	
11.	Wind Shield	Good condition having proper visibility, no cracks	
		Wipers/Washers	
12.	Brakes/Parking Brake	Foot Brake Operable and efficient	
		Hand Brake Operable and efficient	
13.	Rear View Mirrors	Both Side / Rear View in driver cab available and adjustable, no cracks	
14.	Body/canopy/booms	Good condition	
15.	First Aid Kit	Available & maintained	
Additional Checks For Cranes			
16.	Safe Load Indicator	Working condition & tripping system not bypassed.	
		Anti-two Block Alarm/Cut - out	
		Load Indicator	
		Over Hoist Alarm	
		Over Boom Cut – Out/Alarm	
17.	Limit Switches	For crawler & hydraulic cranes	
18.	Glass enclosure for Forklift	Good condition having proper visibility, no cracks	
19.	ELCB Available	Applicable for welding machine or powered devices above 24V	
20.	Third Party Certificate	Valid certificate from approved third party for lifting appliances, PSV of equipment. & tank/vessel/cylinders of tankers	

21.	Safety latches	Available in hooks & in good condition.	
		Wire Ropes Condition/anchorages	
		Hook with Latch in good condition	
22.	Slings	Slings with load test and marking.	
	Operator	Operator's certificate of competency	
	Operator/Helper: Identity	Availability of Yellow Colour Jackets	

Driver's Name & Sign: Validity up to:

Checked by Safety Steward
(Name & Sign with seal)

Approved by: F&S Officer; BPCL

Fire & safety department is responsible for the safety clearance at the time of inspection. Responsibility of the vehicle before & after the inspection lies with the user department/Engineer in charge.

Contractor's Safety Performance Checklist

F/03/CPM/FSG/03

Date:		**Time: Hrs**		
Location / Area of audit :				
Name of contractor company:				
Name of auditees during audit:				
Type of work involved:				
Name of auditors:				
Reporting department:		**Name of Engineer Incharge:**		
SN	**Check Points**	**Max. Marks**	**Marks Obtained**	**Remarks**
Compliance to Contractor Safety Guidelines				
1	Does the Contractor have adequate number of Supervisors for the jobs?	2		
2	Are the Supervisors competent to ensure that the work force adhere to all applicable safety requirements? (As per the scope of safety guidelines)	4		
3	Is there any incident/Accident/LTI occurred, (If 2 FAC - 0 , 1 FAC - half marked)	10		
4	Detail Report available, Remedial measure taken , Briefing about the incident done.	4		
5	Does the contractor know the accident / incident including Nearmiss reporting system of BPCL? Interview any Two Persons (supervisor & site incharge).	2		
6	Whether all the tools / equipment Including PPE used are meeting the standards of Contractor Safety Guidelines? (any certification CE, ISI Marked)	3		
Personal Protective Equipment				
7	Whether PPE are being used and in good condition? (Available with Workers at field)	10		
	• Full sleeve (Cotton overall)/ Boiler Suit			
	• Safety Shoes			
	• Safety Helmet			
	• Safety Goggles			
	• Hang gloves while working			
	• Ear Plug/Muff in high noise area			
	• Any specific PPE such as safety harness, respiratory protectors / mask, welder's screen, gum boot etc.			
Fire & Safety Protection System				
8	Does the workmen know about the nearest location of:	10		
	• MCP (with full form)			
	• Fire extinguishers (Act to operate)			
	• Safety Shower,			
	• Assembly Point, Wind socks, Siren Codes			
	• First Aid Box,			
	• Wind sock cloth?			
Compliance of Work Permit System				
9	Are contractor's personnel aware of the various types of permits for different kinds of jobs?	5		
10	Are the specified conditions of the permit complied?	5		

Chemical/ Material Safety				
11	Workplace maintained clean and orderly during / after the job?	5		
12	Chemicals / materials handled properly?	2		
Healthiness of Tools & Tackles				
13	Is the following equipment used by the contractors maintained in good condition? (check for the different legal requirement & BPCL requirement like list, internal inspection)	8		
	• Tools , Tackles			
	• Electrical / Welding Generators/ Cutting Set with Flash back Arresters.			
	• Scaffolds			
	• Cranes			
Maintaining Safety Records				
14	Whether the contractor workmen/supervisor familiar with safety sign, BPCL Area classification, etc.?	4		
15	Whether workmen undergone Safety training and records kept? (compulsory training all were attended seek record)	5		
16	All employee were taken basic fire & safety induction (record & interview any two persons)	5		
17	Whether toolbox talk conducted regularly and records kept properly? Record checked	4		
18	Asked the information from any of worker about tool box talk subject	2		
19	Does the contractor attend safety committee meetings regularly?	2		
Familiarization with Emergency Actions				
20	Does the contractor personnel know about the hazard associated with their job/ chemicals / material handled and precautions to be taken? (Brief discussion at field)	3		
21	Are the contractor's personnel familiar with emergency actions?	5		
	• Emergency telephone numbers			
	• What to do in case of fire?			
	• What to do in case of toxic release?			
Housekeeping & Safety Promotional Activities				
22	Site condition & equipment preparation & housekeeping.	10		
23	Safety promotion activities	10		
Process Safety Management				
24	Does the PSM Awareness among workers, PSM Poster/Beacon Displayed at site?	10		
25	Does the Contractor have a safety policy as per PSM Contractor Safety Management / OISD-207?	10		
26	Is Safety Statistics of Last 3 years Total Injury Frequency Rate (LWC+MTC) record maintained by contractor as per prequalification questionnaire of PSM Contractor Safety Management work process. **Calculation =[(No. of Injury cases)x(200,000)hrs/(Total hrs worked)]**	10		
	Total	150		
	Overall Rating			

Ref. of Rating: **0-50%**- Below Avg,**51-60%** - Average, **60-75%** - Satisfactory, **76-85%** - Good, **86-95%** -V Good,**96-100%** - Excellent

Name & Signature Auditor(BPCL) Auditee (Contractor/Owner)

Annexure IV

UNDERTAKING

We, M/s _____ have been awarded contract work order no. _____ dtd. __.__._____ by M/s Bharat Petroleum Refineries Ltd. We hereby undertake as follows:

1. That we have understood the details of the work to be executed with reference to the aforesaid work order and the requirements of manpower, equipment, tools/tackles, safety equipment and other resources necessary to execute the work thereof.
2. That we have got competent supervisors and workers with required qualification, relevant experience / skills and trained for safe execution of the work. Our supervisors are well aware of the work hazards and have got adequate knowledge and familiarity about the safe work practices / safe work methods, necessary safety measures and precautions to be taken to avoid accidents during execution of the work.
3. That we have read and understood the General and Special Conditions of the contract work order under reference and agree to abide by the same.
4. That we have familiarized ourselves with the working conditions, understood all necessary requirements for safe execution of the work, including HSE policy and procedures of BPCL and obtained all clarifications regarding the job.
5. That we undertake to ensure and strictly comply with safety procedures and safe practices / methods relevant to the work for safety of our employees and property of the company BPCL and provide required personal protective equipment to all our employees, as necessary for safety & to prevent probable injuries to our workers and as per the safety requirements of the Company (BPCL). We further undertake to carry out the work in accordance with the HSE policy and procedures of BPCL
6. That we shall also comply with all applicable regulations with respect to environmental protection.
7. That we undertake to deploy competent and trained personnel for the job identified who will possess requisite skill, certificate / license.
8. That we shall ensure use of right type of tools, tackles & equipment, maintained in good working condition, suitable to the nature of the job under execution.
9. That we shall be responsible for safety of our employees and other persons at site / property of the company and accountable for any accident due to negligence / fault of our employees or our company and shall be ready to accept the responsibilities for any legal consequences.

Signed, Sealed & Delivered by –

(Signature of the proprietor of the Company / Authorized person)

Name :

Date :

Name of Company :

Company Seal :

Witnesses:

1. Signature : _____
   Name : _____
   Date : _____
   Address : _____
   _____

2. Signature : _____
   Name : _____
   Date : _____
   Address : _____
   _____

Annexure V

Safety Engineer / Supervisor appointment

Contractor's Name: - .....
Nos. of Work force at site:-.....
Details of Safety officer / Supervisor
Full Name: - .....
Date of Birth: - .....Designation: - .....
Contact No :- ..... Email ID: - .....
Appointment date: - .....
Educational Qualification: -
1).....
2).....
3).....
Professional Experience (In Chronological Order)

S.N.	Name of Organization	Period of Service		Designation	Area of Responsibility
		From	To		

Stamp and Signature of Contractor's Owner / Site Incharge
Date:-_____

Annexure VI: **F/03/CPM/FSG/04**

Contractor's Monthly Safety Performance Report

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY
CONTRACTOR'S MONTHLY SAFETY PERFORMANCE REPORT

REPORT FOR THE MONTH	
CONTRACT NO	
CONTRACTOR NAME	
CONTRACT TITLE	
CONTROLLING DEPT./TEAM	
SITE INCHARGE NAME - Mr.	SIGNATURE
THROUGH - ENGINEER INCHARGE NAME -	SIGNATURE
TO, FIRE & SAFETY DEPT NAME - Mr.	SIGNATURE

Following data to be furnish

Sr./No.	DESCRIPTION	THIS MONTH	YEARLY FY (22-23)	CUMMULATIVE	REMARK
	ManHours worked				
	Average No. of Employees Monthly				
	No of Employees				
	Leading Indicators				
1	Near-Miss (NM) Reporting				
2	Toolbox Talk Meeting (No.)				
3	Safety Awareness Training conducted (No.)				
4	BOSOP (No.)				
5	Safety Suggestion (No.)				
6	Safety Audits				
7	Fire & Safety Training (No. of Employee)				
8	Safety Promotion Activities				
9	Unsafe Act Reporting				
10	Unsafe Condition Reporting				
	Lagging Indicators				
1	First Aid cases (FAC)				
2	Medical Treatment cases (MTC)				
3	Restricted work Cases (RWC)				
4	Lost Time Injury (LTI)				
5	Lost Work - Days				
6	Accident/Incident				
7	Dangerous Occurrences (DO)				
8	Fatality				
9	Violation				

What is Safety Activity Rate (SAR) -

The safety activity rate is the overall safety promotional & awareness activity which including safety training & safety inspection conducted in a year with respect to total employees present & man hours worked in a month.

$$SAR = \frac{\text{Total No. of Safety Activities - Lagging Indicators (Excluding LTI)} \times 5 \times 10}{\text{Man Hours Worked} \times \text{No. of employees Present in a Month} \times 30} \times 6 = \text{SAR Benchmark}$$

Safety Activities Rate (SAR) % =	A	B	SAR %

Note : (1) Lagging Indicator includes Violation Notifications/Penalty Note/Warning/FAC/MTC/RWC/Lost Work -Days / Accident/Incident/DO.
(2) In case of any LTI the Safety Performance (SAR) of the company will be considered is zero.

Detail of Accidents/ Near miss/ Dangerous Occurrence

Date &time	Emp Name, ID,& Desig.	Brief Description	Recommendation

Detail of ToolBox Talk & Training

Date &Time	No of participants	Topic

Detail of safety Audits (copy of Report should be attached with report)

Date &Time	Audit done by		Auditee

Detail of Safety Violations by contractors (Report attached if any)

Date &Time	Breif Description of violation	Action taken / Remark

Annexure VII

F/03/CPM/FSG/05

Bharat Petroleum
energising lives

NOTIFICATION FOR CONTRACTORS SAFETY VIOLATIONS

From : Date : .....

To : Engineer in Charge, BPCL

Given below are violation detail of Safety Regulation / Site Instructions committed by a contractor working for your division.

Name of contractor's Employee / Workmen :
Emp. No. :

Contractor's Name/Agency EIC Name

Location of Violation : PO No.:

Date : Time :

Details of Violation : .....

.....

Immediate action taken : .....

.....

This Violation is : ☐ Minor ☐ Major

Action recommended : ☐ Written warning ☐ Penalty Rs. _____

☐ Suspension ☐ Dismissal ☐ Other _____

BPCL shall have right to recover increased amount of penalty from the contractor as per BPCL's sole discretion based on gravity of violation. In addition the contractor shall suspende/terminate his concerned employee, supervisor or the site manager etc. as the case may be due to said violations.

Sign of Person/Supervisor Violation Safety Norms

Name & Sign of Safety Officer/EIC

CC,
Head, Fire & Safety Department, BPCL

Annexure – I

Colour Code Matrix for Service Provider's Boiler Suits working at Bina Refinery

Sr. No.	Category / Service	Boiler Suit Colour	Sample / Picture
1	BR Employees	Royal Blue Colour	
2	Fire Fighting Services	Red Colour	
3	Mechanical Services / Tank M&I Services	Coffee Colour	
4	Electrical Services	Orange Colour	
5	Instrumentation Services	Olive Green Colour	

6	Operation Services (BDT/Offsite/ Refinery)	Navy Blue Colour	
7	Power Plant	Khaki Colour	
8	Utility / Canteen / Civil Services	Grey Colour	
9	Grass cutting / Housekeeping services / Gardening / Green belt Services	Green Colour	
10	Project Services	Dark Blue Colour	

Note: -

1. For other services which are not mentioned above, respective Engineer In-charges shall ensure different colour boiler suits than above colours for contractors.
2. Company Logo, Safety message and design of boiler suits is as per individual service provider's company policy.

Annexure VIII : Contractors Roles & Responsibilities : HSE Guidelines

Contractor's Project Manager

The contractor's Manager has overall responsibility for the development and implementation of appropriate Location Managing and Health and Safety Standards of BPCL. He shall also keep all team members of their responsibilities, current, new and amended statutory requirements.

The contractor's representative shall inform the name of Location Manager to BPCL at least 3 weeks prior to commencement of work. He shall work closely with BPCL Project manager and BPCL Location Safety officer.

Contractor's Managers/ Supervisors

All managers / supervisors employed by the contractor shall conform to the following requirements:

i. The understanding and acceptance of their responsibilities under the BPCL health and Safety Policies and current Indian Health and Safety Legislation.

ii. Make themselves fully conversant with the contents of this document copy and operate within all legal and BPCL requirements applicable to the project location. This requires the continual and regular checking of these requirements in actual practice and taking any necessary corrective action.

iii. Ensuring that all newly engaged or transferred personnel under their control are made fully aware of any known hazards or processes within the project location and the preventative measures to be taken or provided to reduce the risk to personnel.

iv. Ensuring that all employees, including Supervisors, are properly trained for the specific tasks allotted to them. That all newly engaged and transferred employees receive the Health and Safety induction training prior to commencing work at the project location, and that they receive on the job training in health and Safety matters.

v. Ensuring that all personnel under their control are made fully aware of the emergency and evacuation procedures and that the locations of firefighting equipment, alarms, emergency doors and exit routes and assembly areas are pointed out to them.

vi. Making sure that all plant, tools and equipment at the location are maintained in a condition that is safe to use, that all the necessary Safety equipment is readily available, issued, used and maintained and that there is a safe means of access and egress to and from the work location at all times.

vii. Ensuring that the entire relevant safe operating procedures and systems of work instructions are generated, made known to all respective personnel and strictly adhered to. This includes the continual review of these procedures and instructions in practice and discussions with the employees concerned to ensure that they are workable and understood.

viii. Ensuring that all personnel under their control are adequately trained and capable of carrying out their duties correctly and safely, and that no newly engaged or transferred employees are required to undertake any task without the appropriate training, instruction and supervision.

ix. Knowing and thoroughly implementing the accident and incident reporting investigation procedure and taking prompt remedial action to prevent recurrences.

x. Assisting BPCL on investigations, complying with instructions given by him, and co-operating on areas recommended for improvement.

xi. Demonstrating a personal interest in the health, Safety and welfare of personnel, applying a good standard of housekeeping within the work location and encouraging a positive response from other personnel by showing a high standard of self-discipline in respect of health and Safety. xii.

Maintaining a high standard of health and Safety at project location by the day to day Safety training, no matter how small the requirement, by individual instructions, as necessary.

xiii. Assisting the BPCL Representative on work location inspections and taking action any recommendations made, provided they are able to do so. Ensuring that in the event that any matter raised be unresolved, even with the facilities available to them, they refer the issue to the location Incharge/ Head.

xiv. Where new plant, equipment, process or changes are to be implemented within the work area, they are to make BPCL Representative(s) aware of the details and the potential effect such plant / equipment / practices are likely to have on the health and Safety of personnel in the work area.

xv. Seek the advice of the Location Incharge on matters of health and Safety, protective equipment, clothing, systems of work and procedures wherever any doubt exists.

xvi. Determine the requirements for protective equipment or clothing for operations and processes and requisition the same from stores and issue same to those requiring use of such equipment. xvii. Notify their immediate superior of any defective, damaged or missing guards on machinery or plant and request that the matter be dealt with immediately prior to permitting the use of any such plant or machinery, etc.

xviii. Notifying the Location Incharge of all personnel whom they intend to employ on operations involving contact with hazardous process.

xix. The contractor's managers/ supervisors have an overall responsibility to ensure that all machinery, plant and equipment under their direct control are safe and without risk to employees.

xx. In the event of the contractor's managers/ supervisors not being able to resolve a health and Safety problem, especially ones reported to him by employees, he shall refer the matter to the BPCL project manager.

xxi. The contractor shall maintain Portable First Aid Boxes in fully equipped state at various places. The contractor shall ensure that at least one employee on every working shift, is a trained First Aider, capable of administering First Aid competently until the arrival of professional help, in an accident situation.

Contractor's Safety Officer

The contractor's Safety officer is primarily responsible for writing and the upkeep of his Safety Plan, and any other identified required procedures as the project progresses. Other responsibilities include, but are not limited to, advising the SM and any members of the project team on Safety matters, assuring compliance with BPCL Safety Manual and any other relevant Safety related documents, ensuring audits and inspections are conducted on a regular basis as required, ensure that personnel, at all levels within their scope receive appropriate Safety training through organized induction and refresher courses and activity toolbox talks , provide assistance to assure they fully comply with their responsibilities for Safety, chairing Safety committee meetings and constant liaison with the BPCL Safety Engineer. PSE shall be appointed and notified to the Employer in due course.

ANNEXURE IX : Facilities /Equipment for the Contractor's Safety Function

The following minimum facilities shall be provided:

S.No	Safety monitoring and Audio-Visual equipment details	Quantity
1	Portable hand held Digital Sound Level Meter (SLM)	
2	Portable hand held Digital Lux Meter	
3	Laptop computer with standard configuration including multimedia facilities.	
4	Colour Printer	
5	Computer Projector with Screen	
6	Overhead Projector	
7	35mm Camera	
8	Digital Camera with flash (4 Mega pixel minimum) with video facility	
9	Digital still Camera with flash (4 Mega pixel minimum)	
10	Portable loud speaker (for tool box talk and emergency purpose)	
11	Communication facilities like mobile phones and Walky talky	
12	Accident Investigation kit	

निर्माण स्थल पर स्वास्थ्य, सुरक्षा एवं पर्यावरण प्रबंधन हेतु मानक विनिर्देश

STANDARD SPECIFICATION FOR HEALTH, SAFETY & ENVIRONMENTAL MANAGEMENT AT CONSTRUCTION SITES

Rev. No.	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
					Approved by	
2	18/04/2023	REVISED & UPDATED	BT	RK	JPV	SM
1	07/06/2022	REVISED & UPDATED	BT	RK	JPV	SM
0	23/12/2020	REVISED & UPDATED	BT	RK	AKK	S Mazumdar

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Abbreviations:

AERB	:	Atomic Energy Regulatory Board
ANSI	:	American National Standards Institute
BARC	:	Bhabha Atomic Research Centre
BS	:	British Standard
BOCW	:	Building and other construction workers
BOO/BOOT	:	Build, Own, Operate/Build, Own, Operate, Transfer
EIL	:	Engineers India Limited
EIC	:	Engineer In charge
ELCB	:	Earth Leakage Circuit Breaker
EPC	:	Engineering, Procurement and Construction
EPCC	:	Engineering, Procurement, Construction and Commissioning
ESI	:	Employee State Insurance
GCC	:	General Conditions of Contract
GM	:	General Manager
GTAW	:	Gas Tungsten Arc Welding
HOD	:	Head of Department
HSE	:	Health, Safety & Environment
HIRAC	:	Hazard, Identification Risk Assessment & Control
HMV	:	Heavy Motor Vehicle
HV	:	High Voltage
IS	:	Indian Standard
ISO	:	International Organization for Standardization
IE	:	Indian Electricity
LTI	:	Lost Time Injuries
LMV	:	Light Motor Vehicle
LOTO	:	Lock Out & Tag Out
LPG	:	Liquefied Petroleum Gas
LSTK	:	Lump Sum Turn Key
MV	:	Medium Voltage
OH&S	:	Occupational Health and Safety
OISD	:	Oil Industry Safety Directorate
PPE	:	Personal Protective Equipment
PUC	:	Pollution Under Control
RC	:	Registration Certificate
RCCB	:	Residual Current Circuit Breaker
RCM	:	Resident Construction Manager or Site-in-Charge, as applicable
SCC	:	Special Conditions of Contract
SLI	:	Safe Load Indicator
SWL	:	Safe Working Load
TPI	:	Third Party Inspection
TBT	:	Tool Box Talks

Construction Standards Committee

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1.0 SCOPE

This specification establishes the Health, Safety and Environment (HSE) management requirement to be complied by Contractors/Vendors including their sub-contractors/sub vendors during construction.

This specification is not intended to replace the necessary professional judgment needed to design & implement an effective HSE system for construction activities and the contractor is expected to fulfill HSE requirements in this specification as a minimum. It is expected that contractor shall implement best HSE practices beyond whatever are mentioned in this specification.

Requirements stipulated in this specification shall supplement the requirements of HSE Management given in relevant Act(s)/ Legislations, General Conditions of Contract (GCC), Special Conditions of Contract (SCC) and Job (Technical) Specifications. Where different documents stipulate different requirements, the most stringent shall apply.

2.0 REFERENCES

The document should be read in conjunction with following:

- General Conditions of Contract (GCC)
- Special Conditions of Contract (SCC)
- Building and other construction workers Act, (Refer Appendix-D)
- Indian Factories Act,(Refer Appendix-D)
- Job (Technical) specifications
- Relevant International/ National Codes (refer Appendix-A for standards/codes on HSE)
- Relevant State & National Statutory requirements.
- Operating Manuals Recommendation of Manufacturer of various construction Machineries
- Occupation Health and Safety Management System (OHSAS 18001:2007/ISO 45001) and Environmental Management System (ISO 14001:2015)

3.0 REQUIREMENTS OF HEALTH, SAFETY & ENVIRONMENTAL (HSE) MANAGEMENT SYSTEM TO BE COMPLIED BY BIDDERS

3.1 Management Responsibility

3.1.1 HSE Policy & Objectives

The Contractor should have a documented and duly approved HSE policy &objectives to demonstrate commitment of their organization to ensure health, safety and environmental aspects in their line of operations.
The Contractor's senior management shall provide strong visible leadership and continuously demonstrate commitment to develop, operate and maintain, review and continually improve a HSE culture at site which empowers individuals to take responsibility for their safety and embrace and accept nothing but responsible HSE behaviour.
Contractor shall refer in clause No. 3.3.23 for Key Performance Indicator (KPI).

3.1.2 Management System

The HSE management system of the Contractor shall cover the HSE requirements & commitments to fulfill them, including but not limited to what have been specified under clauses 1.0 and 2.0 above. The Contractor shall obtain the approval of its site specific HSE Plan from EIL/ Owner prior to commencement of any site works. Corporate as well as Site management of the Contractor shall ensure compliance of their HSE Plan at work sites in its entirety in true spirit.

3.1.3 Indemnification

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Contractor shall indemnify & hold harmless, Owner/EIL & their representatives, free from any and all liabilities arising out of non-fulfillment of HSE requirements or its consequences.

3.1.4 **Deployment &Qualifications of Safety Personnel**

The Contractor shall designate/deploy various categories of HSE personnel at site as indicated below insufficient number. In no case, deployment of safety Supervisor / Safety Steward shall substitute deployment of Safety Officer / Safety Engineer what is indicated in relevant statute of BOCW Act i.e. deployment of safety officer/Safety Engineer is compulsory at project site. The Safety supervisors, Safety stewards/Observer etc. would facilitate the HSE tasks at grass root level for construction sites and shall assist Safety Officer /Engineers.

Contractor shall appoint safety personnel as given below for every work shift:

(i) Safety Observer/Steward: Contractor shall depute one Safety Observer/Steward for every 100 workers or part thereof

(ii) Safety Supervisor: In addition to above(i), contractor shall depute one Safety Supervisor for every 250 workers or part thereof

(iii) Safety Engineer: In addition to above (i&ii), one safety engineer/ officer for every 1000 workers or part thereof.

Contractor shall intimate/obtain prior permission from EIC before demobilizing any safety personnel. The Contractor shall mobilize suitable safety personnel as replacement.

a) Safety Steward/Observer

As a minimum, he shall possess class XII pass certificate and trained in fire-fighting as well as in safety/occupational health related subjects, with minimum two year of practical experience in construction work environment and should have adequate knowledge of the local language spoken by majority of the workers at the construction site.

b) Safety Supervisor

As a minimum, he shall possess a recognized graduation Degree in Science (with Physics & Chemistry) or a Diploma in Engg. Or Tech. with minimum Two years of practical experience in construction work environment and should possess requisite skills to deal with construction safety & fire related day-to-day issues.

c) Safety Officer / Safety Engineer

Safety Officer/Engineer should possess following qualification & experience:

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(i) Recognized degree in any branch of Engg. or Tech. or Architecture with practical experience of working in a building or other construction work in supervisory capacity for a period of not less than two years, **or** possessing recognized diploma in any branch of Engg. or Tech with practical experience of working in a building or other construction work in supervisory capacity for a period of not less than five years.

(ii) Recognized degree or one year diploma in Industrial safety(from any Indian Institutes recognized by AICTE or State Council of Tech. Education of any Indian State/Union territory) with at least one paper in construction safety (as an elective subject).

(iii) Preferably have adequate knowledge of the language spoken by majority of the workers at the construction site.

Alternately

(i) Person possessing Graduation Degree in Science with Physics **or** Chemistry and degree or one year diploma in Industrial Safety (from any Indian institutes recognized by AICTE or State Council of Tech. Education of any Indian State/ Union Territory) with practical experience of working in a building, plant or other construction works (as Safety Officer, in line with Indian Factories Act, 1948) for a period of not less than five years, may be considered as Safety Officer.

d) HSE In-Charge

In case there is more than one Safety Officer at any project construction site, one of them, who is senior most by experience (in HSE discipline), may be designated as HSE In-Charge. Duties & responsibilities of such person shall be commensurate with that of relevant statute and primarily to coordinate with top management of EIL/Client and contractors.

In case the statutory requirements i.e. State or Central Acts and / or Rules as applicable like the Building and Other Construction Workers' Regulation of Employment and Conditions of Service- Act,1996 or State Rules (wherever notified), the Factories Act, 1948 or Rules (wherever notified), etc. are more stringent than above clarifications, the same shall be followed.

Contractors shall ensure physical availability of safety personnel at the place of specific work location, where Hot Work Permit is required/granted. No work shall be started at any of the project sites until above safety personnel & concerned Site Engineer of Contractor are physically deployed at site. The Contractor shall submit a HSE Organogram clearly indicating the lines of responsibility and reporting system and elaborate the responsibilities of safety personnel in their HSE Plan.

Upon fulfilling the basic requirement of qualification and relevant experiences, the performance of contractor HSE personnel's is to be monitored.

The good performing contractor's HSE personnel at site shall be rewarded upon assessment of performance by EIL/Owner. The non-performing HSE personnel shall be counselled by EIL/Owner & suitable action may be taken for suspension from site for 3-6 days. Contractor shall arrange training for non performing HSE personnel.

HSE In –Charge of the contractor shall be given the status at par with the other heads of department and shall report to Head of Project.

The Contractor shall verify & authenticate credentials of such safety personnel and furnish Bio-Data/Resume/Curriculum Vitae of the safety personnel as above for EIL/Owner's approval, at least 1 month before the mobilization. The Contractor, whenever required, shall arrange submission of original testimonials/certificates of their Safety personnel, to EIL/Owner (for verification/scrutiny, etc.)

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Imposition/ Realization of penalty shall not absolve the Contractor from his/her responsibility of deploying competent safety officer at site.

Adequate planning and deployment of safety personnel shall be ensured by the Contractor so that field activities do not get affected because of non-deployment of competent & qualified safety personnel in appropriate numbers.

3.1.5 Implementation, Inspection/Monitoring

a) The Contractor shall be fully responsible for planning, reporting, implementing and monitoring all HSE requirements and compliance of all laws & statutory requirements.

b) The Contractor shall also ensure that the HSE requirements are clearly understood & implemented conscientiously by their site personnel at all levels at site.

c) The Contractor shall ensure physical presence of their field engineers / supervisors, during the continuation of their contract works / site activities including all material transportation activities. Physical absence of experienced field engineers / supervisors of Contractor at critical work spot during the course of work may invite halting / stoppage of work.

d) The Contractor shall regularly review inspection report internally and implement all practical steps / actions for improving the status continuously.

e) Contractor skilled workmen like riggers, scaffold erectors, welders, crane operators etc. should have sufficient past experience and skill on the relevant job.

f) The Contractor shall ensure important safety checks right from beginning of works at every work site locations and to this effect format No. HSE-10 "Daily Safety Check List" shall be prepared by field engineer & duly checked by safety personnel for conformance.

g) The Contractor shall carry out inspection to identify various unsafe conditions of work sites/machinery/equipment's as well as unsafe acts on the part of workmen/supervisor/engineer while carrying out different project related works.

h) Adequate records for all inspections shall be maintained by the Contractor and the same shall be furnished to EIL/Owner, whenever sought.

i) To demonstrate involvement/commitment of site management of Contractor, at least one Monthly Safety Walk through in a month shall be carried out by Contractor's head of site (along with his area manager/field engineers)and a report shall be furnished to EIL/Owner as per format No: HSE-1" Safety walk through report" followed by compliance for unsatisfactory remarks.

j) As a general practice lifting tools/tackles, machinery, accessories etc. shall be inspected, tested and examined by competent person(approved by concerned State authorities) before being used at site and also at periodical interval (e.g. during replacement, extension, modification, elongation/reduction of machine/parts, etc.) as per relevant statutes. Hydraulic Mobile Crane, cranes, lifting machinery, mobile equipment's/ machinery/ vehicles, etc. shall be inspected regularly by only competent / experienced personnel at site and requisite records for such inspections shall be maintained by contractor. Contractor shall also maintain records of maintenance of all other site machinery (e.g. generators, rectifiers, compressors, cutters, etc.) & portable tools/equipment's being used at project related works (e.g. drills, abrasive wheels, punches, chisels, spanners, etc.).The Contractor shall not make use of arbitrarily fabricated 'derricks' at project site for lifting/ lowering of construction materials.

k) Site facilities /temporary. installations, e.g. batching plant, cement godown, DG-room, temporary electrical panels/distribution boards, shot-blasting booth, fabrication yards, etc. and site welfare facilities, like labour colonies, canteen/pantry, rest-shelters, motor cycle/bicycle-shed, First-aid centers, urinals/toilets, etc. should be periodically inspected by Contractor (preferably utilizing HR/Admin. personnel to inspect site welfare facilities) and records to be maintained.

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3.1.6 **Behaviour Based Safety**

a) The contractor shall develop a system to implement Behavior-Based Safety (BBS) through which work groups can identify, measure and change the behaviors of employees and workers towards construction safety aspects.

b) The BBS process shall include the following:
- Identify the behaviors critical to achieve required safety performance.
- Communicate the behaviors and how they are performed correctly byall
- Observe the work force and record safe/at risk behaviors. Intervene with workers to give positive reinforcement when unsafe behaviors are observed. Provide coaching/correction when at risk behaviors are observed
- Collect and record observation data
- Summarize and analyze observation data
- Communicate observation data and analysis results to all employees
- Provide recognition or celebrate when safe behavior improvements occur
- Change behaviors to be observed or change activators or change consequences as appropriate.
- Communicate any changes to workforce

c) Contractor through its own HSE committee shall implement the above process.

d) The necessary procedures and Monthly reporting formats shall be developed by the contractor for approval by EIL/Owner.

e) The HSE committee of contractor shall observe individual's behavior for safe practices adapted for utilization/execution of work for followings a minimum:-
- PPE
- Tools & equipment's
- Hazard Identification & control
- House keeping
- Confined space entry
- Hot works
- Excavation
- Loading & unloading
- Work at height
- Stacking & storage
- Ergonomics

f) EIL/Owner and Contractor's site staff at all levels shall monitor the behavior of contractor employees that create and/or contribute to the unsafe situations at work place.

g) Contractor shall arrange Behavior Based safety (BBS) training of their employees at site on yearly basis.

3.1.7 **Awareness and Motivation**

a) The Contractor shall promote and develop awareness on Health, Safety and Environmental protection among all personnel working for the Contractor.

b) The contractor shall display safety statistics board at all prominent location .Also shall provide dedicated notice board for displaying of safety alerts or any other safety related notices for awareness site workforces.

c) Regular awareness programs and fabrication shop/work site meetings at least on monthly basis shall be arranged on HSE activities to cover hazards/risks involved in various operations during construction.

d) Contractor's workmen & supervisory staff shall participate in common Tool Box Meeting as & when organized/required at site to avoid any incident/accident or occupational disease arising out of multidisciplinary jobs/activities being performed by various contracting agencies in the same location at different elevation.

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e) Contractor to motivate & encourage the workmen & supervisory staff by issuing/ awarding them with tokens/ gifts/ mementos/ monetary incentives/ certificates etc. The motivational program shall be organized on regular basis.

f) Contractor shall assess & recognize the behavioral change of its site engineers / supervisors periodically and constantly motivate / encourage them to implement HSE practices at project works

g) Life Saving Rules (refer Appendix-I for details) are to be displayed at prominent location of site.

3.1.8 **Fire Prevention & First-Aid**

The Contractor shall deploy First aider & suitable First-aid measures such as First Aid Box (Refer Appendix-B for details), stand-by Emergency Vehicle. Additionally separate ambulance with trained personnel/male or female nurse to administer First Aid shall be provided by the Contractor beyond deployment of 500 workmen during day/night working hours.

a) The Contractor shall arrange installation of fire protection measures such as adequate number of steel buckets with sand & water and adequate number of appropriate portable fire extinguishers (Refer Appendix-C for details) to the satisfaction of EIL/Owner.

b) The Contractor shall arrange EMERGENCY MOCK DRILL like fire, bomb threat, gas leakage, earth quake, etc. at each site at least once in three months, involving site workmen and site supervisory personnel & engineers. The Contractor shall maintain record of such mock drills at project site.

c) The contractor shall require to tie-up with the hospitals located in the neighborhood for attending medical emergency.

3.1.9 **Documentation**

The Contractor shall evolve a comprehensive, planned and documented system covering the following as a minimum for implementation and monitoring of the HSE requirements and the same shall be submitted for approval by owner/EIL.

- HSE Organogram
- Site specific HSE Plan
- Safety Procedures, forms and Checklist. Indicative list of HSE procedures is attached as Appendix :H
- Inspections and Test Plan
- Risk Assessment & HIRAC for critical works.
- HIRAC Register as per Format no: HSE-19 to identify, assess, analyze & mitigate the construction hazards& incorporate relevant control measures before actually executing site works.
- Environmental Aspect Impact Register as per Format no: HSE-18 (identify, assess, analyze & mitigate the environmental impact & incorporate relevant control measures).
- Legal Register to identify and comply to all applicable HSE related legal requirements.

The monitoring for implementation shall be done by regular inspections and compliance of the observations thereof. The Contractor shall get similar HSE requirements implemented at his sub-contractor(s) work site/office, if applicable. However, compliance of HSE requirements shall be the responsibility of the Contractor. Any review/approval by EIL/Owner shall not absolve contractor of his responsibility/liability in relation to fulfilling all HSE requirements.

3.1.10 **Audit**

Safety Audit shall be conducted at initial stage by EIL/Owner to understand the readiness to start the job after mobilization of contractor's RCM at site& Suitable action shall be taken by contractor to comply the audit observation(s).

The Contractor shall submit an Audit Plan to EIL/Owner indicating the type of audits covering following as minimum:

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a) Internal HSE audits regularly on six monthly basis by engaging internal qualified auditors (viz. safety officers/Construction personnel having 5years experience in construction safety and Lead Auditor Course: OHSAS 18001/ISO 45001 certification).However, minimum two internal HSE audit will have to be conducted irrespective of time period of the contract.

b) External HSE audits regularly on yearly basis by engaging authorized auditing agencies (viz. National Safety Council etc.)or qualified external auditors (viz safety officers/Construction personnel having 10years experience in construction safety and Lead Auditor Course: OHSAS 18001/ISO 45001certification). However, minimum one external HSE audit will have to be conducted irrespective of time period of the contract.

c) EIL/Owner may participate in Opening and closing meeting of external audits and provide inputs to the external auditor. Outcome of external audit shall be discussed during HSE Meeting with EIL/Owner.

All HSE shortfalls/ non-conformances on HSE matters brought out during review/audit, shall be resolved forthwith(generally within a week) by Contractor& compliance report shall be submitted to EIL/Owner.

In addition to above audits by contractor, the contractor's work shall be subjected to HSE audit by EIL/Owner at any point of time during the pendency of contract. The Contractor shall take all actions required to comply with the findings of the Audit Report and issue regular Compliance Reports for the same to OWNER/ EIL till all the findings of the Audit Report are fully complied.

Failure to carry-out HSE Audits& its compliance (internal & external) by Contractor, shall invite penalization.

3.1.11 **Meetings**

i. The Contractor shall ensure participation of his top most executive at site (viz. Resident Construction Manager / Resident Engineer/ Project Manager / Site-in-Charge) along with safety officer in Safety Committee/HSE Committee meetings arranged by EIL/Owner usually on monthly basis or as and when called for. In case Contractor's top most executive at site is not in a position to attend such meeting, he shall inform EIL/Owner in writing before the commencement of such meeting indicating reasons of his absence and nominate his representative – failure to do so may invite very stringent penalization against the specific Contractor, as deemed fit as per Contract. The obligation of compliance of any observations during the meeting shall be always time bound. The Contractor shall always assist EIL/Owner to achieve the targets set by them on HSE management during the project implementation.

ii. In addition, the Contractor shall also arrange internal HSE meetings chaired by his top most executive at site on fortnightly basis and maintain records. Such internal HSE meetings shall essentially be attended by field engineers / supervisors including safety personnel of the Contractor and its associates. Records of such internal HSE meetings shall be maintained by the Contractor for review by EIL/Owner or for any HSE Audits.

iii. Agenda of internal HSE meeting should broadly cover: -

a) Confirmation of record notes /minutes of previous meeting
b) Discussion on outstanding subjects of previous points / subjects, if any
c) Incidents / Accidents (of all types) at project site, if any
d) Current topics related to site activities / subjects of discussion
e) House keeping
f) Behavioral Safety
g) Information / views / deliberations of members / site sub-contractors
h) Report from Owner / Client
i) Status of Safety awareness, Induction programs & Training programs

The time frame for such HSE meeting shall be religiously maintained by one and all.

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3.1.12 Intoxicating drinks & drugs and smoking

a) The Contractor shall ensure that his staff members & workers (permanent as well casual) shall not be in a state of intoxication during working hours and shall abide by any law relating to consumption & possession of intoxicating drinks or drugs in force.

b) The Contractor shall not allow any workman to commence any work at any locations of project activity who is/are influenced / effected with the intake of alcohol, drugs or any other intoxicating items being consumed prior to start of work or working day.

c) Awareness about local laws on this issue shall form part of the Induction Training and compulsory work-site discipline.

d) The Contractor shall ensure that all personnel working for him comply with "No-Smoking" requirements of the Owner as notified from time to time. Cigarettes, lighters, auto ignition tools or appliances as well as intoxicating drugs, dry tobacco powder, etc. shall not be allowed inside the project / plant complex.

e) Smoking shall be permitted only inside smoking booths, if any, exclusively designated & authorized by the Owner/EIL.

3.1.13 Penalty

The Contractor shall adhere consistently to all provisions of HSE requirements. In case of non-compliances and also for repeated failure in implementation of any of the HSE provisions, EIL/Owner may impose stoppage of work without any cost & time implication to the Owner and/or impose a suitable penalty.

The amount of penalty to be levied against defaulted Contractor shall be up to a cumulative limit of

2.0% (Two percent) of the contract value for Item Rate or Composite contracts with an overall ceiling of 1,00,00,000(Rupees One Crore).

0.5% (Zero decimal five percent) of the contract value for LSTK, OBE, EPC,BOO/BOOT, EPCC or Package contracts with an overall ceiling of 10,00,00,000(Rupees Ten Crores.)

This penalty shall be in addition to all other penalties specified elsewhere in the contract. The decision of imposing stop-work-instruction and imposition of penalty shall rest with EIL/Owner. The same shall be binding on the Contractor. Imposition of penalty does not make the Contractor eligible to continue the work in unsafe manner.
The amount of penalty applicable for the Contractor on different types of HSE violations is specified below:

Sl. No.	Violation of HSE Norms	Penalty Amount
1.	For not using personal protective equipment like Helmet, Safety Shoes, and other safety gadgets as applicable as per nature of work.	Rs.500/- per day/Item / Person
2.	Working without Work Permit/Clearance	Rs.20,000/- per occasion
3	Execution of work without deployment of requisite field engineer / supervisor at work spot	Rs.5,000/- per violation per day
4.	Unsafe electrical practices (not installing ELCB, using poor joints of cables, using naked wire without top plug into socket, laying wire/cables on the roads, electrical jobs by incompetent person, etc.)	Rs.10,000/- per item per day

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Sl. No.	Violation of HSE Norms	Penalty Amount
5.	Working at height without full body harness, using non-standard/ rejected scaffolding and not arranging fall protection arrangement as required, like hand-rails, life-lines, Safety Nets etc.	Rs.10,000/- per case per day
6.	Unsafe handling of compressed gas cylinders (No trolley, jubilee clips double gauge regulator, and not keeping cylinders vertical during storage/handling, not using safety cap of cylinder).	Rs.1,000/- per item per day
7.	Use of domestic LPG for cutting purpose / not using flash back arresters on both the hoses/tubes on both ends.	Rs.5,000/-per occasion
8.	No fencing/barricading of excavated areas / trenches.	Rs.5,000/- per occasion
9.	Not providing shoring/strutting/proper slope and not keeping the excavated earth at least 1.5M away from excavated area.	Rs.5,000/-per occasion
10.	Non display of scaffold tags, caution boards on erected scaffolds.	Rs.1,000/- per occasion per day
11.	Traffic rules violations like over speeding of vehicles, rash driving, talking on mobile phones during vehicle driving, wrong parking, not using seat belts, vehicles not fitted with reverse horn / warning alarms / flicker lamps during foggy weather.	Rs.3,000/-per occasion per day
12.	Absence of Contractor's RCM/SIC or his nominated representative (prior approval must be taken for each meeting for nomination) from site HSE meetings whenever called by EIL/Owner& failure to nominate his immediate deputy for such HSE meetings.	Rs.10,000/- per meeting
13.	Failure to maintain HSE records by Contractor Safety personnel, in line with approved HSE Plan/Procedures/Contract specifications.	Rs.10,000/- per month
14.	Failure to conduct daily site safety inspection (by Contractor's Site Engineer &safety officer), internal HSE meeting, internal HSE Awareness/Motivation Program and Site HSE Training at predefined frequencies (as approved in HSE Plan).	Rs.10,000/- per occasion
15.	Failure to fill online/submit the monthly HSE report by 5th of subsequent month to Engineer-in-Charge/ Owner	Rs10,000/-per occasion and Rs.1,000/-per day of further delay
16.	Poor House Keeping	Rs.5,000 /- per occasion per subject
17.	Failure to report &follow-up accident (including Near Miss) reporting system within specific time-frame.	Rs.20,000/- per occasion
18.	Degradation of environment (not confining toxic spills, spilling oil/lubricants onto ground)	Rs.10,000/- per occasion

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Sl. No.	Violation of HSE Norms	Penalty Amount
19.	Not medically examining the workers before allowing them to work at height / to work in confined space / to work in shot-blasting / to work for painting / to work in bitumen or asphalt works, not providing ear muffs while allowing them to work in noise polluted areas, made them to work in air polluted areas without respiratory protective devices, etc.	Rs.5,000/- per occasion per worker
20.	Violation of any other safety condition as per job HSE plan / work permit and HSE conditions of contract (e.g.using crowbar on cable trenches, improper welding booth, not keeping fire extinguisher ready at hot work site, unsafe rigging practices, non-availability of First-Aid box at site, not providing dead man handle switch for blasting, whiplash arrestor for the compressor line, not using hood with respiratory devices by blaster for shot//grit blasting, etc.)	Rs.5,000/- per occasion
21.	Penalty for non-deployment of ambulance in case of man-power more than 500 or not providing dedicated emergency vehicle in case of man-power less than 500.	Rs.3,000 per day
22.	Failure to carry-out Safety audit in time (internal & external),close-out of identified shortfalls of Observations of Safety Aspects(OSA),etc.	Rs.20,000/- per occasion (for internal audit &OSA). Rs.30,000/-per occasion for external audit
23.	Carrying out sand blasting instead of grit/shot blasting	Rs.50,000/- per day
24.	Failure to deploy adequately qualified and competent Safety Officer	Rs.10,000/- per day per Officer
25.	Utilization of Hydraulic Mobile Crane /back-hoe loader for material shifting or any other unauthorized /unsafe lifting works	Rs.25,000/- per occasion
26.	Any Fatal Accident	Rs.10,00,000/-per fatality
27.	Any violation not covered above	To be decided by EIL/Owner.

Note: Penalty amount deducted from the contractor shall be utilized by owner/EIC for the promotion of the safety during the currency of the project.

The Contractor shall make his field engineers/supervisors fully aware of the fact that they keep track with the site workmen for their behavior and compliance of various HSE requirements. Safety lapses / defects of project construction site shall be attributable to the concerned job supervisor / engineer of the Contractor, (who remains directly responsible for safely executing field works). For repeated HSE violations, concerned job supervisor / engineer shall be reprimanded or appropriate action, as deemed fit, shall be initiated (with information to EIL & Owner) by the concerned Contractor.

Contractor shall initiate verbal warning shall be given to the worker/employee during his first HSE violation. A written warning shall be issued on second violation and specific training shall be arranged / provided by the Contractor to enhance HSE awareness/skill including feedback on the mistakes/ flaws. Any further violation of HSE stipulations by the erring individuals shall call

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for his forthright debar from the specific construction site. A record of warnings for each worker/employee shall be maintained by the Contractor, like by punching their cards / Gate passes or by displaying their names at the Project entry gate. Warnings, penalizations, appreciations etc. shall be discussed in HSE Committee meetings by site Head of the Contractor.

3.1.14 **Accident/ Incident investigation**

All accidents/incidents shall be informed to EIL/Owner at least telephonically by Contractor immediately and in writing within 24 hours on Format No. HSE-2 as applicable, by Contractor. Thereafter, a Supplementary Accident/Incident investigation Report on Format No. HSE-3 shall be submitted to EIL/Owner within 72 hours. Near Miss incident(s), Dangerous accidents/incident shall also be reported on Format No. HSE-4 within24 hours. The accident/ incident shall be investigated by a team of Contractor's senior Site personnel (involving Site-in-Charge or at least by his deputy) for establishing root-cause and recommending corrective & preventive actions. Findings shall be documented and suitable actions taken to avoid recurrences shall be communicated to EIL/Owner. Owner/EIL shall have the liberty to independently investigate such occurrences and the Contractor shall extend all necessary help and cooperation in this regard. EIL/Owner shall have the right to share the content of this report with the outside world.

3.2 House Keeping

The Contractor shall ensure that a high degree of housekeeping is maintained and shall ensure inter-alia; the followings:

a) All surplus earth and debris are removed/disposed-off from the working areas to designated location(s).

b) Unused/surplus cables, steel items and steel scrap lying scattered at different places within the working areas are removed to identify location(s).

c) All wooden scrap, empty wooden cable drums and other combustible packing materials, shall be removed from work place to identified location(s).

d) Roads shall be kept clear and materials like pipes, steel, sand, boulders, concrete, chips and bricks etc. shall not be allowed on the roads to obstruct free movement of men & machineries.

e) Fabricated steel structural, pipes & piping materials shall be stacked properly.

f) Water logging on roads shall not be allowed.

g) No parking of trucks/trolleys, cranes and trailers etc. shall be allowed on roads, which may obstruct the traffic movement.

h) Utmost care shall be taken to ensure over all cleanliness and proper upkeep of the working areas.

i) Protective measures to be ensured with projected rebar by suitable means.

j) Trucks carrying sand, earth and pulverized materials etc. shall be covered while moving within the plant area/ or these materials shall be transported with top surface wet.

k) The contractor shall ensure that the atmosphere in plant area and on roads is free from particulate matter like dust, sand, etc. by keeping the top surface wet for ease in breathing.

l) At least two exits for any unit area shall be assured at all times – same arrangement is preferable for digging pits/ trench excavation/ elevated work platforms/ confined spaces etc.

m) Welding cables and the power cable must be segregated and properly stored and used. The same shall be laid away from the area of movement and shall be free from obstruction.

n) Upkeep/cleaning of site to be carried out on regular basis by the contractor. Contractor shall earmark the area for waste/scrap disposal and ensure that all waste/scrap arising out of the day's work is properly disposed to the earmarked area.

o) Hazardous waste shall be segregated and shall be kept separately at designated place.

p) Contractor shall present the status of housekeeping in HSE meeting.

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The Contractor shall carry-out regular checks (minimum one per fortnight) as per format No. HSE-11 for maintaining high standard of housekeeping and maintain records for the same. The Contractor shall provide supervisor for housekeeping exclusively for management of day-to-day housekeeping activities.

3.3 HSE Measures

3.3.1 Construction Hazards

The Contractor shall ensure identification of all Occupational Health, Safety & Environmental hazards in the type of work he is going to undertake and enlist mitigation measures. Contractor shall carry out HIRAC specifically for high risk jobs/critical jobs like

a) Working at height (+2.0 Mts height) for cold (incl. colour washing, painting, insulation etc.) & hot works.
b) Work in confined space,
c) Deep excavations &trench cutting (depth > 2.0 mts.)
d) Operation & Maintenance of Batching Plant.
e) Shuttering / concreting (in single or multiple pour) for columns, parapets & roofs.
f) Erection & maintenance of Tower Crane.
g) Erection of structural steel members / roof-trusses / pipes at height more than 2.0 Mts. with or without crane.
h) Erection of pipes (full length or fabricated) at height more than 2.0 Mts. height with Crane of 100T capacity.
i) All lifts using 100T Crane plus mechanical pulling.
j) All lifts using two cranes in unison (Tandem Lifting).
k) Any lift exceeding 80% capacity of the lifting equipment's (Hydraulic Mobile Crane, crane etc.).
l) Laying of pipes (isolated or fabricated) in deep narrow trenches – manually or mechanically.
m) Maintenance of crane / extension or reduction of crane-boom on roads or in yards.
n) Erection of any item at >2.0 Mts. height using 100T crane or of higher capacity
o) Hydrostatic test of pipes, vessels & columns and water-flushing.
p) Radiography jobs (in-plant & open field)
q) Work in Live Electrical installations / circuits
r) Handling of explosives &Blasting operations
s) Demolishing/ dismantling activities
t) Welding/ gas cutting jobs at height (+2.0 Mts.)
u) Lifting/placing roof-girders at height(+2.0 Mts.)
v) Lifting & laying of metallic / non-metallic sheet over roof/structures.
w) Lifting of pipes, gratings, equipment's/vessels at heights (+2.0 Mts.) with & without using cranes
x) Calibration of equipment, instruments and functional tests at yards / work-sites.
y) Operability test of Pump, Motors (after coupling) & Compressors.
z) Cold or Hot works inside Confined Space.
aa) Transportation & shifting of ODC consignments into project areas.
bb) Working in "Charged/Live" elect. Panels
cc) Stress Relieving works (Electrically or by Gas-burners).
dd) Pneumatic Tests
ee) Card board blasting
ff) Grit Blasting activity
gg) Catalyst loading/unloading
hh) Erection/dismantling of scaffolding
ii) Chemical cleaning

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The necessary HSE measures devised shall be put in place, prior to start of an activity &also shall be maintained during the course of works, by the Contractor. Copies of such HIRAC shall be kept available at work sites by the Contractor to enable all concerned carrying out checks / verification.

A list of typical construction hazards along with their effects & preventive measures is given in **Appendix-E.**

3.3.2 Accessibility

h) The Contractor shall provide safe means of access(in sufficient numbers)& efficient exit to any working place including provisions of suitable and sufficient scaffolding at various stages during all operations of the work for the safety of his workmen and EIL/Owner.

i) The Contractor shall implement use of all measures including use of "life line", "fall-arresters", "retractable fall arresters", "safety nets" etc. during the course of using all safe accesses& exits, so that in no case any individual remains at risk of slip & fall during their travel.

j) A ladder or step- ladder must have a level and firm footing, in case of use of fixed ladders, sufficient foot hold and hand hold to be provided.

k) The access to operating plant / project complex shall be strictly regulated. Any person or vehicle entering such complex shall undergo identification check, as per the procedures in force / requirement of EIL/Owner.

l) Accessibility to 'confined space' shall be governed by specific system / regulation, as established at project site.

3.3.3 Personal Protective Equipment (PPEs)

a) The Contractor workmen shall be permitted entry inside the project premises only with proper PPEs.

b) The Contractor shall ensure that all their staff, workers and visitors including their sub-contractor(s) have been issued (records to be kept) & wear appropriate PPEs like nape strap type safety helmets preferably with head &sweat band with ¾" cotton chin strap (made of industrial HDPE), High ankle safety shoes with steel toe cap and antiskid sole, Coverall, full body harness (CE marked and conforming to EN361), protective goggles, gloves, ear muffs, respiratory protective devices, etc. All these gadgets shall conform to applicable IS Specifications/CE or other applicable international standards. The Contractor shall implement a regular regime of inspecting physical conditions of the PPEs being issued / used by the workmen of their own & also its sub-agencies and the damaged / unserviceable PPEs shall be replaced forthwith.

c) Owner/EIL may issue a comprehensive color scheme for helmets to be used by various agencies. The Contractor shall follow the scheme issued by the owner/EIL and shall choose colour other than white (for Owner) or blue (for EIL). All HSE personnel shall preferably wear dark green band on their helmet or green color safety helmet so that workmen can approach them for guidance during emergencies.HSE personnel shall preferably wear such dresses with fluorescent stripes, which are noticeable during night, when light falls on them.

d) Florescent jackets with respective company logo to be worn by the contractor workmen with different color coding for categories like supervisor and workmen.

e) Workers required using or handling alkalies, acid or other similar corrosive substance at site shall be provided with appropriate protective equipment, in accordance with MSDS.

f) For shot blasting, the usage of protective face shield and helmets, gauntlet and protective clothing is mandatory. Such protective clothing should conform relevant IS Specification.

g) For off-shore jobs/contracts, contractor shall provide PPEs (new) of all types to EIL & Owner's personnel, at his (contractor's) cost. All personnel shall wear life jacket at all time.

h) An indicative list of HSE standards/codes is given under **Appendix-A**.

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i) Contractor shall ensure procurement & usage of following safety equipment's/ accessories (conforming to applicable IS mark / CE standard) by their staff, workmen & visitors including their subcontractors all through the span of project construction / pre-commissioning/ Commissioning:-

i. PPEs (Helmet with company name/logo, Safety Goggles, Coverall, Ear-muff, Face Shield, Hand Gloves, High Ankle Safety Shoes, Gum Boot etc.)
ii. Barricading tape / warning signs
iii. Rechargeable Safety torch (flame-proof)
iv. Safety nets (with tie-chords)
v. Fall arresters
vi. Emergency Man-basket/rescue kit for height works
vii. Portable ladders (varying lengths)
viii. Life-lines (steel wire-rope, dia. not less than 8.0 mm)
ix. Full body double lanyard Safety harness with Rebar/ladder hook or scaffolding hook.
x. Lanyard
xi. Karabiner
xii. Retractable fall arresters (various length)
xiii. Portable fire extinguishers (DCP type) – 5 kg&10 kg capacity
xiv. Portable Multi Gas detector
xv. Sound level meter
xvi. Digital lux meter
xvii. Fire hoses & flow nozzles
xviii. Fire blankets/ Fire retardant cloth (with eyelets)
xix. Flame retardant/Flame resistant coverall-based on hazard identification & risk assessment, if required.

3.3.4 **Working at height**

a) The Contractor shall issue permit for working (PFW) at height after verifying and certifying the checkpoints as specified in the attached permit (Format No. HSE-6). He shall also undertake to ensure compliance to the conditions of the permit during the currency of the permit including adherence of personal protective equipment's. Contractor's Safety Officer shall verify compliance status of the items of permit document after implementation of action is completed by Contractor's execution / field engineers at work site. HIRAC for specific works at height duly commented by EIL/Owner, shall be kept attached with particular Permit for Work (PFW) at site for ready reference & follow-up.

b) Such PFW shall be initially issued for one single shift or expected duration of normal work and extended further for balance duration, if required. EIL/Owner can devise block-permit system at any specific area, in consultation with project specific HSE Committee to specify the time-period of validity of such PFW or its renewal. This permit shall be applicable in areas where specific clearance from Owner's operation Deptt./Safety Deptt. is not required. EIL / Owner's field Engineers/Safety Officers/Area Coordinators may verify and counter sign this permit (as an evidence of verification) during the execution of the job.

c) All personnel shall be medically examined & certified by registered doctor, confirming their 'medical fitness(Vertigo or epilepsy must be covered under test report)for working at height. Contractor shall develop the model for conducting vertigo test. The fitness examination shall be done once in six months. Sticker for "PASS FOR HEIGHT WORK" shall be pasted on the safety helmet of the site personnel.

d) In case work is undertaken without taking sufficient precautions as given in the permit, EIL/Owner Engineers may exercise their authority to cancel such permit and stop the work till satisfactory compliance/rectification is arranged made. Contractors are expected to maintain a register for issuance of permit and extensions thereof including preserving the

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used permits for verification during audits etc.

e) The Contractor shall arrange (at his cost) and ensure use of Fall Arrester Systems by his workers. Fall arresters are to be used while climbing/descending tall structures or vessels / columns etc. These arresters should lock automatically against the anchorage line, restricting free fall of the user. The device is to be provided with a double security opening system to ensure safe attachment or release of the user at any point of rope. In order to avoid shock, the system should be capable of keeping the person in vertical position in case of a fall. All the fall arrest systems should be cleaned after use and stored in a clean &dry area. Defective Safety Harness, lanyards & life line must be discarded from workplace and record to be maintained.

f) The Contractor shall ensure that Full body harnesses with double lanyards conforming EN361 and having authorized CE marking is used by all personnel while working at height. The lanyards and life lines should have enough tensile strength to take the load of the worker in case of a fall. One end of the lanyard shall be firmly tied with the harnesses and the other end with life line. The harness should be capable of keeping the workman vertical in case of a fall, enabling him to rescue himself.

g) The Contractor shall provide Roof Top Walk Ladders for carrying out activities on sloping roofs in order to reduce the chances of slippages and falls.

h) The Contractor shall ensure that a proper Safety Net System is used wherever the hazard of fall from height is present. The safety net, preferably a knotted one with mesh ropes conforming to IS 5175/ ISO 1140 shall have a border rope & tie cord of minimum 12mm dia. The Safety Net shall be located not more than 6.0 meters below the working surface extending on either side upto. sufficient margin to arrest fall of persons working at different heights.

i) In case of accidental fall of person on such Safety Net, the bottom most portion of Safety Net should not touch any structure, object or ground.

j) Grade separators shall be provided in Pipe-rack/Tech-structures to arrest falling objects like welding spatters, welding rods, nuts, bolts, tools etc. and to facilitate U/G and A/G works simultaneously.

k) Beam Clamps may be used for construction of localized temporary working platforms sheds for welding booths etc. at height in all types of steel structure due to faster installation and requirement of less scaffolding materials.

l) Hanging Platform, manufactured by Standard HSE equipment vendors must be encouraged for painting of Buildings etc.

m) All the tools used at height (like spanner, screw driver etc.) shall be provided with securing arrangement like back-pack/waist pouch to prevent accidental slippage from worker hand.

n) The Contractor shall install temporary lightening arrester in tall structures during construction to save human life and to avoid damage to equipment's& machineries. During the possibility of a thunderstorm, all the work at height where a person can be exposed to lightning shall be stopped.

o) To the extent possible use Roller arrangement to shift overhead pipes from one end to other in Pipe Racks Area.

p) Providing of steel scaffold stair tower system with landings at regular intervals as and when required for height work.

q) The Contractor shall ensure positive isolation while working at different levels like in the pipe rack areas. The working platforms with toe boards & hand rails shall be sufficiently strong & shall have sufficient space to hold the workmen and tools& tackles including the equipment's required for executing the job. Such working platforms shall have mid-rails, to enable people work safely in sitting posture.

3.3.5 Scaffoldings& Barricading

a) Suitable steel scaffoldings only shall be provided to workmen for all works that cannot be safely done from the ground or from solid construction except such short period work that

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can be safely done using ladders or certified (by 3rd party competent person) man-basket. When a ladder is used, an extra workman shall always be engaged for holding the ladder. The ladder shall be inspected before use for cracked or split stiles, missing, broken, loose or damaged rungs & splinters. The ladder shall be of adequate length to enable it to extend to at least 1.0m above the landing place or working point. Metallic ladders shall be only used as access.

b) The Contractor shall ensure that the scaffolds used during construction activities shall be strong enough to take the designed load. Main Contractor shall always furnish duly approved construction-design details of scaffold &SWL (from competent designers) free of charge, before they are being installed/ constructed at site. Owner/EIL reserves the right to ask the Contractor to submit certification and or design calculations from his Head Office/ Design/Engineering expert regarding load carrying capacity of the scaffoldings. All steel tubing, couplers and fittings used for scaffolding shall conform to IS 3696 or an acceptable equivalent. Only metallic scaffold boards shall be allowed to use. Steel tubes shall be free from cracks, splits. Surface flaws & other defects. All couplers & fittings shall be properly oiled and maintained. Nuts shall have a free running fit on their bolts. Bolts with worn or damaged thread shall be replaced.

c) All scaffolds shall be inspected by a competent Scaffolding Inspector (person with scaffolding related experience in construction field and having a training of scaffolding supervisor from a institute/agency like National Safety Council etc.). He shall paste a GREEN tag (duly signed by competent Scaffolding Inspector) on each scaffold found safe and a RED tag (duly signed by competent Scaffolding Inspector) on each scaffold found unsafe. Scaffolds with GREEN tag only shall be permitted to be used and Scaffolds with RED ones shall immediately be made inaccessible. Work being found continuing on scaffolds with RED tag shall be considered unauthorized work by Contractor and may invite penalization from EIL/Owner. For every 120-125 m^2 /m^3 area / volume or its parts thereof minimum one TAG shall be provided.

d) The Contractor shall ensure positive barricading (indicative as well as protective) of the excavated, radiography, heavy lift, high pressure hydrostatic & pneumatic testing and other such areas. Sufficient warning signs shall be displayed along the barricading areas.

e) Scaffolding shall be constructed using foot seals or base plates only. Base plates shall be used below each standard on surface .Sole plate of timber shall be used beneath the base plate to achieve greater load distribution.

3.3.6 **Electrical installations**

a) All electrical installations/ connections shall be carried out as per the provisions of latest revision of following codes/standards, in addition to the requirements of Statutory Authorities and IE/applicable international rules& regulations:

- OISD STD 173 : Fire prevention & protection system for electrical installations
- SP 30 (BIS) : National Electric Code

b) All electrical installations shall be approved by the concerned statutory authorities.

c) All temporary electrical installations / facilities shall be regularly checked by the licensed/competent electricians of the Contractor and appropriate records shall be maintained in format no: HSE-12" Inspection of temporary electrical booth/installation at project construction site". Such inspection records are to be made available to EIL/Owner, whenever asked for.

3.3.6.1 The Contractor shall meet the following requirements:

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a. Shall make Single Line Diagram (SLD) for providing connection to each equipment's & machinery and the same (duly approved by EIL/Owner) shall be pasted on the front face of DBs (distribution boards) or JBs (Junction boxes) at every site.(A typical Switch Board Sketch is attached as Appendix -G)

b. Ensure that electrical systems and equipment including tools & tackles used during construction phase are properly selected, installed, used and maintained as per provisions of the latest revision of the Indian Electrical/ applicable international regulations.

c. Shall deploy qualified & licensed electricians for proper & safe installation and for regular inspection of construction power distribution system/points including their earthing. A copy of the license shall be submitted to EIL / Owner for records. Availability of at least one competent (ITI qualified) / licensed electrician (by State Elec. authorities) shall be ensured at site round the clock to attend to the normal/emergency jobs.

d. All switchboards / welding machines shall be kept in well-ventilated & covered shed/ with rain shed protection. The shed shall be elevated from the existing ground level to avoid water logging inside the shed. Installation of electrical switch board must be done taking care of the prevention of shock and safety of machine.

e. No flammable materials shall be used for constructing the shed. Also flammable materials shall not be stored in and around electrical equipment / switchboard. Adequate clearances and operational space shall be provided around the equipment.

f. Fire extinguishers and insulating mats shall be provided in all power distribution centers.

g. Temporary electrical equipment shall not be employed in hazardous area without obtaining safety permit.

h. Proper housekeeping shall be done around the electrical installations.

i. All temporary installations shall be tested before energizing, to ensure proper earthing, bonding, suitability of protection system, adequacy of feeders/cables etc.

j. All welders shall use hand gloves irrespective of holder voltage.

k. Multilingual (Hindi, English and local language) caution boards, shock treatment charts and instruction plate containing location of isolation point for incoming supply, name & telephone No. of contact person in emergency shall be provided in substations and near all distribution boards / local panels.

l. ELCB tester /test meter shall be used for testing the ELCBs operation. ELCBs testing shall be carried out by using ELCB tester on monthly basis but in specific cases like heavy rain as decided by owner/EIC. Record of the testing shall be maintained.

m. Regular inspection of all installations at least once in a month. (**Ref. Format HSE-12**).

3.3.6.2 The following features shall also be ensured for all electrical installations during construction phase by the contractor:

a. Each installation shall have a main switch with a protective device, installed in an enclosure adjacent to the metering point. The operating height of the main switch shall not exceed 1.5 M. The main switch shall be connected to the point of supply by means of armoured cable.

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b. The outgoing feeders shall be double or triple pole switches with fuses / MCBs. Loads in a three phase circuit shall be balanced as far as possible and load on neutral should not exceed 20% of load in the phase.

c. The installation shall be adequately protected against overload, short circuit and earth leakage by the use of suitable protective devices. Fuses wherever used shall be HRC type. Use of rewirable fuses shall be strictly prohibited. ELCB/RCCB (Residual Current Circuit Breaker) must be fitted with all Electrical installation. The earth leakage devices shall have an operating current not exceeding 30 mA.

d. All connections to the hand tools / welding receptacles shall be taken through proper switches, sockets and plugs.

e. All single phase sockets shall be minimum 3 pin type only. All unused sockets shall be provided with socket caps.

f. Only 3 core (P+N+E) overall sheathed flexible cables with minimum conductor size of 1.5 mm^2 copper shall be used for all single phase hand tools.

g. Only metallic distribution boxes with double earthing shall be used at site. No wooden boxes shall be used.

h. All power cables shall be terminated with compression type cable glands. Tinned copper lugs shall be used for multi-strand wires / cables.

i. Cables shall be free from any insulation damage.

j. Minimum depth of cable trench shall be 750 mm for MV & control cables and 900 mm for HV cables. These cables shall be laid over a sand layer and covered with sand, brick & soil for ensuring mechanical protection. Cables shall not be laid in waterlogged area as far as practicable. Cable route markers shall be provided at every 25 M of buried trench route.

When laid above ground, cables shall be properly cleated or supported on rigid poles of atleast 2.1 M high. Minimum head clearance of 6 meters shall be provided at road crossings.

k. Underground road crossings for cables shall be avoided to the extent feasible. In any case no underground power cable shall be allowed to cross the roads without pipe sleeve.

l. All cable joints shall be done with proper jointing kit. No taped/temporary joints shall be used.

m. An independent earthing facility should preferably be established within the temporary installation premises. All appliances and equipment shall be adequately earthed. In case of armored cables, the armour shall be bonded to the earthing system. IS: 3043 Code for earthing practices shall be followed at project site.

n. All cables(green colour) and wire rope used for earth connections shall be terminated through tinned copper lugs.

o. In case of local earthing, earth electrodes shall be buried near the supply point and earth continuity wire shall be connected to local earth plate for further distribution to various appliances. All insulated wires for earth connection shall have insulation of green colour. Periodical check tests of all electrodes should be carried out and record shall be maintained of such checks.

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p. Separate core shall be provided for neutral. Earth / Structures shall not be used as a neutral in any case.

q. ON/OFF position of all switches shall be clearly designated / painted for easy isolation in emergency.

3.3.7 Welding/ Grinding/Gas cutting

a) Contractor shall ensure that flash back arrestors conforming to BS:6158 or equivalent are installed on all gas cylinders as well as at the torch end of the gas hose, while in use.

b) All cylinders shall be mounted on trolleys and provided with a closing key. Empty & filled-up gas cylinders shall be stored separately with TAG, protecting them from direct sun or rain. Minimum 2 nos. of Portable DCP type fire extinguishers (10 kg) shall be maintained at the gas cylinder stores. Stacking & storing of compressed gas cylinders shall be arranged away from DG set, hot works, Elect. Panels / Elec. boards, etc.

c) The burner and the hose placed downstream of pressure reducer shall be equipped with Flash Back Arrester/Non Return Valve device.

d) The hoses for acetylene and oxygen cylinders must be of different colours. Their connections to cylinders and burners shall be made with a safety collar.

e) At end of work, the cylinders in use shall be closed and hoses depressurized.

f) Cutting of metals using gases, other than oxygen &acetylene, shall require written concurrence from Owner.

g) Grinding activity shall not be carried out in confined spaces without a valid work permit.

h) All grinding/cutting machines shall be guarded and fitted with Dead-Man switch and this shall not be bypassed any time.

i) All welding/grinding machines shall have effective earthing at least at distinctly isolated two points.

j) In order to help maintain good housekeeping, and to reduce fire hazard, live electrode bits shall be contained safely and shall not be thrown directly on the ground.

k) The hoses of Acetylene and Oxygen shall be kept free from entanglement & away from common pathways / walkways and preferably be hanged overhead in such a manner which can avoid contact with cranes, Hydraulic Mobile Crane or other mobile construction machinery.

l) Hot spatters shall be contained / restricted appropriately (by making use of effective fire-retardant cloth/fabric) and their flying-off as well as chance of contact with near-by flammable materials shall be stopped. The Fire retardant blanket shall be woven from ceramic yarn with eyelets.

m) The Contractor shall arrange adequate systems & practices for accumulation / collection of metal & other scraps and remnant electrodes and their safe disposal at regular interval so as to maintain the fabrication and other areas satisfactorily clean & tidy.

n) All gas cylinders must have a cylinder cap on at all times when not in use.

3.3.8 Ergonomics and tools & tackles

a) The Contractor shall assign to his workmen, tasks commensurate with their qualification, experience and state of health. Competency of the crane operator to be thoroughly checked prior to engaging in crane operation.

b) All lifting tools, tackles, equipment, trailers, trucks/dumpers, accessories including cranes shall be tested periodically by statutory/competent authority for their condition and load carrying capacity. Valid test & fitness certificates from the applicable authority shall be submitted to Owner/EIL for their review/acceptance before the lifting tools, tackles,

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equipment, trailers, trucks/dumpers, accessories and cranes are used. Third party inspection certificate is mandatory for all lifting tools & tackles before put into use.

c) Load testing of Cranes by competent person must be made mandatory after each modification/alteration of crane configuration/change in boom length. All heavy equipment's including cranes must be maintained in good condition &record of such maintenance shall be maintained. Routine preventive maintenance of the crane to be carried out& record to be maintained for such preventive maintenance. Healthiness of the crane to be checked by Crane Expert on regular basis as per manufacturer guidelines.

d) HIRAC/JSA for assembly/dismantling activity of the crane to be submitted for approval of EIC.

e) No one should stand/work below the mast & boom of the crane. Mast of the crane should not be used for unintended lifts.

f) Mast of the crane to be kept in right position during dismantling activity of the crane.

g) Log book of all crane to be maintained.

h) Only authorized person shall be allowed to give signal to the operator.

i) Lifting/Loading/Unloading activities shall be carried out by the trained riggers under supervision of rigging Foreman.

j) Prior to marching/movement of the crane, obstructions free access/route to be ensured.

k) Skilled Technician to be engaged for AC gas checking and refilling of refrigerant and should follow the safe operating procedure for cranes.

l) Manufacturer's instructions to be followed without any deviation.

m) The contractor shall not be allowed to use defective equipment or tools not adhering to safety norms.

n) Adequate capacity of Chain pulley blocks with valid TPI certificate to be used for lifting/lowering/dragging/erection of piping material .

o) Colour coding system for lifting tools & tackles shall be followed on quarterly basis for a particular colour as mentioned below:

Period	Colour Code
January, February, March	Blue
April,May, June	Yellow
July, August, September	Green
October, November, December	Orange
For Quarantine (Unsafe Tools & Tackles)	Red

Contractor shall arrange non-sparking tools for project construction works in operating plant areas / hydrocarbon prone areas.

i. Wherever required the Contractor shall make use of Elevated Work Platforms (EWP) or Aerial Work Platforms (mobile or stationary) to avoid ergonomical risks and workmen shall be debarred to board such elevated platform during the course of their shifting / transportation.

ii. Contractor shall ensure installation of Safe Load Indicator (SLI) on all cranes (while in use) to minimize overloading risk. SLI shall have capability to continuously monitor and display the load on the hook, and automatically compare it with the rated crane capacity at the operating condition of the crane. The system shall also provide visual and audible warnings at set capacity levels to alert the operator in case of violations.

iii. The contractor shall be responsible for safe operations of different equipments mobilized and used by him at the workplace like transport vehicles, Tower Crane, engines, cranes, mobile ladders, scaffoldings, work tools, etc. Strictly avoid standing close to Hydraulic Mobile Crane/vehicles tyres during operation.

iv. The contractor shall deploy cranes in good working condition of maximum allowable years of service from the year of manufacture as specified below: -

20 years for cranes of 50 MT & below capacity,25 years for 51 MT to 100 MT,30 years for cranes above 101 MT.

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v. In general Man basket shall not be lifted by Hydraulic Mobile Crane. Generally Crane shall be used for lifting the man basket.

vi. Tower Crane, Crane, Hydraulic Mobile Crane or equivalent, Hydraulic Rig &Boom Lift shall be inspected on fortnightly basis as per Format No. HSE-20, HSE-21, HSE-22, HSE-23 & HSE-24.

vii. The Contractor shall arrange periodical training for the operators of Hydraulic Mobile Crane, crane, excavator, mobile machinery, Tower Crane, etc. at site by utilizing services from renowned manufacturers.

viii. Hydraulic Mobile Crane or equivalent having steering control mechanism shall be permitted at construction site only for the purpose of loading/unloading. However, continuous rigger availability during marching of hydraulic crane at site shall be ensured by contractor.

3.3.9 Occupational Health

a) The contractor shall identify all operations that can adversely affect the health of its workers and issue & implement mitigation measures.

b) For surface cleaning operations, sand blasting shall not be permitted even if not explicitly stated elsewhere in the contract.

c) To eliminate radiation hazard, Tungsten electrodes used for Gas Tungsten Arc Welding shall not contain Thorium.

d) Appropriate respiratory protective devices(hood with respiratory devices) shall be used to protect workmen from inhalation of air borne contaminants like silica, asbestos, gases, fumes, etc.

e) Workmen shall be made aware of correct methods for lifting, carrying, pushing & pulling of heavy loads. Wherever possible, manual handling shall be replaced by mechanical lifting equipment's.

f) Fuelling of construction equipments/Diesel Generator set shall be carried out by hand operated pump.

g) In view of the congested working environment and associated hazards, deployment of manpower/machineries shall be in staggered manner keeping adequate safe distance between two adjacent work spot.

h) For jobs like drilling/demolishing/dismantling/steam blowing/cardboard blasting etc. where noise pollution exceeds the specified limit of 85decibels, ear muffs shall be provided to the workers. The Noise level monitoring record shall be maintained.

i) To avoid work related upper limb disorders (WRULD) and backaches, Display Screen Equipments' workplace stations shall be carefully designed & used with proper sitting postures. Power driven hand-held tools shall be maintained in good working condition to minimize their vibrating effects and personnel using these tools shall be taught how to operate them safely & how to maintain good blood circulation in hands.

j) The Contractor shall arrange health check-up(by registered medical practitioner) for all the workers at the time of induction. Health check may have to be repeated if the nature of duty assigned to him is changed necessitating health check or doubt arises about his wellness. EIL/Owner reserves the right to ask the contractor to submit medical test reports. Regular health check-ups are mandatory for the workers assigned with Welding, Radiography, Blasting, Painting, Heavy Lift and Height (>2m) jobs. All the health check-ups shall be conducted by registered Medical practitioner and records are to be maintained by the Contractor.

k) The Contractor shall arrange Medical Camps at regular intervals at work sites and labor colonies to assess health condition of workers.

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l) The Contractor shall ensure vaccination of all the workers including their families, during the course of entire project span.

3.3.10 Hazardous substances

a) Hazardous, inflammable and/or toxic materials such as solvent coating, thinners, anti-termite solutions, water proofing materials shall be stored in appropriate containers preferably with lids having spillage catchment trays and shall be stored in a good ventilated area. These containers shall be labeled with the name of the materials highlighting the hazards associated with its use and necessary precautions to be taken. Respective MSDS (Material Safety Data Sheet) shall be made available at site &may be referred whenever problem arises.

b) Where contact or exposure of hazardous materials are likely to exceed the specified limit or otherwise have harmful effects, appropriate personal protective Equipment's such as gloves, goggles/face-shields, aprons, chemical resistant clothing, respirator, etc. shall be used.

c) The work place shall be checked prior to start of activities to identify the location, type and condition of any asbestos materials which could be disturbed during the work. In case asbestos material is detected, usage of appropriate PPEs by all personnel shall be ensured and the matter shall be reported immediately to EIL/ Owner.

3.3.11 Slips, trips & falls

a) The contractor shall establish a regular cleaning and basic housekeeping programme that covers all aspects of the workplace to help minimize the risk of slips, trips & falls. The contractor shall take positive measures like keeping the work area tidy, storing waste in suitable containers & harmful items separately, keeping passages, stairways, entrances & exits especially emergency ones clear, cleaning up spillages immediately and replacing damaged carpet/ floor tiles, mats & rugs at once to avoid slips, trips & falls.

b) Grating removal permit system should be implemented during construction phase. So that after permanent gratings are installed on platforms and tech structure floors; removal of any gratings for whatever purpose (including for lifting piping material etc.) is required to be sanctioned by signed permit by HSE officers of both contractor and Engineer-in-charge. The spot where gratings are removed shall be hard-barricaded during course of work. The removed gratings shall be re-installed immediately after completion of work or at the time of cessation of work every day whichever is earlier and the permit shall be closed on daily basis. A register shall be maintained for recording all the grating removal permits and their closure shall be monitored on daily basis.

3.3.12 Radiation exposure

a) All personnel exposed to physical agents such as ionizing &non-ionizing radiation, including ultraviolet rays or similar other physical agents shall be provided with adequate shielding or protection commensurate with the type of exposure involved.

b) For Open Field Radiography works, requirements of Bhabha Atomic Research Centre (BARC)/ Atomic Energy Regulatory Board (AERB) shall be followed.

c) The Contractor shall implement an effective system of control (as described in the AERB regulations) at site for handling radiography-sources & for avoiding its misuse & theft.

d) The contractor shall generate the Format No: HSE-8 "Permit for radiation work" before start of work.

e) In case the radiography work has to be carried out at day time, suitable methodology to be used so that other works, people are not affected.

3.3.13 Explosives/Blasting operations

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a) Blasting operations shall be carried out as per latest Explosive Rules (Indian/ International) with prior permission. The Contractor shall obtain license from Chief Controller of Explosives (CCoE) for collection, transportation, storage of explosives as well as for carrying out blasting operations.

b) The Contractor shall prepare exclusive method statement (in cognizance with statutory requirements)for rock blasting works &diffusing unfired explosives, if any, at project site before carrying out actual task. Nowhere blasting shall be carried out by the Contractor or its agency without the involvement of competent supervisor and licensed blaster.

3.3.14 Demolition/ Dismantling

a) The contractor shall adhere to safe demolishing/ dismantling practices at all stages of work to guard against unsafe working practices.

b) The contractor shall disconnect service lines (power, gas supply, water, etc.)/ make alternate arrangements prior to start of work and restore them, ifrequired as directed by EIL/ Owner at no extra cost.

c) Before carrying out any demolition/dismantling work, the contractor shall take prior approval of EIL/Owner and generate the Format No.HSE-9. For revamp jobs in operating plants where location of underground utilities is not known with certainty, the contractor shall depute an experienced engineer for supervision and shall make adequate arrangements for Fire-fighting& First-Aid during the execution of these activities.

d) The Contractor shall arrange approved HIRAC/ Method Statement for the specific demolition / dismantling task and corresponding action plan commensurate with hazards / risks associated therein. In no case any activity related to demolition / dismantling shall be carried out by the Contractor without engaging own supervision / field engineer.

3.3.15 Road Safety

a) The Contractor shall ensure adequately planned road transport safety management system.

b) The vehicles shall be fitted with reverse warning alarms & flashing lights / fog-lights and usage of seat belts shall be ensured.

c) The Contractor shall also ensure a separate pedestrian route for safety of the workers and comply with all traffic rules & regulations, including maintaining speed limit of 20 KMPH or indicated by owner for all types of vehicles / mobile machinery. The maximum allowable speed shall be adhered to.

d) In case of an alert or emergency, the Contractor must arrange clearance of all the routes, roads, access. The Contractor shall deploy sufficient number of traffic controllers at project site routes / roads/ accesses, to alert reversing movement of vehicles & machinery as well as pedestrians. Experienced drivers/operators with valid driving license (LMV/HMV)shall be allowed to drive/operate the vehicles/equipment's. The Contractor shall maintain copy of PUC,RC and Insurance etc. for all the vehicles/equipment`s.

e) Dumpers, Tippers, etc. shall not be allowed to carry workers within the plant area and also to & from the labour colony to & from project sites.

f) Hydraulic Mobile Crane or equivalent)shall only be allowed for handling(loading/unloading) the materials at fabrication/ storage yards and in no case shall be allowed to transport the materials over project / plant roads.

g) The Contractor shall not deploy any such mobile machinery / Equipment`s, which do not have competent operator and / or experienced banks-man/signal-man. Such machinery/equipment`s shall have effective limit-switches, reverse-alarm, front& rear-end lights etc. and shall be maintained in good working order.

h) The Contractor shall not carry-out maintenance of vehicles / mobile machinery occupying space on project / plant roads and shall always arrange close supervision for such works.

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i) For pipeline jobs, the contractor shall submit a comprehensive plan covering transportation, loading / unloading of pipes, movement of side booms, movement of vehicles on the ROW, etc.

j) Height barrier/Restriction to be provided on both side of the HT lines, if required.

k) Contractor's shall arrange /install visible road signs, diversion boards, caution boards, etc. on project roads for safe movement of men and machinery.

3.3.16 Welfare measures

Contractor shall, at the minimum, ensure the following facilities at work sites:

a) A crèche at site where 10 or more female workers are having children below the age of 6 years.

b) Adequately ventilated / illuminated rooms at labour camps & its hygienic up-keeping.

c) Reasonable canteen facilities at site and in labour camps at appropriate location depending upon site conditions. Contractor shall make use of "industrial" variety of LPG cylinder & satisfactory illumination at the canteens. Necessary arrangement for efficient disposal of wastes from canteens & urinals /toilets shall also be made and regular review shall be made to maintain the ambience satisfactorily hygienic &shall also comply with all applicable statutory requirements.

d) Adequately lighted & ventilated Rest rooms at site (separate for male workers and female workers).

e) Provision for suitable mobile toilets to be made available by Contractor for remote/scattered job locations.

f) Urinals, Toilets, drinking water, washing facilities, adequate lighting at site and labour camps, commensurate with applicable Laws/ Legislation.

g) The contractor shall ensure the test report of drinking water.

h) The contractor at periodic interval shall arrange to prevent mosquito breeding by fumigation/spraying of insecticides at workplace/fabrication yard.

3.3.17 Environment Protection

Contractor shall ensure proper storage and utilization methodology of materials that are detrimental to the environment. Where required, Contractor shall ensure that only the environment friendly materials are selected and emphasize on recycling of waste materials, such as metals, plastics, glass, paper, oil & solvents. The waste that cannot be minimized, reused or recovered shall be stored and disposed of safely. In no way, toxic spills shall be allowed to percolate into the ground. The contractor shall not use the empty areas for dumping the wastes.

The contractor shall ensure availability of stack emission test report of DG set. Monitoring of air quality emission of DG stack shall be carried out on yearly basis. However, air quality emission shall be monitored first time on commissioning of DG Set.

Contractor to submit Environmental Aspect Impact Register detailing the list of activities in his scope, the respective environmental impact and the actions taken to minimize the impact. Environmental Aspect Impact Register to be prepared as per Format HSE-18 and to be updated and maintained till job completion. Environmental Aspect Impact Register of the contractor shall be reviewed by EIL/Owner on half-yearly basis.

The contractor shall strive to conserve energy and water wherever feasible.

The contractor shall ensure dust free environment at workplace by sprinkling water on the ground at frequent intervals. The air quality parameters for dust, poisonous gases, toxic releases,

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harmful radiations, etc. shall be checked by the contractor on daily basis and whenever need arises.

The contractor shall not be allowed to discharge chemicals, oil, silt, sewage, sullage and other waste materials directly into the controlled waters like surface drains, streams, rivers, ponds. A discharge plan suggesting the methods of treating the waste before discharging shall be submitted to EIL/Owner for approval.

For pipeline jobs, top soil shall be stacked separately while making ROW through fields. This fertile soil shall be placed back on top after backfilling.

For offshore construction barges, arrangements shall be made for safe disposal of human, food & other wastes and applicable laws in this regard shall be followed.

3.3.18 Rules & Regulations

All persons deployed at site shall be knowledgeable of and comply with the environmental laws, rules & regulations relating to the hazardous materials, substances and wastes. Contractor shall not dump, release or otherwise discharge or disposes off any such materials without the express authorization of EIL/Owner. An indicative list of Statutory Acts & Rules relating to HSE is given under Appendix-D.

3.3.19 Weather Protection

Contractor shall take appropriate measures to protect workers from severe storms, rain, solar radiations, poisonous gases, dust, etc. by ensuring proper usage of PPEs like Sun glasses, Sun screen lotions, respirators, dust masks, etc. and rearranging/ planning he construction activities to suit the weather conditions. Effective arrangement (without creating inconvenience to project facilities & permanent installations) for protecting workmen from hailstorm, drizzle in the form of temporary shelter shall be made at site.

3.3.20 Communication

All persons deployed at the work site shall have access to effective means of communication so that any untoward incident can be reported immediately and assistance sought by them.

All health & safety information shall be communicated in a simple & clear language easily understood by the local workforce.

For information to all, typical subjects that should be communicated are: -

Inside the company (Top to down)

a. Quality Policy
b. HSE Policy contents
c. Environment Policy
d. HSE Objectives
e. Safety Cardinal Rules
f. HSE Target – reached or missed
g. Praises & Warnings to personnel for HSE Management
h. Safety Walk Through Reports and safety defects / shortfalls (by management)
i. HSE Audit results
j. Revised Statutory Health & Safety provisions, if any
k. H & S publicity
l. Suggestions

Inside the Company (Bottom to up)

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a. Complaints
b. Compliances on safety defects / shortfalls
c. Suggestions
d. Proposals for changes & improvements
e. HSE Reports (including near-miss reports)

3.3.21 Confined Space Entry

The contractor shall generate a work permit (Format No. HSE -7) before entering a confined space. People, who are permitted to enter into confined space, must be medically examined & certified by registered doctor, confirming their 'medical fitness for working in confined space'. All necessary precautions mentioned therein shall be adhered to. An attendant shall be positioned outside a confined space for extending help during an emergency. Effective communication shall be maintained between personnel in confined space and outside by combination of visual/voice or portable radio. Compressed gas cylinders shall not be taken into confine space. Entry Register for confined space to be maintained with the name and time of entry/exit. All appropriate PPEs and air quality parameters shall be checked before entering a confined space. It shall be ensured that the piping of the equipment which has to be opened is pressure- free by checking that blinds are in place, vents are open and volume is drained. Inside confined space works, only electrical facilities / installations of 24V shall be permitted. Contractor shall ensure usage of safe & suitable arrangement of oxygen supply for individual workmen (during the course of work in confined space), if oxygen concentration is found to be less than 19.5% (v/v) there. All persons must be made aware of the risk associated with Nitrogen &all precautionary measures shall be taken when vessel/sphere/pipelines etc. are being purged with nitrogen.
Rescue arrangement must be readily available at workplace to fulfill requirement of the emergency situation.

3.3.22 Heavy Lifts

a) The contractor shall submit detailed rigging study/ plan for EIL/ Owner approval prior to lifting equipment requiring a crane of approx. 100 MT capacity or more due to constraints of its dimensions, location of foundation height, approach & weight.
b) Contractor shall generate the format no. HSE-15 "Permit for heavy lift/critical erection"
c) The Safe Working Load (SWL) and manufacturer's serial numbers shall be clearly marked on the slings and the lifting gears, either by tagging, stamping, engraving or embossing.
d) Prior to actual lifting activities, contractor shall check the validity of the crane inspection certificate issued by statutory/ competent authority. This requirement shall also apply to all rigging equipment's utilized for the job.
e) The contractor shall, at all times, be responsible for all rigging activities.
f) The Contractor shall ensure medical fitness of all workmen who are engaged / involved in erection of equipment's, vessels etc. and such fitness checks shall be carried-out every six months interval with the help of a registered medical practitioner & record shall be maintained
g) Adequate safety measures such as positive barricading, usage of appropriate PPEs, permit to work, etc. shall be taken during all heavy or critical lifts.
h) Ground condition should be suitable to sustain the Ground Bearing Load of the Crane with full load condition.
i) For lifting any material (irrespective of shape, size or volume), at any height, it is always advisable to prepare a Plan of Erection (PoE) taking into consideration hazards & risks associated therein – this can enable people to put their own experiences of various natures & side-by-side establish a practical method for risk-free erection / lifts. The contractor shall

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prepare PoE & shall document the same, when risks are identified as "medium" or "high" and the same shall be approved by its competent / qualified engineer.

3.3.23 Key Performance Indicators

The contractor shall measure an activity in both leading & trailing indicators for statistical and performance measurement. The activities pertaining to key performance indicators are covered in Monthly HSE Report (Format No. HSE-5). The contractor shall try to achieve a statistically fair record and strive for its continual improvement.

Leading Indicators viz:-:

- Number of Safety Inductions carried-out at site (for workmen & staff members)
- Number of HSE inspections carried out
- Number of "Safety Walk Through" carried-out by site-head.
- Number of HSE shortfalls / lapses identified per contractor& closed-out in time.
- Number of Safety Meetings conducted (in-house / with contractors)
- Number of HSE Audits made (internal & external) vis-à-vis non conformances raised
- Number of HSE Awareness / Motivational program conducted by contractors
- Number of HSE Trainings conducted at site for supervisors & workmen
- Study of Near miss case reported
- Encouragements / Awards / Recognitions to workmen, job supervisors & field engineers.
- Suggestions for improvement

Trailing Indicators viz:-:

- Calculation of HSE statistics viz frequency rate, severity rate, LTA free man hours etc.
- Analysis of incidents / accidents (nature, severity, types etc.)
- Study of Incident / Accident with respect to :-
    - Variety
    - Period of the year / project span
    - Timings of the incident / accident
    - Age profile of victims
    - Body parts involved
    - Penalty levied for causing incident / accident

3.3.24 Unsuitable Land Conditions

Contractor shall take appropriate measures and necessary work permits/clearances if work is to be done in or around marshy areas, river crossings, mountains, monuments, etc. The Contractor shall make right assessment and take all necessary action for developing work areas to make them safe & suitable for crane operations or other vehicular movement before carrying out any project related activity / operation. Contractor shall take all necessary actions to make the surroundings of its site establishments (site office, stores, lay-down area etc.) work-worthy safe and secure.

3.3.25 Under Water Inspection

Contractor shall ensure that boats and other means used for transportation, surveying & investigation works shall be certified seaworthy by a recognized classification society. It shall be equipped with all life saving devices like life jackets, adequate fire protection arrangement sand shall possess communication facilities like cellular phones, wireless, walkie-talkie. All divers used for seabed surveys, underwater inspections shall have required authorized license, suitable life-saving kit. Number of hours of work by divers shall be limited as per regulations. EIL/ Owner shall have the right to inspect the boat and scrutinize documents in this regard.

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3.3.26 Excavation

The Contractor shall obtain permission from competent authorities prior to excavation wherever required.

The Contractor shall locate the position of buried utilities (water line, cable route, etc.) by referring to project / plant drawing / in consultation with EIL/Owner. The Contractor shall start digging manually to locate the exact position of buried utilities & thereafter use mechanical means.

In case of non-availability of sufficient data/drawings, underground services i.e. underground cable/ pipe shall be checked by cable detector/pipe locator by the contractor.

The Contractor shall keep soil heaps at least 1.5 M away from edge or a distance equal to depth of pit (whichever is more)

All excavated pits greater than 10 Sq.M plan area and depth more than 1.5M shall have at least two access routes for ingress and egress. Also, additional access routes shall be provided such that distance between any two access routes shall not be more than 20M.

The Contractor shall maintain sufficient "angle of repose" during excavation – shall also provide slope or suitable bench as decided by EIL / Owner.

The Contractor shall arrange "battering" or "benching" wherever required for preventing collapse of edge of excavations.

Avoid vertical wall of less than 2mtrs between two adjacent deep excavated pit/area. Further deep excavation should not be kept open for a longer duration.

The Contractor shall identify & arrange de-watering pump or well-point system to prevent earth collapse due to heavy rain / influx of underground water.

The Contractor shall arrange protective fencing/hard barricading with warning signal around excavated pits, trenches, etc. along with minimum 2 (two) entries, exits / escape ladders.

The Contractor must avoid "underpinning" / under-cutting to prevent collapse of chunk of earth during excavation.

The Contractor shall use "stoppers" to prevent over-run of vehicle wheels at the edge of excavated pits / trenches. Vehicles movement should be restricted to minimum three meters away from the excavated pit.

The Contractor shall arrange strengthening of "shoring" & "strutting" proactively to avoid collapse of earth / edges due to vehicular movement in close proximity of excavated areas / pits/ trenches, etc.

3.4 Tool Box Talks (TBT)

Contractor shall conduct daily TBT with workers prior to start of work and shall maintain proper record of the meeting. A suggested format is given below. The Job specific TBT is to be conducted by the immediate supervisor of the workers.

The Contractor shall conduct TBT before start of every morning or evening shift or night shift activities, for alerting the workers on specific hazards and their appropriate dos & don'ts. The Contractor shall provide sufficient rests to the site workmen and their foremen to avert fatigue & thereby endangering their lives during the course of site works.

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TOOLBOX TALK RECORDING SHEET		
Date & Time		
Work Location		
Subject (Nature of work)		
Presenter		
Hazards involved		
Precautions to be taken		
Worker's Name	Signature	Section
Remarks, in any		

The topics during TBT shall include

- Hazards related to work assigned on that day and precautions to be taken.
- Any forthcoming HSE hazards/events/instruction/orders, etc.

The above record can be kept in local language, which workers can read. These records shall be made available to EIL/ Owner whenever demanded.

3.5 Training & Induction Programme

a) Initial induction of workers into Construction oriented activities and appraising them about the methodology of works and how to carry-out safely and the same should not be inter mixed with Tool Box Talks or HSE Training. In this regard careful action should be made& maintained for imparting HSE induction to every individual, irrespective of his task/designation/level of employment, whereas, HSE Training should be imparted to specific person/group of people who are to carry-out that specific task more than once – for example, Riggers must be trained for working at heights, welders must be trained for work in confined space, fitters/carpenters, mesons must be trained for work at heights, etc.
Contractor shall arrange suitable facilities (e.g training room/place, audio visual facilities etc.) for organizing such training on HSE.

b) Contractor shall conduct Safety induction programme on HSE for all his workers and maintain records. Sticker for "Safety Induction" shall be pasted on the safety helmet of the site personnel. The Gate Pass shall be issued only to those workers who successfully qualify the Safety induction programme. Contractor to conduct effective safety induction program at work site by making efforts to arrange Video film/Virtual Reality (VR) technology pertaining to the escape routes, assembly points, risks involved in the event of an emergency etc while imparting safety induction.

c) The Contractor brief the visitors about the HSE precautions which are required to be taken before their proceeding to site and make necessary arrangements to issue appropriate PPEs like Aprons, hard hats, ear-plugs, goggles & safety shoes etc., to his visitors. The Contractor shall always maintain relevant acknowledgement from visitor on providing him brief information on HSE actions.

d) Contractor shall submit job specific training schedule for approval of EIL/Owner &ensure that all his personnel possess appropriate training to carry out the assigned job safely. The training should be imparted in a language understood by them and should specifically be trained about

- Potential hazards to which they may be exposed at their workplace

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- Measures available for prevention and elimination of these hazards

The topics during training shall cover, at the minimum: -

- Why safety should be considered during work - explanation
- Education about hazards and precautions required
- Employees' duties & responsibilities
- Emergency and evacuation plan
- HSE requirements during project activities
- Fire fighting and First-Aid
- Use of PPEs
- Occupational health issues – dos & don'ts
- Local laws on intoxicating drinks, drugs, smoking in force
- Common environmental subjects – lighting, ventilation, vibration, smoke/fumes etc.

e) Records of the training shall be kept and submitted to EIL/ Owner.

f) The Contractor shall make regular program for conducting Safety Training on various topics related to various activities & their safe-guarding utilizing experienced persons / outside agency / faculty. A program for Safety Training (indicative list as per Appendix –F) shall be furnished by the Contractor in its HSE Plan.

g) For offshore and jetty jobs, contractor shall ensure that all personnel deployed have undergone a structured sea survival training including use of lifeboats, basket landing, use of radio communication etc. from an agency acceptable to Owner/EIL.

3.6 ADDITIONAL SAFETY REQUIREMENTS FOR WORKING INSIDE A RUNNING PLANT

As a minimum, the contractor shall ensure adherence to following safety requirements while working in or in the close vicinity of an operating plant:

a) Contractor shall obtain permits for Hot work, Cold work, Excavation and Confined Space from Owner in the prescribed format.

b) The contractor shall monitor record and compile list of his workers entering the operational plant/unit each day and ensure & record their return after completing the job.

c) Contractor's workers and staff members shall use designated entrances and proceed by designated routes to work areas only assigned to them. The workers shall not be allowed to enter units' area, tanks area, pump rooms, etc. without work authorization permit.

d) Work activities shall be planned in such a way so as to minimize the disruption of other activities being carried out in an operational plant/unit and activities of other contractors.

e) The contractor shall submit a list of all chemicals/toxic substances that are intended to be used at site and shall take prior approval of the Owner.

f) Specific training on working in a hydrocarbon plant shall be imparted to the work force and mock drills shall be carried out for Rescue operations/First-Aid measures.

g) Proper barricading/cordoning of the operational units/plants shall be done before starting the construction activities. No unauthorized person shall be allowed to trespass. The height and overall design of the barricading structure shall be finalized in consultation with the Owner and shall be got approved from the Owner.

h) Care shall be taken to prevent hitting underground facilities such as electrical cables, hydrocarbon piping during execution of work.

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i) Barricading with water curtain shall be arranged in specific/critical areas where hydrocarbon vapors are likely to be present such as near horton spheres or tanks. Positioning of fire tenders (from owner) shall also be ensured during execution of critical activities.

j) Emergency evacuation plan shall be worked out and all workmen shall be apprised about evacuation routes. Mock drill operations may also be conducted.

k) Flammable gas test shall be conducted prior to any hot work using appropriate measuring instruments. Sewers, drains, vents or any other gas escaping points shall be covered with flame retardant tarpaulin.

l) Respiratory devices shall be kept handy while working in confined zones where there is a danger of inhalation of poisonous gases. Constant monitoring of presence of Gas/Hydrocarbon shall be done.

m) Clearance shall be obtained from all parties before starting hot tapping, patchwork on live lines and work on corroded tank roof.

n) Positive isolation of line/equipment by blinding for welding/cutting/grinding shall be done. Closing of valve will not be considered sufficient for isolation.

o) Welding spatters shall be contained properly by using fire retardant blanket and in no case shall be allowed to fall on the ground containing oil. Similar care shall be taken during cutting operations. Fire watcher to be deployed to ensure the same.

p) The vehicles, cranes, engines, etc. shall be fitted with spark arresters on the exhaust pipe and got it approved from Safety Department of the Owner.

q) Plant air should not be used to clean any part of the body or clothing or use to blow off dirt on the floor.

r) Gas detectors should be installed in gas leakage prone areas as per requirement of Owner's plant operation personnel.

s) Flame proof electrical distribution board, plug and socket shall be used for electrical appliances.

t) Experienced full time safety personnel shall be exclusively deployed to monitor safety aspects in running plants.

3.7 Self-Assessment and Enhancement

The contractor shall develop a method of check & balance through self-assessment& enhancement techniques and shall explore the opportunities for continual improvement in the HSE system.

3.8 HSE Promotion

The contractor shall encourage his workforce to promote HSE efforts at workplace by way of organizing workshops/seminars/training programs, celebrating HSE awareness weeks &National Safety Day, conducting quizzes & essay competitions, distributing pamphlets, posters & material on HSE, providing incentives for maintaining good HSE practices and granting incentives/ bonus for completing the job without any lost time accident.

3.9 Lock Out and Tag Out(LOTO) for Isolation of Energy Source

a) Contractor shall follow the LOTO/Isolation procedure of owner for all energy source isolations installed/under purview by /of owner i.e. "Brown field"

b) For all the other energy source (not under purview of client/owner)i.e. "Green field" Contractor shall develop a system to ensure the isolation of equipments, pipelines, Vessel, electrical panels from the energy source covering following as minimum:-

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- Identification of all energy source viz electrical, mechanical, hydraulic, pneumatic, chemical, thermal, gravitational, radiation and other forms of stored or kinetic energy.
- Establishing the energy isolation devices viz manually operated electrical circuit breakers, disconnection switches, blind flanges, etc.
- Installation of Lock Out devices for preventing the inadvertent release of stored energy and Tag Out devices ("Danger", "Do Not operate" or Do not Remove"tags) to indicate that testing, maintenance or servicing is underway and the device cannot be operated until the tag out device is removed.
- Lock Out and Tag out log book
- Permit for isolation and de-isolation of energy source as per format No.: HSE-16
- Availability of competent persons like experienced operators at substations, pump house, units etc. supervisors etc.

c) Contractor shall ensure that all the sources are locked out and tagged properly before giving clearance to start the job.

d) After the completion of job, contractor shall ensure all tools and tackles are removed and nobody is present in the working area and signing on LOTO log book.

e) Only on confirmation of above the contractor will remove their lock and tag from the isolation points and give instructions for energizing the same. Only the person carrying out the task shall himself carry the key for the lock in /Lock out.

4.0 DETAILS OF HSE MANAGEMENT SYSTEM BY CONTRACTOR

4.1 On Award of Contract

The Contractor shall submit a comprehensive Health, Safety and Environmental Plan or programme for approval by EIL/Owner prior to start of work. The Contractor shall participate in the pre-start meeting with EIL/Owner to finalize HSE Plans which shall including the following:

- HSE policy & Objectives
- Job procedure to be followed by the Contractor for construction activities including handling of equipment's, scaffolding, electric installations, etc. describing the risks involved, actions to be taken and methodology for monitoring each activity. Indicative list of procedures is enclosed as Annexure-H
- EIL/Owner review/audit requirement.
- Organization structure along with responsibility and authority, on HSE activities.
- Administrative & disciplinary steps involving implementation of HSE requirements
- Emergency evacuation plan/ procedures for site and labour camps
- Procedures for reporting & investigation of accidents and near misses.
- HSE Inspection
- HSE Training programme at project site
- HSE Awareness program eat project site
- Reference to Rules, Regulations and statutory requirements.
- HIRAC
- Environment Aspect Impact Register
- Legal Register
- HSE documentation viz reporting, analysis & record keeping.

4.2 During Job Execution

Contractor shall implement approved Health, Safety and Environment management plan or programme including but not limited to as brought out under para 3.0. Contractor shall also ensure:

a) to arrange workmen compensation insurance, registration under ESI Act, third party liability insurance, registration under BOCW Act etc., as applicable.

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b) to arrange all HSE permits before start of activities (as applicable), like permits for hot work, working at heights (Refer Format No. HSE-6), confined space (Refer Format No. HSE-7), Radiation Work Permit (Refer Format No. HSE-8), Demolishing/ Dismantling Work Permit (Refer Format No. HSE-9),Permit for erection/modification & dismantling of scaffolding(Refer Format No:HSE-14),Permit for heavy lift/critical erection (Refer Format No:HSE-15) ,Permit for energy Isolation & De-isolation" (HSE-16) ,storage of chemical/explosive materials & its use and implement all precautions mentioned therein. In this regard, requirements of *Oil industry Safety Directorate Standard No.* Std -105 "Work Permit Systems" shall be complied with while working in existing Oil or Gas processing plants. List of the persons involved shall be maintained as annexure to the work permit issued for a particular activity.

c) to submit, timely, the completed checklist on HSE activities in Format No.HSE-1, Monthly HSE report in Format No.HSE-5 (use of web based package (www.eil.co.in/conthse) is compulsory wherever the facility is available else a hard copy is to be submitted), accident/ incident reports, investigation reports etc. as per EIL/Owner requirements. Compliance of instructions on HSE shall be done by Contractor and informed urgently to EIL/Owner.

d) that his top most executive at site attends all the Safety Committee/HSE meetings arranged by EIL/Owner and carries out safety walk regularly. Only in case of his absence from site that a second senior most person shall be nominated by him, in advance, and communicated to EIL/Owner for performing the above tasks.

e) display at site office and at prominent locations HSE Policy, caution boards, list of hospitals, emergency services available, safety signs like Men at work, Speed Limits, Hazardous Area, various do's & don'ts, etc.

f) provide posters, banners for safe working to promote safety consciousness.

g) identify, assess, analyze & mitigate the construction hazards& incorporate relevant control measures before actually executing site works. (HIRAC = Hazard Identification, Risk Analysis and Control).

h) identify, assess, analyze & mitigate the environmental impact & incorporate relevant control measures through Environmental Aspect Impact Register

i) Identify and comply to all applicable HSE related legal requirements by preparing and maintaining a Legal register.

j) To maintain & monitor the level of legal compliance at site, a committee shall be formed comprising of contractor's RCM as Head and lead representatives as member(s)from HR/Legal, HSE and discipline engineer(s) (Civil, Mechanical, Electrical, Instrumentation) as applicable. Committee shall review the applicable legal requirements during periodical meetings and monitor the compliance status.

k) arrange testing, examination, inspection of own as well as borrowed construction equipment's/ machinery (stationary &mobile) before being used at site and also at periodical interval, through own resources and also by 3rd party competent agencies (as deemed fit in statutes). Records of such test, examination etc. shall be maintained & shall be submitted to EIL/Owner as & when asked for.

l) carryout audits/inspection (internal & external) at his works as well as sub-contractor works as per approved HSE plan/procedure/programme & submit the compliance reports of identified shortfalls for EIL/Owner review.

m) Arranging HSE training for site workmen (of his own &subcontractors) through internal or external faculty at periodical intervals.

n) Assistance& cooperate during HSE audits by EIL/Owner or any other 3rd party and submit compliance report.

o) Generate & submit of HSE records/report as per this specification.

p) Contractor shall arrange minimum 100 lux. illumination level at construction site for night works& record shall be maintained.

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q) Mobile phones shall not be permitted in operational area of the Project Site. However, intrinsically safe mobile phone can be permitted on approval from EIL/Owner. Alternatively, telephone booth(s) may be set up by the contractor after obtaining approval from EIL/Owner. Use of mobile phone shall also be restricted during construction activities such as height work, erection of material, confined space and Pre-commissioning & Commissioning activities at all project sites.

r) The contractor shall assign responsible person as in charge for night works and it shall be informed to owner/EIL.

s) Appraise EIL/Owner on HSE activities at site regularly.

t) Carry-out all dismantling activities safely, with prior approval of EIL/Owner representative.

u) The Contractor shall ensure that "Hot works" and painting works do not continue at the same place/ location at project site for which chance or probability of "fire" incident exists.

4.3 During Short Listing of the Sub-Contractors

The contractor shall review the HSE management system of the sub-contractors in line with the requirements given in this specification. The contractor shall be held responsible for the shortcomings observed in the HSE management system of the sub-contractor(s) during execution of the job.

5.0 RECORDS

At the minimum, the contractor shall maintain/ submit HSE records in the following reporting formats:

Safety Walk Through Report	HSE-1
Accident/ Incident Report	HSE-2
Supplementary Accident/ Incident Investigation report	HSE-3
Near Miss Incident Report	HSE-4
Monthly HSE Report	HSE-5
Permit for working at height	HSE-5
Permit for working in confined space	HSE-7
Permit for radiation work	HSE-8
Permit for demolishing/ dismantling	HSE-9
Daily Safety checklist	HSE-10
Housekeeping Assessment & compliance	HSE-11
Inspection of temporary electrical booth/installation	HSE-12
Inspection for scaffolding	HSE-13
Permit for erection/modification &dismantling of scaffolding	HSE-14
Permit for heavy lift/critical erection.	HSE-15
Permit for Energy isolation and de-isolation.	HSE-16
Permit for Excavation	HSE-17
Environmental Aspect Impact Register	HSE-18
HIRAC Register	HSE-19
Checklist for Tower Crane	HSE-20
Crane Inspection Checklist	HSE-21
Hydraulic Mobile Crane Inspection Checklist	HSE-22
Hydraulic Rig Inspection Checklist	HSE-23

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Boom Lift Inspection Checklist	HSE-24
Inspection reports of Equipment/tools/tackles	*
Report of Toolbox Talks	As indicated in specification
PPE issue report/register	*
Site inspection reports	*
Training records	*

(*) The formats shall be developed by contractor in consultation with EIL/Owner.

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APPENDIX-A
(Sheet 1 of 2)

A. IS CODES ON HSE

SP: 53	Safety code for the use, Care and protection of hand operated tools.
IS: 838	Code of practice for safety & health requirements in electric and gas welding and cutting operations
IS: 1179	Eye & Face precautions during welding, equipment etc.
IS: 1860	Safety requirements for use, care and protection of abrasive grinding wheels.
IS: 1989 (Pt -II)	Leather safety boots and shoes
IS: 2925	Industrial Safety Helmets
IS: 3016	Code of practice for fire safety precautions in welding & cutting operation.
IS: 3043	Code of practice for earthing
IS: 3764	Code of safety for excavation work
IS: 3786	Methods for computation of frequency and severity rates for industrial injuries and classification of industrial accidents
IS: 3696	Safety Code of scaffolds and ladders
IS: 4083	Recommendations on stacking and storage of construction materials and components at site
IS: 4770	Rubber gloves for electrical purposes
IS: 5121	Safety code for piling and other deep foundations
IS: 5216 (Pt-I)	Recommendations on Safety procedures and practices in electrical works
IS: 5557	Industrial and Safety rubber lined boots
IS: 5983	Eye protectors
IS: 6519	Selection, care and repair of Safety footwear
IS: 6994 (Pt-I)	Industrial Safety Gloves (Leather & Cotton Gloves)
IS: 7293	Safety Code for working with construction Machinery
IS: 8519	Guide for selection of industrial safety equipment for body protection
IS: 9167	Ear protectors
IS: 11006	Flash back arrestor (Flame arrestor)
IS: 11016	General and safety requirements for machine tools and their operation
IS: 11057	Specification for Industrial safety nets
IS: 11226	Leather safety footwear having direct moulded rubber sole
IS: 11972	Code of practice for safety precaution to be taken when entering a sewerage system
IS: 13367	Code of practice-safe use of cranes
IS: 13416	Recommendations for preventive measures against hazards at working place

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APPENDIX-A
(Sheet 2 of 2)

B. INTERNATIONAL STANDARDS ON HSE

Safety Glasses	:	ANSI Z 87.1, ANSI ZZ 87.1, AS 1337, BS 2092, BS 1542, BS 679, DIN 4646/ 58311
Safety Shoes	:	ANSI Z 41.1, AS 2210, EN 345
Hand Gloves	:	BS 1651
Ear Muffs	:	BS 6344, ANSI S 31.9
Hard Hat	:	ANSI Z 89.1/89.2, AS 1808, BS 5240, DIN 4840
Goggles	:	ANSI Z 87.1
Face Shield	:	ANSI Z 89.1
Breathing Apparatus	:	BS 4667, NIOSH
Welding & Cutting	:	ANSI Z49.1
Safe handling of compressed:	P-1	(Compressed Gas Association Gases in cylinders 1235 Jefferson Davis Highway, Arlington VA 22202 - USA)
Full body harness	:	EN-361
Lanyard	:	EN-354
Karabiner	:	EN-362 and EN-12275

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APPENDIX-B

DETAILS OF FIRST AID BOX

SL. NO.	DESCRIPTION		QUANTITY
1.	Small size Roller Bandages, 1 Inch Wide	(Finger Dressing small)	6 Pcs.
2.	Medium size Roller Bandages, 2 Inches Wide	(Hand & Foot Dressing)	6 Pcs.
3.	Large size Roller Bandages, 4 Inches Wide	(Body Dressing Large)	6 Pcs.
4.	Large size Burn Dressing	(Burn Dressing Large)	4 Pkts.
5.	Cotton Wool	(20 gms packing)	4 Pkts.
6.	Antiseptic Solution Dettol (100 ml.) or Savlon		1 Bottle
7.	Mercurochrome Solution (100 ml.) 2% in water		1 Bottle
8.	Ammonia Solution (20 ml.)		1 Bottle
9.	A Pair of Scissors		1 Piece
10.	Adhesive Plaster (1.25 cm X 5 m)		1 Spool
11.	Eye pads in Separate Sealed Pkt.		4 pcs.
12.	Tourniqut		1 No.
13.	Safety Pins		1 Dozen
14.	Tinc. Iodine/ Betadine (100 ml.)		1 Bottle
15.	Polythene Wash cup for washing eyes		1 No.
16.	Potassium Permanganate (20 gms.)		1 Pkt.
17.	Tinc. Benzoine (100 ml.)		1 Bottle
18.	Triangular Bandages		2 Nos.
19.	Band Aid Dressing		5 Pcs.
20.	Iodex/Moov(25 gms.)		1 Bottle
21.	Tongue Depressor		1 No.
22.	Boric Acid Powder (20 gms.)		2 Pkt.
23.	Sodium Bicarbonate (20 gms.)		1 Pkt.
24.	Dressing Powder (Nebasulf) (10 gms.)		1 Bottle
25.	Medicinal Glass		1 No.
26.	Duster		1 No.
27.	Booklet (English& Local Language)		1 No. each
28.	Soap		1 No.
29.	Toothache Solution		1 No.
30.	Vicks (22 gms.)		1 Bottle
31.	Forceps		1 No.
32.	Snake –Bite Lancet		1No.
33.	Note Book		1 No.
34.	Splints		4 Nos.
35.	Lock		1 Piece
36.	Life Saving/Emergency/Over-the counter Drugs		As decided at site

Box size: Suitable size first aid box to be used for first aid items

Note : The medicines prescribed above are only indicative. Equivalent medicines can also be used. A prescription, in this regard, shall be required from a qualified Physician.

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APPENDIX-C

TYPE OF FIRES VIS-À-VIS FIRE EXTINGUISHERS

Fire Extinguisher → / Fire ↓	Water	Foam	CO_2	Dry Powder	Multi purpose (ABC)
Originated from paper, clothes, wood	✔	✔	can control minor surface fires	can control minor surface fires	✔
Inflammable liquids like alcohol, diesel, petrol, edible oils, bitumen	×	✔	✔	✔	✔
Originated from gases like LPG, CNG, H_2	×	×	✔	✔	✔
Electrical fires	×	×	✔	✔	✔

LEGEND : ✔ : CAN BE USED

× : NOT TO BE USED

Note: Fire extinguishing equipment must be checked atleast once a year and after every use by an authorized person. The equipment must have an inspection label on which the next inspection date is given. Type of extinguisher shall clearly be marked on it.

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APPENDIX-D

List of Statutory Acts & Rules Relating to HSE

- The Indian Explosives Act and Rules
- The Motor Vehicle Act and Central Motor Vehicle Rules
- The Factories Act and concerned Factory Rules
- The Petroleum Act and Petroleum Rules
- The Workmen Compensation Act
- The Gas Cylinder Rules and the Static & Mobile Pressure Vessels Rules
- The Indian Electricity Act and Rules
- The Indian Boiler Act and Regulations
- The Water (Prevention & Control & Pollution) Act
- The Water (Prevention & Control of Pollution) Cess Act
- The Mines & Minerals (Regulation & Development) Act
- The Air (Prevention & Control of Pollution) Act
- The Atomic Energy Act
- The Radiation Protection Rules
- The Indian Fisheries Act
- The Indian Forest Act
- The Wild Life (Protection) Act
- The Environment (Protection) Act and Rules
- The Hazardous Wastes (Management & Handling) Rules
- The Manufacturing, Storage & import of Hazardous Chemicals Rules
- The Public Liability Act
- The Building and Other Construction Workers (Regulation of Employment and Condition of Service) Act
- Other statutory acts Like EPF, ESIS, Minimum Wages Act.

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APPENDIX-E(Sheet 1 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
(A) EXCAVATION Pit Excavation upto 3.0m	Falling into pit	Personal injury	Provide guard rails/ barricade with warning signal Provide atleast two entries/ exits. Provide escape ladders.
	Earth Collapse	Suffocation/ Breathlessness Buried	Provide suitable size of shoring and strutting, if required. Keep soil heaps away from the edge equivalent to 1.5m or depth of pit whichever is more. Don't allow vehicles to operate too close to excavated areas. Maintain atleast 2m distance from edge of cut. Maintain sufficient angle of repose. Provide slope not less than 1:1 and suitable bench of 0.5m width at every 1.5m depth of excavation in all soils except hard rock. Battering/benching the sides.
	Contact with buried electric cables Gas/ Oil Pipelines	Electrocution Explosion	Obtain permission from competent authorities, prior to excavation, if required. Locate the position of buried utilities by referring to plant drawings. Start digging manually to locate the exact position of buried utilities and thereafter use mechanical means.
Pit Excavation beyond 3.0m	Same as above plus Flooding due to excessive rain/ underground water	Can cause drowning situation	Prevent ingress of water Provide ring buoys Identify and provide suitable size dewatering pump or well point system
	Digging in the vicinity of existing Building/ Structure	Building/Structure may collapse Loss of health & wealth	Obtain prior approval of excavation method from local authorities. Use under-pining method Construct retaining wall side by side.
	Movement of vehicles/ Equipments close to the edge of cut.	May cause cave-in or slides. Persons may get buried.	Barricade the excavated area with proper lighting arrangements Maintain at least 2m distance from edge of cut and use stop blocks to prevent over-run Strengthen shoring and strutting

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APPENDIX-E: (Sheet 2 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
Narrow deep excavations for pipelines, etc.	Same as above plus Frequent cave-in or slides	May cause severe injuries or prove fatal	Battering/benching of sides Provide escape ladders
	Flooding due to Hydro- static testing	May arise drowning situation	Same as above plus Bail out accumulated water Maintain adequate ventilation.
Rock by excavation blasting	Improper handling of explosives	May prove fatal	Ensure proper storage, handling & carrying of explosives by trained personnel. Comply with the applicable explosive acts & rules.
	Uncontrolled explosion	May cause severe injuries or prove fatal	Allow only authorized persons to perform blasting operations. Smoking and open flames are to be strictly prohibited
	Scattering of stone pieces in atmosphere	Can hurt people	Use PPE like goggles, face mask, helmets etc.
Rock excavation by blasting (Contd)	Entrapping of persons/ animals.	May cause severe injuries or prove fatal	Barricade the area with red flags and blow siren before blasting.
	Misfire	May explode suddenly	Do not return to site for atleast 20 minutes or unless announced safe by designated person.
Piling Work	Failure of pile-driving equipment	Can hurt people	Inspect Piling rigs and pulley blocks before the beginning of each shift.
	Noise pollution	Can cause deafness and psychological imbalance.	Use personal protective equipment's like ear plugs, muffs, etc.
	Extruding rods/casing	Can hurt people	Barricade the area and install sign boards Provide first-aid
	Working in the vicinity of 'Live-Electricity'	Can cause electrocution/ Asphyxiation	Keep sufficient distance from Live-Electricity as per IS code. Shut off the supply, if possible Provide artificial/rescue breathing to the injured
(B) CONCRETING	Air pollution by cement	May affect Respiratory System	Wear respirators or cover mouth and nose with wet cloth.
	Handling of ingredients	Hands may get injured	Use gloves & other PPE.
	Protruding reinforcement rods.	Feet may get injured	Provide platform above reinforcement for movement of workers or provide end caps for protection on reinforcement bars.

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APPENDIX-E :(Sheet 3 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
	Earthing of electrical mixers, vibrators, etc. not done.	Can cause electrocution/ asphyxiation	Ensure earthing of equipments and proper functioning of electrical circuit before commencement of work.
	Falling of materials from height	Persons may get injured	Use hard hats Remove surplus material immediately from work place. Ensure lighting arrangements during night hours
	Continuous pouring by same gang	Cause tiredness of workers and may lead to accident.	Insist on shift pattern Provide adequate rest to workers between subsequent pours.
	Revolving of concrete mixer/ vibrators	Parts of body or clothes may get entrapped.	Allow only mixers with hopper Provide safety cages around moving motors Ensure proper mechanical locking of vibrator.
Super-structure	Same as above plus Deflection in props or shuttering material	Shuttering/props may collapse and prove fatal	Avoid excessive stacking on shuttering material Check the design and strength of shuttering material before commencement of work Rectify immediately the deflection noted during concreting.
	Passage to work place	Improperly tied and designed props/planks may collapse	Ensure the stability and strength of passage before commencement of work. Do not overload and stand under the passage.
(C) REINFOR-CEMENT	Curtailment and binding of rods	Persons may get injured	Use PPE like gloves, shoes, helmets, etc. Avoid usage of shift tools
	Carrying of rods for short distances/at heights	Workers may get injured their hands and shoulders.	Provide suitable pads on shoulders and use safety gloves. Tie up rods in easily liftable bundles Ensure proper staging.
	Checking of clear distance/ cover with hands	Rods may cut or injure the fingers	Use measuring devices like tape, measuring rods, etc.
	Hitting projected rods and standing on cantilever rods.	Persons may get injured and fell down	Use safety shoes and avoid standing unnecessarily on cantilever rods Avoid wearing of loose clothes

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APPENDIX-E:(Sheet 4 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
	Falling of material from height	May prove fatal	Use helmets Provide safety nets
	Transportation of rods by trucks/ trailers	Protruded rods may hit the persons	Use red flags/lights at the ends Do not protrude the rods in front of or by the side of driver's cabin. Do not extend the rods 1/3rd of deck length or 1.5m whichever is less
(D)WELDING AND GAS CUTTING	Welding radiates invisible ultraviolet and infra-red rays	Radiation can damage eyes and skin.	Use specified shielding devices and other PPE of correct specifications. Avoid thoriated tungsten electrodes for GTAW
	Improper placement of oxygen and acetylene cylinders	Explosion may occur	Move out any leaking cylinder Keep cylinders in vertical position Use trolley for transportation of cylinders and chain them Use flashback arrestors
	Leakage/ cuts in hoses	May cause fire	Purge regulators immediately and then turn off Never use grease or oil on oxygen line connections and copper fittings on acetylene lines Inspect regularly gas carrying hoses Always use red hose for acetylene & other fuel gases and black for oxygen
	Opening-up of cylinder	Cylinder may burst	Always stand back from the regulator while opening the cylinder Turn valve slowly to avoid bursting Cover the lug terminals to prevent short circuiting
	Welding of tanks, container or pipes storing flammable liquids	Explosion may occur	Empty & purge them before welding Never attach the ground cable to tanks, container or pipe storing flammable liquids Never use LPG for gas cutting

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APPENDIX-E:(Sheet 5 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES ...(Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
(E) RADIOGRAPHY	Ionizing radiation	Radiations may react with the skin and can cause cancer, skin irritation, dermatitis, etc.	Ensure Safety regulations as per BARC/AERB before commencement of job. Cordon off the area and install Radiation warning symbols Restrict the entry of unauthorized persons Wear appropriate PPE and film badges issued by BARC/AERB
	Transportation and Storage of Radiography source	Same as above	Never touch or handle radiography source with hands Store radiography source inside a pit in an exclusive isolated storage room with lock and key arrangement. The pit should be approved by BARC/AERB. Radiography source should never be carried either in passenger bus or in a passenger compartment of trains. BARC/AERB has to be informed before source movement. Permission from Director General of Civil Aviation is required for booking radio isotopes with airlines.
	Loss of Radio isotope	Same as above	Try to locate with the help of Survey Meter. Inform BARC/AERB (*)
(F) ELECTRICAL INSTALLATION ANDUSAGE	Short circuiting	Can cause Electrocution or Fire	Use rubberized hand gloves and other PPE Don't lay wires under carpets, mats or door ways. Allow only licensed electricians to perform on electrical facilities Use one socket for one appliance Ensure usage of only fully insulated wires or cables Don't place bare wire ends in a socket Ensure earthing of machineries and equipment's Do not use damaged cords and avoid temporary connections Use spark-proof/flame proof type field distribution boxes.

(*) Atomic Energy Regulatory Board (AERB),
Bhabha Atomic Research Centre (BARC)
Anushakti Nagar, Mumbai – 400 094

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APPENDIX-E:(Sheet 6 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
			Do not allow open/bare connections Provide all connections through 30mAELCB Protect electrical cables/equipments from water and naked flames Check all connections before energizing
	Overloading of Electrical System	Bursting of system can occur which leads to fire	Display voltage and current ratings prominently with 'Danger' signs. Ensure approved cable size, voltage grade and type Switch off the electrical utilities when not in use Do not allow unauthorized connections. Ensure proper grid wise distribution of Power
	Improper laying of overhead and underground transmission lines/cables	Can cause electrocution and prove fatal	Do not Jay un armoured cable directly on ground, wall, roof of trees Maintain atleast 3m distance from HT cables All temporary cables should be laid atleast 750 mm below ground on 100 mm fine sand overlying by brick soling Provide proper sleeves at crossings/ inter-sections Provide cable route markers indicating the type and depth of cables at intervals not exceeding 30m and at the diversions/termination
(G) FIRE PREVENTION AND PROTECTION	Small fires can become big ones and may spread to the surrounding areas	Cause burn injuries and may prove fatal	In case a fire breaks out, press fire alarm system and shout "Fire, Fire". Keep buckets full of sand & water/ fire extinguishing equipment near hazardous locations. Confine smoking to 'Smoking Zones' only. Train people for using specific type of fire fighting equipments under different classes of fire. Keep fire doors/shutters, passages and exit doors unobstructed. Maintain good housekeeping and first-aid boxes (for details refer Appendix-B). Don't obstruct assess to Fire extinguishers. Do not use elevators for evacuation during fire. Maintain lightening arrestors for elevated structures. Stop all electrical motors with internal combustion.

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APPENDIX-E :(Sheet 7 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
			Move the vehicles from dangerous locations. Remove the load hanging from the crane booms Remain out of the danger areas.
	Improper selection of Fire extinguisher	It may not extinguish the fire	Ensure usage of correct fire extinguisher meant for the specified fire (for details refer Appendix-C). Do not attempt to extinguish Oil and electric fires with water. Use foam cylinders/CO_2/sand or earth.
	Improper storage of highly inflammable substances	Same as above	Maintain safe distance of flammable substances from source of ignition. Restrict the distribution of flammable materials to only min. necessary amount. Construct specifically designed fuel storage facilities. Keep chemicals in cool and dry place away from heat. Ensure adequate ventilation. Before welding operation, remove or shield the flammable material properly. Store flammable materials in stable racks, correctly labeled preferably with catchment trays. Wipe off the spills immediately
	Short circuiting of electrical system	Same as above Can cause Electrocution	Don't lay wires under carpets, mats or door ways Use one socket for one appliance. Use only fully insulated wires or cables. Do not allow open/bare connections. Provide all connections through 30mAELCB. Ensure earthing of machineries and equipments.
(H) VEHICULAR MOVEMENT	Crossing the Speed Limits (Rash driving)	Personal injury	Obey speed limits and traffic rules strictly. Always expect the unexpected and be a defensive driver. Use seat belts/helmets. Blow horn at intersections and during overtaking operations. Maintain the vehicle in good condition. Do not overtake on curves, bridges and slopes.
	Adverse weather condition	Same as Above	Read the road ahead and ride to the left. Keep the wind screen and lights clean. Do not turn at speed. Recognize the hazard, understand the defense and act correctly in time.

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APPENDIX-E :(Sheet 8 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
	Consuming alcohol before and during the driving operation	Same as above	Alcohol and driving do not mix well. Either choose alcohol or driving. If you have a choice between hitting a fixed object or an on-coming vehicle, hit the fixed object Quit the steering at once and become a passenger. Otherwise take sufficient rest and then drive. Do not force the driver to drive fast and round the clock. Do not day dream while driving
	Falling objects/ Mechanical failure	May prove fatal	Ensure effective braking system, adequate visibility for the drives, reverse warning alarm. Proper maintenance of the vehicle as per manufacturer instructions
(I) PROOF TESTING (HYDROSTATIC/ PNEUMATIC TESTING)	Bursting of piping Collapse of tanks Tanks flying off	May cause injury and prove fatal	Prepare test procedure & obtain EIL/owner's approval. Provide separate gauge for pressurizing pump and piping/equipment. Check the calibration status of all pressure gauges, dead weight testers and temperature recorders. Take dial readings at suitable defined intervals and ensure most of them fall between 40-60% of the gauge scale range. Provide safety relief valve (set at pressure slightly higher than test pressure) while testing with air/ nitrogen. Ensure necessary precautions, stepwise increase in pressure, tightening of bolts/nuts, grouting, etc. before and during testing. Keep the vents open before opening any valve while draining out of water used for hydro-testing of tanks. Pneumatic testing involves the hazard of released energy stored in compressed gas. Specific care must therefore be taken to minimize the chance of brittle failure during a pneumatic leak test. Test temperature is important in this regard and must be considered when the designer chooses the material of construction.

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APPENDIX-E :(Sheet 9 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
			A pressure relief device shall be provided, having a set pressure not higher than the test pressure plus the lesser of 345 KPa (50 psi) or 10% of the test pressure. The gas used as test fluid, if not air, shall be nonflammable and nontoxic.
(J) WORKING AT HEIGHTS	Person can fall down	May sustain severe injuries or prove fatal	Provide guard rails/barricade at the work place Use PPE like full body harness, life line, helmets, safety shoes, etc. Obtain a permit before starting the work at height above 2 meters Fall arrest and safety nets, etc. must be installed Provide adequate working space(min. 0.6 m) Tie/weld working platform with fixed support Use roof top walk ladder while working on a slopping roofs Avoid movement on beams
		May hit the scrap/material stacked at the ground or in between	Keep the work place neat and clean Remove the scrap immediately
	Material can fall down	May hit the workers working at lower levels and prove fatal	Same as above plus Do not throw or drop materials or equipment from height. i.e. do not *bomb* materials All tools to be carried in a tool-kit Bag or on working uniform Remove scrap from the planks Ensure wearing of helmet by the workers working at lower levels. Multiple activities at same location to be avoided. .
(K) CONFINED SPACES	Suffocation/ drowning	Unconsciousness, death	Use respiratory devices, if reqd. Avoid overcrowding inside a confined space Provide Exhaust fans for ventilation Do not wear loose clothes, neck ties, etc. Fulfill conditions of the permit

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APPENDIX-E:(Sheet 10 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
			Check for presence of hydrocarbons, O_2 level Obtain work permit before entering a confined space Ensure that the connected piping of the equipment which is to be opened is pressure free, fluid has been drained, vents are open and piping is positively isolated by a blind flange
	Presence of foul smell and toxic substances	Inhalation can pose threat to life	Same as above plus Check for hydrocarbon and Aromatic compounds before entering a confined space Depute one person outside the confined space for continuous monitoring and for extending help in case of an emergency
	Ignition/ flame can cause fire	Person may sustain burn injuries or explosion may occur	Keep fire extinguishers at a hand distance Remove surplus material and scrap immediately Do not smoke inside a confined space Do not allow gas cylinders inside a confined space Use low voltage (24V) lamps for lighting Use tools with air motors or electric tools with max. voltage of 24V Remove all equipment's at the end of the day
(L) HANDLING AND LIFTING EQUIPMENTS	Failure of load lifting and moving equipment's	Can cause accident and prove fatal	Avoid standing under the lifted load and within the operating radius of cranes. Check periodically oil, brakes, gears, horns and tyre pressure of all moving machinery. Check quality, size and condition of all chain pulley blocks, slings, U-clamps, D-shackles, wire ropes, etc. Allow crane to move only on hard, firm and leveled ground. Allow lifting slings as short as possible and check gunny packings at the friction points. Do not allow crane to tilt its boom while moving Install Safe Load Indicator. Ensure certification by applicable authority.

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APPENDIX-E :(Sheet 11 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS & PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
	Overloading of lifting equipments	Same as above	Safe lifting capacity of derricks and winches written on them shall be got verified The max. safe working load shall be marked on all lifting equipments Check the weight of columns and other heavy items painted on them and accordingly decide about the crane capacity, boom and angle of erection Allow only trained operators and riggers during crane operation.
	Overhead electrical wires	Can cause electrocution and fire	Do not allow boom or other parts of crane to come within 3m reach of overhead HT cables Hook and load being lifted shall preferably remain in full visibility of crane operators.
(M) SCAFFOLDING, FORMWORK AND LADDERS	Person can fall down	Person May sustain severe injuries and prove fatal	Provide guard rails for working at height. Face ladder while climbing and use both hands. Ladders shall extend about 1m above landing for easy access and tying up purpose. Do not place ladders against movable objects and maintain base at 1/4 unit of the working length of the ladder. Suspended scaffolds shall not be less than 500 mm wide and tied properly with ropes. No loose planks shall be allowed. Use PPE, like helmets, safety shoes etc.
	Failure of scaffolding material	Same as above	Inspect visually all scaffolding materials for stability and anchoring with permanent structures. Design scaffolding for max. load carrying capacity. Scaffolding planks shall not be less than 50X250 mm full thickness lumber or equivalent. These shall be cleated or secured and must extend over the end supports by at least 150mm and not more than 300mm. Don't overload the scaffolds. Do not splice short ladders to make a longer one. Vertical ladders shall not exceed 6m.
	Material can fall down	Persons working at lower level gets injured	Remove excess material and scrap immediately. Carry the tools in a tool-kit bag only. Provide safety nets.

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APPENDIX-E:(Sheet 12 of 12)

CONSTRUCTION HAZARDS, THEIR EFFECTS &PREVENTIVE MEASURES (...Contd.)

ACTIVITY	TYPE OF HAZARD	EFFECT OF HAZARD	PREVENTIVE MEASURES
(N) STRUC-TURAL WORKS	Personal negligence and danger of fall	Can cause injury or casualty	Do not take rest inside rooms built for welding machines or electrical distribution system. Avoid walking on beams at height. Wear helmet with chin strap and full body harness while working at height. Use hand gloves and goggles during grinding operations. Cover or mark the sharp and projected edges. Do not stand within the operating radius of cranes.
	Lifting/ slipping of material	Same as above	Do not stand under the lifted load. Stack properly all the materials. Avoid slippage during handling. Control longer pieces lifted up by cranes from both ends. Remove loose materials from height. Ensure tightening of all nuts & bolts.
(O)PIPELIN E WORKS	Erection/ lowering failure	Can cause injury	Do not stand under the lifted load. Do not allow any person to come within the radii of the side boom handling pipes. Check the load carrying capacity of the lifting tools & tackles. Use safe Load Indicators (SLI). Use appropriate PPEs.
	Other	Same as above	Wear gum boots in marshy areas. Allow only one person to perform signaling operations while lowering of pipes. Wedges to be provided below the pipe to prevent spool/pipe roll out. Provide night caps on pipes. Provide end covers on pipes for stoppage of pigs while testing/ cleaning operations.
(P) GRIT BLASTING	Pollution in neighboring area, hit by grit sand high pressure air	Can cause personal injury	Ensure the blasting is done in enclosed shed. Keep safe distance while blasting operations. Wear positive pressure blast hood or helmet with view-window, ear-muff/plug, gloves, overall or leather coat /apron, rubber shoes.

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APPENDIX-F

TRAINING SUBJECTS / TOPICS

(For contractors' personnel)

1. The Law & Safety – Statutory Requirement / Applicable statutes / Duties of employer / employee.
2. Policy & Administration – Why HSE? / Duties & Responsibilities of Safety Personnel at project site / Effect of incentive on accident prevention.
3. HSE & Supervision – Duties of Supervisor / HSE integrated supervision / Who should be held responsible for site accidents?
4. Safety Budget / Cost of Accidents – Direct costs / Indirect costs.
5. Hazard Identification / Type of hazards / HIRAC.
6. Behavioral Safety & Motivation.
7. Housekeeping – Storage / Stacking / Handling of materials / Hydraulic Mobile Crane handling.
8. Occupational Health in Construction sector.
9. Personal Protective Equipment's – Respiratory & Non- respiratory.
10. Electricity & Safety – ELCB / Fuse / Powered tools / Project illumination.
11. Handling of Compressed Gas – Transportation / Storage / FBAs / Fire prevention.
12. Machine Safety – Machine guarding / Maintenance.
13. Transportation – Hazards & risks in transp. of materials / ODC consignments.
14. Cranes & Other Lifting machinery – Legal requirements vis-à-vis essential safety requirements.
15. Communication – HSE Induction / TBTs / Safety Committee / Safety meeting / Safety propaganda / Publicity.
16. Excavation – Risks & Dangers / Safety measures.
17. Working at Heights – Use of ladder / Work on roofs / Scaffolds / Double harness lanyards / Life-line / Fall arrester / Safety Nets / Floor openings.
18. Hazards in Welding & important safety precautions.
19. Gas Cutting – Hazards & safety measures.
20. Fire prevention & fire protection.

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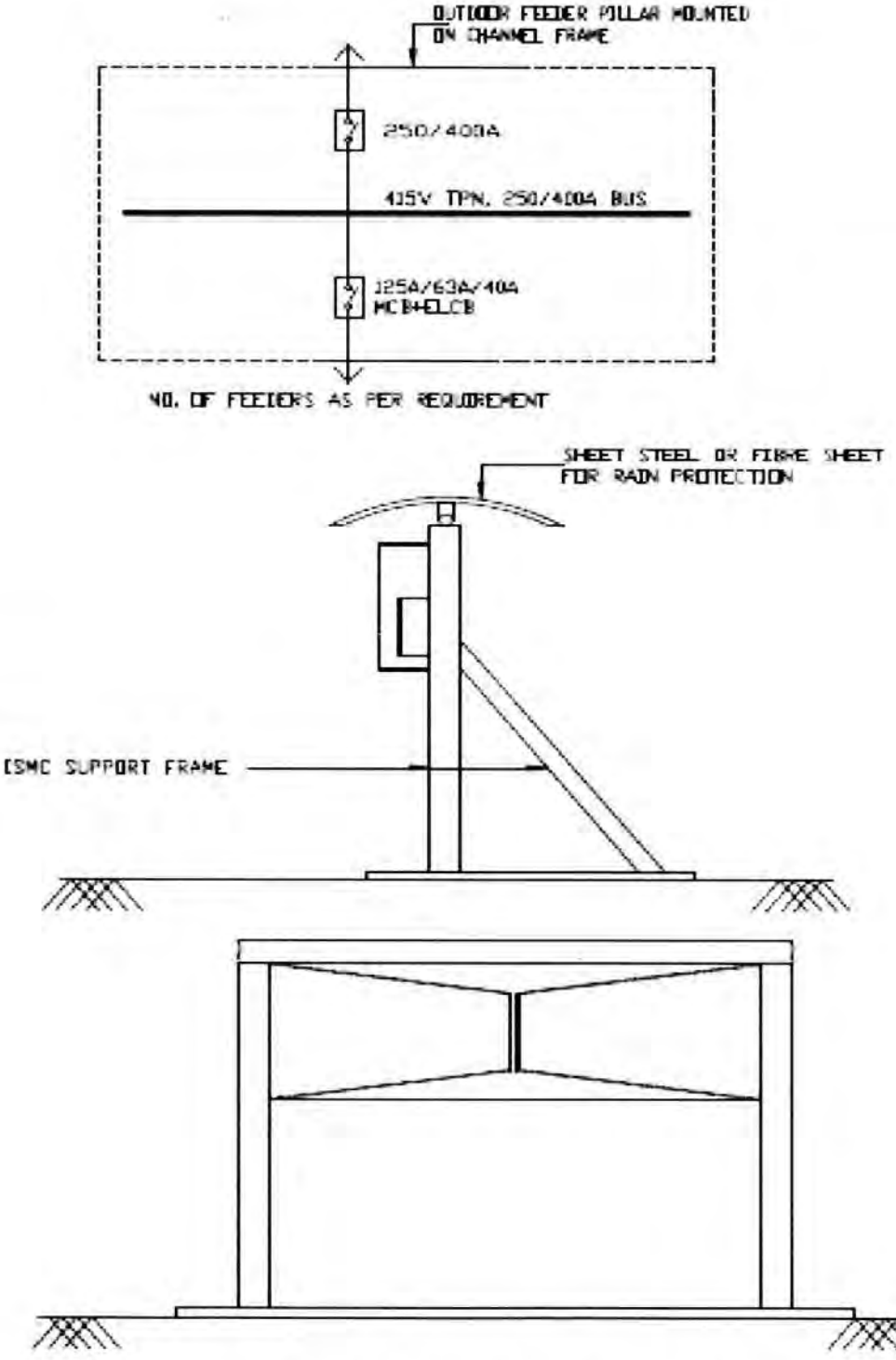
APPENDIX - G

CONSTRUCTION POWER BOARD(typ)



NOTES:-

1. CONTRACTOR TO INSTALL TEMPORARY CONST. POWER BOARD AS SHOWN IN THE DRG. ITS LOCATION SHALL BE EASILY ACCESABALE.
2. POWER DISTRIBUTION BOARD SHALL BE EARTHED AT TWO POINTS BY MINIMUM 40X5MM GI STRIP FROM THE AVILABLE GRID OR DIRECTLY CONNECTED TO TWO DIRECTLY DRIVEN EARTH ELECTRODES.
3. DISTRIBUTION BOARD SHALL BE FABRICATED BY USING 14MM CRCA SHEET STEELWITH HINGED DOORSAND ALL COMPONENT MOUNTED IN IT.
4. ALL INCOMING AND OUTGOING CABLESSHALL HAVE BOTTOM ENTRY.

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APPENDIX-H

LIST OF PROCEDURES (MINIMUM) TO BE FORMING PART OF HSE PLAN:-

A. HSE Management Procedures:

- HSE Risk Management (including HIRA)
- HSE Legal Compliance and Other Requirements
- HSE Objectives & Performance
- HSE Training and Competence (including Induction)
- HSE Motivation &Award Scheme
- HSE Audits
- HSE Sub Contractor Management
- HSE Emergency Management
- HSE Incidents Reporting and Management
- HSE procedure for Behaviour based Safety
- First Aid & Management
- Roles, Responsibility, accountabilities and Authorities

B. Job procedures/Safe Operating procedures

- Setting Up Site &Signages
- Working at Height
- Confined Space Entry
- Permit to Work (including hot works)
- Housekeeping
- Transportation of materials including Manual Handling
- Earthmoving Operations & excavation
- Scaffolding
- Fire Prevention/Protection
- Hazardous Substance handling & Storage
- Personal Protective Equipment

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APPENDIX-I

LIFE SAVING RULES

Bypassing Safety Controls

Obtain authorisation before overriding or disabling safety controls

- I understand & use safety-critical equipment and procedure which apply to my task
- I obtain authorization before:
  - disabling or overriding safety equipment
  - deviating from procedures
  - crossing a barrier

Confined Space

Obtain authorisation before entering a confined space

- I confirm energy sources are isolated
- I confirm the atmosphere has been tested and is monitored
- I check and use my breathing apparatus when required
- I confirm there is an attendant standing by
- I confirm rescue plan is in place
- I obtain authorization to enter

Driving

Follow safe driving rules

- I always wear a seatbelt
- I do not exceed the speed limit, and reduce my speed for road conditions
- I do not use phones or operate devices while driving
- I am fit, rested and fully alert while driving
- I follow journey management requirements

Energy Isolation

Verify isolation and zero energy before work begins

- I have identified all energy sources
- I confirm that hazardous energy sources have been isolated, locked and tagged
- I have checked there is zero energy and tested for residual or stored energy

Hot Work

Controls flammables and ignition sources

- I identify and control ignition sources
- Before starting any hot work:
  - I confirm flammable material has been removed or isolated
  - I obtain authorization
- Before starting hot work in a hazardous are I confirm:
  - a gas test has been completed
  - gas will be monitored continually

Line of Fire

Keep yourself and others out of the line of fire

- I position myself to avoid:
  - moving objects
  - vehicles
  - pressure releases
  - dropped objects
- I establish and obey barriers and exclusion zones
- I take action to secure loose objects and report potentialdropped objects

Safe Mechanical Lifting

Plan lifting operations and control the area

- I confirm that the equipment and load have been inspected and are fit for purpose
- I only operate equipment that I am qualified to use
- I establish and obey barriers and exclusion zones
- I never walk under a suspended load

Work Authorization

Work with a valid permit when required

- I am authorised to perform the work
- I understand the permit
- I have confirmed that hazards are controlled and it is safe to start
- I stop and reassess if conditions change

Work at Height

Protect yourself against a fall when working at height

- I inspect my fall protection equipment before use
- I secure tools and work materials to prevent dropped objects
- I tie off 100% to approved anchor points while outside a protected area

Excavation

Follow safe excavation procedure

- Before starting any excavation:
  - I confirm availability of underground utilities
  - I obtain authorization
  - I take adequate precautions to prevent collapse of soil

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FORMAT NO. : HSE-1 REV 1

(Sheet 1 of 6)

SAFETY WALK-THROUGH REPORT

(Name & signature of walk through performer to be inserted at the bottom of each page)

Project : _____ Report no. : _____

Date : _____ Ccontractor : _____

Inspection by : _____ Owner : _____

Frequency : Monthly Job no. : _____

Note : Write 'NA' wherever the item is not applicable

SL. NO.	ITEM	Satisfactory/ Yes	Non satisfactory/ No	Remarks	Action
1.	HOUSEKEEPING				
a)	Waste containers provided and used				
b)	Sanitary facilities adequate and Clean				
c)	Passageways and Walkways Clear				
d)	General neatness of working areas				
e)	Other				
2.	PERSONNEL PROTECTIVE EQUIPMENT				
a)	Goggles; Shields				
b)	Face protection				
c)	Hearing protection				
d)	Foot protection				
e)	Hand protection				
f)	Respiratory Masks etc.				
g)	Full body harness conforming to CE, EN 361				
h)	Hard hat (HDPE)				
i)	Other				
3.	EXCAVATIONS/OPENINGS				
a)	Openings properly covered or barricaded				
b)	Excavations shored				
c)	Excavations barricaded				
d)	Overnight lighting provided				
e)	Other				

Safety walk-through performer (Name & Signature).....

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FORMAT NO. : HSE-1 REV 1

(Sheet 2 of 6)

SL. NO.	ITEM	Satisfactory/ Yes	Non satisfactory/ No	Remarks	Action
4.	WELDING & GAS CUTTING				
a)	Gas cylinders chained upright				
b)	Cables and hoses not obstructing				
c)	Screens or shields used				
d)	Flammable materials protected				
e)	Live electrode bits contained properly				
f)	Fire extinguisher (s) accessible				
g)	Other				
5.	SCAFFOLDING & BARRICADING				
a)	Fully decked platforms				
b)	Guard and intermediate rails in place				
c)	Toe boards in place				
d)	Adequate shoring				
e)	Adequate access				
f)	Positive barricading for critical activities				
g)	Installation of warning signs				
h)	Other				
6.	LADDERS				
a)	Extension side rails 1 m above				
b)	Top of landing				
c)	Properly secured				
d)	Angle + 70^0 from horizontal				
e)	Other				

Safety walk-through performer (Name &Signature).....

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FORMAT NO. : HSE-1 REV 1

(Sheet 3 of 6)

SL. NO.	ITEM	Satisfactory/ Yes	Non satisfactory/ No	Remarks	Action
7.	HOISTS, CRANES AND DERRICKS				
a)	Condition of cables and sheaves OK				
b)	Condition of slings, chains, hooks and eyes O.K.				
c)	Inspection and maintenance log-books maintained				
d)	Outriggers used				
e)	Reverse horn installed / active / coupled with gear				
f)	Signs/barricades provided				
g)	Signals observed and understood				
h)	Qualified operators				
i)	Other				
8.	MACHINERY, TOOLS AND EQUIPMENT				
a)	Proper instruction				
b)	Safety devices				
c)	Proper cords				
d)	Inspection and maintenance				
e)	Other				
9.	VEHICLE AND TRAFFIC				
a)	Rules and regulations observed				
b)	Inspection and maintenance				
c)	Licensed drivers				
d)	Other				

Safety walk-through performer (Name &Signature).....

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FORMAT NO. : HSE-1 REV 1

(Sheet 4 of 6)

SL. NO.	ITEM	Satisfactory/ Yes	Non satisfactory/ No	Remarks	Action
10.	TEMPORARY FACILITIES				
a)	Emergency instructions posted				
b)	Fire extinguishers provided				
c)	Fire-aid equipment available				
d)	Secured against storm damage				
e)	General neatness				
f)	In accordance with electrical requirements				
g)	Other				
11.	FIRE PREVENTION				
a)	Personnel trained& instructed to make use of facility				
b)	Fire extinguishers checked periodically & record maintained				
c)	No smoking in Prohibited areas.				
d)	Fire Hydrants not obstructed				
e)	Regular fire drill conducted				
12.	ELECTRICAL				
a)	Use of 3-core armored cables everywhere				
b)	Usage of 'All insulated' or 'double-insulated' electrical tools				
c)	All electrical connection are routed through ELCB				
d)	Natural Earthing at the source of power (Main DB)				
e)	Continuity and tightness of earth conductor				
f)	Effective covering of junction boxes, panels and other energized wiring places				
g)	Ground fault circuit interrupters provided				
h)	Prevention of tripping hazards maintained				
f)	DCP extinguishers arranged & licensed electrician engaged at site				

Safety walk-through performer (Name &Signature).....

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FORMAT NO. : HSE-1 REV 1

(Sheet 5 of 6)

SL. NO.	ITEM	Satisfactory/ Yes	Non satisfactory/ No	Remarks	Action
13.	HANDLING AND STORAGE OF MATERIALS				
a)	Safely stored or stacked				
b)	Passageways clear / free from obstructions				
c)	Fire fighting facility in place				
14.	FLAMMABLE GASES AND LIQUIDS				
a)	Containers clearly identified / protected from fire				
b)	Safe storage & transportation arrangement made				
c)	Fire extinguishers positioned nearby				
d)	Facilities kept away from electric spark, hot spatters & ignition source.				
15.	WORKING AT HEIGHT				
a)	Approved Erection plan and work permit in place				
b)	Safe access, Safe work platform & Safety nets provided				
c)	Life lines, Fall arrester, Full body harness with double lanyards used;				
d)	Health Check record available for workers going up?				
e)	Protective handrails arranged around floor openings				
16.	CONFINED SPACE				
a)	Work Permit obtained from requisite authority				
b)	Test for toxic gas and sufficient availability of oxygen conducted & status				
c)	Supervisor present at site & at least one person outside the confined space for monitoring deputed				
d)	Availability of safe means of entry, exit and ventilation (register for entry & exit maintained)				
e)	Fire extinguisher and first-aid facility ensured				
f)	Lighting provision made by using 24V Lamp				
g)	Proper usage of PPEs ensured				
17.	RADIOGRAPHY				
a)	Proper storage and handling of source as per BARC/ AERB guidelines (authorized radiographer available)				
b)	Work permit obtained				

Safety walk-through performer (Name &Signature).....

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FORMAT NO. : HSE-1 REV 1

(Sheet 6 of 6)

SL. NO.	ITEM	Satisfactory/ Yes	Non satisfactory/ No	Remarks	Action
c)	Cordoning of the area done				
d)	Use of appropriate PPE's ensured				
e)	HSE training to workers/supervisors imparted during the fortnight (indicate topic)				
f)	Minimum occupancy of workplace ensured				
18.	HEALTH CHECKS				
a)	All Workers medically examined and found be fit for working at heights (slinging, rigging, painting etc.) in confined space in excavation / trenching in shot blasting				
b)	Availability of First Aid box with contents				
c)	Proper sanitation at site, office and labour camps				
d)	Arrangement of medical facilities.				
e)	Measures for dealing with illness at site & labour camps.				
f)	Availability of Potable drinking water for workmen & staff.				
g)	Provision of crèches for children.				
h)	Stand by vehicle / ambulance available for evacuation of injured				
i)	Adherence to Govt. Guidelines/procedures during epidemic and pandemic (as applicable).				
19.	ENVIRONMENT				
a)	Chemical and Other Effluents properly disposed				
b)	Cleaning liquid of pipes disposed off properly				
c)	Seawater used for hydro-testing disposed off as per agreed procedure				
d)	Lubricant Waste/Engine oils properly disposed				
e)	Waste from Canteen, offices, sanitation etc. disposed properly				
f)	Disposal of surplus earth, stripping materials, Oily rags and combustible materials done properly				
g)	Green belt protection				

Safety walk-through performer (Name &Signature).....

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FORMAT NO. : HSE-2 REV 0

(Sheet 1 of 3)

ACCIDENT REPORT

(To be submitted by Contractor after every Accident within 24 hours to EIL/ Owner)

Report No.: _____ **Date:** _____

Project site: _____ **Name of work:** _____

Contractor's name: _____ Contractor's Job Engineer (name) _____

Non-disabling injury (Non-LTI)	Hospitalized but resumed duty before end of 48 hrsof accident	
Disabling injury (other LTI)	Hospitalized & failed to resume duty within next 48 hrs	
Fatal (LTI):	Death / Expiry	
First Aid case	Resume duty after first aid	

Name of the injured:_____ Father's name of victim: _____

Sub Contractor's Name: .....

Gate Pass No.:.....Age: _____Yrs. Victim's medical fitness exam. (Pre-empl.) date: - _____

Date & time of Accident / Incident: _____

Names of Witnesses: (1_____ (2)_____ (3) _____

Profession of victim:

Bar bender		Carpenter		Meson	
Fitter		Helper		Gas cutter	
Grinder		Welder		Electrician	
Driver		Rigger		M/c.operator	
Engineer		Manager		Other/specify	

Qualification

No formal education		Non-Matriculate		Matriculate	
Graduate		Post- grad		Other/specify	

Job Experience

NIL		Less than 2 yrs		2-5 yrs	
5-10 yrs		11-15 yrs		15 years and above	

Location where the incident happened: _____

_____

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FORMAT NO. : HSE-2 REV 0

(Sheet 2 of 3)

Activity / Works that were continuing during incident / accident: -

Excavation		Demolition		Concrete carrying	
Concrete pouring		Transportation of materials (manually)		Transportation of materials (mechanically)	
Work on or adjacent to water		Work at height (+2.0 mts)		Scaffold preparation	
Scaffold dismantling		Piling works		Welding	
Grinding		Gas-cutting		Pipe fit-ups & fabrication	
Structural fabrications		Machine works		Hydro-testing works	
Electrical works		Erection activities		Other/specify	

What exactly the victim was doing just before the incident / accident? .....

.....

.....

Nature of injury:

Bruise or Contusion		Abrasion (superficial wound)		Sprains or strains	
Cut or Laceration		Puncture or Open wound		Burn	
Inhalation of toxic or Poisonous fumes or gases		Absorption		Amputation	
Fracture		Other/specify			

Parts of body involved in incident / accident

Head		Face		Eyes	
Throat		Arm (above wrist)		Hand (including wrist)	
Fingers		Truck (Abdomen / Back / Chest / Shoulder)		Throat	
Leg (above ankle)		Foot (incl. ankle)		Toes	
Multiple				Other/specify	

Accident type:

Struck against		Struck by		Fall from Elevation	
Fall on same level		caught in		caught under	
caught in between		Rubbed or abraded		Contact with (Electricity)	
Contact with (Temp./ extremes)		Contact with chemicals oroils		Vehicle accident	
Other/specify					

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FORMAT NO. : HSE-2 REV 0

(Sheet 3 of 3)

Medical Aid provided:-(indicate specific aids / treatment etc.)-

.....

.....

Actions taken to prevent recurrence of similar incident / accident:.....

.....

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.....

Intimation to local authorities (Dist. Collector / Local Police Station / ESI authority): Yes / No / NA.

If yes, to whom .....

Safety Officer
(Signature and Name)
Stamp of Contractor

Site Head / Resident Construction Manager
(Signature and Name)

To : Owner
: RCM/Site-in-charge EIL (3 copies)
- Nodal Officer HO through RCM (In case of major accident)
- Divisional Head (Constn) through RCM
- Project Manager, EIL, through RCM

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FORMAT NO. : HSE-3 REV 0

(Sheet 1 of 5)

SUPPLEMENTARY ACCIDENT INVESTIGATION REPORT

TICK THE APPROPRIATE ONEAS APPLICABLE (furnish within 72 hours)

Supplementary to Incident / Accident Report No: _____ (Copy enclosed)

Report No.: _____ **Date:** _____

Project site: _____ **Name of work:** _____

Contractor's name: _____ Contractor's Job Engineer (name) _____

Non-disabling injury (Non-LTI)	Hospitalized but resumed duty before end of 48 hrs of accident.	
Disabling injury (other LTI)	Hospitalized & failed to resume duty within next 48 hrs.	
Fatal (LTI)	Death / Expiry	
First Aid case	Resume duty after first aid	

Name of the injured: _____ Father's name of victim: _____

Sub Contractor's Name: .....

Gate Pass No.:..... Age: _____Yrs. Victim's medical fitness exam. (Pre-empl.) date: - _____

Date & time of Accident / Incident: _____

Names of Witnesses: (1_____ (2)_____ (3) _____

Profession of victim:

Bar bender		Carpenter		Meson	
Fitter		Helper		Gas cutter	
Grinder		Welder		Electrician	
Driver		Rigger		M/c. operator	
Engineer		Manager		Other/specify	

Qualification

No formal education		Non-Matriculate		Matriculate	
Graduate		Post- grad		Other/specify	

Job Experience

NIL		Less than 2 yrs.		2-5 yrs.	
5-10 yrs.		11-15 yrs.		15 years and above	

Location where the incident happened: _____

_____

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FORMAT NO. : HSE-3 REV 0

(Sheet 2 of 5)

Activity / Works that were continuing during incident / accident: -

Excavation		Demolition		Concrete carrying	
Concrete pouring		Transportation of materials (manually)		Transportation of materials (mechanically)	
Work on or adjacent to water		Work at height (+2.0 mts)		Scaffold preparation	
Scaffold dismantling		Piling works		Welding	
Grinding		Gas-cutting		Pipe fit-ups & fabrication	
Structural fabrications		Machine works		Hydro-testing works	
Electrical works		Erection activities		Other/specify	

What exactly the victim was doing just before the incident / accident? .....

.....

.....

Particular of tools & tackles being used and condition of the same after incident/accident:

.....

.....

Description of Incident/Accident (How the incident was caused) : .....

.....

.....

.....

Nature of injury:

Bruise or Contusion		Abrasion (superficial wound)		Sprains or strains	
Cut or Laceration		Puncture or Open wound		Burn	
Inhalation of toxic or Poisonous fumes or gases		Absorption		Amputation	
Fracture		Other/specify			

Parts of body involved in incident / accident

Head		Face		Eyes	
Throat		Arm (above wrist)		Hand (including wrist)	
Fingers		Truck (Abdomen / Back / Chest / Shoulder)		Throat	
Leg (above ankle)		Foot (incl. ankle)		Toes	
Multiple				Other/specify	

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FORMAT NO. : HSE-3 REV 0

(Sheet 3 of 5)

Accident type:

Struck against		Struck by		Fall from Elevation	
Fall on same level		caught in		caught under	
caught in between		Rubbed or abraded		Contact with (Electricity)	
Contact with (Temp./ extremes)		Contact with chemicals or oils		Vehicle accident	
Other/specify					

Name & Designation of person who provided First-Aid to the victim: _____

Name & Telephone number of Hospital where the victim was treated _____

Mode of transport used for transporting victim – Ambulance / Private car / Tempo / Truck / Others

How much time taken to shift the injured person to Hospital_____

In case of FATAL incident, indicate clearly the BOCW Registration No. of the victim/Company.....
...

Comments of Medical Practitioner, who treated / attended the victim/injured (attached / described here)_____

What actions are taken for investigation of the incident, please indicate clearly – (Video film / Photography / Measurements taken etc. .....)

Immediate cause (Please tick the right applicable) –

Hazardous methods or procedures inadequately guarded		Poor housekeeping		Inadequate or improper PPE	
Environmental hazards (excess noise/ space constraint/ inadequate ventilation		improper illumination/Moving on oval surface		Working on dangerous equipment	

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FORMAT NO.: HSE-3 REV 0

(Sheet 4 of 5)

Failure to secure		Horse-play		Failure to use PPE	
Inattention to surroundings		Improper use of hands & body-parts		By-passing safety devices	
Unsafe mixing or placement of tools & tackles		Bypassing standard procedures		Failure in communication	
Operating without authority		Improper use of equipment or tools & tackles		drug or alcoholic influence	
excessive haste		Others(specify)			

Basic cause

Over confidence		Impulsiveness		over-exertion	
Faulty judgement or poor understanding		Failing to keep attention constantly		Nervousness & Fear	
Fatigue		Defective vision		Ill health or sickness	
Slow reaction		Others(specify)			

Root cause

Inadequate Engg.		Improper Design		Inadequate Planning & organization	
Inadequate knowledge		Inadequate skill		Inadequate training	
Inadequate supervision		Improper work procedure		Inadequate compliance with standard	
Substandard performance		Inadequate maintenance		Improper inspection	
Others(specify)					

Loss of man days and impact on site works, (if any) –

Remarks from Contractor's Safety Officer/ Engineer –

Was the victim performing relevant tasks for which he was engaged /employed? Yes / No
Was the Supervisor present on work-site during the incident? Yes / No
Have the causes of incident rightly identified? Yes / No
Cause of Accident was _____

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FORMAT NO. : HSE-3 REV 0

(Sheet 5 of 5)

Remedial measures recommended by **Safety Officer of Contractor** for avoiding similar incident in future

: .....

.....

.....

.....

.....

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.....

Intimation to local authorities (Dist. Collector / Local Police Station / ESI authority): Yes / No / NA.

If yes, to whom .....

Safety Officer
(Signature and Name)

Site Head / Resident Construction Manager
(Signature and Name)
Stamp of Contractor

To : Owner
: RCM/ Site-in-charge of EIL (3 copies)
Nodal Officer HO through RCM (In case of major accident)
Divisional Head (Constn.) through RCM
Project Manager EIL, through RCM

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FORMAT NO. : HSE-4 REV 0

NEAR MISS INCIDENT/ DANGEROUS OCCURRENCE REPORTPROFORMA

(to be submitted within 24 hours)

Report No.: _____

Name of Site: _____ Date: _____

Name of work: _____ Contractor: _____

Incident reported by :

Date & Time of Incident :

Location :

Brief description of incident

Probable cause of incident

Suggested corrective action

Steps taken to avoid recurrence Yes ☐ No ☐

Safety Officer
(Signature and Name)

Site Head / Resident Construction Manager
(Signature and Name)

Stamp of Contractor

Note:

- **Near Miss:** Human injury escaped & no damage to property, equipmentor interruption to work.
- **Dangerous Occurrence**: Occurrences as mentioned below shall be considered as "Dangerous occurrences"

a. collapse or failure of lifting appliances or hoist or conveyors or other similar equipment for handling building or construction material or breakage or failure of rope, chain or loose gears; overturning of cranes used in building or other construction work; falling of objects from height;
b. collapse or subsidence of soil, any wall, floor, gallery, roof or any other part of any structure, platform, staging, scaffolding or any means of access including formwork;
c. collapse of transmission tower;
d. fire and explosion causing damage to property at Construction site.
e. spillage or leakage of hazardous substances and damage to their container;
f. Collapse, capsizing, toppling or collision of transport equipment;
g. Leakage or release of harmful toxic gases at the construction site.

To :Owner
:RCM/Site-in-charge EIL (3 copies)

Divisional Head (Const.) through RCM
Project Manager EIL, through RCM
} (Applicable for Dangerous Occurrence only)

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FORMAT NO. : HSE-5 REV 0

MONTHLY HEALTH, SAFETY &ENVIRONMENTAL (HSE) REPORT

(To be submitted by each Contractor)

Actual work start Date: _____ For the Month of: _____

Project: _____ Report No: _____

Name of the Contractor: _____ Status as on: _____

Name of Work: _____ Job No : _____

(Contractor in consultation with EIL shall generate the reports through web basedpackage (www3.eil.co.in/eilhse)only.

ITEM		UPTO PREVIOUS MONTH	THIS MONTH	CUMULATIVE
1) Average number of Staff & Workmen (average daily headcount. not man days)				
2)Total Man-hours worked				
3) Number of site personnel undergone HSE Induction				
4) Number of HSE meetings organized at site				
5) Number of HSE awareness programmes conducted at site				
6) Number of Tool Box Talks conducted				
7) Number of Loss Time Injuries (LTI)	Fatalities			
	Other LTI			
8) Number of Non disabling injury (Non-LTI)				
9) Number of First Aid Cases				
10) Number of Near Miss Incidents				
11) Number of Dangerous Occurrences				
12) No. of unsafe acts/ practices detected				
13) No. of disciplinary actions taken against staff/ workmen				
14) Man-days lost due to injury				
15) LTI Free man-hours i.e. LTI free man-hours counted from the Last LTI (enter date: .....)				
16) Frequency Rate (No. of reportable LTI per 10lacs man-hours worked)				
17) Severity Rate (No. of man days lost due to LTI per 10lacs man-hours worked)				
18) No. of activities for which HIRAC Completed				
19) No. of incentives/ awards given				
20) No. of occasions on which penalty imposed by EIL/ Owner				
21) No. of Audits conducted				
22) No. of pending NCs in above Audits				
23) Compensation cases raised with Insurance				
24) Compensation cases resolved and paid to workmen				
25) No of Vehicular Accident cases				
26) No of fire/Explosion cases				

27) Whether workmen compensation policy taken			Yes		No
28) Whether workmen compensation policy is valid			Yes		No
29) Whether workmen registered under ESI Act, as applicable			Yes		No
30) Whether HIRAC Register prepared and updated			Yes		No
31)Whether Environment Aspect Impact Register prepared and updated			Yes		No
32) Whether Legal Register prepared and updated			Yes		No
Remarks, if any					

Date:

Prepared by Safety Officer Approved by Site Head / Resident Construction Manager

(Signature and Name)(Signature and Name)

To: -

- RCM EIL

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FORMAT NO. : HSE-6 REV 1

PERMIT FOR WORKING AT HEIGHTS (ABOVE 2.0 METER)

(In duplicate to be issued daily for site and for office)

Permit No..... Name of Main Contractor.....
Name of work executing agency / sub agency / vendor:.....
Date..... Exact Location of work.....
Nature of work .....Duration of work (from) ..... (to) .....
Number of workers covered within this permit.....
(*List enclosed with name & gate pass numbers.*)

Sl. No.	Items / Subjects	Status of compliance (Yes / No)	
1	Work areas / Equipment's inspected		
2	Work area cordoned off		
3	Adequate lighting is provided		
4	Precautions against public traffic taken		
5	Concerned persons in & around have been alerted & cautioned		
6	Hazards / risks involved in routine / non-routine task assessed and control measures have been implemented at specific task		
7	ELCB provided for electrical connection & found working		
8	Ladder safely attached / fixed		
9	Scaffoldings are checked and TAGs are found used correctly		
10	Working platforms are provided and are found sound /safe for use		
11	Safe access & egress arrangements (e.g. ladders, fall arresters, life-lines etc.) are satisfactorily incorporated		
12	a. Openings on platform / floors are effectively cordoned / covered		
	b. Safety Nets are provided wherever required		
13	Use of following safety gadgets by people working at area under this permit, is checked and found satisfactory - Safety helmet Safety harness (full body) with double lanyard Safety Shoes Safety gloves Safety goggles		
14	Housekeeping of work area found satisfactorily tidy / clean & clear		
15	Adequate measures have been taken for works being continued at the ground level, when simultaneous works are permitted overhead at that very location.		
16	Materials are not thrown from heights on to ground		
17	Medical examination of workers are made & found satisfactory		
18	Responsible job engineer / supervisor found physically present at work spot for overall administration of work as well as safety of people.		

Above items have been checked & compliance has been found in place. Hence work is permitted to start / continue at the above-mentioned location. Work shall not start till identified lapses are rectified.

Additional Precautions, if any .....
.....

Work Permit Receiver Verification By Work Permit issuer
Contractor Job Supervisor Contractor Safety Officer Contractor Engineer/RCM

AT THE END OF THE DAY/WORK:
All works at height are completed & workmen have returned safely from work location at (time)..... (date).....

(Sig. Contractor Engineer)

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FORMAT NO. : HSE-7 REV 1

CONFINED SPACE ENTRY PERMIT

Project site _____ Sr. No. _____
Name of the work _____ Date _____
Name of Contractor _____ Nature of work _____
Exact location of work _____

Safety Requirements POSITIVE ISOLATION OF THE VESSEL IS MANDATORY

(A) Has the equipment been ?

Y	NR		Y	NR		Y	NR	
☐	☐	Isolated from power/steam/air	☐	☐	water flushed &/or steamed	☐	☐	radiation sources removed
☐	☐	isolated from liquid or gases	☐	☐	Man ways open & ventilated	☐	☐	proper lighting provided
☐	☐	depressurized &/or drained	☐	☐	cont. inert gas flow arranged	☐	☐	
☐	☐	blanked/ blinded/ disconnected	☐	☐	adequately cooled	☐	☐	

(B) Expected Residual Hazards

☐	☐	lack of O_2	☐	☐	combustible gas/ liquid	☐	☐	H_2S / toxic gases
☐	☐	corrosive chemicals	☐	☐	pyrophoric iron / scales	☐	☐	electricity / static
☐	☐	heat/ steam / frost	☐	☐	high humidity	☐	☐	ionizing radiation
☐	☐		☐	☐		☐	☐	

(C) Protection Measures

☐	☐	gloves	☐	☐	ear plug / muff	☐	☐	goggles / face shield
☐	☐	protective clothing	☐	☐	dust / gas / air line mask	☐	☐	personal gas alarm
☐	☐	grounded air duct/blower /AC	☐	☐	attendant with SCBA/air mask	☐	☐	rescue equipment/team
☐	☐	Fire fighting arrangements	☐	☐	safety harness & lifeline	☐	☐	communication equipment
☐	☐		☐	☐		☐	☐	

Authorization / Renewal (It is safe to enter the confined space)

	No. of persons allowed	Name of persons allowed	Signature			Time		Signature
			Work Permit Receiver(Contractor Supervisor)	Verification by Contractor Safety officer	Work permit issuer Contractor Engineer/RCM	From	To	Workman

Permit Closure :

(A) Entry ☐ was closed ☐ stopped ☐ will continue on ...

(B) ☐ Site left in a safe condition ☐ Housekeeping done

(C) Multi lock ☐ removed ☐ key transferred

☐ Ensured all men have come out ☐ Man-ways barricaded

Remarks, if any:

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FORMAT NO. : HSE-8 REV 0

RADIATION WORK PERMIT

Project :
Name of the work :
Name of site contractor :

Sr. No. :
Date :
Job No. :

Location of work :

Source strength :

Cordoned distance (m) :

Name of Radiography agency :

Approved by Owner/EIL ☐

No. of workers engaged :
(List enclosed with name & gate pass numbers.)

The following items have been checked &compliance shall be ensured during currency of the permit:

S. No.	Item description	Done
	Safety regulations as per BARC/AERB ensured while source in use/in transit & during storage	☐
	Area cordoned off / safe working platform provided	☐
	Lighting arrangements for working during nights ensured	☐
	Warning signs/ flash lights installed	☐
	Cold work permit taken (if applicable)	☐
	PPEs like film badges, dosimeters used	☐

Additional precautions, if any _____

(Radiography Agency's BARC/AERB authorized Supervisor)

Permission is granted.

Permit is valid from _____ AM/PM _____ Date to _____ AM/PM _____ Date

(Signature of permit issuing authority-RCM of contractor)
Name : Designation: Date:

Permit renewal:

Permit extended up to		Additional precautions required, if any	Sign of issuing authority with date (of site contractor)	
Date	Time			

Work completed/ stopped/ area cleared at _____ Hrs of Date _____
(Sign. of permit issuing authority)
Name& Signature of site contractor:

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FORMAT NO. : HSE-9 REV 1

DEMOLISHING/DISMANTLING WORK PERMIT

Project :
Name of the work :
Name of contractor :

Sr.No. :
Date :
Job No. :

Name of sub-contractor :

No. of workers to be engaged:
(List enclosed with name & gate pass numbers.)

Line No./ Equipment No./ Structure to be dismantled :

Location details of dismantling/ demolition with sketch : (clearly indicate the area)

The following items have been checked &compliance shall be ensured during currency of the permit:

S. No.	Item description	Done	Not Applicable
	Services like power, gas supply, water, etc. disconnected	☐	☐
	Dismantling/ Demolishing method reviewed & approved	☐	☐
	Usage of appropriate PPEs ensured	☐	☐
	Precautions taken for neighboring structures	☐	☐
	First-Aid arrangements made	☐	☐
	Fire fighting arrangements ensured	☐	☐
	Precautions taken for blasting	☐	☐

Work Permit Receiver
(Contractor's Supervisor/Engineer)

Verification by Contractor
(Contractor's Safety Officer)

Permission is granted.

(Work Permit issuer-Client)

Name :
Date :

Completion report:

Dismantling/ Demolishing is completed on _____ Date at _____ Hrs.

Materials/ debris transported to identified location ☐ Tagging completed (as applicable) ☐

Services like power, gas supply, water, etc. restored ☐

(Permit issuing authority-Client)

CONTRACTOR's NAME

FORMAT NO. : HSE-10 REV 0

DAILY SAFETY CHECKLIST

(To make use of before start of day's work)

Project :
Name of the work :
Name of contractor :

Sr.No. :
Date :
Job No. :

Description of Job decided to perform : -

- **Use of PPE / Safety Gadgets**

Sl. No	PPEs	Compliance (Yes / No)	Sl. No	PPEs	Compliance (Yes / No)
1	Safety Helmets		6	Face Shield	
2	Safety Shoes		7	Full body harness	
3	Hand Gloves		8	Fall Arrest System	
4	Dust Musk		9	Safety net	
5	Safety Goggles		10	Horizontal life-line made of steel wire, (dia not less than 8.0 mm.)	

(Serial No. 1 & 2 are compulsory for everyone. Specify & ensure use of other safety gadgets as required for the job)

- **Identify following important unsafe conditions: -**

Sl. No	Conditions	Yes / No
1	Access to work site / emergency escape clear	
2	Soil / Loose earth kept away from excavated pit / slope / ladder provided	
3	Electrical wire / welding lead lying entangled on ground / welding m/c. booth accessible	
4	Elevated work platform / open ends are protected	
5	Ground area cordoned off before lifting works or erection at height / ground area checked & cordoned-off before start of height works	
6	Structural members / erected pipes / wooden boards/pieces etc. are safely anchored at heights and are not likely to fall down on people when working beneath	
7	Ladders tied-up on tall steel structures, long before are removed to get rid of their use	
8	Any Other	

- **Indicate actions taken, if status of any of the above items is found "No"**
  .....
  .....
- **Specific Safety guidelines / precautions, if any** (communicated thro' TBT)
  .....
  .....
- **Above conditions and PPE compliances are checked by undersigned and correct status are indicated after verification**

Prepared by
Contractor Site Engineer

Verification By
Contractor Safety Officer

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FORMAT NO. : HSE-11 REV 0

(Sheet 1 of 2)

HOUSEKEEPING ASSESSMENT& COMPLIANCE

Project :
Name of the work :
Name of contractor :
Name of contractor : Fortnightly

Sr.No. :
Date :
Job No. :

Sl. No.	Subjects of Review	Satisfactory/ Yes	Non satisfactory/No	Remarks	Action
1.	Cleanliness at the Main entry / access of site				
2.	Ground condition / floor areas free from water-logging / oil spillage				
3.	Ground & elevated floors free from rubbish / wastes / accumulated debris / scraps.				
4.	Manholes / openings are covered / fenced				
5.	Trenches are barricaded / walkways are in place				
6.	Drains are cleaned / not choked / not occupied by dumped materials				
7.	Sufficient CAUTION boards / instructions displayed				
8.	Construction machinery are maintained & parked in orderly manner.				
9.	Movement of site people are not obstructed because of dumping / storing of construction materials				
10.	Access / egress to Electrical Distribution Boards / Panels clear from wires / cables / earth-strips etc.				
11.	Electrical panel rooms / sheds / MCC / Control rooms / Substations etc. are clean & tidy and not used for storing dress / clothes, tiffin-box or bicycles.				
12.	Passage behind Elec. panels are free for access				
13.	Fire extinguishers / fire-buckets are accessible without any difficulty.				
14.	Stair-steps, platforms & landings are clear & tidy				
15.	Sheds / rooms & work areas have got sufficient illumination as well as ventilation				
16.	Cables / Wires / welding leads are routed / hanged appropriately & are not creating unsafe condition.				
17.	Stacking / storing of insulation materials or their packing.				
18.	Removal or cleanliness of left-over sand, concrete, brick-bats, insulation-materials, excess earth, wastes etc.				
19.	Storing / stacking of sand, metal chips, re-bars, steel pipes, valves, fittings etc.				
20.	One escape route at ground & minimum two escape routes at elevation available,				

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FORMAT NO. : HSE-11 REV 0

(Sheet 2 of 2)

Sl. No.	Subjects of Review	Satisfactory/ Yes	Non satisfactory/No	Remarks	Action
21.	Captions / Posters / Slogans on various safety instructions are displayed legibly in local language				
22.	Cable trenches are water-free or regular arrangement for taking out accumulated water exists.				
23.	Windows of rooms / offices are regularly cleaned				
24.	Facilities for cycle sheds, drinking water, washing, rest-rooms etc. are maintained in tidy manner.				
25.	Toilet, Urinals, Canteen / kitchen / pantry etc. are maintained & free from obnoxious smell.				
26.	Construction tools / tackles are stored systematically - the items are tagged / tested / certified by competent third party.				
27.	Sufficient numbers of Dust-bins / Waste-bins found at site and are regularly emptied.				

Additional remarks, if any -

.....

.....

.....

Inspected by
Contractor Engineer

Verification By
Contractor Safety Officer

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FORMAT NO. : HSE-12 REV 0

INSPECTION OF TEMPORARY ELECTRICAL BOOTH / INSTALLATION

Project :
Name of the work :
Name of contractor :
Sub Station No:/Booth No

Sr.No. :
Date :
Job No. :
Location:

SL NO	SUBJECTS	OBSERVATION (YES /NO)	ACTION TAKEN
1	Switchboards installed properly are in order and protected from rain & water-logging.		
2	Adequate illumination provided for switchboard operation during night hours & the lamps are protected from direct human contact.		
3	Voltage ratings, DANGER signs, Shock-Treatment-Chart displayed in the installation / booth		
4	Fire extinguisher (DCP or CO_2) & Sand Bucket kept in close vicinity of Switchboards		
5	Valid License & Competent Electrician / Wireman available & name/ license no. displayed at booth / installation.		
6	General housekeeping in & around booth / installation found in order.		
7	Cable-route-markers for U/G cables provided.		
8	Monthly inspection report of Electrical hand tools available in booth / installation.		
9	Electrical Panel door to be in closed condition and Insulated Mat to be provided in front of panel.		
10	Rubber hand gloves available/ used by Electricians		
11	Availability of CAUTION boards for shutdown & / or repairing works.		
12	All incoming & outgoing feeders have proper MCCB / HRC fuses / Switches.		
13	Switchboards "earthed" at two distinctly isolated locations.		
14	Switchboards have adequate operating space at the front face & at the rear face too.		
15	All connections provided through 30mA ELCB.		
16	Testing records of all ELCBs available at site		
17	Only industrial type plugs & sockets are used.		
18	Temporary connections are 3-core double insulated & free from cuts & joints and 3rd core is earthed at both ends		
19	Socket boards are properly mounted on stand & protected from water ingress.		
20	Electrical equipments operating above 250V have two earthing / double earthing.		
21	All incoming / outgoing cables are properly glanded& terminated with "lugs".		
22	Switch-boards are of industrial variety / type.		
23	Sketch for installation / connection (SLD) made & pasted& other safety labels/display boards		
24	Labeling of incoming / outgoing feeders made.		
25	All hand lamps are protected from direct contact.		
26	All electrical cable / joints are in safe condition		

Inspected by
Contractor Engineer

Verification By
Contractor Safety Officer

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FORMAT NO. : HSE-13 REV 0

(Sheet 1 of 2)

INSPECTION FOR SCAFFOLDING

Project : Sr.No. :
Name of the work : Date :
Name of contractor : Job No. :

Sl. No	Description	Yes	No	N.A.	Actions taken
1	Whether work permit is obtained to take up work at height above 1.5 Mts?				
2	Whether atmospheric condition is "stormy" or "raining" and works at heights have been permitted?				
3	Whether steel pipes scaffoldings are used for units /off-site areas?				
4	Whether scaffolding has been erected on rigid/firm/leveled surfaces / ground? Whether "foot-seals" or "base-plates" are used beneath the up-rights (vertical steel pipes)				
5	Whether scaffold construction is as per IS specification with toe-board and hand-rails (top-rail as well as mid-rail)?				
6	Whether distance between two successive up-rights are less than 2.5 Mts (height of scaffold & load carrying capacity governs the distance between two uprights)				
7	Whether all uprights are extended at least 900 mm above the top most working platform (to enable fitting of handrails)?				
8	Whether vertical distance of two successive ledgers is satisfactory? (*varying between 1.3 Mts. To 2.1 Mts)*				
9	Whether the peripheral areas of working at height are cordoned-off? (for avoiding accident to people arising out of dropped / deflected materials)				
10	Whether platform is provided? Is it safely approachable?				
11	Whether end of scaffold platform / board are extended beyond transoms? (125mm to 150 mm)				
12	Whether CE / IS approved quality and worthy conditioned full-body safety harness (with double lanyard & karabiners) are used while working at heights?				
13	Whether life-line of safety harness is anchored to an independent secured support capable of withstanding load of a falling person?				
14	Whether the area around the scaffold is cordoned off to prohibit the entry of unauthorized person / vehicle?				
15	Whether clamps used are of good condition, of adequate strength and free from defects?				
16	Whether ladder is placed at secured and leveled surface?				
17	Whether water-pass and oil-spills are avoided around the scaffold structure?				
18	Whether ladder is extended 1.5mts. above the landing point at height?				
19	Whether more than one access/egress provided to the scaffold?				
20	Whether ladder used are of adequate length and overlapping of short ladders avoided?				
21	Whether metallic ladders are placed much away from near-by electrical transmission line?				
22	Whether rungs of ladder are inspected and found in good order?				
23	Whether fall-arresters provided on both the access/egress routes?				
24	Whether diagonal (cross) bracings are provided at regular interval on the scaffold?				
25	Whether working platform on the scaffold has been made free from "jolt" or "gap"?				
26	Whether tools or materials are removed after completion of the day's job at heights?				
27	Whether a valid Permit for Work (PFW) is obtained before taking up work over asbestos or fragile roof?				
28	Whether sufficient precaution is taken while working on fragile roof?				

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FORMAT NO. : HSE-13 REV 0

(Sheet 2 of 2)

Sl. No	Description	Yes	No	N. A	Actions taken
29	Whether provision is made to arrange duck ladder, crawling board for working on fragile roof?				
30	Whether scaffold has been inspected by qualified civil engineers prior to their use?				
31	Whether the scaffolding has been designed for the load to be borne by the same?				
32	Whether the erection and dismantling of the scaffolding is being done by trained persons and under adequate supervision?				
33	Whether safety net with proper working arrangement and life-line has been provided?				
34	Whether TAGS (Green for acceptable and Red for incomplete/unsafe scaffolds) are used on scaffolds?				
35	Whether sufficient illumination is provided in and around the scaffold and access?				
36	Whether emergency rescue / response arrangements are made in place				

Inspected by
Contractor Engineer

Verification By
Contractor Safety Officer

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FORMAT NO. : HSE-14 REV 1

(sheet 1 of 2)

PERMIT FOR ERECTION / MODIFICATION & DISMANTLING OFSCAFFOLDING

Project :
Name of the work :
Name of contractor :
Nature of activities :

Sr.No. :
Date :
Job No. :
Duration: From.....To.....

SL. No.	SUBJECTS / ITEMS	DONE	NOT DONE	REMARKS
1	Specific task of Erection / Modification / Dismantling of scaffolds, identified & TAGGED accordingly (before as well as after carrying-out jobs).			
2	People engaged in doing the job are identified & are certified by Job Engineer of Main Contractor as experienced / trained.			Names to be noted
3	Concerned persons are alerted by the Job Engineer of Main Contractor in connection with possible hazards & what the workmen MUST do / MUST not do.			
4	Verification by Job Engineer of Main Contractor made for confirming that all persons permitted to carry-out the jobs are making use of Helmet, Safety Shoes, Goggles, Gloves & Double lanyard safety harness and other relevant PPEs.			
5	Area of work is effectively cordoned-off / barricaded / illuminated.			
6	For taking-up / lowering down Scaffolding members / clamps / couplings etc. appropriate ropes / pulleys/ chains etc. have been arranged for use (not to throw any item) & the same have been verified as "fit for purpose".			
7	Items / members of scaffold, being lowered are removed from the area & stacked correctly.			
8	Ropes, chains, pulley blocks etc. being used for lifting or lowering scaffold items, are inspected by the Job Engineer & their certifications as well as physical conditions have been found O.K. before signing this PERMIT.			
9	Safety Net / Life-line / Fall Arresters etc. are arranged in position and Job Engineer has found working conditions favorable for activities to start.			
10	Scaffold erection or dismantling tasks are being supervised by Experienced Engineer / Competent person.			
11	Only competent & experienced people have been selected / engaged in Scaffolding erection, modification or dismantling tasks.			
12	Adequate & effective actions for traffic and movement of people around the cordoned-off area taken to avoid inadvertent incident			
13	Working platforms are protected with handrails & toe-boards.			
14	Access & Exit (for reach & escape) are safe for use by people.			
15	Tools, tackles to be used for above jobs are verified by job Engineers of Main contractor as genuinely good and tied-up at height (to prevent their fall).			
16	Site important Telephone Nos. are made known to everyone			
17	SOP (Safe Operating Procedure) for the specific task is made & followed too.			
18	Emergency vehicle has been arranged at work locations.			

- This permit for work shall be available at specific work location all the time.
- After completion of work, permit shall be returned to safety cell of main contractor, without fail.
- This Permit shall be issued maximum upto (Monday to Sunday).
- Additional Precautions, if any

  .....
- **ACCORD OF PERMISSION** (to be ticked) - **YES** ( )/ NO ( )

  Work Permit Receiver Verification By Work Permit issuer Contractor Job Supervisor
  Contractor Safety Officer Contractor Engineer/RCM

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FORMAT NO. : HSE-14 REV 1

(sheet 2of 2)

Everyday Site working conditions & performance of workmen shall be assessed / checked by Contractor Site Engr. and Safety Officer shall verify the same.

	Name / Sign.	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Site Engr.								
Safety Off.								

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FORMAT NO. : HSE-15 REV 1

PERMIT FOR HEAVY LIFT/CRITICAL ERECTION

Project :
Name of the work :
Name of contractor :
Nature of activities :
Location of work :
Equipment/Structure to be erected:

Sr. No. :
Date :
Job No. :
Duration: From.....To.....
Name /Type of crane :
Wt. of equipment/ structure to be erected

SL. NO.	Description of Item	COMPLIANCE STATUS			Remarks
		Yes	No	Not applicable	
1)	Is the crane type suitable for lift or as per erection procedure?				
2)	Is the crane have the correct number of counterweights fitted?				
3)	Availability of Load Certification of crane from authorized agency.				
4)	Is the load chart of crane available in carne cabin/or with Crane operator?				
5)	Is the device to check the Wind speed in crane is working? Is the safety features in crane are working?				
6)	Availability of Load certification of slings and other accessories from authorized agency				
7)	Availability of Licensee/certificate for crane operator from authorized agency.				
8)	Availability of approved HIRAC for the subject activities.				
9)	Availability of approved erection/rigging procedures.				
10)	Availability of temporary gratings/ platforms for critical lifting(as applicable)				
11)	Tool Box conducted before erection?				
12)	Has the area been cordoned off?				
13)	Are the authorized persons during erection are identified?				
14)	Does each person identified for erection understand their roles and responsibilities?				
15)	Is the ground on which crane will rest or outrigger support are correct?				
16)	Is hard stand requirement (if any) complied?				
17)	Is the communication system (viz walkie-talkies, etc. are working properly?				
18)	If more than one crane is lifting the load, is an Intermediate rigger will supervise the lift?				
19)	If there is other obstruction within the operating radius of the crane, have correct precautions been taken to prevent collision?				
20)	All the persons are wearing the requisite PPE?				

Work Permit Receiver Verification By Work Permit issuer Contractor Job Supervisor
Contractor Safety Officer Contractor Engineer/RCM

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FORMAT NO. : HSE-16 REV 1

PERMIT FOR ENERGY ISOLATION & DE-ISOLATION

Project :
Name of the work :
Name of contractor :

Sr.No. :
Date :
Job No. :

ENERGY ISOLATION PERMIT

- Clearance required from:.....Hrs .....Date To .....Hrs ....Date
- Name of equipment/ energy source etc. .....
- Nature of job to be done: .....
- Area.....Location:.....

PERMIT VALIDATION	PERFORMING AUTHORITY
I hereby authorize the .....personnel(performer) to isolate the above equipment/energy source from all sources of power and handover the equipment/energy source for maintenance/repair. Issuing authority Client/Contractor RCM (as applicable) Signature: Date: Name:	The work and precautions will be carried out under my overall responsibility.(Testing/execution engineer) Signature: Date: Name:

SAFETY PRECAUTIONS FOR CLEARANCE	NORMALISING AFTER CLEARANCE
1. Notify workers of intent to de- energize ☐ 2. Obtain lock, tag or locking/tagging devices ☐ 3. Shut down, de-energize, dissipate any residual energies. ☐ 4. Apply lock ,tag and locking and/or tagging devices ☐ 5. *Any other job specific precautions ☐ 6. Verify effectiveness of lockout by attempting to restart. ☐ 7. Proper PPE is ensured ☐ I certify that the energy source mentioned above is isolated from all sources and is safe to start the work. Tag No:..... Lock No:..... Issuing authority Client/Contractor RCM (as applicable) Signature: Date: Name: **(*to be included by contractor in consultation with issuing authority)**	1. Notify workers of intent to re- energize ☐ 2. Conduct visual inspection to confirm that the danger zone is clear of workers ☐ 3. Conduct visual inspection to confirm that tools ,equipment's danger zone is clear of workers ☐ 4. Reposition the safety devices(interlocks, valves, guards, covers ,sensors, as applicable, etc.) ☐ 5. *Any other job specific normalizing details ☐ 6. Remove lock, tag and locking and/or tagging devices. ☐ 7. Re-energize. ☐ 8. Confirm system is operating properly& safely I certify that the energy source mentioned above is isolated from all sources and is safe to start the work. Tag No:..... Lock No:..... Issuing authority Client/Contractor RCM (as applicable) Signature: Date: Name: **(*to be included by contractor in consultation with issuing authority)**

ENERGY DE-ISOLATION PERMIT

PERMIT VALIDATION	PERFORMING AUTHORITY
I hereby authorize the .....personnel(performer) to de- isolate the above equipment/energy source from all sources of power and handover the equipment/energy source for normal operation.. Issuing authority Client/Contractor RCM (as applicable) Signature: Date: Name:	I hereby certify that the equipment/energy source mentioned above has been de-isolated and is ready for normal operation.(Testing/execution engineer) Signature: Date: Name: Countersigned by Issuing authority

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FORMAT NO. : HSE-17 REV 1

PERMIT FOR EXCAVATION (depth 2m and above)

(Sheet 1of 2)

Project :
Name of the work :
Name of contractor :
Job Description :
Size of excavation :

Sr.No. :
Date :
Job No. :
Location:

SL. NO.	Description of Item	COMPLIANCE STATUS			Remarks
		Yes	No	Not applicable	
1)	Suitable and sufficient risk assessments and method statements has been carried to ensure that the work shall be undertaken in accordance with specification and standard.				
2)	Are plans/details of underground services available and the same has been reviewed?				
3)	Has survey done to locate the services/obstacles etc.				
4)	Has the live services (electrical, water line, air line, telephone line, etc)has been disabled for carrying out the job.				
5)	Is adequate barriers/fences to protect the excavation are in place?				
6)	Is Adequate warning signs are in place?				
7)	Is Assessment of ground conditions done and remedial action(if any) taken?				
8)	Safe access / egress (e.g. ramp / steps / ladders etc.) provided for site workmen & supervisors.				
9)	Is the excavation work being undertaken in proximity of structure, etc. ?If Yes, it's effect is considered?				
10)	Availability of competent person for supervising the excavation work?				
11)	Adequate safe arrangement to prevent collapse of edges (e.g. shoring / strutting / benching / sloping etc.) made at site.				
12)	Hard barricades (at least 1.0M away from edge & for excavation near site access roads) with warning signs/caution boards are provided				
13)	Accumulation / passage-ways of water at periphery of excavation / trench stopped/ restricted.				
14)	Is the equipment being used for excavation has been checked for adequacy and is in good working condition having all the safety features?				
15)	Age & fitness of workmen ensured by medical test before engagement in job ?				
16)	Arrangement of Monitoring of possible oxygen deficiency or obnoxious gases done & action taken?				

PERMIT GRANTED - Yes / No

(List enclosed with name & gate pass numbers.)

Name & Signature of Site Engr. Name & Signature of Area – In charge/RCM of Contractor (Receiver) Contractor (Issuer)

Verification by Contractor Safety Officer

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FORMAT NO. : HSE-17 REV 1

PERMIT FOR EXCAVATION

(Sheet 2of 2)

NOTES: -

1. Slopes or benches for excavation beyond 2.0M depth shall be designed & approved by Contractor's site head.
2. Excavated earth to be kept at least 1.5M away from edges
3. Safety helmets, Safety shoes or gum-boots, gloves, goggles, Face shield, Safety Harness shall be essential PPEs.
4. Permit shall be made in **duplicate** and original shall be available at site of work.
5. Permit shall be issued for maximum **one week** only (Monday to Sunday)
6. After completion of works, permit shall be closed & preserved for record purpose

GRANT OF PERMIT AND EXTENSIONS

Sl. No.	Validity period From ____To ____	Working Time From _____To _____	Receiver (site Engr. of Main Contractor)	Issuer(Area In charge/RCM of Main Contractor)	Review by EIL / Owner (Remarks with date
1.					
2.					
3.					
4.					
5.					
6.					
7.					

Additional safety instructions if any: -

1.

2.

3.

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FORMAT NO. : HSE-18 REV 0 **(Sheet 1of 2)**

IDENTIFICATION OF ENVIRONMENTAL ASPECTS, IMPACT ASSESSMENT AND CONTROL MEASURES

S.No	Activity	Environmental Aspect	N/A/E	Environment Impact	Control Measures	Consequences						Risk Level	Significant	Gaps/ Recommendations
						A	B	C	D	E	F	G	Yes/No	

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(Sheet 2 of 2)

INITIAL ENVIRONMENT REVIEW TECHNIQUE

Environmental Impacts	AP = Air Pollution	WP = Water Pollution	LC = Land Contamination	DNR = Depletion of Natural Resources	NP = Noise Pollution

Scale	Quantity (A)	Occurrence (B)	Severity of Impact (C)	Detection (D)	Control (E)	Legal and other requirements (F)
1	Negligible	Very Rare	Negligible visual impact	Immediately	Available & effective at place	In compliance or not applicable
2	Low	Once a month or less	Causes Discomfort or Nuisance	Within 1 hour	Has in-built Secondary control	
3	Moderate	Once a day	Resource Depletion	Within 8 hours	Needs human Intervention	
4	High	Several times a Day	Affects Aquatic Life, flora, fauna or global issue	Within 24 hours	Mechanism in place but not reliable	
5	Excessive	Continuous	Human health effect	More than 24 hours	Absent or no effective control	Not in compliance

Risk Level - G : A x B x C x D x Ex F

Aspects with score of **100 and above** are considered as significant.
Also, Irrespective of the score, all legal noncompliance's to be considered as significant

Condition	
N	NORMAL
A	ABNORMAL
E	EMERGENCY

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FORMAT NO. : HSE-19 REV 0 HIRAC

Risk Identification						Desired Controls & Existing Gaps, If Any		Risk Assessment				Recommended Control Actions To Reduce The Risk Level	Action By	Remarks
SN	Activity	Activity Type (R/NR)	Hazards	Condition(N/AN/E)	Associated Risk	Desired Control Measures	Gaps If Any	Probability(P)	Impact (I)	Risk R= P*I	Risk Classification			

Likelihood – Possibility of occurrence of risks based on present gaps (technological / operational / competence / measurement and monitoring);

UL: Unlikely, **L:** Likely, **VL:** Very Likely, **FR:** Frequent, **C**: Continuous

Impact –

SI: Slight Injury, **MI:** Minor Injury, **MJ:** Major Injury, **SF:** Single Fatality, **MF:** Multiple Fatalities

Level of consequence – Refer Guidance criteria for this i.e. possible degree of damage;

Condition- N: Normal, **AN**: Abnormal, **E**-Emergency

Activity Type: R- Routine, NR- Non Routine

RISK –

L: Low Risk, **M:** Moderate Risk, **H:** High Risk

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FORMAT NO.: **HSE-20 REV 0**

Inspection of Tower Crane

Name of Contractor: **Project:**

Name of Work: **Job No:**

Vehicle Identification/Registration No: **Date:**

Sr. No.	Description	Observation	Remarks & Suggestions
1	Serial number plate &SWL marking		
2	Valid TPI Certificate		
3	Valid Insurance		
4	Safe access and egress are provided to the crane operator.		
5	Front glass of Operator cabin		
6	Operator crane cabin is provided with a locking mechanism so as to prevent unauthorised entry.		
7	A safety bar is fitted across the operator's cabin window where there is likelihood of the operator falling through it.		
8	Manufacturer Operating Manual and Maintenance Manual are made available.		
9	An updated Operation and Maintenance log book is available in the operator cabin.		
10	All mounting bolts are in good condition.		
11	Load chart provided		
12	SLI available		
13	Crane hooks have got smooth surface and no dent		
14	Hook-latch / Dog-clamp in hook is effective		
15	Over hoist limit switch		
16	Double body earthing of Tower Crane		
17	Jib angle indicator is provided (For Luffing Jib Tower Crane).		
18	Emergency stop button, which will terminate the operation of the crane engine, is installed in the operator cabin and correctly identified.		
19	Effective braking mechanisms for Hoisting, Derricking, Slewing, Trolley Travelling maintained:		
20	Trolley Travelling limiter to prevent over-travelling of trolley is functional.		
21	Limit switches to prevent over-derricking and over-lowering of jib (For Luffing Jib Tower Crane) is functional.		
22	Slewing limiter to restrict slewing of crane is functional.		
23	Over load Limiter to prevent overloading of crane is functional.		
24	Load Moment Limiter to prevent over-turning moment is functional.		
25	Anti-collision devices are tested to stop the tower crane's operation such that the crane-to-crane interference must be maintained at not less than 3 m.		
26	Condition of boom		
27	Counter weight placement and pins		
28	Winches, pulleys and wire ropes are in good working condition.		
29	Colour coding		
30	Leakage in hydraulic cylinder		

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31	Fire Extinguisher		
32	Tower crane is adequately grounded or protected against lightning.		
33	Wind anemometer is installed and is in good working condition.		
34	Aviation lamp is functional (Reqd. for 30mt and above)		
35	Pre Medical Check-up& Periodic Medical check-up (every 6 months) including vision test for Operator		
36	Safety Induction for Operator		
37	Others		

Signature & Name of Operator:

Signature and name of Job Engineer

Signature & Name of Contractor's Safety Officer

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FORMAT NO. : HSE-21 REV 0

Crane Inspection Checklist

Name of Contractor: **Project:**

Name of Work: **Job No:**

Vehicle Identification/Registration No: **Date:**

Sr. No.	Description	Observation	Remarks & Suggestions
1	Crane hooks have got smooth surface and no dent		
2	Hook-latch / Dog-clamp in hook is effective		
3	Over hoist limit switch		
4	Over Load Indicator		
5	Over Boom limit switch		
6	Boom angle indicator		
7	Colour coding		
8	Condition of boom		
9	Condition of wire rope		
10	Rope drum / sheaves are in good working condition		
11	Swing break & lock		
12	Swing Alarm		
13	Over hoist break & lock		
14	Boom break & lock (For Telescopic Boom)		
15	Leakage in hydraulic cylinder		
16	Condition of Outrigger (For Tyre Mounted Crane)		
17	Outrigger fully extended Marking (For Tyre Mounted Crane)		
18	Condition of Tyre (For Tyre Mounted Crane)		
19	Wheel chokes are present and are used whenever required (For Tyre mounted)		
20	Battery & lamps		
21	Moving & rotating parts guarded		
22	Load chart provided		
23	Reverse horn (For Tyre Mounted Crane)		
24	Body Condition of crane		
25	Front glass of Operator cabin		
26	Both side Mirror		
27	Number Plate (For Tyre Mounted Crane)		
28	Fire Extinguisher		
29	Horn		
30	Windshield and wipers		
31	Working of light & Indicator		
32	SLI		
33	Spark Arrestor(For Running Refinery/ Petrochemical/Chemical Plant)		

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34	Foot-steps and hand-holds are in good working condition for exit /enter in to cabin		
35	TPI Certificate		
36	RC Document (For Tyre Mounted Crane)		
37	Fitness Certificate of Vehicle by authority		
38	Insurance		
39	PUC		
40	HMV License for Operator		
41	Pre Medical Check-up& Periodic Medical check-up (every 6 months) including vision test for Operator		
42	Safety Induction for Operator		
43	Others		

Signature & Name of Operator:

Signature & Name of Contractor's Concern Engineer

Signature & Name of Contractor's Safety Officer

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FORMAT NO. : HSE-22 REV 0

Hydraulic Mobile Crane- Inspection Checklist

Name of Contractor: **Project:**

Name of Work: **Job No:**

Vehicle Identification/Registration No: **Date:**

Sr. No.	Description	Observation	Remarks & Suggestions
1	Identification number of Hydraulic Mobile crane boldly scribed in front and rear end of machine		
2	Operator has got adequate document in support of his competency (i.e. HMV driving license, knowledge & training)		
3	Marking of SWL on hook position is clearly visible		
4	Test & examination of Hydraulic Mobile crane by statutory / competent authority is carried out & document is valid		
5	Colour Coding		
6	RC Document		
7	Fitness Certificate of Vehicle by authority		
8	Valid Insurance		
9	Valid PUC		
10	Pre Medical Check-up& Periodic Medical check-up (every 6 months) including vision test for Operator		
11	Safety Induction for Operator		
12	Crane hooks have got smooth surface and no dent		
13	Hook-latch / Dog-clamp in hook is effective		
14	Over hoist limit switch		
15	Over Load Indicator		
16	SLI		
17	Condition of boom		
18	Condition of wire rope		
19	Rope drum / sheaves are in good working condition		
20	Leakage in hydraulic cylinder		
21	Tyre condition		

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22	Battery		
23	Moving & rotating parts guarded		
24	Break		
25	Parking Break		
26	Front horn		
27	Reverse horn		
28	Hydraulic Mobile Crane cabin body and frame of machine is in good order		
29	Both side Mirror		
30	Fire Extinguisher		
31	Front glass pane of the Hydraulic Mobile operator's cabin is clean & clear (i.e. not cracked / damaged / broken)		
32	Windshield and wipers condition		
33	Working of front & back lights, turn Indicators, parking lights & fog lamps		
34	Spark Arrestor(For Running Refinery/ Petrochemical/Chemical Plant)		
35	Wheel chokes are present and are used whenever required		
36	Foot-steps and hand-holds are in good working condition for exit /enter in to cabin		
37	Others		

Signature & Name of Operator

Signature & Name of Contractor's Concern Engineer

Signature & Name of Contractor's Safety Officer

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FORMAT NO. : HSE-23 REV 0

Hydraulic Rig Inspection Checklist

Name of Contractor: **Project:**

Name of Work: **Job No:**

Vehicle Identification/Registration No: **Date:**

Sr. No.	Description	Observation	Remarks & Suggestions
1	Control panel is clean & all buttons/switches are clearly visible (no paint over spray, etc.)		
2	All switch & mechanical guards are in good condition and properly installed		
3	All Safety Indicator lights work		
4	Drive controls function properly & accurately labelled (up, down, right, left, forward, back)		
5	Motion alarms are functional		
6	Safety decals are in place and readable		
7	Any defects such as cracked welds, fuel leaks, hydraulic leaks, damaged control cables or wire harness, etc.		
8	Braking devices are operating properly		
9	Winches, pulleys and wire ropes are in good working condition.		
10	Function of interlocks and limit switch		
11	The manufacturer's operations manual (in all languages of the operators)		
12	Oil level, Hydraulic Oil Level, Fuel Level, Coolant Level		
13	Battery Charge		
14	Outriggers in place or functioning. Associated alarms working		
15	Moving & rotating parts guarded		

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16	Load chart provided		
17	Fire Extinguisher		
18	Spark Arrestor, if operated by using fuel(For Running Refinery/ Petrochemical/Chemical Plant)		
19	Serial number plate		
20	SLI		
21	TPI Certificate		
22	Colour Coding		
23	Insurance		
24	Pre Medical Check-up& Periodic Medical check-up (every 6 months) including vision test for Operator		
25	Safety Induction for Operator		
26	Others		

Signature & Name of Operator:

Signature & Name of Contractor's Concern Engineer

Signature & Name of Contractor's Safety Officer

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FORMAT NO. : HSE-24 REV 0

Boom Lift Inspection Checklist

Name of Contractor: **Project:**

Name of Work: **Job No:**

Vehicle Identification/Registration No: **Date:**

Sr. No.	Description	Observation	Remarks & Suggestions
1	Operating and emergency controls are in proper working condition, EMO button or Emergency Stop Device		
2	Functional upper drive control interlock (i.e. foot pedal, spring lock, or two hand controls)		
3	Emergency Lowering function operates properly		
4	Lower operating controls successfully override the upper controls		
5	Both upper and lower controls are adequately protected from inadvertent operation.		
6	Control panel is clean & all buttons/switches are clearly visible (no paint over spray, etc.)		
7	All switch & mechanical guards are in good condition and properly installed		
8	All Safety Indicator lights work		
9	Drive controls function properly & accurately labelled (up, down, right, left, forward, back)		
10	Motion alarms are functional		
11	Safety decals are in place and readable		
12	Guardrails and anchor points are in place, and in good condition		
13	Work platform & extension slides are clean, dry, & clear of debris		
14	Work platform extension slides in and out freely with safety locking pins in place to lock setting on models with extension platforms.		
15	Any defects such as cracked welds, fuel leaks, hydraulic leaks, damaged control cables or wire harness, etc.		
16	Braking devices are operating properly		
17	The manufacturer's operations manual is stored on AWP (in all languages of the operators)		
18	Oil level, Hydraulic Oil Level, Fuel Level, Coolant Level		

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19	Battery Charge		
20	Outriggers in place or functioning. Associated alarms working		
21	Tyres and wheels are in good condition, with adequate air pressure if pneumatic		
22	Wheel chokes are present and are used whenever required		
23	Moving & rotating parts guarded		
24	Load chart provided		
25	Fire Extinguisher		
26	Spark Arrestor, if operated by using fuel(For Running Refinery/ Petrochemical/Chemical Plant)		
27	Serial number plate with Load capacity		
28	TPI Certificate		
29	Colour Coding		
30	Insurance		
31	Pre Medical Check-up& Periodic Medical check-up (every 6 months) including vision test for Operator		
32	Safety Induction for Operator		
33	Others		

Signature & Name of Operator:

Signature & Name of Contractor's Concern Engineer

Signature & Name of Contractor's Safety Officer

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CONSTRUCTION SAFETY AUDIT CHECK-LIST FOR REFINERIES & PETROCHEMICAL PLANTS

Oil Industry Safety Directorate

Government of India

Ministry of Petroleum & Natural Gas

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Section 1: Introduction

The safety Checklist is a tool to help identify the tasks, hazards, and controls, based upon contractor's scope of work, and to properly align them with Oil Industry Safety Directorate's applicable standard, guidelines, and recommended practises.

The safety checklist is intended to be filled out by internal auditors of owner and later verified by OISD auditor. Filling out the Safety Checklist helps determine if owner, main contractor, and its subcontractor(s) is considering expected hazards and controls based upon the scope of work.

This checklist will be applicable to auditing the construction areas of petroleum refineries, petrochemical plants, and oil /gas processing plants.

1.1 Audit Facility details

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
1.1.1.	Name of the Project:	
1.1.2.	Plant Location:	
1.1.3.	Name of PMC/EPCM/LSTK Contractor (Unit wise):	
1.1.4.	Licensed/Design Capacity: unitwise (Annual & Hourly):	
1.1.5.	Type of Feed/ feed mix	
1.1.6.	Provide brief description of the unit/facility	
1.1.7.	Land area- L x B (In meters):	
1.1.8.	Max. No. of Persons deployed on any particular day	
1.1.9.	Present overall progress of work completion in percentage	

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1.2 Contractors Competent & Qualified Person(s):

Provide the name(s) of those persons onsite who by possession of a recognized degree, certification, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated their ability to solve or resolve problems relating to the subject matter, the work, or the project. The contractor shall confirm that each qualified and competent person listed has been trained in the following areas as applicable:

1.2.1	Overall site In-charge of contractor for the facility	
1.2.2	Site supervisor of contractor	
1.2.3	Crane Competent Person of Contractor:	
1.2.4	Confined Space Entry Supervisor of Contractor:	
1.2.5	Electrical Qualified Person(s) of Contractor:	
1.2.6	Excavation & Trenching Competent Person of Contractor:	
1.2.7	Scaffold Competent Person of Contractor:	

Section 2: Leadership and Commitment by Owners for contractor safety

As we embark on this critical evaluation of contractor safety practices, we begin by focusing on the pivotal role that owners play in fostering a safe work environment. In this section, we examine the leadership and commitment demonstrated by owners towards the safety of all personnel involved in their projects. The extent to which owners embrace safety as a core value and actively support contractors in their pursuit of a hazard-free workplace is fundamental to the success of any safety program. This section will audit into the actions, policies, and culture established by owners to confirm that safety is paramount in every aspect of their operations.

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Sl. No.	Description	Observations by the team
2.1	In the HSE policy, what are the components relevant to construction sites?	
2.2	Are HSE related issues reviewed by company management, during project reviews? Provide MoM of last project review meeting.	
2.3	What is the system for safety aud t of construction sites in line with OISD-GDN-192 and checklist of OISD-GDN-207? Who reviews the construction safety audit report? When was the last audit conducted?	
2.4	Is there a company nominated HSE executive for each construction site? To whom does the HSE executive report? Are the role, responsibility, accountability and authority of the HSE executive defined and communicated?	
2.5	What is the qualification & experience of contractor HSE officer? How many contractor HSE officers are there in the site and what is basis for this number?	
2.6	Are HSE personnel deployed by contractor in ratio as specified in contract condition?	
2.7	What is the system for review & approval of CVs of HSE personnel of PMC & executing agencies before their deployment at site?	
2.8	Are the HSE officer aware of related OISD standards like OISD-STD-105, OISD-STD-155, OISD-GDN-206, OISD-GDN-192, OISD-GDN-207 etc.	
2.9	What is the system for giving induction safety training to all workmen? What is the periodicity of training imparted to workmen? Who reviews and approves the contents & matter of induction safety training?	
2.10	What is the system for rewarding the workmen performing excellently in the field of HSE?	
2.11	What system is there to confirm competency of contract workmen (specialized job like welder, electrical technician, instrument technician, scaffolders, crane operator etc)?	

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2.12	Who imparts toolbox talk to contract workmen, before start of job? Is record available for same? Are applicable recommendations of OISD safety alerts/case studies being discussed during TBT?	
2.13	What is the system and frequency for regular health check-up of working personnel?	
2.14	Is Doctor or Paramedic available at site?	
2.15	Does "Basic Life Support Ambulance" is available at site?	
2.16	Does the system exist for tie-up with nearby hospital for attending to emergency cases on round the clock basis?	
2.17	Does the system exist to Confirm that children & unhealthy adults are not engaged for the job.	
2.18	Has Asset Integrity Management (AIM) been considered during design stage i.e. inherent safety, built in reliability.	
2.19	Is there any procedure to Confirm safety aspects such as safe access, approach, escape etc., operability and maintenance aspects such as ergonomics etc. w.r.t. equipment?	
2.20	What is the procedure to Confirm Calibration/ standardization of equipment and instrumentation used for construction/ fabrication/ erection/ inspection etc?	
2.21	What system is followed to Confirm proper inspection of materials at various stage of procurement at vendor shop? What is the role of owner in this inspection process?	
2.22	Is the installation procedure available for all type of equipment?	
2.23	What system exist to confirm use of appropriate gaskets, packing, bolts, valves, lubricants and welding rods etc? Is it documented?	
2.24	(a) What is the frequency of safety review meeting by contractor/ PMC/ Owner? (b) Produce the agenda, MOM and compliance status of these meetings for verification.	

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Section 3: Pre-Project Safety Planning and Statutory Approval

Pre-project safety planning and obtaining statutory approvals are critical aspects of ensuring safety and compliance, especially in construction and hazardous operations. Here's a combined checklist that addresses both pre-project safety planning and the necessary statutory approvals:

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
3.1	Are the conditions stipulated in the PESO (CCOE) approval for construction of facilities complied? Provide Ref no and Date of approval of PESO approval along with plot plan. equipment layout and Hazardous area classification.	
3.2	OISD standard	
3.3	Is storage license for hydrocarbon and gas cylinder available?	
3.4	Are the conditions stipulated in the MOEF Clearance (EC) is compiled?	
3.5	Is the Change of Land Use (CLU) approval being applicable and available?	
3.6	Are the conditions stipulated in the consent to establish from State Pollution control Board complied? Issue date? List pending issues if any.	
3.7	Are the Consent to Establish under Factories Act taken.	
3.8	Are Registration of establishment from Central / State Govt. Labour Commissioner under Contract Labour (Regulation and Abolition) Act 1970 available?	
3.9	Whether water supply/ Electricity supply agreement is available?	
3.10	Whether construction approval for IBR equipment and piping is available from IBR authority?	
3.11	Whether PNGRB consent/ approval for pipe line is applicable and taken?	
3.12	Whether fire NOC is available?	

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3.13	Confirm the existence of a comprehensive project-specific safety plan. Confirm that the safety plan addresses potential hazards and risks associated with the project.	
3.14	Whether Risk Analysis (QRA/ RRA) has been carried out and recommendations implemented?	
3.15	Provide the list of risk reduction measures implemented.	
3.16	Whether Environment impact assessment has been carried out and recommendations implemented?	
3.17	Whether consent under hazardous waste/ construction waste or plastic waste management taken?	
3.18	Whether HAZOP study has been carried out and its recommendations addresses and updated in as-built P&ID? Specify total recommendations.	
3.19	Any other approval like ground water, forest clearance CRZ etc.	

Section 4: Site Assessment and Preparation

Meticulous evaluation and readiness Confirm the safety and effectiveness of contractor safety in the oil and gas industry. This section focuses on key considerations for identifying hazards, implementing safeguards, and setting the foundation for a secure project site.

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
4.1	Confirm that the site is properly cleared of any debris, vegetation, or potential obstructions.	
4.2	Confirm the establishment of safe access routes and pathways for personnel and equipment.	
4.3	Confirm that safety barriers are installed to prevent unauthorized access to hazardous areas, construction area evacuated area.	

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4.4	Check for the presence of safety barriers, warning signage, and access control. Confirm that warning signs are clearly visible and appropriately placed to alert personnel to potential dangers.	
4.5	Confirm that fully equippec first-aid stations are strategically located throughout the site. Confirm that personnel are aware of the location of first-aid facilities and how to access them in case of emergencies.	
4.6	Confirm that essential safety equipment, such as fire extinguishers and safety showers are readily accessible and well-maintained. Confirm that personnel are trained in the proper use of safety equipment.	
4.7	Confirm that access points, walkways, stairs, and platforms are in good condition and free from tripping hazards.	
4.8	Confirm that adequate lighting is available for safe movement, especially in areas with 24/7 operations.	

Section 5: Incident Reporting and Investigation

This Section focuses on ensuring that inc dents are promptly reported, thoroughly investigated, and corrective actions are implemented:

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
5.1	Existence of a clear and documented incident reporting process at the construction site. Confirm that all personnel including contractors, are aware of the reporting process.	
5.2	Confirm that incidents are reported promptly, including unsafe act, unsafe condition, near misses and minor injuries.	
5.3	Confirm that incident reports contain essential information, including date, time, location, individuals involved, and a detailed description of the incident.	
5.4	Confirm that all incidents, regardless of severity, are reported and documented, and that there are no instances of unreported incidents.	
5.5	Whether consumption of first a d items are being evaluated to analysed the type of incident.	

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Section 6: Safety Equipment and PPE

This comprehensive evaluation Confirms that personnel, including contractors, are adequately equipped to mitigate refinery-specific hazards and adhere to safety protocols, ultimately fostering a secure working environment. The checklist encompasses various aspects, including PPE selection, proper usage, maintenance, and compliance with industry safety standards.

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
6.1	What is the PPE policy and the system to confirm the use of mandatory PPEs at all the construction sites? What are the mandatory PPEs used?	
6.2	What is the system for selecting and ensuring the quality of PPEs & safety gadgets? Please give details of system.	
6.3	Confirm that personnel, including contractors and sub-contractors are trained on the proper use, care, and maintenance of PPE.	
6.4	Evaluate the availability and condition of essential PPE items, including: - • Hard he met • Safety glasses or face shields • Hearing protection (e.g., earplugs or earmuffs) • Gloves (variety of types for different tasks • Safety footwear with slip-resistant soles • High-visibility vests or clothing (if required)	
6.5	Confirm the availability and functionality of emergency safety equipment, including: - • Eyewash stations and safety showers • Fire extinguishers • Emergency escape respirators (if needed) • First-aid kits and medical supplies	

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Section 7: Emergency Response and Evacuation

Audit checklist is a vital tool to assess the contractor's preparedness and capability to respond swiftly and effectively to various potential emergencies, including fires, chemical spills, and other critical incidents. This comprehensive evaluation Confirms that emergency plans, equipment, personnel training, and evacuation procedures are meticulously reviewed, promoting the safety of all individuals.

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
7.1	Existence of a comprehensive emergency response plan specific to project site.	
7.2	Confirm that the plan is well-documented, up-to-date, and accessible to all personnel, including sub-contractors	
7.3	Confirm that the emergency response plan addresses a wide range of potential construction incidents, including fire, Slip, Trip, and Fall, Electrical Accident, Trench and Excavation Hazard, Caught-in or Caught-between Accidents, Confined space Incidents, explosions, releases of hazardous materials, natural calamity and handling heavy equipment.	
7.4	Confirm the clarity and specificity of roles and responsibilities assigned to personnel, including emergency response teams and sub-contractors.	
7.5	Confirm that emergency contact information is prominently displayed throughout the project site, including: Phone numbers for local emergency services (fire, medical, police). Contacts for management and designated emergency responders.	
7.6	Confirm the availability and functionality of emergency response equipment, including: • Fire extinguishers, hoses, and suppression systems • Gas detectors and alarms. • Spill control kits and containment materials.	
7.7	Confirm that all personnel, including contractors, receive emergency response training: • Confirm that training includes procedures for evacuations, fire response, spill containment, and first aid. • Confirm that personnel are trained in the proper use of emergency equipment.	

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7.7.1	Review training records to confirm compliance with training requirements.	
7.8	Is arrangement for rescuing affected person adequate?	
7.9	Are signs showing emergency exit route installed?	
7.10	Is emergency exit route clear of obstacles?	
7.11	Is communication system adequate?	
7.12	Whether emergency vehicle with driver has been provided to meet any emergency situation?	
7.13	Does any tie-up with hospitals or local doctors exist?	
7.14	Has the assembly point for workers in case of emergency been identified and earmarked?	
7.15	Has training been provided to a few workers for First Aid?	
7.16	Emergency procedure and telephone numbers are known to all and same are prominently displayed at site? (Sample compliance check)	
7.17	Whether emergency mock drills are being regularly done?	
7.18	Specify frequency, coverage and effectiveness of mock drill	

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Section 8: Safety while working at Height/ Scaffolding /ladders.

Safety while working at height, particularly on scaffolding and ladders, is paramount in preventing falls and injuries. It involves thorough risk assessments, proper training, and the use of fall protection equipment to Confirm workers' safety. Adherence to safety protocols and equipment maintenance is vital to minimize risks in elevated work environments.

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
8.1	Confirm for issuance of "Height Work Permit" before start of for any work at height (> 1.8 Mtrs).	
8.2	Confirm that a comprehensive Job safety assessment has been conducted for all tasks involving working at height at project site taking into account specific work areas, types of tasks, and potential hazards associated with working at height. Confirm that control measures are in place to mitigate identified hazards.	
	Scaffolding	
8.3	Confirm that scaffolding is erected, inspected, and maintained by competent personnel.	
8.4	Confirm that scaffold structures are designed to support the intended loads and are stable and secure.	
8.5	Confirm that guardrails, toe boards, and access points are installed correctly.	
8.6	Check that scaffolding platforms are fully planked and free from defects.	
8.7	Confirm that only authorized personnel are allowed to erect, modify, or dismantle scaffolding.	
	Fall Protection	
8.8	Confirm that fall protection measures are in place when working at height:	
8.9	Confirm the use of personal fall protection equipment (harnesses, lanyards, lifelines, fall arrestor) where necessary.	

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8.10	Confirm the presence of anchorage points or anchor systems for connecting fall protection equipment.	
8.11	Confirm that workers are trained in the proper use of fall protection equipment.	
	Training and Competency	
8.12	Confirm the training and competency of contractors and sub-contractors involved in working at height tasks:	
8.13	Confirm that personnel are trained in identifying fall hazards and using fall protection equipment.	
8.14	Confirm that workers are competent in scaffold erection, ladder use, and fall prevention measures.	
8.15	Whether vertigo test is mandatory for the workers working at height.	
8.16	Review training records to Confirm compliance with training requirements.	
	Inspection	
8.17	Confirm the system exist for certification of scaffolds (and green tagging), by competent person. What is the frequency of inspection/ recertification	
8.18	Does the system exist for periodic visit to all height locations by a competent person, and identification of dangerous openings, for necessary corrective actions. Are the records available. Furnish list of deviations observed.	
	Supervision and Monitoring	
8.19	Confirm that competent supervisors oversee activities	
8.20	Confirm that regular inspections and audits are conducted to monitor compliance with safety measures.	
8.21	Confirm that hazard communication includes proper signage and barricades to warn of working at height activities.	

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Section 9: Safety while excavation and trenching

Excavation and trenching activities are paramount for various maintenance, construction, and projects. These processes involve digging into the earth's surface to create cavities or trenches for purposes such as installing pipelines, repairing underground structures, or conducting maintenance on critical infrastructure. Safety is of utmost concern in these operations due to the risk of trench collapses, utility strikes, and exposure to hazardous gases. Stringent safety protocols, including comprehensive excavation plans, proper protective systems, and continuous training, are imperative to mitigate risks and Confirm the well-being of workers, the integrity of the refinery's infrastructure, and the prevention of environmental incidents.

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
9.1	Confirm that a comprehensive excavation and trenching plan is in place and approved by competent authority.	
9.2	Verify that a thorough site inspection of excavation and trenching activities as per clause 6.1.4 of OISD-GDN-192 is followed.	
	Protective Systems:	
9.3	Inspect the use of appropriate protective systems such as trench boxes, shoring, or sloping based on soil conditions and depth	
9.4	Is it Confirmed that excavated earth is not dumped by the side of excavated pit.	
9.5	Are the escape stairs/ ladders available in every excavated pit (of more than 1.2 mts depth)	
9.6	Whether barricading of 1 Mtr. Height with glowing caution boards provided for excavations beyond 1.5 mtr. Depth.	
9.7	Whether one person is available outside at all times to communicate any hazards noticed with workers working in deep trenched or excavations.	

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Section 10: Safety while reinforcement/ shuttering & concreting

A comprehensive safety checklist for these activities includes Confirming the structural integrity of formwork and shuttering, ensuring proper bracing and support systems are in place to prevent collapses, and confirming the correct placement of reinforcement materials. Additionally, rigorous checks for the availability and use of personal protective equipment, fall protection measures, and adequate ventilation are essential to safeguard workers from potential hazards associated with concrete work in this high-risk environment.

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
	Pre-Work Planning:	
10.1	Confirm the presence of detailed reinforcement and concreting plans and designs. Confirm that plans are reviewed and approved by qualified structural engineers and complied with national building codes.	
	Structural Stability	
10.2	Inspect formwork, shuttering, and bracing systems to Confirm they are structurally sound and properly installed.	
10.3	Confirm that adequate supports are in place to prevent collapses during concreting.	
	Safety:	
10.4	The safety of workers on erection and dismantling of steel and prefab structure should be Confirmed by provision mentioned in OISD-GDN-192 clause no 6.3.2	
10.5	All lifting appliances should be suitable for the operations and approved and tested as per statutory requirement.,	
10.6	Inspect the proper storage and handling of reinforcement bars, concrete, and related materials to prevent accidents and material degradation.	

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Section 11: safety while working in confined space area.

Safety is paramount when working in confined spaces. These spaces can pose numerous hazards, including toxic atmospheres, limited entry and exit points, and the potential for engulfment or entrapment. To Confirm worker safety, strict adherence to confined space entry procedures, including proper ventilation, continuous atmospheric monitoring, and the use of appropriate personal protective equipment, is essential. Comprehensive training, frequent drills, and clear communication among the team are vital elements in mitigating risks and responding effectively to emergencies within confined spaces, ultimately safeguarding the lives of refinery personnel.

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
	General	
11.1	Whether entry inside the vessel to carry out any job shall be done after issuance of valid permit only in line with the requirement of OISD-STD-105?	
11.2	Shut down, pos tively isolate, depressurise and purge the confined area as per laid down procedures.	
	Entry Procedures	
11.3	Confirm proper and accessible means of exit before entry inside a confined space.	
11.4	Whether systems exist for registering the number of workmen entering & leaving the confined space.	
11.5	What type of ladder/ safety harness are in use for working in confined space?	
	Atmospheric Testing	
11.6	Whether system exists for gas test of confined spaces in order to Confirm adequate oxygen level & absence of Hydrocarbon, H2S, CO or other toxic gases before entry of workmen into the confined spaces.	
11.7	Confirm that gas detectors are calibrated and functioning correctly.	
	Communication	

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11.8	When the work is going on in the confined space, there should always be two men standby at the nearby manway / manhole equipped with communication arrangement to contact seniors and to evacuate the worker inside confined space in case of emergency.	
	Lighting and Equipment	
11.9	Use 24V flameproof lamp fittings only for illumination.	
11.10	Use tools with air motors or electric tools with maximum voltage of 24V.	
11.11	The cutting torches should also be kept outside the vessel immediately after the cutting and the gas cylinders used for cutting/welding shall be kept outside.	
	Emergency Response	
11.12	Confirm the availability and condition of rescue equipment, such as hoists, tripods, and self-contained breathing apparatus (SCBA).Also Confirm that a well-documented rescue plan s in place, and rescue personnel are trained and ready to respond.	

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Section 12: Safety during material handling and lifting equipment safety.

Ensuring safety while handling and lifting equipment is of paramount importance in the industrial setting of an oil refinery. It involves meticulous equipment inspection, rigorous operator training, and strict adherence to safety procedures to prevent accidents, protect personnel, and safeguard critical infrastructure.

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
12.1	Does the system exist for load testing & certification of all lifting tools and tackles like wire ropes slings, chain blocks etc. at regular intervals as per the provisions of factories act. Is register maintained to record particulars of such tests. Please mention the periodicity of such tests. Furnish list of deviations/ failures of such tests.	
12.2	Does the systems exist for load test & certification of equipment (Cranes, Hoists, Hydra etc.) by competent persons before deployment at site and thereafter at regular intervals.	
12.3	Whether all parts including the working gears fixed or movable of every lifting machine, chain, rope, tackles specify the following condition: a) Thoroughly examined by competent person at least once a year or such interval as required by statutory authority. b) Document of such examination are maintained and produced to owner supervisor before use of particular equipment? c) Whether safe working load, date of testing & next test due date visibly marked/ painted on all equipment.	
12.4	Whether chain blocks and cables are inspected before each use to assure their sound condition?	
12.5	Whether area below the movement of boom of crane is cleared to avoid injury from falling objects?	
12.6	In crane handling area whether it is confirmed that crew of truck, leave the truck before starting loading / unloading?	
12.7	Whether transporting material from one place to another is done by suitable means?	
12.8	Whether carrier with sufficient capacity without projecting parts is used for transporting materials?	

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12.9	Whether riggers engaged are well trained and conversant with signalling procedures including night signalling if required?	
12.10	Whether permission of authorized person is obtained before working on or near an overhead crane?	
12.11	Whether trained riggers are available all the time along with crane?	
12.12	Whether barricading has been done to confirm no unauthorised person enters in the working area of the crane?	
12.13	Whether lifting (rigging) plan has been prepared and approved before start of the work?	
12.14	Whether route of crane movement has been planned before the crane moves out of the garage?	
12.15	Whether it has been confirmed that no electrical cable comes within 3 meters or safe distance from the boom of the crane?	
12.16	Whether boom is be ng kept in the horizontal position or locked while idling?	
12.17	Whether material is being stacked / de-stacked in trucks with the help of wedges to Confirm no slippage whi e loading / unloading takes place?	
12.18	Whether the for<lift / crane is being operated only by trained / authorized person?	
12.19	Whether permissior of authorized person is obtained before working on or near an overhead crane?	
12.20	Whether trainec riggers are available all the time along with crane?	
12.21	Whether barricading has been done to Confirm no unauthorised person enters in the working area of the crane?	
12.22	Whether lifting (rigging) plan has been prepared and approved before start of the work?	
12.23	What system is available to Confirm that all Heavy equipment operators are experienced for operating the relevant equipment.	
12.24	Does the system exist for general check-up of cranes, hydra etc. like tyre pressure, reverse horn etc. on daily basis.	
12.25	Does the system exist for approval of erection scheme of heavy lifts & critical lifts. Who is the approving authority?	
12.26	Does the system exist for keeping record of equipment, tools & tackles and manpower involved in heavy lifts & critical lifts.	

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12.27	Does the system exist to restrict the boom loaded hydras for movement/ transshipment of loads?	
12.28	Does the system exist to Confirm adequate hard stand before deployment of crane?	

Section 13: Safety while gas cutting, grinding & welding.

Safety during gas cutting, grinding, and welding is paramount in industrial operations, particularly in environments like an oil refinery. These processes involve high temperatures, flammable materials, and potentially hazardous fumes, making strict adherence to safety protocols, proper training, and the use of appropriate personal protective equipment critical to prevent accidents, fires, and exposure to harmful substances.

SR. NO.	DESCRIPTION	OBSERVATIONS BY AUDIT TEAM
13.1	Whether LPG / Oxygen / Acetylene/ Gas cylinders are kept outside only while working in confined space	
13.2	Are Acetylene/ O2 / LPG cylinders kept in upright position with required valve cap and secured at designated places under shed – wet fire retardant clothes gunny bags wrapped around it if the same is under sun at designated place?	
13.3	Check cylinder and cylinder valves for approved quality & any kind of damage?	
13.4	Whether protective valves caps are kept on cylinders while not in use?	
13.5	Whether proper means and method for transportation of cylinders to avoid dropping and rolling are being adopted / followed?	
13.6	Whether gas cylinders, regulators are kept away from combustible materials and / free from oil and grease?	
13.7	Check cylinder and cylinder valves for approved quality & any kind of damage?	
13.8	Are the electric connection cables & welding cables, cutting hoses laid in non-haphazard manner.	
13.9	Whether all hoses are of approved quality and found to be free of any damage or crack?	
13.10	Whether oxygen and acetylene cylinders are stored separately at a distance of at least 5 feet from each other and kept under shade as per Gas Cylinder rules 2016?	
13.11	Whether gas cylinders are kept at safe location particularly in case job is being done at different elevations while in use?	

Signature Not Verified
Digitally signed by ARITRA DE
Date: 2026.05.18 17:36:05 IST
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