ENQUIRY DOCUMENT - TENDER

(Document No : C050-TENDER_DOC-C050-1U68-81-45-PB-T-8010)

इंजीनियर्स इंडिया लिमिटेड
(भारत सरकार का उपक्रम)
ENGINEERS INDIA LIMITED
(A Govt. of India Undertaking)

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BIDDING DOCUMENT

FOR

COOLING TOWER PACKAGE FOR POLYPROPYLENE PROJECT OF M/S NUMALIGARH REFINERY LIMITED

(BIDDING DOCUMENT NO. LT / C050-1U68-PB-T-8010 /1004)

PROJECT: SETTING UP POLYPROPYLENE UNIT AT NUMALIGARH

Prepared & Issued by:

इंजीनियर्स इंडिया लिमिटेड
(भारत सरकार का उपक्रम)
ENGINEERS INDIA LIMITED
(A Govt. of India Undertaking)

MASTER INDEX

NAME OF WORK : **COOLING TOWER PACKAGE FOR POLYPROPYLENE PROJECT OF M/S NUMALIGARH REFINERY LIMITED**

BIDDING DOCUMENT NO. : **LT / C050-1U68-PB-T-8010 /1004**

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INVITATION FOR BIDS (IFB) FOR

COOLING TOWER PACKAGE FOR

POLYPROPYLENE PROJECT OF M/S

NUMALIGARH REFINERY LIMITED

BIDDING DOCUMENT NO.: LT / C050-1U68-PB-T-8010 /1004

(DOMESTIC COMPETITIVE BIDDING)

1.0 INTRODUCTION:

Numaligarh Refinery Limited (NRL) is a Government of India Enterprise and a subsidiary of Oil India Ltd. NRL operates a 3.0 MMTPA Refinery at Numaligarh in the District of Golaghat, Assam since the year 2000.

NRL intends to set up Polypropylene Unit [PPU] of design capacity of 360 KTPA for production of homo-polymer PP along with its associated facilities under Polypropylene Unit (PPU) project at Numaligarh Refinery located at Golaghat District in Assam.

Engineers India Ltd. (EIL) has been appointed the Engineering, Procurement & Construction Management (EPCM) Consultant for this project.

EIL invites e-bids for "**COOLING TOWER PACKAGE**" under Single Stage Two Part Bid System from eligible bidders in the category **Class-I and Class-II local** supplier, as defined in PPP-MII Order enclosed elsewhere in the Bidding Document, with sound commercial and financial capabilities meeting the Bidder's Qualification Criteria stated in Cl. 5.0 below.

2.0 BRIEF SCOPE OF WORK:

Scope of Work & Supply for the complete Cooling Tower Package includes design, basic & detailed engineering, procurement & supply, transportation, construction, erection, testing, pre-commissioning, commissioning and performance guarantee test run, operation & maintenance of chemical dosing system for a period of six months after commissioning including supply of chemicals, consumables & lubricants for Fresh Water Induced Draft Counter Flow Cooling Tower (FRP) and all allied facilities as defined in the Bidding Document.

The scope of work covers as a minimum but not limited to the following:

2.1 Induced Draft Counter Flow FRP Cooling Tower

Number of Cells	2 Working + 1 Stand-by
Capacity (per cell)	4000 m3/hr

2.2 Cooling Tower RCC Basin, Channel & Sump

2.3 Cooling Water Treatment Plant Building

2.4 Chemical Dosing Systems

2.5 Cooling Water Re-circulation Pumps

2.6 Cooling Water Pump house including all associated piping

2.7 Operation & Maintenance of Chemical Dosing System for a period of 6 (six) months after commissioning including supply of chemicals, consumables and lubricants

2.8 All associated Civil, Structural, Architectural, Piping, Electrical, Instrumentation & Mechanical works within battery limit.

The detailed scope of work of the Contractor is defined elsewhere in the bidding document.

3.0 TIME SCHEDULE FOR COMPLETION:

15 Months from the date of issue of Letter of Acceptance / Award. **Scheduled mechanical completion & Commissioning period shall be 14 Months & 01 Month respectively.** Refer ANNEXURE-A – I to SCC.

4.0 SALIENT DETAILS:

a)	Bidding Document & subsequent Amendment(if any) available on Website for viewing & downloading.	:	The complete Bidding Document can be viewed and downloaded from CPP Portal having URL **https://eprocure.gov.in/eprocure/app**) Tender details are also available in EIL website **http://tenders.eil.co.in** **Cost of Bidding Document: NIL**
b)	Bidding Document available on Website	:	From **09.04.2026 to 04.06.2026 upto 1200 Hrs. (IST)**
c)	Last date of Receipt of Bidder's Queries	:	On 17.04.2026
d)	Date, Time and Venue of Pre Bid Meeting	:	Pre-bid meet shall be held online as per the details below: Date & Time: **20.04.2026 (*) at 1400 Hrs. (IST)** Meeting Link: Join from the meeting link: **https://teams.microsoft.com/meet/45736590210956?p=bWpUFkJ1PxJlPoy5VY** **Meeting ID: 457 365 902 109 56** **Passcode: 2yB7o3Sw** All pre-bid queries must be submitted exclusively through the NIC CPP Portal latest by **17.04.2026**. The queries sent through e-mails by any bidder shall not be given any cognizance.
e)	Last Date and time of Online submission of Bids (Bid Due Date) and Mode of Bid Submission	:	**Up to 1200 Hrs. (IST) on 04.06.2026** **Online submission (e-Bids)** through CPP Portal **Bid submitted through any other mode shall not be acceptable.**
f)	Online Opening of Techno-commercial Un- priced Bid	:	**1400 Hrs. (IST) on 05.06.2026 (*)**
g)	Bid Validity	:	Bid shall be valid for **180 Days** from the Bid Due Date (BDD) (#). (#) - Final BDD after extensions, if any
h)	Earnest Money Deposit /Bid Security	:	**INR 62,50,000/-** (Rupees Sixty Two Lakh Fifty Thousand). [Refer Instructions to Bidder (ITB) pertaining to submission of EMD/Bid Security]
i)	Date of Opening of Priced Bids	:	Date & time shall be intimated later.

j)	Contact details of dealingofficer	:	Mr. Arnab Mondal – Manager (SCM-C&P) E-mail: arnab.mondal@eil.co.in Tel. No.: +91-124- 289 1373 Mr. Shashi Shekhar, AGM (SCM-C&P) Email: sashi.shekhar@eil.co.in Tel. No.: +91-124-289 1356 Mr. Lotavath Thavurya GM (SCM-C&P) Email: l.thavurya@eil.co.in Tel. No.: +91-124- 289 1281
k)	Communication address for submission of documents, in hard copy	:	Refer Instructions to Bidder (ITB)
l)	Site Visit	:	On 17.04.2026 (^) [Refer Instructions to Bidder (ITB) for details]

4.1 If dates identified as (*) above happen to be a declared holiday in EIL Gurugram, the next working day shall be considered.

4.2 If dates identified as (^) above happen to be a declared holiday in NRL Complex-Numaligarh, the next working day shall be considered.

4.3 The complete Bidding Document is available on Central Public Procurement Portal (CPPP) website: http://eprocure.gov.in/eprocure. Link of the same is also available on EIL website: http://tenders.eil.co.in. Bidders can view / download the document from these websites.

4.4 All amendments, time extension, clarifications, etc. will be uploaded in the websites only and will not be published in Newspapers. Bidders should regularly visit the above website(s) to keep themselves updated.

4.5 Request for extension received from any bidder with less than four working days prior to bid due date shall generally be ignored, since there will not be adequate time for proper communication with Client and other Bidders.

5.0 BIDDER QUALIFICATION CRITERIA (BQC)

The Bidder shall meet the following qualification criteria:-

5.1 TECHNICAL EXPERIENCE CRITERIA:

Bidder during the last 15 (fifteen) years ending last day of the month previous to one in which the original bid due date falls (In case of due date extension, Original bid due date shall be considered) shall fulfill the following experience criteria-

5.1.1 Design and engineering, procurement & supply, construction / construction management, erection, commissioning of minimum one Mechanical (Induced) Draft Counter Flow type Cooling Tower of FRP construction with film/ splash type fill having per cell capacity of 2400 m3/hr or higher.

5.1.2 The reference Cooling Tower should have been commissioned and should have completed operation for at least one (1) year after commissioning.

5.1.3 The Bidder, who is an Indian subsidiary (Foreign Principal holding at least 51% shares) of the Foreign Principal, can also be considered, if the Bidder meets the requirements of clause no. 5.1.3.1 AND the qualification criteria as enumerated in clause no. 5.1.1 and 5.1.2 above is met by either of the following individually or jointly with the Bidder:

a. Foreign Principal

OR

b. Another “51% or above subsidiary” (called “Group Company”) of the Foreign Principal

OR

c. Foreign Principal’s holding Company

5.1.3.1 Qualification Criteria for Indian Subsidiary (hereinafter called the Bidder):

a. The Bidder must be a subsidiary of the Foreign Principal (Principal holding at least 51% shares) for not less than One (1) year reckoned from last day of the month previous to one in which the original bid due date falls (In case of due date extension, original bid due date shall be considered).

b. As a minimum, the Principal or the Group Company or the Holding company, as the case may be, shall carry out the following activities:

- Design and Engineering
- Approval of Sourcing of critical components as recommended by the Principal or the Group Company or the Holding Company
- Approval of Quality Assurance Plans (QAP)
- Approval of Responsibility Matrix

c. The Bidder shall furnish along with their bid the MOU (or Letter of Agreement or Letter of Consent) with the Foreign Principal OR the Group Company OR the Holding Company (as applicable), identifying the scope division matrix for the subject work in line with clause no. 5.1.3.1 (b) above.

d. Foreign Principal OR the Group Company OR the Holding Company (as applicable) shall furnish a “Corporate Guarantee” from an authorized signatory committing their continued support to the Bidder, till defect liability period.

5.2 DOCUMENTS AND DATA REQUIRED WITH BID TOWARDS TECHNICAL CRITERIA

5.2.1 Bidder shall submit documentary evidence (along with duly completed Experience Record Proforma (ERP) as enclosed with the bidding document, together with all back-up documents specified therein) as mentioned below to establish that the Bidder meets the Bidder Qualification Criteria as per Clause no. 5.1 of this document.

5.2.1.1 Copy of Work Order/ LOA along with technical details indicating the cell capacity, type of tower, type of fill and material of construction of Cooling Tower against Clause 5.1.1.

5.2.1.2 Completion Certificate issued by Owner/ Owner's Consultant (having correlation with work order) with date of completion against Clause 5.1.1 & 5.1.2.

5.2.1.3 One year operation certificate from End User/ Owner against Clause 5.1.2.

5.2.1.4 A job executed by a Bidder as a Sub-Contractor shall be considered for the purpose of meeting the experience criteria of BQC, subject to submission of following documents in support of meeting the "Bidder's Qualification Criteria":

a. Copy of Work Order/ LOA along with technical details indicating the cell capacity, type of tower, type of fill and material of construction of Cooling Tower issued by the Main Contractor against Clause 5.1.1.

b. Completion certificate issued by Owner/ Owner's consultant /Main Contractor**. The completion certificate shall have details like work order no., date, brief scope of work, ordered & executed value of the job, completion date etc. as required for qualification of the Bidder against Clause 5.1.1 & 5.1.2.

** In case Bidder is not able to furnish the Completion Certificate issued by Owner/ Owner's Consultant in his name then the Certificate issued by Main Contractor shall also be considered as proof of completion of the reference job, subject to countersigning of the aforesaid Certificate by Owner/ Owner's Consultant

c. One year operation certificate from End User/ Owner against Clause 5.1.2

5.2.1.5 In case qualification is sought as per Clause 5.1.3 above, Bidder shall submit the following documents:

a. MOU (or Letter of Agreement or Letter of Consent) from the Foreign Principal OR the Group Company OR the Holding Company (as applicable), identifying the scope division matrix for this project & jointly signed by the Foreign Principal OR the Group Company OR the Holding Company (as applicable) and the Bidder, along with the below documents (as applicable):

- Documents for establishing the Bidder as a subsidiary of the Foreign Principal
- Documents for establishing the relationship of the Group Company or Holding Company

b. Documents as mentioned at 5.2.1, 5.2.1.1 to 5.2.1.4 for qualification of the Foreign Principal OR the Group Company OR the Holding Company (as applicable).

c. General Supply Reference List of the Foreign Principal OR the Group Company OR the Holding Company (as applicable) for Cooling Tower Package

d. Corporate Guarantee from the Foreign Principal OR the Group Company OR the Holding Company (as applicable).

5.3 COMMERCIAL EXPERIENCE CRITERIA:

5.3.1 The bidder should have past experience of having successfully completed ***Similar Works** during last fifteen (15) years ending last day of month previous to one in which the original bid due date falls *(in case of due date extension, original bid due date shall be considered*); should be either of the following:

(i) Three similar completed works each costing not less than the amount equal to **INR 24,00,00,000/- (Indian Rupees Twenty Four Crore only);**

OR,

(ii) Two similar completed works each costing not less than the amount equal to **INR 32,00,00,000/- (Indian Rupees Thirty Two Crore only**);

OR,

(iii) One similar completed work costing not less than the amount equal to **INR 40,00,00,000/- (Indian Rupees Forty Crores Only)**

** ***Similar Work shall mean "Design and engineering, procurement & supply, construction / construction management, erection, commissioning of Mechanical (Induced) Draft Cooling Tower of any type.***

5.3.2 **Documents towards Commercial Experience Criteria:**

5.3.2.1 For fulfilling Commercial Experience Criteria the following documents may be considered

a) Copies of work orders/ relevant pages of contract/SOR mentioning the value and the scope of work along with Completion certificate by client/ Consultant / Main Contractor indicating with executed value.

b) In case of Bidder submitting documents for their work executed for private establishments (other than any Govt. bodies/PSUs), Work Order copy along with either (a) TDS Certificate in Form 26AS (Annual Tax Statement under Section 203AA of the Income Tax Act, 1961) or (b) Bank Certificate indicating receipt of payment from the owner, shall be required to be furnished.

5.3.2.2 In case the Bidder has executed ******Composite Works which includes the qualifying work(s) as per the definition of "Similar Work" (defined in clause no. 5.2.1 above), then the value of such qualifying work(s) out of the total value of Composite Works shall be considered for the purpose of qualification. In case the specific qualifying Work(s) and/or their executed value of such qualifying work(s) cannot be ascertained from the completion certificate submitted by bidder, Copy of Schedule of Rates / Price Schedule, relevant pages of final Bill certified by Owner/Owner's Consultant for establishing requirement of BQC or written letter from Owner/Owner's Consultant specifying the nature of Work with quantities and executed values can be submitted for qualification.

***Composite work means multi-disciplinary works in combination of Civil & Structural Work and/or Mechanical Work and/or Electrical Work and/or Instrumentation Work*.

5.3.2.3 In case, the executed value of job is more than work order value and bidder claims for meeting the BQC requirement on the basis of executed value then it is the responsibility of the bidder to submit the documentary evidence of final executed value (such as copy of final bill, executed value mentioned in completion certificate etc.) along with his bid. In case executed value is not mentioned in the completion certificate issued by the client, work order value with amendments, if any along with certified copy of final bill shall be considered for the purpose of evaluation.

5.4.1 NOTES TO COMMERCIAL EXPERIENCE CRITERIA:

(i) The bidder shall, in his own interest, furnish complete documentary evidence to justify that the bidder meets the Qualification Criteria as given above.

(ii) Value of past experience shall be adjusted at a simple rate of 7% for every completed year and / or part thereof ending last day of the month previous to one in which the original bid due date falls *(in case of extended bid submission date, original bid submission date shall be considered).* For calculation of period of escalation of value of past experience, start date shall be reckoned from the date of *Completion of the works/ Mechanical Completion.* **Job Completion Certificate issued against incomplete / in-progress job will not be acceptable.**

(iii) Order value(s) in multiple currencies shall be converted to equivalent INR at the exchange rate of SBI bill selling rate as on the date of award of such proposed qualifying work(s).

In case, the SBI Selling rate is not available as on the date of conversion as specified above, the exchange rate for conversion of currency shall be taken from the internet, such as:

https://www.xe.com/currencyconverter,
https://www.oanda.com/currency/converter,
https://economictimes.indiatimes.com/markets/forex/currency-converter

(iv) **Experience based on EPC/LSTK Contracts:**

In case Bidder has executed EPC/LSTK Contract which includes the Qualifying work(s) as per definition of "Similar Work", then the value of such qualifying work(s) out of total lumpsum value of EPC/LSTK Contract shall be considered for the purpose of evaluation.

Date of Mechanical Completion will be considered as completion date and that should fall within the qualifying period. In case the Mechanical Completion Certificate is not available, Commissioning date shall be considered as completion date.

(v) **For meeting the experience criteria** of BQC, the value of completed job shall be exclusive of Taxes & Duties. Bidder shall produce documentary evidence against the Taxes & Duties applicable against the concerned job(s).

(vi) Bidder's past experience as a leader or member of a Consortium/Unincorporated Joint Venture (JV) shall be considered acceptable, provided his scope in that Consortium/JV meets the requirement stipulated in the subject BQC.

In case, the PTR of Consortium/ Unincorporated Joint Venture (JV) experience submitted by the Bidder meets the similar work without indicating the division of scope of work in terms of specific activities and associated value of work between the Consortium/ Unincorporated Joint Venture (JV) members, but only the division of scope in terms of percentage share is indicated, in such case the completed value shall be arrived at after considering percentage share of each member, for the purpose of BQC evaluation.

(vii) In case, two separate Bidders submit reference of same work (wherein one was Main Contractor and the other was Sub-Contractor) for meeting Bidder Qualification Criteria, both Bidders' experience shall be considered for qualification subject to Bidder's meeting other qualification requirements.

(viii) In case a Bidder submits PTR having job awarded for multiple Parts in single Work Order having separate completion schedule for each Part, and the Bidder wants to get qualified based on the completion of One or more Parts (irrespective of whether all Parts under the same work order are completed or not), which meets the subject BQC value-wise and with respect to Similar Work, the same may be considered subject to the completion certificate with executed value of that/those Part(s) from the Owner/Owner's Consultant for that/those Part(s).

However, where multiple-Parts work is awarded under different Work Order(s) having different Work Order reference number(s) with the same Enquiry Document No., cumulative value of such completed Work Orders meeting definition of Similar Work, as submitted, shall be considered for the purpose of BQC Evaluation, provided multiple orders have been issued concurrently.

(ix) Whenever a bidder had worked as a sub-contractor to main contractor, their experience can also be considered for the purpose of meeting the Qualification criteria subject to submission of following documents:

a) Copy of work order along with SOR issued by Main Contractor.
b) Copies of Completion/Mechanical Completion/ Commissioning Certificates (as the case may be) issued by the Owner/Owner's consultant/ **Main contractor (Counter signed by Owner/Owner's consultant). The said certificates shall have a details like work order no./date, brief scope of work, ordered & executed value of the job, completion date etc.

** In case bidder is not able to furnish the Completion/Mechanical Completion/ Commissioning Certificates (as the case may be) from the Owner/Owner's Consultant in his name then the certificate issued by the main contractor shall also be considered as proof of completion certificate of the relevant job, **subject to countersigning of the aforesaid Certificate by the Owner/Owner's Consultant**.

c) If the bidder cites any reference of a job executed for NRL or executed for some client through same PMC working for NRL and the bidder is not able to furnish documentary evidence, the internal records of NRL or PMC (as the case may be) shall be considered.

d) The sub-contractor shall furnish either (a) TDS Certificate in Form 26AS (Annual Tax Statement under Section 203AA of the Income Tax Act, 1961) or (b) Bank Certificate indicating receipt of payment from the Main Contractor.

(x) Bidder to provide details of their past experience in support of Commercial Criteria as per format **Form-C & Form-D** of the Bidding Forms along with all documentary evidence.

5.5 FINANCIAL CRITERIA

Average Annual Turnover, of the **last 3 (three) financial years, shall be at least **INR 19,20,00,000.00/-/- (Indian Rupees Nineteen Crore Twenty Lakh only).**

***Last three financial years mentioned above refers to immediate three preceding financial years wherever the **original bid due date** is after 31st December. In case of tenders having original bid due date up to 31st December and audited / CA certified turnover documents of the preceding financial year is not available, the audited / CA certified turnover documents of the three years prior*

to preceding financial year will be considered.

Note: If a Bidder does not submit the aforementioned financial statements for three specified years, then Average Annual Turnover will be calculated based on financial figures of only those specified years for which requisite financial statements are submitted. Turnover will be considered '0' (Zero) for the year(s) for which requisite financial statements are not submitted

5.5.1 **Net Worth: The net-worth of the Bidder should be positive for the **immediate preceding financial year as per the latest audited report.**

***The net worth of the immediate preceding financial year shall be considered where the **original bid due date** falls after 31 December. For tenders having original bid due date on or before 31 December, if the audited or CA-certified turnover documents of the preceding financial year are not available, the audited or CA-certified turnover documents of the year prior to the preceding financial year shall be considered.*

5.5.2 **Calculation of Turnover and Net Worth:**

a) **Net worth calculation**: Net worth means paid up share capital, Share Application Money pending allotment* and reserves*# less* accumulated losses and deferred expenditure to the extent not written off. Net worth shall be calculated using the following formula:

Reserves to be considered for the purpose of net worth shall be all **reserves created out of the profits and securities premium account** but shall not include reserves created out of revaluation of assets, write back of depreciation and amalgamation.

*Share Application Money pending allotment will be considered only in respect of share to be allotted.

Description		Values (In Currency)	Reference (Page no., Clause etc.)
Paid up Share capital (A)	:		
Add: Share Application Money pending allotment (B)	:		
Add: Reserves (As defined above)(C)	:		
Less: Accumulated Losses (D)	:		
Less: Deferred Revenue Expenditureto the extent not written off (E)	:		
Net Worth (A+B+C-D-E)	:		

b) **Turnover:** Turnover shall be calculated excluding GST and other Incomes.

5.5.3 **In case a bidder (a Parent Company) is having wholly owned subsidiaries but only a single consolidated annual report is prepared and audited which includes the financial details of their wholly owned subsidiaries, consolidated audited annual report shall be considered for establishing the financial criteria subject to statutory auditor of the bidder certifying that separate annual report of bidder (without the financial data of subsidiaries) is not prepared and audited.**

Further, in case a bidder is a subsidiary company and separate annual report of the bidder is not prepared & audited, but only a consolidated annual report of the Parent Company is available, consolidated audited annual report shall be considered for establishing the financial criteria subject to statutory auditor of the parent company certifying that separate annual report of bidder is not prepared and audited.

5.5.4 Financial BQC parameters shall be calculated after giving effect to the impact of quantified and qualified Auditor's opinion (if any) given in Statutory Auditor's Report."

5.6 Documents towards Financial Criteria

5.6.1 For fulfilling the Financial Criteria, any of the following documents may be considered:

(i) Audited published Annual Report
OR
(ii) Audited Balance Sheet and Profit and Loss Statement (Including Auditor's report and all schedules/ notes to Balance sheet & Profit and Loss Statement)
OR
(iii) Financial statements duly certified by practicing Chartered Accountant (not being an employee or a Director and not having any interest in the bidder's company) where audited accounts are not mandatory as per law.

5.6.2 Bidder shall not be allowed to submit the Financial Statement of the company audited and issued after the final bid due date and time (including extended bid due date). Accordingly, Financial Statements of the Company audited and issued post final bid due date and time shall not be considered for evaluation.

5.6.3 Audited Annual Report / financial statements needs to be accompanied with UDIN number, which is mandatory from July 2019 onwards. Any Financial Report which is issued after July 2019 onwards without UDIN shall not be considered for evaluation.

5.6.4 Notwithstanding any other condition/ provision in the tender documents, bidders are required to submit complete documents pertaining to BQC along with their offer. Failure to meet the BQC will render the bid to be summarily rejected. NRL/EIL reserves the right to complete the evaluation based on the details furnished by the bidder, with or without seeking any additional supporting documents /clarifications.

5.6.5 The bidders must submit complete and unambiguous documents pertaining to BQC in the first instance itself along with the offer. Consultant / NRL may not offer any opportunity to the bidder to provide complete or unambiguous documents and reserve the right to proceed on the basis of documents received along with the offer and in case of non-submission of some documents or submission of incomplete or ambiguous documents, the bid may be rejected.

5.6.6 Bidder shall not be allowed to submit new references or document related such new references with respect their BQC (Technical Criteria), BQC (Commercial Criteria) unless it is not mentioned in the List [EXPERIENCE RECORD PROFORMA (Annexure-III of IFB)], List of Past Experience as per **Form – C & D**) **respectively]** submitted along with the bid. If sought, the bidders can submit only the shortfall information/documents which pre-existed at the time of the tender opening and which have not undergone change since then.

5.6.7 In case of ambiguity or incomplete documents pertaining to qualification Criteria (BQC), bidders shall be given opportunity with a fixed deadline after bid opening to provide complete & unambiguous documents in support of meeting the Qualification criteria (BQC). In case the bidder fails to submit any document or submits incomplete documents within the given time, the bidder's tender is liable to be rejected. However, NRL reserves the right to make any further queries.

5.7 Authentication of BQC documents [together with documents against MSE, if applicable]:

a) Submission of authentic documents shall be the prime responsibility of the bidder.

b) All documents furnished by the bidder in support of meeting the Bidder's Qualification Criteria (BQC) shall be:

Submitted duly certified by Statutory Auditor of the bidder or a practicing Chartered Accountant (not being an employee or a Director and not having any interest in the bidder's company) where audited accounts are not mandatory as per law.

OR

Submit documents duly notarized by any notary public in the bidder's country or certified true copies duly signed, dated and stamped by an official authorized for this purpose in Indian Embassy/ High Commission in Bidder's country.

In case of Proprietorship/ Partnership firms, Bidder shall also submit self-certified documents by the proprietor /any two partners in addition to the above requirement of notarization along with Undertaking as per **Annexure-I** to IFB.

OR

Bidder shall submit self-certified documents from any one out of CEO or CFO or Company Secretary of the bidder (Limited company only) along with Undertaking as per **Annexure-I** to IFB. This option shall not be applicable to Proprietorship/ Partnership firms.

OR

In case of PSU, the Power of Attorney holder duly authorized by the Board shall self-certify the BQC documents.

c) Requirement of certification/authentication as stated above shall not be applicable to published audited annual financial statements in English, if original booklets are submitted.

d) Bidder shall upload the authenticated copies of documents duly digitally signed, on the e-procurement website. Hence submission of physical document is not required.

5.8 VERIFICATION OF BQC CREDENTIALS:

NRL /EIL shall verify documents submitted by a bidder in support of bidder's credential against BQC, authentication may be verified with the issuing authorities, by way of direct communication to NRL/EIL over official e-mail IDs/ Original letter of authentication by post. Bidders may also follow up with the issuing authority for eliciting early response. If documents remain unauthenticated till given time line, NRL reserves the right to reject the bid. Proper address for communication including e-mail ID of the issuing authority should be provided along the tender document.

5.8.1 The steps in brief may be in the following seriatim:

a) Authentication from the issuing authority may be in letters by post, fax or by emails from official e-mail IDs.

b) In case documents submitted remain unauthenticated for a reasonably long period of time, a final reminder shall be served to the issuing authority with a copy to respective vendor, before rejecting their bid. A committee from NRL may visit the document issuing authority and submit a report on the authentication of the documents submitted by vendor in support of their credentials against BQC.

c) In case of foreign bidder certified true copies duly signed, dated and stamped by an official authorized for this purpose in Indian Embassy/ High Commission in bidder's country shall be accepted.

d) In a situation of rejecting L1 bidder due to lack of authentication of their submitted document, the tender shall be cancelled and refloated.

6.0 <u>GENERAL</u>

6.1 Even if an applicant meets the eligibility criteria (refer ITB) and BQC, he shall be subject to disqualification if he is found to have:

a) Made misleading or false representations in the forms, statements, affidavits and attachments submitted in proof of the qualification requirements; and/ or;

b) On account of currency of debarment by NRL.

6.2 **Experience of Own Projects**:

A job executed by a bidder for its own plant/ projects can't be considered as experience for the purpose of meeting requirement of BQC of the enquiry document. However, jobs executed for

Subsidiary/ Fellow subsidiary / Holding company will be considered as experience for the purpose of meeting BQC subject to submission of tax paid invoice(s) duly certified by Statutory Auditor of the bidder towards payments of statutory tax in support of the job executed for Subsidiary/ Fellow subsidiary/ Holding company. Such bidders to submit these documents in addition to the documents specified above to meet BQC.

6.3 The bidder qualifying under IFB Clause no. 5.1.3 shall provide Additional Contract Performance Security of 5% of the order value (over and above the CPS defined in the SCC).

6.4 A firm that has been engaged by the procuring entity to provide consultancy services for the preparation or implementation of a project, and any of its affiliates (associates, subsidiary, JV partner), shall not be eligible for subsequently providing goods or works (other than a continuation of the firm's earlier consultancy services) for the same project.

6.5 Unincorporated Joint Venture (JV) / Consortium Bids shall not be accepted.

6.6 Bidder should not be under liquidation, court receivership or similar proceedings.

6.7 The Bidders who are on Holiday / Negative of EIL / NRL / MoPNG on the due date of submission of Bid / during the process of evaluation of the Bids, the offers of such Bidders shall not be considered for Bid opening/Evaluation/Award. Bidder shall submit a self-declaration of black listing / holiday listing as per **Annexure-II** of IFB.

6.8 NRL / EIL shall not be responsible or liable for cost incurred in preparation, submission & delivery of Bids, site visit, participating in the discussion and other expenses incurred during the Bidding process, regardless of the conduct or outcome of the Bidding process.

6.9 In case, any Bidder is found to be involved in cartel formation, their Bid shall not be considered for evaluation/placement of order. Such Bidder shall be put on Holiday / blacklisted / debarred from Bidding in future for NRL / EIL.

6.10 Canvassing in any form by the Bidder or by any other agency on their behalf may lead to disqualification of their Bid.

6.11 NRL may cancel the process of procurement or reject all bids at any time before intimating acceptance of successful bid. NRL decision to cancel the procurement and reasons for such a decision shall be communicated to all bidders.

6.12 Unsolicited clarifications to the offer and/ or change in the prices during the validity period would render the bid liable for rejection.

6.13 Bidders to note that “Public Procurement (Preference to Make in India) (PPP-MII) Order 2017” for the procurement of goods and services is applicable as per prevailing Government policy.

6.14 Bidders to note that “Purchase Preference under Public Procurement Policy, 2012 for MSEs” is not applicable, being Works Contract Services.

6.15 Bidders to note that Policy for providing Preference to Domestically Manufactured Iron & Steel Products in Government Procurement is applicable as per Bidding Document.

6.16 Contractor shall comply with Provisions regarding Procurement from a Bidder from a Country sharing Land Border with India. The details of these provisions are mentioned in the ITB & its Appendix of the bidding document and bidder shall furnish necessary undertaking as detailed therein.

6.17 BQC relaxation to start ups and MSE bidders shall not be applicable.

6.18 For terms and conditions and other details/Specifications, refer complete Bidding document and subsequent Amendment(s), if any.

Note: Engineers India Ltd / Numaligarh Refinery Limited including its officers and representatives, shall under no circumstances solicit or request any payment, monetary consideration from bidders other than those specifically stipulated in the published tender/enquiry document and its amendments (if any).

Bidders are cautioned that, should they receive any phone calls, messages, emails, or personal approaches requesting payments other than specified in Tender Document, such communications are fraudulent and do not originate from Engineers India Ltd / Numaligarh Refinery Limited.

Engineers India Ltd / Numaligarh Refinery Limited shall not be responsible for any financial loss, penalty, or damage caused due to actions taken by Bidders/Contractors on the basis of such communications.

6.19 Clarification, if any, can be obtained from Mr. Arnab Mondal / Mr. Shashi Shekhar / Mr. Lotavath Thavurya through following number:

Telephone No. +91-124-289 1373 / 1356 / 2812 E-mail: arnab.mondal@eil.co.in, sashi.shekhar@eil.co.in, l.thavurya@eil.co.in.

For & on behalf of Numaligarh Refinery Ltd
(Authorized Signatory)
Name : Lotavath Thavurya
Designation: GM (SCM-C&P)

Annexure-I to IFB

UNDERTAKING

(ON BIDDER'S LETTER HEAD BY CEO/ CFO/ COMPANY SECRETARY (CS) OR PROPRIETOR OR PARTNERS)

I, _____ S/o/D/o of _____, working as _____*{CEO/ CFO/ Company Secretary in case of a limited company or proprietor / any two partners in case of Proprietorship / Partnership firms (indicate, as applicable)}* of the Company _____ having its registered office at _____ certify that all the details including documents pertaining to Bidder Qualification Criteria signed by undersigned vide our offer reference _____ against your Enquiry document _____, are true, authentic, genuine and exact copy of its original.

It is certified that none of the documents are false/forged or fabricated. All the documents has been submitted with full knowledge of (i) the provisions of the Indian laws in respect of offences including, but not limited to those pertaining to criminal breach of trust, cheating and fraud (ii) provisions of bidding conditions and iii) Suspension / Banning rules of Owner/ EIL, which entitle the Owner/EIL to initiate action in the event of such declaration turning out to be a misrepresentation or false representation.

I further certify that further documents, if any, required to be submitted by our company, shall be submitted under my knowledge and those documents shall also be true, authentic, genuine, exact copy of its original and shall not be false/forged or fabricated.

I also declare that in case, at a later date, any of the document submitted in our bid referred above is found to be false/forged or fabricated, I, shall be held responsible for the same and EIL/Owner has every right to take action against me and my company, as deemed fit as per law of land and provisions of the Bidding Documents and EIL/Owner's right to put our company on Suspension / Banning list for future business with EIL/Owner.

Specimen Signature of authorized representative

Signature

Name & Designation

Date:

Notarised by Notary Public (applicable only in case of Proprietorship / Partnership firm)

Annexure-II to IFB

PROFORMA FOR SELF DECLARATION OF DEBARMENT /BLACK LISTING / HOLIDAY LISTING

Job Name :

Tender No. :

(1) SELF DECLARATION OF DEBARMENT / BLACK LISTING / HOLIDAY LISTING

I/We hereby declare that I am / we are currently not serving any holiday listing/black listing/debarment orders issued by Numaligarh Refinery Limited (NRL) or Engineers India Limited (EIL) or Ministry of Petroleum & Natural Gas (MoPNG) debarring me/us from participation in tendering or carrying on business dealings with NRL/EIL/MOPNG.

I/We understand that bids from the bidders who are on holiday list by NRL or EIL or MoPNG will not be considered.

It is understood that any wrong declaration in this context shall make me / my agency / company liable for action under Holiday Listing procedure of NRL / Procedure for Suspension / Banning of Business Dealings of EIL.

(2) DECLARATION OF ALLIED FIRMS OF THE BIDDER

I/We hereby declare that following are my/our allied firm(s) (*as defined in NRL's holiday listing policy*):-

Name(s), PAN and GST number(s) of our allied firms are as follows:-

Sl. No.	Name of Allied Firm	PAN	GSTN

It is understood that in case of debarment of me / my agency / company by NRL, the debarment shall be automatically extended to my/our allied firms.

_____

(SIGNATURE OF BIDDER)

Date:

Place:

Note:

1. *Please refer NRL's current "Policy for Holiday listing/ Banning/ Debarring of Contractors/ Suppliers" available in NRL website www.nrl.co.in (under "Tenders" section) for details. Bidders are requested to carefully read the said policy which will be applicable for this tender*.
2. *Please refer EIL's "*Procedure for Suspension / Banning of Business Dealings" *available in EIL website https://www.engineersindia.com (under "Suppliers & Contractors" section) for details. Bidders are requested to carefully read the said policy which will be applicable for this tender*.

SL. NO.	CREDENTIALS OF BIDDER									
	NAME OF THE PROJECT/ WORK	CLIENT/ OWNER	EXPERIENCE CRITERIA (AS PER BQC) REFER NOTE-2	WORK ORDER/ FOA/ LOA/ LOI/ PO	DATE OF COMMIS SION-ING	COMPLETION CERTIFICATE (Reference No. & issue date)	TYPE & M.O.C. OF COOLING TOWER	COOLING TOWER CELL CAPACITY	CERTIFICATE FOR OPERATION of 1 YEAR (YES/NO)	WHETHER BIDDER IS QUOTING BASED ON THE JOBS EXECUTED FOR SUBSIDIARY/ FELLOW SUBSIDIARY/ HOLDING COMPANY - YES/NO

Note:

1. Since the information requested in this format shall be utilized to assess the Bidder's capability to execute the subject Project, it would be in the interest of the Bidder to include only those references which are relevant for Bidder Qualification Criteria. The Bidder shall also ensure that all information asked for is furnished and the same is correct and complete in all respects. **Incorrect information furnished in this format shall render the bid/order liable for rejection.**
2. Bidder's experience as per technical BQC:
   a) In case the referenced Project/Work is executed & completed by the Bidder please write "OWN".
   b) In case the referenced Project/Work is executed & completed by the Bidder as Sub-Contractor, please write "SUB-CONTRACTOR".
   c) In case the Bidder is an Indian Subsidiary and referenced Project/Work is executed & completed by the Foreign Principal please write "Indian Subsidiary"
3. The Bidder shall furnish all documentary evidence required to justify that the Bidder meets Technical BQC for referenced projects/works mentioned above.
4. Bidder to ensure that any additional document required to support qualification shall be enclosed as documentary evidence.

(STAMP & SIGNATURE OF BIDDER)

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FORMAT FOR CORPORATE GUARANTEE

This Corporate Guarantee made on this ___ day of _____ month _____ year by M/s _____(Parent Company/Group Company/affiliate), a Company organized and existing under the laws of _____ and having its registered office at _____(hereinafter referred to as the "Guarantor" which expression shall unless repugnant to the subject or context deemed to include their successors and assignees) at the request and/or behest of _____, a Company organized and existing under the laws of _____ having its registered office at _____(hereinafter referred to as "Bidder"), in favour of Engineers India Ltd/ _____ (insert name of client), a Public Company organized under the laws of India having its Registered office at _____(hereinafter referred to as "Beneficiary").

Whereas:

The Beneficiary floated a public tender dated _____no. _____ for _____ (Purpose).The Bidder has submitted its quotation dated _____ and has represented to the Beneficiary that the Bidder is the wholly owned subsidiary/Group Company/affiliate of the Guarantor and that the Bidder has access to and the Guarantor shall make available necessary financial and technical support as required by the Bidder for successful execution of the contract, if awarded to the Bidder, for the Purpose. Accordingly, the Guarantor is ready and willing to give this Corporate Guarantee on the terms and conditions hereinafter contained.

We, the Guarantor are hereby recording the terms and conditions governing our obligations under this Guarantee with the intent of being legally bound by the same and hereby agree, covenant and bind ourselves as follows:-

1. The Guarantor hereby irrevocably and unconditionally guarantees to the Beneficiary, the performance by the Bidder of its obligations under the terms and conditions of the tender and the contract, upon the contract being awarded to them. The Guarantor shall execute such other deeds and documents as may be desired by the Beneficiary in this regard.
2. The Guarantor unconditionally and irrevocably guarantees to the Beneficiary that it will make available or cause to be made available to the Bidder all financial, technical support and expertise, expert manpower and procurement assistance and project management and other resources required to ensure that the Bidder can carry out its obligations as per the tender terms and conditions and that the Bidder at all times fully and effectively discharge its obligations under the terms and conditions of tender, including by discharging the obligations within the time and cost so stipulated.
3. The Guarantor hereby agrees that if the Bidder shall in any respect commit any breach or fails to fulfill any of the terms of the contract/tender or complete it in all respects or if there is a failure to make any supplies or if any material, equipment or machinery under the contract so supplied is not of the required specifications or does not perform as envisaged under the contract, then the Guarantor undertakes to forthwith perform the same and fulfill all the obligations required under tender/contract terms & conditions (including payment of any liquidated damages) on behalf of the Bidder without any extra cost and time implications. The decision of the Beneficiary with respect to breach/failure by the Bidder shall be final and binding on the Guarantor.
4. The Guarantor further undertakes to indemnify and keep harmless the Beneficiary against all losses, damages, expenses, claims, costs (including legal costs and attorney fees) which may

be suffered or incurred or threatened to be suffered or incurred by the Beneficiary due to the failure or breach on the part of the Bidder under the contract and/or the Guarantor under this Guarantee.

5. The Guarantor assures and undertakes that during the term of the contract or of any guarantee for performance as per the contract, the Bidder shall continue to be the wholly owned subsidiary/affiliate/group company of the Guarantor and the Guarantor's liability shall not be affected due to any incapacity or lack of power or legal personality or change in the status of the Bidder or the Guarantor.

6. The Guarantor's liabilities under this Guarantee shall not exceed the maximum limit liability (if any) of the Bidder under the tender/contract terms and conditions.

7. The obligation of the Guarantor shall take effect from the date of this Guarantee and shall be independent of any other security given under the contract and remain in full force until all the obligations of the Bidder under the tender/contract have been fully performed and discharged and/or all sums of money payable to Beneficiary have been fully paid.

8. The liabilities of the Guarantor shall not be discharged, diminished or otherwise affected by:-

   a) Any change in the Articles of Association or Bye-Laws or constitution of the Bidder or the Guarantor.

   b) Any amendment to the contract (including any extension of time) or any waiver granted to the Bidder.

   c) The dissolution, amalgamation, reconstruction or reorganization of the Bidder or the Guarantor.

9. NOTICE:

   Any notice, demand, declaration or other communication to be given by the Beneficiary or the Guarantor to the other shall be in writing, in English language and delivered in person or by Air Mail or by Courier Services or by Facsimile or by E-Mail to the address given below and shall be deemed to be validly served after two days from the date thereof:-

   For Guarantor
   Attention of
   Mailing Address
   Email Address
   Fax No.

   For Beneficiary
   Attention of
   Mailing Address
   Email Address
   Fax No.

11. No modification, alteration or amendment of this Guarantee or any of its terms or provisions shall be valid or legally binding unless the Beneficiary consents to the same in writing.

12. No failure to take any action with respect to a breach of this Guarantee or a default by any other party shall constitute a waiver of the Beneficiary's right to enforce any provision of this Guarantee or to take action with respect to such breach or default or any subsequent breach or default.

13. The Guarantor confirms that it has all the necessary powers and corporate authority to issue this Guarantee in favour of the Beneficiary and this Guarantee constitutes a valid legal and enforceable document under the law to which it is subject. The undersigned has full power to issue this Guarantee under the power of Attorney /Resolution of Board of Directors Dated---------- granted to him by the Guarantor.
14. GOVERNING LAW AND JURISDICTION: This Guarantee shall be exclusively governed by and construed in accordance with the laws of India without giving effect to the principles of conflict of laws therein. No party shall take a plea that any forum is inconvenient.
15. DISPUTE RESOLUTION: Any dispute arising out of or in relation to this Guarantee shall be resolved by arbitration as per the provision set out in the tender document.

IN WITNESS WHEREOF the Guarantor has duly executed this Guarantee as at the date first above written.

For and on behalf of Guarantor,

_____

(Signature)Name :

Corporate Seal / Designation :

Witness

Signature :

Date:

PROFORMA FOR ACKNOWLEDGEMENT CUM CONSENT LETTER

E-MAIL: arnab.mondal@eil.co.in/ shashi.shekhar@eil.co.in /l.thavurya@eil.co.in

(PLEASE E-MAIL TO EIL WITHIN TEN DAYS ON RECEIPT OF BIDDING DOCUMENT)

GM (SCM)
Tower I - First Floor
Engineers India Limited
Sector-16, Gurugram, Haryana

Kind Attention	**:**	**Mr. L. Thavurya**
Bidding Document No.	**:**	**LT / C050-1U68-PB-T-8010 /1004**
Name of Work	**:**	**COOLING TOWER PACKAGE FOR POLYPROPYLENE PROJECT OF M/S NUMALIGARH REFINERY LIMITED**
Project	**:**	**SETTING UP POLYPROPYLENE UNIT AT NUMALIGARH**
Due Date	**:**	**04.06.2026 upto 1200 Hrs. (IST)**

Dear Sirs,

We acknowledge with thanks receipt of your above cited Bidding Document alongwith enclosures. We undertake that the contents of the above Bidding Document shall be kept confidential including all the drawings, specifications and documents and the said documents shall be used only for the purpose, for which they are intended.

Further, our response is as under:- (Bidders to put a tick √, as applicable).

1. We will submit the bid within due date. ☐
2. We regret to submit our offer/quote because of the following reasons: ☐
   a. _____
   b. _____

Thanking you,

Very truly yours,

Name of Bidder	**:**
Contact Person	**:**
Contact Person Mobile No	**:**
Bidder's Address	**:**
Bidder's Phone No.	**:**
Bidder's Fax No.	**:**
Bidder's E-mail	**:**

(to be typed on bidder's letter head)

COVERING LETTER FOR SUBMISSION OF OFFERS

From:

_____

_____

Our Ref: ---------- dated ----------

To
GENERAL MANAGER (SCM),
TOWER I - FIRST FLOOR
ENGINEERS INDIA LIMITED
SECTOR-16, GURUGRAM, HARYANA

NAME OF WORK	**:**	**COOLING TOWER PACKAGE FOR POLYPROPYLENE PROJECT OF M/S NUMALIGARH REFINERY LIMITED**
BIDDING DOCUMENT NO.	**:**	**LT / C050-1U68-PB-T-8010 /1004**

ATTN: Mr. L. Thavurya, GM (SCM)

Dear Sir,

Please find herewith our offer in line with requirement of EIL Bidding Document. We confirm that:

1. We have downloaded the full document from the website.
2. EMD/ Bid security is submitted as per Bidding Document.
3. Offer is in complete compliance with technical as well as commercial requirements of bidding document and there is no technical or commercial deviation in the offer.
4. We understand that any technical or commercial deviation in the offer shall render our offer liable for rejection.
5. Our offer shall remain valid for a period of 4 (Four) Months from the bid due date.

We declare that the statement made and the information provided in our offer is true and correct in all respect. In case, it is found that the information/ documents provided by us are incorrect/ false, our application shall be rejected by Owner/EIL without any reference to us.

Thanking you,

Very Truly Yours,

(Signature of Authorised person)
Full Name :
Designation:
Company Seal :

JOB NO. : C050

DRAFT

INSTRUCTIONS TO BIDDER (ITB)

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A GENERAL

1 SCOPE OF BID

1.1. Numaligarh Refinery Limited (NRL), is a Government of India Enterprise having its registered office at 122A, GS Road, Christian Basti, Guwahati - 781005. NRL operates a 3.0 MMTPA Refinery at Numaligarh in the District of Golaghat, Assam since the year 2000 and is in the process of expanding its refining capacity from 3.0 MMTPA to 9.0 MMTPA.

1.2. NRL is setting up a Polypropylene (PP) Unit along with its associated facilities under Polypropylene (PP) project, beside the NREP refinery.

1.3. NRL hereinafter referred to as "Owner/Client" has appointed M/s Engineers India Ltd. (EIL) as Engineering, Procurement & Construction Management (EPCM) Services Consultant hereinafter referred to as "Consultant" and shall be the Engineer-in-Charge for Polypropylene (PP) Project at NRL, Assam hereinafter referred to as "Project".

EIL on behalf of NRL is authorized to enter into correspondence/ discussions & obtain any clarification and confirmations from the bidder.

1.4. In connection with the Invitation for Bids/ Letter Inviting Bid, Engineers India Limited invites e-Bid(s), under single stage two bid system, for the entire scope covered under the Bidding Document (hereinafter for the purpose of these instructions collectively referred to as the "WORK") based on the completion of the work within the time given in the "Time Schedule" in Annexure – A-I to the Special Conditions of Contract. All bids are to be completed and submitted in accordance with and within the time provided in these Instructions to Bidder.

2 CODE OF INTEGRITY FOR PUBLIC PROCUREMENT

2.1. The Owner requires that Bidders/ Vendors/ Contractors observe the highest standard of ethics during the award/ execution of Contract and should not indulge in the following prohibited practices, either directly or indirectly, at any stage during the award or during execution of Contracts:

i) **"Corrupt practice":** making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution;

ii) **"Fraudulent practice":** any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in execution of the contract;

iii) **"Anti-competitive practice":** any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act, 2002, between two or more bidders, with or without the knowledge of the Owner/EIL, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels;

iv) **"Coercive practice":** harming or threatening to harm, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

v) **"Conflict of interest":** participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of procuring entity who are directly or indirectly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the Owner/EIL with an intent to gain unfair advantage in the procurement process or for personal gain; and

vi) **"Obstructive practice":** materially impede the Owner's/EIL's investigation into allegations of one or more of the above mentioned prohibited practices either by deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements to investigators and/or by threatening, harassing or intimidating any party to prevent

it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or by impeding the Owner's/EIL's rights of audit or access to information;

2.2. **Obligations for Proactive Disclosures**

i) The bidders, suppliers, contractors and consultants, are obliged under Code of Integrity for Public Procurement to suo-moto proactively declare any conflicts of interest (coming under the definition mentioned above - pre-existing or as and as soon as these arise at any stage) in any procurement process or execution of contract; and

ii) Any bidder must declare, whether asked or not in a bid document, any previous transgressions of such a code of integrity with any entity in any country or of being debarred by any other procuring entity.

iii) Such declarations would not mean automatic disqualification for the bidder making such declarations. The declared conflict of interest may be evaluated and mitigation steps, if possible, may be taken by the Owner.

2.3. **Punitive Provisions:** Without prejudice to and in addition to the rights of the Owner/EIL to other penal provisions as per the bidding document or contract, if the Owner/EIL comes to a conclusion that a (prospective) bidder/supplier, directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the Owner/EIL may take appropriate measures including one or more of the following:

i) if his bids are under consideration in any procurement

a) Forfeiture or encashment of bid security

b) calling off of any pre-contract negotiations, and;

c) rejection and exclusion of the bidder from the procurement process

ii) if a contract has already been awarded

a) Cancellation of the relevant contract and recovery of compensation for loss incurred by the procuring entity;

b) Forfeiture or encashment of any other security or bond relating to the procurement;

c) Recovery of payments including advance payments, if any, made by the Owner/EIL along with interest thereon at the prevailing rate;

iii) Provisions in addition to above:

a) Banning/ debarment of the bidder from participation in future procurements of the Owner / EIL for a period; as specified in the NRL's / EIL's policy for holiday listing Banning/ Debarring of Contractors/ Suppliers.

b) Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

3 ELIGIBLE BIDDERS

Eligibility conditions are as under:

3.1 An Eligible bidder may be a firm or a company meeting the Bidder Qualification Criteria (BQC) as per Invitation for Bids (IFB)/ Notice Inviting Tender (NIT) on Open Competitive basis.

3.2 Bid submission is allowed to the bidder who intends to submit their Bid, in response to IFB/NIT.

3.3 Bidder should have valid registration with Employees Provident Fund organization under 'EPF and Miscellaneous Provisions Act, 1952', wherever applicable.

3.4 Bidder should have valid GSTIN/UIN registration certificate / GSTIN Number and submit the same with the bid. EIL/Owner at its discretion may not consider the bidder's bid for further evaluation if the same is not found uploaded with the bid or not found to be active in GST portal. Any misinterpretation or misinformation may attract penal action including putting the bidder on holiday / blacklisting as per rules in vogue at Owner.

3.5 Restriction under Rule 144(xi) of the General Financial Rules (GFRs), 2017- Department of Expenditure Order (Public Procurement No. 4) ref. No.F.7/10/2021-PPD (01) dated 23.02.2023 shall be applicable for this tender. [The detailed guidelines are available on the website of DoE (https://doe.govin/)], The same are attached as **Appendix-III to ITB.**

3.6 Bidder to refer Public Procurement (Preference to Make in India) (PPP-MII) Order 2017 in accordance with the provisions detailed in Bidding Document for eligibility.

3.7 A firm determined non-performing by the Procuring Entity shall not be eligible to bid during the period so determined.

3.5 **Documents Establishing Bidder's Qualification**

3.5.1. Pursuant to qualification criteria specified in IFB/NIT, the Bidder shall furnish all necessary supporting documentary evidence to establish the Bidder's claim of meeting qualification criteria to the Owner's/Consultant's satisfaction.

3.6 **Black-list / Holiday List /Suspension / Banning List**

3.6.1. Bidder should not be under liquidation, court receivership or similar proceedings. Bidder shall submit a self-certificate as per proposal Form enclosed with the Bidding Document stating that they are not under liquidation, court receivership or similar proceedings failure to do so or the bidder is under, court receivership or similar proceedings, their bids shall not be considered.

3.6.2. A bidder who is on Black-list / Holiday List /Suspension / Banning List of Owner/EIL as on due date of submission of bid / during the process of evaluation of the bids, the offers of such bidders shall not be considered for bid opening/evaluation/award. Further, in case of a consortium, if any of the member(s) of consortium is on Black-list / Holiday List /Suspension / Banning List of Owner/EIL as on due date of submission of bid / during the process of evaluation of the bids, the offers of such consortium shall not be considered for bid opening/evaluation/Award.

3.6.3. Price Bids shall not be opened in case bidder is on holiday list of EIL or NRL on the date of intimation to bidder for priced bid opening as well as on date of priced bid opening.

3.6.4. If any bidder is qualified based on the credential of his parent/ associate/ affiliate etc. and the parent/ associate/ affiliate is under the Holiday/ Negative/ Suspension/ Banning List of or Black-Listed by Consultant/ NRL, the offer from the bidder shall also not be considered for evaluation, at any stage prior to placement of order.

3.6.5. The information as per Clause 3.6.3 above, shall be submitted as per proposal Form enclosed with the Bidding Document. Non-submission of this undertaking duly filled in and signed shall render the Bid non-responsive and shall be rejected.

3.7 Bids by Consortium / Un-incorporated Joint Ventures are not acceptable unless specifically permitted in NIT/ IFB.

3.8 **MSE Bidder:**

MSE Bidder wherever specified in the Bidding Document shall mean the following and shall comply with the below stated requirements to enable EIL/NRL to consider give them the Benefits, as specified elsewhere in the Bidding Document:

a) MSEs shall provide the necessary valid document issued as evidence of registration by UDYAM. Only **Udyam Registration Certificate** for Micro & Small Enterprises shall be considered for availing the various benefits under Public Procurement Policy for MSE, 2012 (PPP-MSE, 2012).

The Udyam registration certificate shall be verified from GoI Udyam registration portal (present web address is https://udyamregistration.gov.in). The status of MSE Bidder as on date of Unpriced Bid Opening shall be considered for applying above benefits for entire evaluation. Conditions for Micro and Small Enterprises (MSEs) bidders attached as Appendix-II to ITB.

b) Bidder participating as Trader / Agent etc. shall not be given any benefit as available under PPP-2012.

c) In case, a MSE Bidder doesn't submit the MSE document or submits invalid document or submitted un-authenticated MSE document, such Bidders shall not be considered for providing benefits under MSE policy.

d) Bidder shall submit the declaration towards the above, as per proposal Form enclosed with the Bidding Document**.**

3.9 **Conflict of Interest among Bidders/agents:**

A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

a) they have controlling partner(s) in common; or
b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
c) they have the same legal representative/agent for purposes of this bid; or
d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid.
f) In cases of agents quoting in offshore procurements (GTE), on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:
   (i) The principal manufacturer directly or through one Indian agent on his behalf; and [in case of receipt of bids from both the Indian agent & the principal, the principal manufacturer shall be approached to arrange for withdrawal of one of the bids; in case of non-withdrawal, the bid from the principal manufacturer shall be considered]
   (ii) Indian/foreign agent on behalf of only one principal.
g) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;
h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business.

3.10 Quotation Received from Dealers/Agents for Items not Manufactured by Them:

When a firm sends a quotation for an item manufactured by a different company, the firm is also required to attach in its quotation that manufacturer's authorisation certificate and also manufacturer's confirmation of extending the required warranty for that product (in addition to the tenderers' confirmation to the required warranty). If the firm is an authorised agent/dealer of that manufacturer, certified documentary evidence to this effect is to be attached along with the quotation. This is necessary to ensure a quotation from a responsible party offering the genuine product, also backed by a warranty obligation from the concerned manufacturer.

B CONTENTS OF BIDDING DOCUMENT

4 BIDDING DOCUMENT

4.1. Details of the Tender can be viewed / downloaded from the following websites:

- E-Tendering website on CPP Portal of NIC URL: **https://eprocure.gov.in/eprocure/app**
- Bidders are required to upload & submit their e-Bid on above referred E Tendering website only.
- All updates, amendments, Corrigendum including Bid time extension, clarifications etc. (if any) will be uploaded / posted in the above websites only. There will not be any publication of the same through newspapers or any other media. Bidders should regularly visit the websites to keep themselves updated.
- The link to download Bidding Document has also been hosted on website http://tenders.eil.co.in/newtenders/
- In case Non- Disclosure Agreement (NDA) with Licensor (EIL) is applicable, Bidder is required to execute the NDA before they can view/download technical part of the bidding document from the e-tendering website. Bidder to note that submission of duly signed and stamped NDA strictly as per the format included in this Bidding Document without any deviation is mandatory, failing which Bidder(s) shall not be able to view/download technical part of Bidding Document.

4.2. The Bidding Document shall in general consist of the following and should be read in conjunction with any amendment issued in accordance with clause No. 7.0 of ITB.

- Notice Inviting Tender (NIT) / Invitation for Bid (IFB).
- Instructions to Bidders and its attachments.
- Bid Data Sheet.
- Bidding Forms.
- General Conditions of Contract (GCC).
- Special Conditions of Contract (SCC) and its Annexures.
- Schedule of Prices (SOP)
- Technical Specifications / Standards
- Drawings, if any.

4.3. Although all the details presented in this Bidding Document have been compiled with reasonable care, the bidder shall examine the bidding document thoroughly in all respect and if any conflict, discrepancy, ambiguity, error or omission is observed, bidder may request information/ clarification of the bidding document in writing so as to reach office of EIL not later than 07 days prior to the last date for submission of bids.

4.4. Bidding document once issued in case of limited competitive bidding is non-transferable. However, in case of Open Competitive Bidding, since the Bidding Document is available for free downloading on the portal, any bidder may submit the Bid and the same shall be evaluated in line with the provisions of the Bidding Document.

4.5. Bidders shall treat the Bidding Documents and contents therein as strictly confidential.

4.6. The Bidding Document is and shall remain the exclusive property of the Owner/EIL without any right to Bidder to use them for any purpose except for the purpose of Bidding.

4.7. The Bidder Qualification Criteria (BQC) shall not be construed by bidders as a means for creating rights/privileges/entitlement for them by way of hair-splitting, contentious or viciously legalistic interpretations of BQC Criteria, disregarding the very rationale of BQC. In case there is any contentions and disputes regarding BQC, EIL/Owner shall have right to interpret the BQC on common usage of terminologies and phrased in public procurement instead of legalistic and hair-splitting judgments and their decision in this regard would be final.

5 PRE-BID MEETING

5.1. Bidders in their own interest are advised to take part in the pre-bid meeting seriously by issuing their genuine queries and also by attending the pre-bid meeting by their competent personnel.

5.2. Bidder's authorized representative(s) shall attend the pre-bid meeting on the prescribed day at the given venue as per details indicated in Bidding Document. During the pre-bid meeting, technical and commercial issues shall be discussed and Bidders shall ensure that the bid received subsequent to pre-bid meeting shall be without any deviations to terms and conditions. Hence, bidders shall treat the pre-bid meeting as utmost important and depute competent & senior person capable of taking on the spot decision to sort out the technical and commercial queries.

5.3. In case any bidder does not attend the pre-bid meeting, it shall be deemed considered that the bidder has a clear understanding of the scope & terms & conditions of the Bidding Document and does not have any comments/ deviations to the requirements of the Bidding Document.

5.4. In order to ensure fruitful discussions during pre-bid meeting, the bidder is requested to submit any queries/clarification/information pertaining to Bidding Document in writing exclusively on e-tendering i.e. NIC CPPP only as per format enclosed Form-I of Proposal forms by the cut-off date mentioned in the IFB document. Queries received through e- Mail/courier shall not be given any cognizance.

5.5. The bidders are required to participate in the pre-bid meeting after going through the entire Bidding Document along with BQC. Bidder shall come with all technical and commercial points on which they need clarifications and also to ensure that they possess all the supporting documentation for meeting the BQC. In case of any doubt, they may discuss the same during the meeting to avoid any techno-commercial clarifications/ discussions post bid.

5.6. The outcome of the pre-bid meeting (i.e. Consolidated Reply to Pre-bid Queries), including the essential questions raised and the responses given by EIL/Owner shall be compiled as expeditiously as possible and shall be uploaded on the e-tendering website if so required. After pre-bid meeting, EIL/Owner at its discretion may not entertain any further queries from the bidders. Replies to Pre-bid Queries are for the purpose of clarification only and shall not form part of Bidding Document and subsequent Contract, unless issued as an Addendum/ Amendment.

5.7. Any modification of the Bidding Document, which may become necessary as a result of the pre-bid discussion, shall be intimated to all bidders through the issue of an Addendum/Amendment.

5.8. Based on the pre-bid discussions, no-deviation form/techno-commercial compliance shall be signed and submitted by the bidders as part of their offer. After pre-bid meeting, no deviation shall be accepted. Bidder in their own interest shall submit bids fully complying to bidding document requirements and EIL shall reserve the right to proceed with the available compliant bids for evaluation without raising any technical/ commercial queries.

5.9. Extension in bid due date shall not generally be granted due to tight Project Schedule.

5.10. Non- attendance of the pre-bid meeting will neither be a cause for disqualification of the bidder nor a cause for bidder's ignorance to submit the bid as per provisions of the bidding document and latest information uploaded in the Central Public Procurement Portal (CPPP)/Website of Government of India/ NIC Portal https://eprocure.gov.in/eprocure/app.

5.11. In case Non-Disclosure Agreement (NDA) is applicable, only those agencies who have executed NDA with Licensor (EIL), shall be allowed to attend Pre-bid meeting w.r.t. Technical Part/ Technical queries.

6 SITE VISIT

6.1. Bidder is advised to visit and examine the Project Site and its surroundings and obtain for itself, on its own responsibility, all information that may be necessary for preparing the bid and entering into a contract for execution of the Works. **Claims and objections due to ignorance of existing conditions or inadequacy of information will not be considered a reason for extra claim or delay in work at later date after submission of the bid and during contract execution.** All costs towards the same including the cost of visiting the Site shall be at the bidder's own expense.

6.2. The Bidder or any of its personnel or agents will be granted permission by the Owner to enter upon its premises and land for the purpose of such visits, but only upon the express condition that the Bidder, its personnel, and agents will indemnify the Owner/EIL and its personnel and agents from and against all liabilities in respect thereof, and will be responsible for death or personal injury, loss

of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection. During such visits the Bidder shall abide by all the rules and regulations, as applicable. For site visit, Bidder may contact the following persons in EIL and NRL:

(i) *Resident Construction Manager*
Engineers India Limited,
Address:- Polypropylene Unit (PPU)
Numaligarh Refinery Limited,
P.O.: Numaligarh Refinery Complex
Dist.: Golaghat, Assam, India, PIN – 785621
Contact Details – MR. K SHIVAJI (Mob No. 9910691951) /
MR. RAVIRAJ K (Mob No.9599502472)/ MR. VVR MURTY (Mob No. 9958089907).

(ii) *Mr. Madhuchanda Adhikari, Head (Project Civil & Petchem)*
Numaligarh Refinery Limited
(A Government of India Enterprise)
NRL Complex, Numaligarh,
Dist: Golaghat, Assam-785699
Mob.No.9435054321
Email: madhuchanda.adhikari@nrl.co.in

7 AMENDMENT OF BIDDING DOCUMENTS

7.1. At any time prior to the deadline for submission of Bids, the Owner/Consultant may, for any reason, whether on its own requirement or in response to a clarification requested by the Bidders, modify the Bidding Documents by issuing/publishing amendment (also named as Addendum/Corrigendum).

7.2. Any amendment thus issued shall form part of the Bidding Documents. The amendment will be published on e-Tendering Portal**.** Bidders have to take into consideration of all the amendment (s) published on e-Tendering portal before submitting their Bid.

7.3. Bidder shall submit a copy of the Addendum/Amendment duly signed and stamped along with all relevant documents/information (if applicable as per Addendum) in token of their acceptance. Failure of the Bidder to submit Bid without taking cognizance of Amendment issued by OWNER /EIL shall render the bid liable for rejection.

7.4. Bidders shall examine the Bidding Documents thoroughly and inform the OWNER/EIL of any apparent conflict, discrepancy or error, so that the OWNER may issue appropriate clarification(s) or amendment(s), if required.

7.5. The Owner/EIL may, at its discretion, extend the date of submission of Bids in order to allow the Bidders a reasonable time to furnish their most competitive Bid taking into account all the amendments published.

7.6. For Amendment / Addendum issued before BDD (including extended BDD, if any), bidder shall ensure to consider the respective impact in his bid.

C PREPARATION OF BIDS

8 COST OF BIDDING

8.1. The bidder shall bear all direct and indirect costs associated with the preparation and submission/delivery of its bid including (but not limited to) costs and expenses related to clarification meetings, visits to the site(s) and other locations, and the cost of any tests, investigations, evaluations and consultations. The OWNER/EIL will in no case be responsible or liable for any costs regardless of the outcome of the bidding process.

9 LANGUAGE OF BID

9.1. The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and EIL, shall be in the English language. Supporting documents and printed literature that are

part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language, in which case, for purposes of interpretation of the Bid, such translation shall govern.

9.2. If any of the documents in support of meeting BQC are not in English language, then the English translation copy of the same duly certified, stamped and signed by Local Chamber of Commerce shall be furnished along with the document in the un-priced bid. Translation by Indian Embassy/ High Commission or authorized/ approved translation agencies (by Indian embassy/ high commission or any other authority) shall also be acceptable.

10 DOCUMENTS COMPRISING THE BID

10.1. No Physical Bids / Offers shall be permitted (other than the documents which are specifically mentioned to be submitted in physical form for which scanned copy already uploaded along with the bid). The offers/bids submitted online through e-procurement portal along with the respective originals as specified under clause no. 11 shall only be considered as bid for evaluation and ordering. Bidders are required to upload the Bid/offer along with all supporting documents including Priced bid on the E-Tendering website only. Electronic Bids (e-bid) shall be submitted in Part-I - Folder I for Bid Security / EMD, PART-I Folder II for Techno-commercial/ Unpriced bid and PART-II for Priced bid as detailed below.

10.2. Bidders to upload the Un-priced and Price part of their bids strictly in the Un-priced & Priced folders respectively at the designated place in the e-tender portal. Non - Compliance to the same may lead to rejection of their offer.

10.3. The Bid shall be submitted in two parts viz. Part-I & Part-II in respective area provided in the website as per the following.

10.3.1 **BID SECURITY/EARNEST MONEY DEPOSIT (PART-I: Un-priced Bid – Folder I)**

In-spite of the fact that Bidder is submitting the EMD in original, Bidder is required to upload the Scanned copy of EMD /Bid Security as applicable Or Copy of Documentary evidence for availing exemption from EMD as per provisions of Bidding Document. In case bidder is making EMD payment online through portal as per Appendix-IV (A), payment receipt must be uploaded under this part-I / Folder-I.

10.3.2 **TECHNO-COMMERCIAL/UNPRICED BID (PART-I: Un-priced Bid – Folder II)**;

SECTION	DESCRIPTION
SECTION-I	(a) Letter of Submission & Synopsis of the proposal (b) Checklist for submission of bid as per Form – M provided in Bidding Forms. (c) Power of Attorney in favor of person(s) signing/ e-signing the bid that such person (s) is/are authorized to sign the bid on behalf of the bidder and any consequence resulting due to such signing shall be binding on the bidder in accordance with Clause 11.0 of ITB. (d) Integrity Pact (if applicable), duly signed and stamped on each page by the signatory holding Power of Attorney. (e) Signed and stamped copy of Form-A (on Company's Letterhead) attached with Appendix-III of this ITB regarding procurement from bidders from a country or countries sharing Border with India.
SECTION-II	(a) Form – K1 – Commercial Experience Details (b) Past experience along with details and supporting documentation as called for in the Bidder Qualification Criteria (BQC) as per Form-N provided in Bidding Forms. (c) All documents towards proof of meeting Bidder Qualification Criteria of NIT/IFB, duly certified as per Authentication

	process specified under relevant provision of IFB/NIT including Complete Audited Annual Financial Year Report including Auditor's Report, Balance Sheet, Profit & Loss Account Statement and all other schedules for the immediate preceding three financial years. (d) Undertaking (regarding no Conflict of Interest) as per Form-H provided in Bidding Forms (e) Self-Declaration of Debarment/Black Listing/Holiday Listing as per Annexure-II to IFB. (f) Copies of documents defining constitution or legal status, place of registration and principalplace of business of the Company **Organization details** (i) In case of a proprietorship firm, the name & address of proprietor, certified copy ofBank Account Details and proprietorship affidavit. (ii) In case bidder is a partnership firm, certified copy of the partnership deed. (iii) In case of company (whether private or public), certified copy of the 'Certificate of Incorporation' together with certified copy of Memorandum/ Articles of Association.
SECTION-III	(a) Bidder's Financial Details – Form-K2 provided in Bidding Forms.
SECTION-IV	(a) Master Index of the Bidding Document and Amendment/addendum (if any) duly signed and stamped by the bidder in token of having read all parts of the Bidding Document and having accepted and considered the same in preparing and submitting the Bid. (b) Commercial Questionnaire as per Form-J provided in Bidding Forms. (c) Signed & stamped copy of Un-priced Schedule of Price (SOP) including preamble. (d) Valid GSTIN/UIN registration certificate / GSTIN Number (e) Undertaking / Information w.r.t. availing of ITC by NRL: Bidder to submit "INDEMNITY BOND CUM UNDERTAKING" as per FORM-H
SECTION-V	(a) Form of bid as per Form – A provided in Bidding Forms. (b) Information about bidder in accordance with Form – B1 & B2 provided in Bidding Forms. (c) Declaration by Bidder as per Form-C provided in Bidding Forms. (d) Format of Letter of Waiver as per Form-D provided in Bidding Forms. (e) Compliance to Bid Requirement as per Form-E provided in Bidding Forms.

SECTION-VI	(a) Methodology of Execution as per Form – P provided in Bidding Forms. (b) Details of proposed Organization for Home and Site Office as per Form-Q provided in Bidding Forms. (c) Deployment Schedule of Construction Equipment, Tools & Tackles proposed for Execution of Works as per Form-O provided in Bidding Forms. (d) Deployment Schedule of Supervisory personnel as per Form-R provided in Bidding Forms. (e) PF Code Allotment letter/ PF Registration (f) ESI Registration Code (g) Schedule of Completion of major activities in the Form of Bar Chart
SECTION-VII	(a) Bank Mandate Form, as per Form-L provided in Bidding Forms alongwith cancelled cheque duly signed and stamped with the Banker's certification. (b) Self-certificate regarding bidder not under liquidation, court receivership or similar proceedings and Blacklisting/ Holiday listing (refer clause 3.6 of ITB) and Current Litigation / Arbitration, if any as per Form – F & Form-G provided in Bidding Forms. (c) Details of PAN
SECTION-VIII	(a) Technical Compliance/ Documents/ details required as per Technical portion of the bidding document. (b) Reply to Technical Questionnaire in Technical Sections
SECTION-IX	(a) Declaration as per Format-2A, 2AA & 2C of Annexure A – XIV to SCC for claiming the PPP-MII benefit, Bidder shall also submit Format 2B of Annexure A – XIV to SCC i.e. certification by statutory auditor / cost auditor / practicing cost accountant / practicing chartered towards local content (when total Procurement value is INR 10 Crore or above) or Format-2A, 2AA & 2C i.e. self-certification on their letter head (when total procurement value is less than INR 10 Crore) duly signed and stamped and certified as per the instructions provided therein. (b) Documents to be submitted as per Domestically Manufactured Iron & Steel Products in Government Procurement (DMI&SP) shall be as outlined in Annexure A – XVI to SCC. (c) Signed & Stamped copy of MSE Policy, PP-LC Policy and DMI&SP Policy, (whichever is applicable) as a token of compliance.
SECTION-X	(a) Schedule of Exceptions and deviations (if any) to the Commercial and Technical bid documents as per FORM-S provided in Bidding Forms. Technical deviations must be given separately for each discipline in FORM-S. Owner / EPCM Consultant shall not take any cognizance of any deviation /clarification written other than in Form –S. Any Clarification/deviation, if any stipulated, other than Form–

	S shall be treated as null & void and may render the bid liable for rejection.
SECTION-XI	(a) Along with the bid, an Undertaking by the bidder on their company letterhead, issued by the authorized signatory, to be submitted citing that if the bidder, post award of contract, fails to submit proof of Forest Royalty deposition within 03 months from date of withholding the amount against RA bill, then Owner/Consultant will directly deposit the withheld amount to the Govt. exchequer for which no claim from bidder shall be entertained.(Refer SCC Part B Cl. no. 07 for details) (b) Any other information required in the Bidding Documents/BDS or considered relevant by the Bidder.

Note:

i. The above shall be uploaded in **"PREQUAL/ TECHNICAL"** folder in e-tendering portal.

ii. Bidder must ensure that price(s) shall not be disclosed/mentioned in their unpriced part of bid. Any price indicated in unpriced bid shall not be taken into cognizance.

10.3.3 **PRICE BID (PART-II)**

Schedule of Prices with prices filled in. Prices are to be filled in accordance with instructions provided in preamble to Schedule of prices, in e-tendering portal, without making any changes in the format/names of the file/worksheet.

Note:

i. Part-II shall be uploaded in **"FINANCE"** folder in e-tendering portal

ii. No stipulation, deviation, terms and conditions, presumptions, basis etc. shall be stipulated in Price part of bid. In case of any conditions stipulated in price bids the bids of such bidders shall be summarily rejected and shall not be considered for further evaluation. Evaluation of the bids shall be carried out excluding such bidder(s).

10.3.4 **GENERAL NOTES:**

i. All documents uploaded in the e-tendering portal shall be deemed considered digitally signed documents by the authorized signatory of the bidder holding Power of Attorney.

ii. The bid requirements are explicitly stated in the Bidding Documents. The Bidder is required to study these requirements in detail & make a proposal in an outline as defined above completely meeting these requirements. The offer must be complete in all respects, leaving no scope for ambiguity. It is in the interest of the Bidder to submit a complete & comprehensive proposal leaving no scope for OWNER/EIL to raise or ask for any further questions or clarifications, with a view that the proposal may be evaluated only on the basis of what has been submitted by the bidder in the first instance in order to adhere to a very strict project schedule. Bidder's quotation is the responsibility of the bidder and no relief or consideration can be given for errors and omission.

iii. The Institute of Chartered Accountant of India at its 379th council meeting dated 17- 18th December, 2018 made generation of Unique Document Identification Number (UDIN) mandatory for every signature of full time practicing chartered accountant for the following service:

a) All certificates with effect from 1st February, 2019.
b) GST and Income Tax audit with effect from 1st April, 2019.
c) All audit and assurance functions with effect from 1st July, 2019.

In view of the above, bidder shall ensure that any certificate / reports issued / attested by a practicing chartered accountant in India and submitted in the bid shall mandatorily include the UDIN number. Certificate / reports issued / attested without UDIN number of practicing Chartered

accountant in India shall not be considered for evaluation.

This requirement of including UDIN shall not be applicable for certificate / reports issued / attested by a chartered accountant practicing in foreign country.

11 ORIGINAL DOCUMENTS TO BE SUBMITTED:

11.1. In addition to uploading the documents on e-procurement portal, Bidders are required to submit the EMD/Bid Security in original in the manner prescribed in the Bidding Document in sealed envelope titled "Original Documents for respective RFQ/Bidding Document No and shall be submitted **within Bid Due Date but not later than 7 calendar days from the final Bid Due Date.**

11.2. Bidder must upload the copy of the bid security (or authenticated exemption certificate, wherever applicable) within the final bid due date and time on the e-tendering portal failing which their bid shall be rejected. Bidders shall also submit the original BG / ISB in lieu of EMD/ Bid Security to EIL, preferably before the final bid due date and time but not later than 7 (Seven) calendar days from final bid due date. If the Bidder fails to submit Bid Security (BG/ ISB) physically in original within 7 (Seven) calendar days from final bid due date, his bid shall be rejected and shall not be considered for further evaluation, irrespective of their status/ ranking in tender and notwithstanding the fact that a copy of Bid Security/EMD was earlier uploaded by the bidder on the e- tendering portal.

a) The address for submission of original documents is as follow :
   Dak Receipt Section,
   Engineers India Limited
   Gurugram Office Complex, Sector-16 (on N.H.- 8),
   Tower-2 (Ground Floor),
   Gurgaon-122001
   Haryana (India)
   Attn.: Ms. L. Thavurya (SGM – C&P)
   Phone No.: +91-124- 289 2509

b) Each envelope shall indicate name and complete address of the bidder with contact details to enable the bid to be returned unopened, if required.

c) If the envelope is not sealed and marked as above, the Owner / EIL will not assume any responsibility for its misplacement, premature opening, late opening etc.

d) Document submitted in physical form shall be the exact copy of the documents as uploaded on e- procurement portal.

12 INTEGRITY PACT

12.1. Integrity Pact duly signed by authorized representative of NRL is attached **as Appendix – I to this ITB**. All pages of the Integrity Pact are to be returned by the bidder (along with the unpriced bid) duly signed by the same signatory who signed the bid, i.e. who is duly authorized to sign the bid and to make binding commitments on behalf of his company. Any enquiry/tender of estimated value of Rs. 1 Crore and above not accompanied by Integrity Pact duly signed by the bidder or the bidder not agreeing to submit a copy of the signed integrity pact shall be considered to be a nonresponsive bid and shall be rejected. Bidder shall not retype or use any IP other than signed IP provided with the Bidding Document.

12.2. Non-submission of IP and non-adherence to the IP, shall lead to rejection of the Bid. In case of Bid submitted by any partnership firm or Consortium bidder, Integrity Pact must be signed by all Partners/ Consortium members.

12.3. If the Bidder has been disqualified from the tender process prior to the award of the Order in accordance with the provisions of the Integrity Pact, NRL shall be entitled to demand and recover from Bidder Liquidated Damages amount by forfeiting the EMD/Bid Security as per provisions of the Integrity Pact.

12.4. If the Order has been terminated according to the provisions of the Integrity Pact, or if NRL is entitled to terminate the Order according to the provisions of the Integrity Pact, NRL shall be

entitled to demand and recover from Vendor Liquidated Damages amount by forfeiting the Security Deposit/Performance Bank Guarantee as per provisions of the Integrity Pact.

12.5. Bidders may raise disputes/complaints, if any, with the nominated Independent External Monitors as per Integrity pact. Details of Independent External Monitors shall be as per Appendix –I to ITB.

12.6. Priced bid of bidders refusing to sign Integrity Pact shall not be opened.

13 BIDS ON CONSORTIUM BASIS:

13.1 Agreement/ Memorandum of Understanding (MOU) signed by the bidder with consortium members and submitted in the bid shall be made part of contract.

13.2 Bids by Consortium / Un-incorporated Joint Ventures are not acceptable unless specifically permitted in NIT/ IFB.

14 ALTERNATIVE BIDS:

A Bidder (i.e., the Bidding entity) shall, on no account submit more than one Bid either directly (as a single Bidder) or indirectly (as a sub-contractor) failing which following actions shall be initiated.

14.1 All Bids submitted by such Bidder (say 'A') as a single Bidder or as a consortium, shall stand rejected and BID SECURITY, if any, in case of all such Bids submitted by Bidder 'A' shall be forfeited.

14.2 If another Bidder (say 'B') has proposed Bidder 'A' as a sub-contractor then Bidder 'B''s Bid shall also be rejected. However, in case the Bidder 'B' has also proposed an alternative sub-contractor who is other than the Bidder 'A', then Bidder 'B''s Bid shall be evaluated with the proposed alternative sub-contractor only. Hence, every Bidder shall ensure in his own interest that his proposed sub-contractor is not submitting alternative/ multiple Bids.

Note: In case a list of sub-contractors/ sub-vendors is specified in the Enquiry document itself, which shall be common for all the Bidders, the provision at Clause 14.2 above shall not be applicable as long as only the sub-contractors/ sub-vendors are common in case of various Bidders.

14.3 If a Bidder submits his bid, qualifies and does not get the contract because of his being not the lowest, he will be prohibited from working as a sub-contractor for the contractor who is executing the contract.

15 SIGNING OF BID

15.1 In case of e-tendering, login and submission of bids by the bidder on the e-tendering portal is through requisite & valid digital signature certificate. e-Bid Signatory who is using his digital signature for uploading / signing the e-bid, shall also carry the Power of Attorney.

15.2 However, in case foreign bidder does not have digital signature issued by an Indian certifying authority, he can authorize his Indian representative to use the representative's digital signature to upload the bid on behalf of foreign bidder. In such a case, the authorization letter shall be submitted along with the bid.

15.3 All documents as submitted in the e-Procurement Portal using digital signature at any time during the Bidding process shall be deemed considered signed by the POA holder only, irrespective of POA holder's signature on all pages or not.

16 E-TENDERING

16.1 Methodology for e-tendering and **Procedure for obtaining Digital Signature by Foreign Vendors/Bidder** shall be as per attached **Appendix-V** to ITB. Bidders are requested to get acquainted with the E-Tendering Website and the formalities and load their Bid well within the time (extended time in case of extension of bid submission date) provided for bid submission to avoid last minute hassles.

16.2 Bidders in their own interest are requested to register on e-Tendering portal and upload/submit their bid well in time. Bidders should avoid the last hour rush to the website for **registration of**

User I.D. & Password, enabling of User I.D. and mapping of Digital Signature Serial Number, etc. since this exercise require activities from EIL & the Service Provider and needs time. In the event of failure in bidder's connectivity with EIL/Service Provider during the last few hours prior to bid submission time, bidder is likely to miss the deadline for bid submission. EIL/Service Provider shall not be held responsible for such failure to submit the Bid. Any due date extension request due to aforesaid reason shall also not be entertained.

16.3 Bidders are requested to obtain/seek clarifications, if any from EIL and/or EIL's Authorised Service Provider, whose contact information is provided in the Appendix-V to ITB.

16.4 EIL/Owner shall not be responsible for any failure of Bidder to upload the bid for reasons other than any problem in e-tendering website.

17 ENROLMENT OF BIDDER TO CPP PORTAL

17.1 Various links such as "Help for Contractor", "Information about DSC", "FAQ", "Resources Required", "Bidders Manual Kit" etc. are available on home page of **https://eprocure.gov.in/eprocure/app** facilitating Bidders to participate in the bidding process. Bidders 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.

17.2 EIL shall be issuing all enquiries through NIC Portal alone and bidders who do not register with NIC Portal may not be able to submit their bids. Therefore, it is in the interest of the bidders that they register on the NIC Portal at the earliest.

17.3 The bidder registration on NIC Portal is a very user friendly-process. However, in case of any doubt, the bidder may contact as per the details given in NIT.

18 PRICE BID

18.1 For execution of scope of work as per conditions stipulated in the bidding document the Bid price is to be filled in the formats given in Price Schedule/Schedule of Prices. Unless otherwise permitted in the Bidding Documents, the price bid shall be for the whole works.

18.2 The Total Lump sum Price shall be quoted in the FORM SP-0 of the Schedule of Prices/ Price Schedule (SOP).

18.3 The Lump Sum Price in FORM SP-0 means aggregate of Lump Sum prices for completing all activities as per Scope of Work defined in Technical and Commercial Section of Bidding Document and subsequent Amendment (Technical and Commercial).

The Lumpsum price in FORM SP-0 shall be deemed to be inclusive of all the taxes and duties, except "Goods and Services Tax (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). The GST as legally leviable & payable by the Contractor under the provisions of applicable GST law(s) / act(s) shall be reimbursed by Owner according to Contractor's paid GST bill /invoice submitted to Owner.

Prices, taxes, duties including GST on any transaction between Contractor and their sub-supplier/sub-contractor shall be included in the Total Lumpsum Price quoted by the Contractor.

18.3.1 Unless stated otherwise in the Bidding Document, the Contract shall be for the total works as described in Bidding Document, based on the Schedule of Prices submitted by the bidder and accepted by EIL/OWNER.

18.3.2 Bidder shall quote for all the items of Schedule of Prices after careful analysis of cost involved for the performance of the complete item considering all parts of the Bidding Document. In case any activity is not specifically covered in description of item under `Schedule of Prices' but is required to complete the work as per Scope of Work, Scope of Supply, Specifications, Standards, Drawings, General Terms & Conditions of Contract, Special Condition of Contract or any other part of Bidding

Document, the rates/ prices quoted shall be deemed to be inclusive of cost incurred for such activity.

18.3.3 Rates/ prices quoted by the bidder, shall remain firm, fixed and valid till the completion of the Works and will not be subject to variation on any account except as otherwise specifically provided in the Bidding Documents.

18.3.4 All duties, taxes, and other levies payable shall be as per Special Conditions of Contract.

19 CURRENCIES OF BID AND PAYMENT

19.1 In Case of Domestic Competitive Bidding, bidder shall submit bid in Indian Rupees only and accordingly payment shall also be made in Indian Rupees only.

19.2 In case of Global Competitive Bidding, Bidders are allowed to quote in currencies as under:-

i. Indian Rupees (INR) and /or

ii. Foreign Bidders are allowed to quote price (and get paid) in RBI's notified basket of foreign currencies – US Dollar or Euro or Pound Sterling or Yen etc., in addition to the Indian Rupees -except for expenditure incurred in India (including agency commission if any) which should be stated in Indian Rupees.

iii. In case of any Indian supply or services in foreign bids, the same shall be quoted only in INR, clearly indicating in the offer the name and contact details of the Indian party

Bid Currencies once quoted shall not be allowed to change.

19.2.1.1 Payment to the Foreign bidder shall be in their currency of quote as specified above for Foreign component. If the Foreign bidder quotes in Indian Rupees for Indian component of works, the payment against such component shall be released in Indian Rupees only on submission of Indian Bank account details along with PAN, Permanent Establishment certificate etc., as required/applicable as per existing law.

19.2.1 Indian bidders may quote the prices for materials and services to be imported into India in Foreign Currency. Such bidders quoting in foreign currency shall separately indicate in a list the materials and services to be imported into India and the Foreign Currency price payable for such materials and services. However, for evaluation purposes, the bid price shall be converted to Indian Rupees by converting the Foreign Currency into Indian Rupees at the Bill selling rate of State Bank of India, New Delhi prevailing on the day of opening of the price bid.

19.2.2 NRL shall not compensate for any foreign exchange rate fluctuation.

20 INVOLVEMENT OF INDIAN AGENTS (IN CASE OF FOREIGN BIDDER)

OWNER shall deal directly with the CONTRACTOR abroad without involving with Contractor's Agent. Each bidder shall be required, along with the bid, to give a declaration in Bidding **FROM-Y** that no Agent is involved in the transaction.

21 BID VALIDITY

21.1 The Bid shall remain valid for the period of **180 days** from the final bid due date. Owner/EIL shall reject a Bid valid for a shorter period being non-responsive.

21.2 Bidders shall not be entitled during the above period, without the consent of EIL/NRL in writing, to revoke or cancel their Bid or to vary the Bid given or any term thereof or to submit new deviation. In case of Bidders revoking/withdrawing or cancelling their Bid or varying any terms in regard thereof without the consent of NRL/EIL in writing, their Bid shall be rejected and Bid security, if any, shall be forfeited. Such Bidder may also be put on Holiday/ Suspension/ banning list, as applicable of EIL/NRL as per their existing policy in this regard.

NRL/EIL, at its sole discretion, may give an opportunity to the Bidder to withdraw the deviation(s) unconditionally.

21.3 In exceptional circumstances, prior to expiry of the original Bid validity period, the Owner/EIL may request that the Bidder extend the period of validity for a specified additional period. The requests and the responses thereto shall be made in writing (by -post/e-mail). The Bidder shall respond in

writing. If a Bid security is applicable, the same shall also be suitably extended as per **clause 19 (titled "Earnest Money Deposit / Bid Security)**.

21.4 Any Bidder who does not extend the Bid Validity, such Bids shall be rejected & not considered for further evaluation. However, EMD/Bid Security of such Bidders shall not be forfeited.

22 EARNEST MONEY DEPOSIT/ BID SECURITY:

22.1 **Submission of Bid Security:**

a) Bidder are required to submit the EMD **online through HDFC bank portal** link https://nrl.procure247.com (**Appendix – IV (A) to ITB**) **or in the form of Bank Guarantee (BG)** in favour of "Numaligarh Refinery Ltd." (Refer EMD BG format in **Appendix – IV to ITB**) issued by Scheduled Commercial *(i.e. Indian or Foreign Banks included in the Second Schedule of Reserve Bank of India Act, 1934 excluding Co-operative banks or Regional Rural Banks)* **or in the form of Insurance Surety Bond (ISB)** from a Surety Insurer as per guidelines issued by IRDAI as per format attached in **Appendix-IV (B) to ITB**).

b) The currency of EMD for Indian Bidders shall be in INR.

c) **Validity of Bid Security/EMD:** Regarding EMD BG/ISB Validity along with claim period, the following condition shall supersede any other related conditions mentioned in the Tender document:

Bank Guarantee for EMD: The Bank Guarantee shall be valid for at least 06 (Six) months from the final bid submission date. The bid security in the form of BG is normally to remain valid for a period of 60 (sixty) days beyond the final bid validity period. In case, Contract Performance Security (CPS) is applicable, the successful bidder has to keep his Bid Security, if submitted in the form of a BG, valid till CPS is submitted. The contractor shall be required to suitably extend the period of Bank Guarantee.

Insurance Surety Bond for EMD: The Insurance Surety Bond shall be valid for at least 08(Eight) months from the final bid submission date. The bid security in the form of ISB is normally to remain valid for a period of 03 (three) months beyond the final bid validity period. In case, Contract Performance Security (CPS) is applicable, the successful bidder has to keep his Bid Security, if submitted in the form of a ISB, valid till CPS is submitted. The contractor shall be required to suitably extend the period of Insurance Surety Bond.

d) Bidders must upload either the online EMD payment receipt or a soft copy of the BG/ISB along with their Unpriced Bid on the CPP Portal. In case the EMD is submitted in the form of ISB/BG, the bidder shall, in addition to uploading the soft copy on the e-procurement portal, submit the original ISB/BG in a sealed envelope to the address of the Tender Inviting Authority [as provided in clause 11.2 (a) above] so as to receive within 07 (seven) calendar days from final bid due date, failing which bid shall not be considered for evaluation.

e) In case of non-submission of Bid Security / EMD as mentioned above, it should be considered as non- responsive and such Bids shall be rejected.

22.2 **Issuance and verification of BG through Structured Financial Messaging System (SFMS):**

Routing Bank Guarantees (BGs) through Structured Financial Messaging System (SFMS) platform for Bank Guarantee issuance and verification is mandatory w.e.f 1st January, 2021. Therefore, bidders are advised to switchover their banking following above platform for issuance of BGs. The

information / message (as per SFMS platform) shall be sent by the BG issuing Bank branch to NRL's Banker.

22.3 All Bank guarantee should be routed through SFMS platform. Relevant information are as follows:

1. **Beneficiary bank details:**

   Axis Bank Chhibber House, Ground Floor, G.S Road, Guwahati -781005

   IFSC: UTIB0000140

2. **Advising message to be sent to beneficiary bank:**

   (i) IFN 760 / IFN 760 COV for issuance of bank guarantee

   (ii) IFN 767 / IFN 767 COV for amendment of bank guarantee

Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.

The bidder shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

22.4 **Rejection of Bid Security:**

a) Bid submitted along with EMD of value less than the specified value or EMD in favour of beneficiary other than as specified in Enquiry document or EMD issuing bank is not as per Bidding document, Bid shall be rejected and shall not be considered for further evaluation.

22.5 **Exemption from submission of Bid Security:**

a) Start-up Bidders

Note: EMD exemption will be applicable for Start-ups bidders subject to submission of valid Start-Up Registration Certificate issued by DPIIT.

22.6 **Central Public Sector Undertakings/ Enterprises:**

There will be no waiver of EMD for Public Sector undertakings of Central or State governments.

MSE bidders are not exempted from submission of EMD, being work covered under this contract is "Works Contract".

22.7 **EMD/ Bid securities shall be returned as per following:**

(a) EMD of bidders whose price bids are not opened/ disqualified during techno-commercial bid evaluation (unsuccessful Bidder) shall be released immediately after approval of price bid opening. EMD of bidders qualified in the techno-commercial bid but unsuccessful for placement of Order/Contract shall be released after award of the contract to successful bidder.

(b) **To successful Bidder**: EMD/ Bid securities shall be refunded to the successful bidder on receipt of Contract Performance Security (CPS) as per tender provision.

(c) **Cancellation/Annulment of Enquiry:** In case NRL/EIL decides to cancel/ annul the Enquiry/ Bidding Document at any stage during the Bidding process but before the award of Work, EMD of the Bidders shall be returned at the earliest from the date of such decision.

22.8 **The Bid security shall be forfeited:**

a) if the information/documents submitted by the Bidder in the Bid is found to be false/forged at any stage of Bidding process, or if a Bidder submits multiple Bids/ alternative Bids, or

b) if a Bidder suo-moto alters/modifies/withdraws his Bid during the period of Bid Validity, or

c) if a Bidder does not accept the correction of arithmetical errors in Price as per **Clause 30 [titled : Arithmetic Corrections]**, or

d) The successful bidder is not ready to accept Purchase Order/Contract or giving any conditional acceptance of Purchase Order /Contract, or

e) The successful bidder fails to deposit the CPBG or to execute the order, or

f) Violates any other condition mentioned elsewhere in the Bidding Document which may lead to forfeiture of EMD, or

g) Impairs or derogates from the tender in any respect within the period of validity of the tender.

22.9 NRL shall not pay any interest, commission, bank charges on Bid Security furnished. Further, in case Bank Guarantee submitted is found to be fake, Bid of such Bidder shall be rejected and EIL/NRL may initiate action against the Bidder as deemed necessary as per EIL/NRL Policy.

23 POWER OF ATTORNEY

Bidder shall submit a **Power of Attorney (POA)** in the name of authorized signatory who is submitting the bid with his Digital Signature Certificate & signature, as mentioned below:

23.1 **COMPANY:** Bid shall be signed by a duly authorized person holding Power of Attorney for signing the Documents as per the proforma attached as per **Bidding Form** enclosed with the Bidding Document.

Alternatively, in case Bid signatory has General Power of Attorney or has the power as per their Board resolution, the same shall be submitted duly certified by Notary Public or CEO/CFO/Company Secretary (CS)/Member of Board of Directors.

In case, Bid is signed by CEO/CFO/CS/any member of board of Directors, no separate POA is required, provided the documentary evidence of their being CEO/CFO/CS/any member of board of Directors is reflected in the MOA/AOA/Financial Statements, else to be submitted separately in the Bid.

Bidder shall also submit the copy of Memorandum of Association (MOA) / Articles of Association (AOA) of the Company.

23.2 **PARTNERSHIP FIRM**: Bid shall be signed by all the partners of the Firm. Alternatively, the Bid shall be signed by any Partner holding Power of Attorney as specified in the Partnership Deed, OR Bid can be signed by an authorized person and shall submit a specific POA for the tender duly signed by all the Partners, as per the proforma attached as per **Bidding Form** enclosed with the Bidding Document, duly signed by all the Partners.

Bidder shall submit the copy of **Partnership Deed.**

23.3 **Limited Liability Partnership (LLP) Entity**: Bid shall be signed by the person holding Power of Attorney as per the registered LLP Agreement for the Firm, OR, has the power as per their Board resolution, OR, as per the proforma attached as per **Bidding Form** enclosed with the Bidding Document, duly signed by all the LLP Partners.

Bidder shall submit **(i)** a copy of **LLP Agreement**, and **(ii)** a copy of **Certificate of Incorporation**.

23.4 **One Person Company**: Bid shall be signed by the Person Owning the Company. Bidder shall also submit a copy of (i) PAN card, (ii) Bank Mandate Form, duly certified by the Bidder's Banker, and (iii) a copy of Certificate of Incorporation /registration.

23.5 **Proprietorship**: Proprietor shall sign the Bid.

Bidder shall als0.

o submit a copy of (i) PAN card and (ii) Bank Mandate Form, duly certified by the Bidder's Banker.

23.6 **Unincorporated Joint Venture/Consortium**: Both members of the consortium shall authorize the Lead Member of the consortium with the authority to bind the consortium, through a Power of Attorney given jointly by all the members to the Lead Member.

Both Leader as well as Member of the Consortium/JV shall also submit a separate POA from their respective Company/ Firm in the name of the signatory signing the Consortium/JV Agreement. Depending on the formation/ registration/ constitution (Company/ Firm, etc.) of the Leader/Member of the Consortium/JV, POA shall be submitted in a manner, as applicable, as per the above clauses.

23.7 **For Indian Bidder**, the proforma attached in the Proposal Forms shall be on non-judicial **stamp paper** of minimum value of **INR 100/-** and duly Notarized by a Notary Public in India.

For Foreign Bidders, POA shall be:

- on the Stamp Paper of appropriate value or engraving/embossing, in lieu of non-judicial stamp paper, as per applicable laws in Bidder's Country; or
- as per any other system prevailing in the Bidder's country for the purpose of issuing POA.

D SUBMISSION AND OPENING OF BIDS

24 SUBMISSION OF BIDS

No Physical Bids / Offers shall be permitted. Bidders are required to upload the Bid/ offer along with all supporting documents including Priced Bid on e-Tendering Portal https://eprocure.gov.in/eprocure/app only and the offers/Bids submitted online through this Portal shall only be considered for evaluation and ordering. Refer **Appendix-V to ITB** for INSTRUCTIONS TO BIDDERS FOR E-TENDERING.

25 DEADLINE FOR SUBMISSION OF BID

25.1 The E-Bids must be submitted on or before the last date and time mentioned in the Bidding Document.

25.2 The Owner / EIL may, in exceptional circumstances and at its discretion, on giving reasonable notice to all prospective Bidders, extend the deadline for the submission of e-Bids in which case all rights and obligations of the Owner /EIL and Bidders, previously subject to the original deadline will thereafter be subject to deadline as extended.

25.3 Accordingly, Bid Due Date (BDD) means the final due date and time of submission (deadline of submission) of Bid including the extensions (if any) thereof, unless stated otherwise.

26 LATE BIDS / BID SUBMISSION AT OTHER PLACE

26.1 No Bid will be received after the deadline of submission of Bid.

26.2 Bids being submitted to address other than one specifically stipulated in the Bid documents will not be considered for opening / evaluation / award.

27 MODIFICATION AND WITHDRAWAL OF BIDS

27.1 The Bidder may modify or withdraw its Bid after the Bid's submission but prior to the due date prescribed for submission of Bids.

27.2 No Bid shall be modified subsequent to the deadline for submission of Bids.

27.3 No Bid shall be allowed to be withdrawn in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity.

27.4 **There are two specific features in CPP Portal viz, "Withdraw" and "Re-Submission". Bidders should not use the feature "withdraw" unless they have decided to withdraw their bids for non-participation in the bidding process. It is to be noted that once "withdraw" feature is used they will not be allowed to re-submit their bid against this Bidding Document. In case a Bidder desires to change/resubmit his bid for any reason before bid due date, Bidder shall use "Re-Submission" feature**.

28 UNPRICED BID OPENING

28.1 The un-priced Bids shall be opened online through E-Tendering portal, at the specified date and time given in the Bidding Document or extended otherwise.

28.2 Bidders can view the bid opening details online at their respective places, there will be no separate public opening and the bidders shall not be called for attending the bid opening.

28.3 Only name(s) of the Bidders who has/have submitted the Bid(s) shall be visible to the Bidders.

E EVALUATION AND COMPARISON OF BIDS

29 CLARIFICATION REQUESTS FROM BIDDERS

29.1 A bidder may seek clarification regarding the Bidding Document provisions, bidding process and / or rejection of his bid. NRL/EIL may respond in writing to any request for any information or clarification or query on the bidding conditions, bidding process and/or rejection of its bid -directly to the concerned bidder or by publishing in the e-tendering portal - depending on the nature & content of the information/clarification sought. However, information relating to the examination, clarification, evaluation and comparison of bids, and recommendations for the award of a contract, shall not be disclosed to bidders or any other person not officially concerned with such a process until the award to the successful bidder has been announced.

Bidder shall examine the bidding document thoroughly in all respect and if any conflict, discrepancy, ambiguity, error or omission is observed, bidder may request information/ clarification of the bidding document in writing so as to reach office of NRL not later than 07 days prior to the last date for submission of bids.

29.2 Right of Bidder to question rejection at Techno-commercial Stage:

Please refer Clause no. 3.13(A) of GCC.

30 CONTACTING THE OWNER / OWNER REPRESENTATIVE

Please refer Clause no. 3.13(B) of GCC.

31 EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS

31.1 The Owner/EIL will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the Bids are generally in order.

31.2 Prior to the detailed evaluation, the Owner/EIL will determine whether each Bid is of acceptable quality, is generally complete and is responsive to the RFQ/Bidding Documents.

31.3 A substantially responsive Bid is one which conforms to all the terms & conditions, specifications etc. of the Tender Document without any material deviation or reservation or omission. For this purpose Purchaser defines the foregoing terms as below:-

a) “Deviation” is departure from the requirement specified in the Bidding Documents.
b) “Reservation” is the setting of limiting condition(s) or withholding from complete acceptance of the requirement in the Bidding Document.
c) “Omission" is the failure to submit part or all of the information or documentation required in the Tender Document.
d) A material deviation, reservation or omission is one that, If accepted would,
   i) Affect in any substantial way the scope, quality or performance of the job as specified in the Tender Document.
   ii) Limit, in any substantial way, inconsistent with the Tender Document, the Owner/EIL’s rights or the Bidder’s obligation under the proposed Contract.
   iii) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids

31.4 Bidder shall not be allowed to submit any Price Implication or Revised Price after submission of Bid. In case Exceptions and Deviations submitted by Bidder along with Bid, then in such a case the Bidders would be required to withdraw such Exceptions/Deviations in favour of stipulations of the RFQ/ Bidding document and Bidders would not be eligible for submission of Price Implication/Revised Price, failing which such Bid(s) shall be considered as nonresponsive and rejected.

31.5 Bidder should submit all the details asked for, with their bid. However, NRL / EIL may give opportunity to the bidders to submit missing details or clarifications within the stipulated time. In case these are not submitted within stipulated time, offer of the bidder will be evaluated based on available details/ information. The same shall be considered, if found adequate or else shall be rejected.

31.6 The Owner/EIL determination of a Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence. If a Bid is not responsive, it will be liable for rejection by the Owner/EIL.

32 CLARIFICATION OF BIDS

32.1 Bidders should ensure that the Bid submitted is substantially responsive Bid in the first instance itself. It is expected that bidders will submit bids based on the terms and conditions and specifications contained in the Bidding Document and will not stipulate any deviations/clarification etc. Evaluation may be completed based on the content of the Bid itself without seeking any subsequent additional information which may result in rejection of Bid. However, EIL / OWNER may, at its discretion, may request bidder to submit the necessary information or documentation, within a reasonable period of time, to withdraw material deviation, reservation, or rectify omission in the bid related to documentation requirements. Requesting information or documentation on such account shall not be related to any aspect of the price of the Bid. EIL's request for clarification and the response shall be in writing.

32.2 No change, including any voluntary increase or decrease, in the prices or substance of the bid shall be sought, offered, or permitted. Bidder shall not be allowed to submit any price implication or revised price after submission of Bid unless the same is called for by EIL in writing.

32.3 Any clarification submitted by a bidder that is not in response to a request by EIL shall not be considered. Failure of the bidder to comply with the request may result in the rejection of its Bid.

32.4 If a bidder does not provide clarifications of its bid by the date and time set in EIL's request for clarification, Owner/EIL reserves the right to evaluate the bid with available information which may result in rejection of their bid

32.5 If desired by the OWNER, the Bidder shall be prepared to give presentation on salient features of his bid including but not limited to Project Execution Methodology.

33 BID EVALUATION CRITERIA

33.1 Zero deviation bid:

Bidders to note that Bidding Document is issued on Zero deviation basis. Bids are to be submitted on Zero deviation basis and in strict compliance with the terms & conditions, scope, specifications and other stipulations contained in the enquiry without any deviations.

In view of this Bidder shall ensure submission of complete bid without any deviation as per requirement of Bidding Document in first instance itself.

33.2 PRICE CHANGES / IMPLICATIONS AFTER OPENING OF TECHNICAL BIDS

Any Price implication after final Bid Due Date is not permitted. In case of any suo moto change in price, following shall apply:

Stage	Price Increase	Price Decrease
After opening of unpriced bid	Not Acceptable, Bid shall be rejected without offering any opportunity to the bidder to withdraw the same, Action regarding Holiday Listing may be taken. EMD shall be forfeited.	In case of suo moto price decrease: 1. Tender evaluation shall be done without considering suo moto decrease. 2. Ordering shall be done considering suo moto decrease.

34 PRICE BID OPENING

35.1 The Owner/EIL shall inform the time and date for price Bid opening to all such Bidders who qualify & are accepted pursuant to Bid evaluation.

35.2 The Owner will open price Bids online. The Bidders who qualify & are accepted pursuant to Bid evaluation shall be able to view online the prices of all other Bidders who qualify & are accepted pursuant to Bid evaluation at their respective windows, after price Bid opening by Owner.

35.3 If after the opening of price part, it is observed that the bidder has not indicated the prices in the price bid, the bid of such bidder shall be considered as non-responsive and shall be rejected.

35 ARITHMETIC CORRECTIONS

36.1 Bidders shall accept correction of arithmetical errors and shall be binding on him. Failure to accept the correction shall result in the rejection of the Bid and Bid Security, if any, shall be forfeited.

36.2 When there is a discrepancy between the prices in figures and words, the price in words shall prevail.

36.3 In case of any contradiction between lumpsum price mentioned in SP-0, and the break-up of lumpsum price mentioned in SP-1, SP-2, SP-3, SP-4, SP-5, SP-6 **the Prices indicated in FORM SP-0 shall be Final & Binding and shall be considered as "Total Lumpsum Contract Price" for complete Scope of Work and Break-up of Prices shall be reworked to match with Prices as per Form SP-0**.

36.4 In case of contradiction between Break up of Prices as per Form SP-1, SP-2 and SP-3 and further Breakup of prices as per Form SP-4, SP-5 and SP-6, following order of precedence shall apply :

(i) SP-1, SP-2, SP-3.

(ii) SP-4, SP-5, SP-6.

36.5 Such discrepancy/contradiction shall be conveyed to the bidder for responding within cut-off date and if the bidder does not agree to Owner/EIL's observation, the bid shall be liable for rejection.

36 EVALUATION & COMPARISON OF BIDS

37.1 The OWNER will determine for each bid the evaluated Bid Price by considering the following items:

a) Total Lumpsum Price indicated in **FORM SP-0**

b) 100% of GST amount calculated as per FORM SP-8.

c) Conditional discount if offered by bidder shall not be considered for evaluation.

d) Any other loading if specified elsewhere in the Bidding Document.

e) Any other Purchase Preference as specified elsewhere in the Bidding Document.

37 OWNER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY BID

The Owner/EIL reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to award of the order without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders of the ground for Owner/EIL's action.

38 CARTEL FORMATION

In case any Bidder is found to be involved in cartel formation, his Bid will not be considered for evaluation /placement of order. Such Bidder will also be debarred from bidding in future.

39 PRICE CHANGES / IMPLICATIONS AFTER OPENING OF PRICE BIDS

40.1 **After opening of price bid**, if the bidder increases the price, though within the validity period and even though the offer remains lowest the bid shall be rejected. Bid Security of such Bidder shall be forfeited and Bidder shall be debarred for future enquiries for such action of bidders as a penal measure.

40.2 Suo-moto Price reduction after price bid opening are to be ignored for evaluation. However, if the bidder happens to be the lowest based on original price bids, the benefit of such reduction may be availed of while placing order.

F AWARD OF CONTRACT

40 NEGOTIATION

41.1 Negotiations will not be conducted with the bidder as a matter of routine. However, NRL reserves the right to conduct negotiations.

41.2 Bidder is expected to quote rates for each item/Lumpsum Price after careful analysis of costs involved for the performance of the complete item considering all specifications and conditions of contract. This will avoid loss of profit or gain in case of curtailment or change of specification for any item. Further, NRL shall not analyze the workability of the prices quoted by the bidder. The bidder shall be solely liable for any and all loses, whether direct or consequential, in this regard, and NRL disclaims any and all liabilities in this regard.

Prior to award, NRL/EIL may require confirmation for the following:

(i) they have read the tender terms and conditions and understood the scope of work completely;

(ii) they shall execute the job at their offered rate without any deviation to the tendered specification; and

(iii) they shall be able to complete the job within the scheduled time.

Failure to provide unconditional confirmation to any and/or all of the above points shall be treated as withdrawal of offer and necessary action under NRLs Holiday Listing Policy shall be initiated.

41 AWARD OF WORK

The Owner will award the order to the successful Bidder whose Bid has been determined to be lowest.

42 NOTIFICATION OF AWARD

43.1 Applicable as per Clause no. 3.24 of GCC.

43.2 Bidder, whose bid is accepted by Owner shall be issued Letter of Acceptance (LOA) prior to expiry of bid validity.

43.3 Bidder will be required to confirm receipt of the same by returning "Copy of the LOA" duly signed and stamped by the Bidder as a token of acknowledgement to Owner and EIL.

43.4 Until a formal contract is prepared and executed, the notification of award along with this Bidding Document together with the annexed documents, modifications, deletions agreed upon by EIL/NRL shall constitute a binding contract between the successful bidder and NRL.

43 CONTRACT DOCUMENTS

44.1 CONTRACT documents for agreement shall be prepared after the Notification of Award.

44.2 Until a formal contract is prepared and executed, the notification of award along with this Bidding Document together with the annexed documents, modifications, deletions agreed upon shall constitute a binding contract between the successful bidder and the OWNER.

44.3 The contract document thus shall consist of the following:

i) Original Bidding Documents issued with its enclosures including General Conditions of Contract, Special Conditions of Contract, drawings etc.

ii) Amendment/ Corrigendum to Bidding Document issued, if any.

iii) Letter of Acceptance

iv) The Detailed Letter of Acceptance cum Contract Agreement

v) Price-schedule.

vi) Integrity Pact

vii) Any Deviations or stipulations made and accepted by the OWNER

viii) Consortium Agreement, in case of successful bidder is a consortium

ix) Engineering Sub-contractor agreement (if applicable)

44 SIGNING AND STAMPING OF CONTRACT

A formal contract agreement will be executed between Contractor and NRL. Please refer GCC Clause 3.19.

Detailed letter of acceptance cum contract agreement will be issued after submission of Contract Performance Security or First RA bill/Claim for the Milestone payment, whichever is earlier.

Until the final Contract Documents are prepared and executed, this Bidding Document together with the annexed documents, modifications, deletions agreed upon by NRL and bidder's acceptance thereof shall constitute a binding contract between the Successful Bidder and NRL based on terms contained in the aforesaid documents and the finally.

45 WAIVER OR TRANSFER OF THE AGREEMENT

The successful Bidder shall not waive the Agreement or transfer it to third parties, whether in part or in whole, nor waive any interest that is included in the Agreement without the prior written permission of the Owner.

46 SAP RELATED ACTIVITIES

Contractor shall provide the assistance to respective EPCM Consultant's SAP Team for updation in NRL SAP system for the execution of work, as & when required by NRL/ Respective EPCM Consultant.

G OTHER

47 PURCHASE PREFERENCE TO MICRO OR SMALL ENTERPRISES

For applicability of purchase preference to Micro or Small Enterprises - Refer BDS. For details refer Appendix –II TO ITB.

48 PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) (PPP-MII) ORDER, 2017:

For applicability of Preference to Make In India (PPP-MII) Order, 2017- Refer BDS. For details refer Annexure A– XIV to SCC.

49 POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT (DMI&SP),

Domestically Manufactured Iron & Steel Products in Government Procurement (DMI&SP) shall be as per Annexure A – XVI to SCC.

50 PROCUREMENT FROM A BIDDER FROM A COUNTRY SHARING LAND BORDER WITH INDIA

Applicable as per **Appendix -III to** ITB

51 PROVISIONS FOR STARTPUS (AS DEFINED IN GAZETTE NOTIFICATION NO. D.L33004/99 DATED 18.02.2016 AND 23.05.2017 OF MINISTRY OF COMMERCE AND INDUSTRY AND AS AMENDED FROM TIME TO TIME)

There shall be no relaxation in the Technical and/or Financial Bidder Qualification Criteria for the Start-ups. However, EMD exemption shall be granted.

52 REVERSE AUCTION

Reverse Auction is not applicable.

INTEGRITY PACT

(Updated format w.e.f. 20.08.2025)

NOTE TO BIDDER:

a. Proforma of Integrity Pact(enclosed) shall be returned by the Bidder(s) along with the bid documents (technical bid in case of 2 part bids), duly signed by the same Signatory who is authorised to sign the bid documents. All the pages of the Integrity Pact shall be duly signed. Bidder's failure to return the IP duly signed shall result in the bid not being considered for further evaluation.

b. If the Bidder has been disqualified from the tender process prior to the award of the contract in accordance with the provisions of the Integrity Pact, NRL shall be entitled to demand and recover from Bidder Liquidated Damages amount by forfeiting the EMD / Bid Security as per provisions of the Integrity Pact.

c. If the contract has been terminated according to the provisions of the Integrity Pact, or if NRL is entitled to terminate the contract according to the provisions of the Integrity Pact, NRL shall be entitled to demand and recover from Contractor / Supplier Liquidated Damages amount by forfeiting the Security Deposit / Performance Bank Guarantee as per provisions of the Integrity Pact.

d. Bidders may raise disputes / complaints, if any, with the Independent External Monitor(s) through telephone and email followed by written document or telephone and written document. However date of receipt of complaint shall be the date of receipt of signed written document only.

Name / address / e-mail ID / contact number(s) of Independent External Monitors appointed to oversee implementation of Integrity Pact Programme at NRL are mentioned below.

Name & Address of Independent External Monitors for Monitoring / Implementation of Integrity Pact

1. Shri Pidatala Sridhar, IRS (Retd.)
Flat 2C, Kanaka Lakshmi Apartments,
3-6-467 &468, Street number 6,
Himayat Nagar, Hyderabad, Pin-500029
Email: sridharpidatala@gmail.com

2. Shri Kishore Kumar Sansi, Ex- MD & CEO, Vijaya Bank
B-301, Badhwar Apartments,
Sector -6, Plot No. 3, Dwarka,
West Delhi, New Delhi -110075
Email: kishoresansi1@gmail.com

दिगंत दास / DIGANTA DAS
मुख्य महाप्रबंधक (वाणिज्यिक)
Chief General Manager (Commercial)
नुमालीगढ़ रिफाइनरी लिमिटेड / Numaligarh Refinery Limited
गोलाघाट, असम-७८५६९९ / Golaghat, Assam-785699

INTEGRITY PACT

Between

Numaligarh Refinery Limited (NRL) 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 Organisation "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an 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 prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, 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

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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. 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 cartelisation in the bidding process.

c) The Bidder / Contractor/Supplier will not commit any offence under the relevant Anti-Corruption Laws of India; 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, either while presenting the bid or during pre-contract negotiations shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

e) If the BIDDER or their personnel have financial or business relationships with any official of procuring entity who are directly related to tender or execution process of the contract or such official has any personal interest in the bidding firm, the same shall be disclosed by the BIDDER at the time of filing of tender or during pre-contract negotiations.

f) The Bidder / Contractor/ Supplier who have signed the Integrity Pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision on the matter.

(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.

(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.

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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 with any other Company in any country conforming to the TI 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.

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

(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. 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.

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(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.

(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 Anti-Corruption Laws of India, 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.

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. Guwahati. 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 joint venture, a consortium or a partnership firm, this agreement must be signed by all partners / members of the concern. In case of sub-contracting, the Principal contractor shall take responsibility of the adoption of IP by the sub-contractor. It is to be ensured that all sub-contractors also sign the IP. In case of sub-contractors, the IP will be a tri-partite arrangement to be signed by the Organization, the contractor, and the sub-contractor.

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(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.

.....
For the Principal

.....
For the Bidder/Contractor/ Supplier

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Place .....

Witness 1 : .....
(Signature/Name/Address)

Date .....

Witness 2 : .....
(Signature/Name/Address)

Information to bidders on NRL's Policy for Micro and Small Enterprises (MSEs) & Start-Ups

Job Name :

Tender No. :

SPECIAL CONDITIONS FOR MICRO AND SMALL ENTERPRISES (MSEs) BIDDERS :

With reference the Public Procurement Policy for Micro and Small Enterprises (MSEs) Order 2012 notified by the Government under the Micro, Small and Medium Enterprise Development Act, 2006 and subsequent amendments through following notifications:

- Notification S.O. 5670(E), dtd. 9th November, 2018
- Ministry of MSME letter D.O. No. 21(8)/2018-MA dated 13th November, 2018
- MoP&NG letter ref. No. J-25011/35/2016-Gen dated 15th November, 2018
- Gazette Notification no. 2119(E) dated 26.06.2020
- FAQs issued by Development Commissioner (MSME) OM F.No. 1(3)/2018-MA, Part-III dated 25th March, 2022
- Notification S.O. 4926(E) dated 18.10.2022 issued by Ministry of MSME
- DoE OM No. F 1/4/2021-PPD dated 18.05.2023 on concurrent application of PPP-MSE (order 2012) and PPP-MII (order 2017)
- MSME D.O. No. P-11/3/2023-Policy-DCMSME) dtd. 28.3.2025 (Gazette notification S.O. 1364(E) dtd. 21.03.2025

Micro and Small Enterprises (MSEs) shall be entitled for benefits, subject to terms and conditions as under:

A. Qualifying Criteria for MSE Bidder:

i) MSE bidder has to mandatorily submit a copy of Udyam Registration Certificate (https://udyamregistration.gov.in).

ii) If the bidder fails to submit Udyam Registration Certificate in the original offer, the bidder may not be considered for evaluation as MSE.

iii) The Udyam Registration Certificate shall be valid. The certificate may be verified online during the bid evaluation and particulars submitted must be found to be valid in the Udyam website.

B. Additional Qualifying Criteria for SC/ST MSE Bidder:

In order for MSE owned by SC/ST Entrepreneurs to qualify for benefits available under Public Procurement Policy for MSEs (order 2012) to SC/ST Entrepreneurs, the "Social Category" in Udyam Registration Certificate should state "SC" or "ST".

Bidder must include the relevant page of Udyam Registration Certificate wherein the social category of the entrepreneur is mentioned.

C. Additional Qualifying Criteria for MSE Bidders owned by Women Entrepreneurs:

Micro & Small Enterprises shall be considered as owned by Women Entrepreneurs as per the below definition:

- In case of proprietary MSE, proprietor should be Women.
- In case of partnership MSE, the Women partner(s) should be holding at least 51% shares in the unit.
- In case of Limited companies, at least 51% share should be held by Women shareholder(s).

In order for MSE owned by Women Entrepreneurs to qualify for benefits available under Public Procurement Policy for MSEs (order 2012) to Women Entrepreneurs, the MSE shall additionally submit notarized copy of the following:

- In case of a proprietorship firm, the name and address of proprietor, and certified copy of Bank Account Details or Cancelled Cheque.
- In case bidder is a partnership firm, certified copy of the partnership deed.
- In case of company (whether private or public), certified copy of the `Certificate of Incorporation' together with certified copy of Memorandum/Articles of Association
- Self-certification by the women owner declaring herself as women owner of the MSE

The above documents shall not be required to qualify for aforementioned benefits when the Udyam registration certificate submitted by the bidder clearly mentions the "Gender" of the MSE and can also be verified online without restriction.

D. Benefits Under The Public Procurement Policy for Micro and Small Enterprises (MSEs) Order 2012

1. **Issue of Tender Sets Free of Cost**
   All Tenders shall be provided free of cost and tender documents are downloadable from the Central Public Procurement Portal (CPPP) **http://eprocure.gov.in/eprocure/app** or GeM portal or can be obtained from the Office of General Manager (Commercial). NITs are also published in NRL Website **www.nrl.co.in**

2. **Exemption from payment of EMD (Earnest Money Deposit)**
   MSE units meeting the qualifying criteria (point A above) shall be exempted from paying EMD, if EMD is applicable against the tender.

3. **Price preference for MSE Bidder:**

i) In tender, participating Micro and Small Enterprises quoting price within price band of L1+15% (evaluated price) shall also be allowed to supply a portion of requirement by bringing down the price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be allowed to supply up to 25 percent of total tendered value. [*Refer point F(i) for applicability*]

Matching of L1 price shall be offered to MSEs in the sequence of their ranking (i.e., L2, L3, L4 and so on).

In case of more than one such MSE within the L1+15% band, the supply shall be shared proportionately (to tendered quantity) provided such MSE bidders matches the L1 price.

ii) In case of tender item is non-splitable or non-dividable, etc. MSE quoting price within price band L1+15% may be awarded for full/complete supply of total tendered value to MSE, considering spirit of policy for enhancing the Government procurement from MSE, provided they agree to bring down their price to L1 price.

iii) NRL reserves the right to allow micro and small enterprises as well as MSEs owned by SC/ST entrepreneur and MSEs owned by Women, purchase preference as admissible under the prevailing procurement policy for MSEs.

iv) **For Supply of Goods only:**

- The quantity against the tender may be split to enable ordering of 25% of tender quantity to MSE bidder(s) within the price range of L1 bidder's price + 15% subject to their matching L1 bidder's evaluated price. [*Refer point F(i) for applicability*]

- In case where tender quantity can be split and MSE vendor is already getting order for more than 25% of the tender value by being L1 or through matching L1 price, no additional purchase preference is required to be given in that tender. In such cases, the sequence of matching L1 bidder's price shall start from the splitable item with highest amount onwards. Once 25% of the tender value is achieved for MSE vendor(s), no additional purchase preference is required to be given in that tender.

- The quoted prices by bidders against various items of tender shall remain valid in case of splitting of quantities to MSE bidder.

- Out of this 25% allocation for MSEs, 4% shall be to MSEs owned by SC/ ST entrepreneurs. However, in event of failure of MSEs owned by SC/ ST entrepreneurs to participate in the bidding process or meet the tender requirements and L1 price, 4% will be met from other MSEs.

- Additionally, out of above 25% allocation to MSEs, 3% shall be to MSEs owned by Women. However, in event of failure of MSEs owned by Women to participate in the bidding process or meet the tender requirements and L1 price, 3% will be met from other MSEs.

- While granting purchase preference as above, procurement of goods may include certain small work, or some services, which are incidental or consequential to supply of such goods such as transportation, insurance, installation, commissioning, training & maintenance.

Clarification:

- *In case where quantity against a line item cannot be split (i.e., 25% to MSEs) or items with single quantity or in grouped item, the complete line item/ group shall be awarded on MSE bidder within the price range of L1 bidder's evaluated price + 15% subject to their matching L1 bidder's price.*

- *In case, quantity(ies) against an item/ group cannot be split among MSEs, first opportunity shall be given to*
  - *MSEs owned by Women*
  - *then to MSEs owned by SC/ ST entrepreneurs, and*
  - *lastly to other MSEs, within the price range of L1 non-MSE bidder's evaluated price + 15%.*
- *In cases where MSE bidder in order of preference indicated above refuses to accept the L1 price, opportunity shall be provided to the other bidders in above order of preference and so on.*

v) **For Services only:**

- *In case the tendered scope cannot be split, the complete scope of Services shall be awarded on MSE bidder within the price range of L1 bidder's evaluated price + 15%, subject to their matching L1 bidder's price.*

- *In case, besides general MSEs, MSEs owned by SC/ ST and/ or MSEs owned by Women are within the price range of L1 bidder's evaluated price + 15%, first opportunity shall be given to*
  - *MSEs owned by Women*
  - *then to MSEs owned by SC/ ST entrepreneurs, and*
  - *lastly to other MSEs, within the price range of L1 non-MSE bidder's evaluated price + 15%.*

- *In cases where MSE bidder in order of preference indicated above refuses to accept the L1 price, opportunity shall be provided to the other bidders in above order of preference indicated above.*

vi) In case purchase preference is applicable, but negotiation is to be conducted with L1 bidder, negotiation shall be carried out. Price range within 15% shall be considered for MSE bidders based on the original prices of L1 bidder not on the negotiated prices. However, MSE bidder shall be offered to match the negotiated prices (even if, post negotiation, they are higher by more than 15% as compared to L1 bidder, provided they were within 15% of L1 bidder as per original quoted prices).

vii) **For Supply of Goods as well as Services:**
In case when the contract is awarded to an MSE bidders matching the L1 price refuses or fails to execute the supply/service after award, the quantities or unexecuted quantities may be subsequently offered to any of the other MSE bidders (not selected for award so far, and falling within the price band of L1+15%), in the sequence of their ranking (i.e., L3, L4 and so on) subject to their matching the evaluated L1 price. In absence of such MSE bidder, the quantity may be offered to the original L1 agency (non-MSE).
- In case of "refusal", subsequent award to next eligible agency shall be done within original or extended offer validity.
- In case of "failure", unexecuted quantities shall be offered to the next eligible agency within maximum one year from the original date of award.

Defaulting supplier/contractor shall be subject to penalties as per procedure.

E. Relaxation of Past Tract Record (PTR) for MSEs and Start ups

- The Pre-Qualification Criteria (PQC) related to prior turnover and prior experience of the bidder will be relaxed if the bidder is Micro or Small Enterprise as per latest definitions under MSME rules or Startups and meets the quality and technical specifications described in the tender, subject to submission of valid supporting documents by the bidder. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded with his bid for evaluation by the buyer.
- As per Department of Expenditure's OM No.F.20/2/2014-PPD dated 20.09.2016, relaxation regarding the prior turnover and prior experience is applicable only to all startups recognized by Department of Industry & Internal Trade (DPIIT), subject to meeting of quality and technical specifications.
  An entity shall be considered as a 'start-up'-
  a) Up to ten years from the date of its incorporation/ registration.
  b) If its turnover for any of the financial years has not exceeded Rs 100 (Rupees Hundred) crore
  c) It is working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation
  d) Provided further that in order to obtain benefits a Startup so identified under the above definition shall be required to be recognized as Startup by DPIIT.
- This waiver of prior turnover and prior experience will not be applicable for items related to public safety, health, critical security operation and equipment's etc.
- If PTR for MSEs is not completely waived off but proposed to relax the same up to certain extent compared to PQC set for other non MSE bidders, in such cases, prior experience may be partially relaxed, however, prior turnover will remain waived off.

F. Applicability of the Policy

i) For a participating bidder, MSE status shall be considered for purchase (price) preference in respect to procurement of goods and services only, if the vendor is registered as MSE. If the bidder wants to avail themselves of the Purchase

preference, the bidder must be the manufacturer / OEM of the offered product. Traders/Distributors/Sole Agents are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documents in this regard shall be uploaded along with the bid in respect of the offered product or service and buyer will decide eligibility for purchase preference based on documentary evidence submitted, while evaluating the bid.

ii) Policy meant for procurement of only goods produced and service rendered by MSEs. However, traders /resellers /distributors /authorized agents will not be considered for availing benefits under Public Procurement Policy 2012 for MSEs, except exemption from payment of EMD.

iii) Public Procurement Policy is applicable for supply of goods and services. Works contract is not covered under the PP Policy for MSME. Accordingly, the clause D 3 (Price preference for MSE bidder) and clause E (Relaxation of past track record (PTR) for MSEs and Startups) as mentioned above will not be extended to works contracts.

iv) The provisions for MSE bidders mentioned in this document shall be applicable for limited enquiries as well as NITs.

G. Providing MSE benefits to Medium category bidders

As per amendment made in Micro, Small and Medium Enterprises Development Act, 2006 vide S.O. 2119(E), dated the 26th June, 2020, and published in Govt. of India gazette notification dated 18th October 2022.
The notification states that - " (5) In case of an upward change in terms of investment in plant and machinery or equipment or turnover or both, and consequent re-classification, an enterprise shall continue to avail of all nontax benefits of the category (micro or small or medium) it was in before the re-classification, for a period of three years from the date of such upward change."

Further it was clarified vide Press Release published on 19th October 2022 in Govt of India website https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1869091 that, - " Non-tax benefits include benefits of various schemes of the Government, including Public Procurement Policy, Delayed Payments, etc."

Therefore, a Medium category bidder can claim for benefits provided to MSEs as per our tender conditions, provided the bidder is eligible by meeting the conditions stipulated in the gazette notification stated above.

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रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

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The Gazette of India

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भाग II—खण्ड 3—उप-खण्ड (ii)
RT II—Section —Sub-section (ii)

प्राधिकार से प्रकाशित
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सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय

अधिसूचना

नई दिल्ली अक्तूबर 2022

का.आ. 4926**(अ).**—केन्द्रीय सरकार सूक्ष्म लघु और मध्यम उद्यम विकास अधिनियम 2006 (2006 का 27) की धारा 7 की उप धारा (9) के साथ पठित उप धारा (1) और धारा 8 की उप धारा (3) के साथ पठित उप धारा (2) के द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए भारत सरकार के सूक्ष्म लघु और मध्यम उद्यम मंत्रालय की अधिसूचना संख्यांक का.आ. 2119(अ) तारीख 26 जून 2020 जो भारत के राजपत्र असाधारण भाग II खंड 3 उपखंड ( ) में प्रकाशित की गई थी का और निम्नलिखित संशोधन करती है अर्थात् :-

उक्त अधिसूचना में पैरा 8 के उप पैरा (5) के स्थान पर निम्नलिखित उप पैरा रखा जाएगा अर्थात् :-

"(5) संयंत्र और मशीनरी या उपस्कर में निवेश में उच्चतर परिवर्तन अथवा और टर्नओवर में उच्चतर परिवर्तन तथा परिणामस्वरूप पुन:वर्गीकरण की स्थिति में कोई उद्यम उस प्रवर्ग (सूक्ष्म या लघु या मध्यम) से ऐसे उच्चतर परिवर्तन की तारीख से तीन वर्ष की अवधि के लिए उन सभी गैर-कर लाभों का उपयोग करता रहेगा जैसा कि वह पुन:वर्गीकरण से पहले कर रहा था ।"

फा. सं. पी-05/1/2022-जीईएन

शैलेश कुमार सिंह अपर सचिव एवं
विकास आयुक्त (एमएसएमई)

टिप्पण : मूल अधिसूचना संख्यांक का.आ. 2119(अ) तारीख 26 जून 2020 द्वारा भारत के राजपत्र भाग II खंड 3 उपखंड ( ) में प्रकाशित की गई थी और तत्पश्चात् संख्यांक का.आ. 1055(अ) तारीख 5 मार्च 2021 का.आ. 2347(अ) तारीख 16 जून 2021 का.आ. 278(अ) तारीख 19 जनवरी 2022 और का.आ. 2134(अ) तारीख 6 मई 2022 द्वारा संशोधित की गई थी ।

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New Delhi, the 18th October, 2022

S. . 2 (E).—In exercise of the powers conferred by sub-section (1) read with sub-section (9) of section 7 and sub-section (2) read with sub-section (3) of section 8 of the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006), the Central Government hereby makes the following further amendments in the notification of the Government of India, Ministry of Micro, Small and Medium Enterprises number S.O. 2119(E), dated the 26th June, 2020, published in the Gazette of India, Extraordinary, Part-II,Section 3, Sub-section (ii), namely:-

In the said notification, for sub-paragraph (5) of paragraph 8, the following sub-paragraph shall be substituted, namely:-

"(5) In case of an upward change in terms of investment in plant and machinery or equipment or turnover or both, and consequent re-classification, an enterprise shall continue to avail of all non-tax benefits of the category (micro or small or medium) it was in before the re-classification, for a period of three years from the date of such upward change.".

[F. No. P-05/1/2022-GEN]

SHAILESH UMAR SINGH, Addl. Secy.
and Development Commissioner (MSME).

ote The principal notification was published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub-section (ii) *vide* number S.O. 2119 (E), dated the 26th June, 2020 and subsequently amended *vide* numbers S.O. 1055(E), dated the 5th March, 2021, S.O. 2347(E), dated the 16th June, 2021, S.O. 278(E), dated the 19thJanuary, 2022 and S.O. 2134(E), dated the 6th May, 2022.

Uploaded by Dte. of Printing at Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

SHARING OF LAND BORDER WITH INDIA

Following Restrictions under Rule 144(xi) of the General Financial Rules (GFRs), 2017- Department of Expenditure Order (Public Procurement No. 4) ref. No.F.7/10/2021-PPD (01) dated 23.02.2023 shall be applicable for this tender.

[The detailed guidelines are available on the website of DoE (https://doe.govin/)]

I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority as specified in the DoE Order referred above.

Further, any bidder (including an Indian bidder) who has a Specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.

[*The conditions relating to specified ToT (as shown in italics) should be incorporated only in the tenders which attract the restrictions due to specified ToT*]

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder from a country which shares a land border with India" for purpose of this Order means:-

a. An entity incorporated, established or registered in such a country; or
b. A subsidiary of an entity incorporated, established or registered in such a country; or
c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
d. An entity whose beneficial owner is situated in such a country; or
e. An Indian (or other) an agent of such an entity; or
f. A natural person who is a citizen of such a country; or
g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

IV. The beneficial owner for the purpose of (iii) above will be as under:

1. In case of accompany or limited liability partnership the beneficial owner is the natural person(s), who whether acting alone or together or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

   Explanation---

   a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. Of shares or capital or profits of the company.
   b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals.

4. Where no natural person is identified under (1) or (2) or (3) above the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another or to represent another in dealings with third person.

VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with "Competent Authority".

VII. The registration shall be valid at the time of submission of bid and at the time of acceptance of bid.

VIII. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution.

VII. Bidder mandatorily requires to submit "Certificate of Compliance" in the enclosed Form: A. This certificate need to be submitted in the Company's Letter Head and should be sealed and signed by the authorized signatory on behalf of the bidder. Non-submission of Form A may lead to disqualification for Techno-Commercial evaluation of the submitted bid.

In case at any stage pre or post order placement it is found that that the certification furnished is false their bid shall be summarily rejected or order terminated as applicable. NRL may at its discretion initiate penal action against such bidders which may include Black Listing Holiday Listing the party /encashment of EMD or PBG submitted as per contractual provision etc.

Note I: For better clarity and to obtain information in detail bidders are requested to go through the Govt Circular issued by the Department of Expenditure Govt of India to this effect.

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FORM A

CERTIFICATE OF COMPLIANCE
(On Company's Letter Head)

To,
CGM (Commercial)
Numaligarh Refinery Limited
Numaligarh, Assam.

Sub: Certificate of Compliance

Bidder's Details :

Job Name : Job*Name**

Tender No. : XCXX000XXX

Sl.	Bidder's Undertaking	Please put Yes (✓) or No (**X**), as applicable
1	(A) "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country".	
	(B) Or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [If applicable, evidence of valid registration by the Competent Authority shall be attached.]	
2	(A) "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority."	
	(B) Or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [If applicable, evidence of valid registration by the Competent Authority shall be attached.]	
3	(A) "I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder does not have any ToT arrangement requiring registration with the competent authority."	
	(B) "I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder has valid registration to participate in this procurement." [If applicable, evidence of valid registration by the Competent Authority shall be attached.]	

Place :

Date :

Signature of Authorized Signatory :

Name of Signatory :

Designation :

Seal of the Company :

BANK GUARANTEE FOR CONTRACT PERFORMANCE SECURITY

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMA OF BANK GUARANTEE CONTRACT PERFORMANCE SECURITY

Dear Sirs,

In consideration of the M/s Numaligarh Refinery Limited, 122 A, G.S. Road, Christian Basti, Guwahati - 781005, Assam, India (hereinafter called the Company which expression shall include its successors and assigns) having awarded to M/s ..... Constitution....., Address..... (hereinafter referred to as "The Contractor" which expression shall wherever the subject or context so permits include its successors and assigns) a supply contract in terms inter-alia, of the Company(s) letter of acceptance No./ Contract / Work / Purchase Order No.: ..... dtd. ..... and the General Purchase Conditions / General Conditions of Contract (as applicable for this contract) of the Company and upon the conditions of contractor's furnishing for the performance of contractor's obligations and/or discharge of contractor's liability under and/or in connection with the said contract up to a sum of (in figures) ..... (in words) .....(only) amounting to 3% (three percent) of the contract value.

We (name)..... (Constitution)..... (hereinafter called the Bank which expression shall include its successors and assigns) hereby jointly and severally undertake and guarantee to pay the Company in (currency) forthwith on first demand in writing and without protest or demur any and all moneys anywise payable by the Contractor to the Company under, in respect or in connection with the said contract inclusive of all the Company's losses and damages and costs (inclusive between attorney and client), charges and expenses and other moneys anywise payable in respect of the above specified in any notice of demand made by the Company to the Bank with reference to this guarantee upto an aggregate limit of (in figures) ..... (in words) ....only.

And the Bank hereby agrees with the Company that:

i) The guarantee/undertaking shall be a continuing Guarantee/Undertaking and shall remain valid and irrevocable for all claims of the Company and liabilities of the Contractor arising upto and until midnight of..... with a claim period until six (6) months thereafter, i.e., until midnight of ……

ii) This Guarantee/Undertaking shall be in addition to any other guarantee or security whatsoever that the Company may now or at any time any wise have in relation to the Contractor's obligations/liabilities under and/or in connection with the said contract and the Company shall have full authority to take recourse to or reinforce this security in preference to the other security(ies) at its sole discretion, and no failure on the part of the Company in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its full liability hereunder.

iii) The Company shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other security in respect of the Contractor's obligations and/or liabilities under or in connection with the said contract, and to vary the terms vis-a -vis the contractor of the said contract or to grant time and or indulgence to the contractor or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forebear from enforcement of all or any of the obligations of the contractor under the said contract and/or the remedies of the Company under any other security (ies) now or hereinafter held by the indulgence /or arrangements with the contractor or release or forbearance whatsoever which under the laws relating to securities shall but for these Provisions have the effect of releasing the Bank from its full liability to the Company hereunder or of prejudicing rights of the Company against the Bank.

iv) This guarantee/undertaking shall not be determined or affected by the liquidation or winding up dissolution or change of constitution or insolvency of the contractor but that in all respects and for all purpose be binding and operative until payment of all moneys payable to the Company in terms hereof.

v) The Bank hereby waive all rights at any time inconsistent with the terms of this Guarantee/Undertaking and the obligations of the Bank in terms thereof shall not be any wise affected or suspended by reason of any dispute or disputes having been raised by the contractor (Whether or not pending before any Arbitrator Officer, Tribunal or Court) or any denial of liabilities by the contractor or any other order of communication whatsoever by the contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to the Company in terms hereof.

vi) The amount stated in any notice of demand addressed by the Company to the Bank as liable to be paid to the Company by the contractor or as suffered or incurred by the Company on account of any losses or damages of costs, charges and/or expenses shall as between the Bank and the Company be exclusive of the amount so liable to be paid to the Company or suffered or incurred by the Company, as the case may be, and payable by the Bank to Company in terms hereof.

vii) Not withstanding anything contained herein above, unless a claim or demand under this guarantee is made against the bank within six months from the date of expiry of the Guarantee, all the rights of the company under this guarantee shall be forfeited and the bank shall be released and discharged from all liability hereunder unless this guarantee shall have been previously extended.

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BANK GUARANTEE FOR INDIGENOUS PURCHASE (WARRANTY/GUARANTEE)

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMA OF BANK GUARANTEE FOR INDIGENOUS PURCHASE (WARRANTY/GUARANTEE)

This deed of Guarantee made this ……day of …… ……by …….. Bank registered under …… and having its registered office at …….. and wherever the context so requires includes its successors and assigns (hereinafter called "The Surety") for the favour of M/s Numaligarh Refinery Limited, a company under Public Sector, registered under Indian Companies Act of 1956 having its registered office at 122A, G.S. Road, Christanbasti Guwahati-781 005 wherever the context so requires includes its successors and assigns (hereinafter called as "The Company").

WHEREAS

1. The Company has placed an Order No. . . ……. Dated …… (hereinafter referred to as "the order") with M/s …… a company registered under Indian

Companies Act 1956 having its registered office at …… …….. And whereas the context so requires includes its successors and assigns (hereinafter called or referred to as "the Supplier".

2. Under the terms of the order, the Supplier is required to furnish the Company at his own cost a Bank Guarantee for an amount of Rs. …….., being the amount equivalent to … …… percentage of the total value of the order for fulfilling the contract.

3. The Surety at the request of the Suppliers, agreed to issue Bank Guarantee in terms of the said order on behalf of the Supplier and the Company has agreed to accept the same. It is hereby stipulated and agreed that the Supplier shall repair or replace free of cost Equipment, Machinery, its parts and components found defective on account of workmanship or defective material or inferior manufacturer, as mentioned in Warranty and Guarantee Clause of the Order for period of …… from the date of commissioning/installation OR from the date of delivery.

4. The Surety binds himself to pay to the extent of Rs. …….. in case of failure on the parts of the Supplier to perform this Guarantee provided the Company informs the Surety in writing to this effect.

5. Notwithstanding anything contained hereinafter the liability of the Surety in respect of this Guarantee is restricted to Rs. ……. (Rupees …… only) and it will remain in force till ……. unless a suit or action to enforce a claim under Guarantee is filled against us within six months from …… (Which is date of expiry of guarantee). However, if the contract for which this Guarantee is given is not completed or fully performed, the Surety (Bank) hereby agrees to further extend the Guarantee till such time as is required to fulfill the contract.

6. The Surety shall not be discharged or released from this Guarantee by any arrangement between the Company and the Supplier with or without the consent of the Surety or by any alteration in the obligation of the parties or by any indulgence, forbearance, whether as to payment, time performance or otherwise.

In witness whereof the said Surety Subscribed and set its name and seal hereupto …… (the day).

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BANK GUARANTEE FOR IMPORTED PURCHASE (WARRANTY/GUARANTEE)

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as “7037” and Particulars (to be mentioned in Row 1) as “NRL140025551” should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMA OF BANK GUARANTEE FOR IMPORTED PURCHASE (WARRANTY/GUARANTEE)

Dear Sirs,

In consideration of the M/s Numaligarh Refinery Limited, 122 A, G.S. Road, Christianbasti, Guwahati - 781005, Assam, India (hereinafter called the Company which expression shall include its successors and assigns) having awarded to M/s (Name)..... Constitution..... (address)..... (hereinafter referred to as "The Supplier" which expression shall wherever the subject or context so permits include its successors and assigns) a supply contract in terms inter-alia, of the Company(s) letter No. ..... dtd. ..... and the General Purchase Conditions of the Company and upon the conditions of supplier's furnishing for the performance of supplier's obligations and/or discharge of supplier's liability under and/or in connection with the said supply contract up to a sum of (in figures) ..... (in words) .....(only) amounting to …….. % (…….percent) of the total contract value.

We (name)..... (Constitution)..... (hereinafter called the Bank which expression shall include its successors and assigns) hereby jointly and severally undertake and guarantee to pay the Company in (currency) forthwith

on first demand in writing and without protest or demur any and all moneys anywise payable by the Supplier to the Company under, in respect or in connection with the said supply contract inclusive of all the Company's losses and damages and costs (inclusive between attorney and client), charges and expenses and other moneys anywise payable in respect of the above specified in any notice of demand made by the Company to the Bank with reference to this guarantee upto an aggregate limit of (in figures) ..... (in words) ....only.

And the Bank hereby agrees with the Company that :

i) The guarantee/undertaking shall be a continuing Guarantee/Undertaking and shall remain valid and irrevocable for all claims of the Company and liabilities of the Supplier arising upto and until midnight of.....

ii) This Guarantee/Undertaking shall be in addition to any other guarantee or security whatsoever that the Company may now or at any time any wise have in relation to the Supplier's obligations/liabilities under and/or in connection with the said supply contract and the Company shall have full authority to take recourse to or reinforce this security in preference to the other security(ies) at its sole discretion, and no failure on the part of the Company in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its full liability hereunder.

iii) The Company shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other security in respect of the Supplier's obligations and/or liabilities under or in connection with the said supply contract, and to vary the terms vis-a -vis the supplier of the said supply contract or to grant time and or indulgence to the supplier or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forebear from enforcement of all or any of the obligations of the supplier under the said supply contract and/or the remedies of the Company under any other security (ies) now or hereinafter held by the indulgence /or arrangements with the supplier or release or forbearance whatsoever which under the laws relating to securities shall but for these Provisions have the effect of releasing the Bank from its full liability to the Company hereunder or of prejudicing rights of the Company against the Bank.

iv) This guarantee/undertaking shall not be determined or affected by the liquidation or winding up dissolution or change of constitution or insolvency of the supplier but that in all respects and for all purpose be binding and operative until payment of all moneys payable to the Company in terms hereof.

v) The Bank hereby waive all rights at any time inconsistent with the terms of this Guarantee/Undertaking and the obligations of the Bank in terms thereof shall not be any wise affected or suspended by reason of any dispute or disputes having been raised by the supplier (Whether or not pending before any Arbitrator Officer, Tribunal or Court) or any denial of liabilities by the supplier or any other order of communication whatsoever by the supplier stopping or preventing or purporting to stop or prevent any payment by the Bank to the Company in terms hereof.

vi) The amount stated in any notice of demand addressed by the Company to the Bank as liable to be paid to the Company by the supplier or as suffered or incurred by the Company on account of any losses or damages of costs, charges and/or expenses shall as between the Bank and the Company be exclusive of the amount so liable to be paid to the Company or suffered or incurred by the Company, as the case may be, and payable by the Bank to Company in terms hereof.

v) Not withstanding anything contained herein above, unless a claim or demand under this guarantee is made against the bank within six months from the date of expiry of the Guarantee, all the rights of the company under this guarantee shall be forfeited and the bank shall be released and discharged from all liability hereunder unless this guarantee shall have been previously extended.

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BANK GUARANTEE FOR SECURITY DEPOSIT

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMA OF BANK GUARANTEE FOR SECURITY DEPOSIT

(ON NON – JUDICIAL PAPER OF APPROPRIATE VALUE)

Required to be submitted by successful agency after placement of work order / letter of acceptance

To

Numaligarh Refinery Ltd.
122A, G.S. Road, Christianbasti
Guwahati –781005, Assam

Dear Sirs:

M/s …….. have taken tender for the work of ……
……..…….. (Work Order no…….) for Numaligarh Refinery Limited, 122A, G.S. Road, Christianbasti, Guwahati-781005.

The tender conditions of contract provide that the Contractor shall pay a sum of Rs……..… (Rupees ……) as Security Deposit in the form there in mentioned. The form of payment of security deposit includes guarantee executed by Nationalized Schedule 'A' Bank, undertaking full responsibility to indemnify Numaligarh Refinery Ltd. in case of default.

The said ……. has 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 condition of the tender or in payment of any money payable to Numaligarh Refinery Ltd. We shall on demand pay to you in such manner as you direct the said amount of Rupees …… only or such portion thereof not exceeding the said sum as you from time to time require.

2. You will have the full liberty without reference to us and without affecting this guarantee postpone 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 forebear from endorsing any powers or rights or by reason of time being given to 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 changes of constitution or insolvency of the said, but shall in all respects and for all purposes be binding and operative until 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 guarantee shall remain in force until …….. unless a suit or action to enforce a claim under Guarantee is filled against us within six months from …… (Which is date of expiry of guarantee) all your rights under the said guarantee shall be forfeited and we shall be relived 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

******

BANK GUARANTEE AGAINST MILESTONE PAYMENT

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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PROFORMAA FOR GUARANTEE AGAINST MILESTONE PAYMENT

(TO BE EXECUTED ON NON-JUDICAL STAMP PAPER OF APPROPRIATE VALUE)

To,
Numaligarh Refinery Limited,
Pankagrant, PO: Numaligarh Refinery Project,
Dist-Golaghat (Assam), India, PIN-785699

Subject: Bank Guarantee for [insert purpose]

WHEREAS

A. [insert *name of the Contractor)* ("Contractor") and the Numaligarh Refinery Ltd. ("NRL") have entered into a Contract Agreement dated *(insert date of Contract Agreement)* ("Agreement"), whereby NRL has authorized the Contractor to execute the Works related to [insert package name].

B. NRL has agreed to release [insert %] of the Contract Price to the Contractor, inter-alia, a sum of Rs._ (Rupees only) (" Milestone Payment"), upon the condition, *inter* a/la, that the Milestone Payment shall without prejudice to any other mode of recovery available to NRL be recoverable by NRL by deduction from the gross accepted amount of any Running Account Bills and the Final Bill of the Contractor commencing from the first Running Account Bill of the Contractor, and meanwhile, the Milestone Payment shall be secured by way of guarantee from a Bank (as defined hereinafter).

C. We (name of the bank) having our registered office at ..... and one of itsbranches at (hereinafter referred to as the "Bank"), at the request of the Contractor, do hereby in terms of the Agreement, irrevocably, unconditionally and without reservation guarantee ("Guarantee") the due and faithful fulfilment and compliance of the terms and conditions of the Agreement by the Contractor and unconditionally and irrevocably undertake to pay NRL forthwith on first demand without any demur, reservation, recourse, contest, protest or proof or satisfaction or condition and without reference to the Contractor, an amount of Rs. |insert amount} ("Guarantee Amount").

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees and undertake to pay to NRL upon occurrence of any failure or default in the due and faithful performance of all or any of the Contractor's obligations or otherwise, under and in accordance with the provisions of the Agreement, on its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as NRL shall claim, without NRL being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from NRL, that there is an amount due and outstanding from the Contractor, or the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that NRL shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations under the Agreement and its decision in this regard shall be final and binding on the Bank, notwithstanding any differences between NRL and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.

3. In order to give effect to this Guarantee, NRL shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/ or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.

4. It shall not be necessary, and the Bank hereby waives any necessity, for NRL to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.

5. NRL has the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfilment and/or performance of all or any of the obligations of the Contractor contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by NRL against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to NRL, and the Bank shall not be released from its liability and obligation under these presents by any exercise by NRL of the liberty with reference to the matters aforesaid, or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of NRL or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would, but for this provision, have the effect of releasing the Bank from its liabilities and obligations under this Guarantee, and the Bank hereby waives all of its rights under any such law.

6. NRL's right to recover the Guarantee Amount from the Bank will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the Contractor and / or that any dispute or disputes are pending before any officer tribunal or court.

7. This Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Bank, NRL or the Contractor.

8. This Guarantee shall be a primary obligation of the Bank and accordingly NRL shall have first and primary recourse to the Bank and shall not be obliged, before enforcing this Guarantee, to take any action in any court or arbitral proceedings against |*insert name of the Bidder),* to make any claim against or issue any notice or demand on *[insert name of the Bidder} or* to exercise, levy or enforce any distress, diligence or other process against *insert name of the Bidders.*

9. Our liability under this Guarantee is restricted to the Guarantee Amount. Our guarantee shall remain in force and be valid until We are liable to pay the Guarantee Amount or any part thereof if you serve upon us a written claim under this Guarantee within 06 (six) months from ……..…… (which is the claim period) after which all your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities thereunder.

10. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of NRL in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.

11. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred Branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course through post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of NRL that the envelope was so posted shall be conclusive.

Notwithstanding anything contained hereinabove:

(a) the Bank's liability under this Guarantee is restricted to INR [insert];
(b) this Guarantee shall remain in force until [insert];
(c) this Guarantee shall have additional claim period of 06 (six) months thereafter; and
(d) the Bank is liable to pay the Guarantee Amount or any part thereof under this Guarantee only if NRL serves upon the Bank a written claim or demand upon the Bank or any branch thereof on or before the aforesaid claim period.

Signed and sealed this [Date] day of [Month], [Year] at [Place]

SIGNED, SEALED AND DELIVERED For and on behalf of the BANK by:

(Signature) (Name)

(Designation)

(Code Number)

(Address)

NOTES:

(a) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.

(b) The address, telephone number and other details of the Head Office of the Bank as well as of issuing Branch should be mentioned on the covering letter of issuing Branch.

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BANK GUARANTEE FOR EARNEST MONEY DEPOSIT

Following Prevailing BG related information of NRL to be provided (to be updated suitably from time to time):-

1) BG shall be as per the prescribed format provided below.

2) The bank guarantee shall be valid for at least 06 (Six) months from the final bid submission date. The bid security is normally to remain valid for a period of 60 (sixty) days beyond the final bid validity period. In case, Contract Performance Security (CPS) is applicable, the successful bidder has to keep his Bid Security, if submitted in the form of a BG, valid till CPS is submitted. The contractor shall be required to suitably extend the period of Bank Guarantee.

3) Acceptable forms of Bank Guarantee: -

(a) Bank Guarantee should preferably be issued in electronic form. For issuance of Electronic Bank Guarantee (e-BG) through National E-Governance Service Limited (NeSL) platform, details of NRL (beneficiary) are as under:-

(i)	PAN	AAACN6984B
(ii)	Name	Numaligarh Refinery Limited
(iii)	Date of Incorporation	22.04.1993
(iv)	E-mail ID	ketool.a.tadvi@nrl.co.in
(v)	Contact No.	9974952135
(vi)	Legal Constitution	Entity
(vii)	Registered Office address	122A, G. S. ROAD CHRISTIANBASTI, GUWAHATI, Assam, India, 781005
(viii)	Registered Office Pin code	781005
(ix)	Communication address	Numaligarh Refinery Limited, PO-Numaligarh Refinery Project, Dist. Golaghat, Assam, 785699
(x)	Communication address Pin code	785699

(b) Other acceptable form of BG would be BG routed through SFMS platform. Relevant information are as follows:

(i) Beneficiary bank details:
Axis Bank
Chhibber House, Ground Floor, G.S Road, Guwahati -781005
IFSC: UTIB0000140

(ii) Advising message to be sent to beneficiary bank:
IFN 760 / IFN 760 COV for issuance of bank guarantee
IFN 767 / IFN 767 COV for amendment of bank guarantee
Field number as "7037" and Particulars (to be mentioned in Row 1) as "NRL140025551" should be correctly captured in the above messages.
The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

(c) If BG is neither issued in electronic form (e-BG) nor routed through SFMS route, the Bank guarantee submitted by the tenderers needs to be immediately verified from the issuing bank before acceptance. For acceptance of such BGs, the BG or its covering letter should contain the name, designation and code number of the Bank officer(s) signing the guarantee(s). The address and contact details (including telephone no.) of the controlling officer of the branch of the bank issuing the BG should be included.

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Proforma for Bank Guarantee for Earnest Money Deposit

(ON NON – JUDICIAL PAPER OF APPROPRIATE VALUE)

Ref…….. Bank Guarantee No…….

To,
Chief General Manager (Commercial)
Numaligarh Refinery Limited,
Pankagrant, PO: Numaligarh Refinery Project,
Dist-Golaghat (Assam), India, PIN-785699

Dear Sir (s)

In accordance with letter inviting Tender under reference No……M/s……having their

Registered / Head office at…….(hereinafter called the Tenderer) wish to participate in the side tender for…….

As an irrevocable bank Guarantee against Earnest Money Deposit for an amount of …….is required to be submitted by the Tenderer as a condition precedent for participation in the said Tender which amount is liable to be forfeited on the happening of any contingencies mentioned in the Tender Document.

We, the……Bank at …….. Having our Head office…… (Local Address) guarantees and undertakes to pay immediately on demand by Numaligarh Refinery Ltd, the amount……..without any reservation, protest, demur and recourse. Any such demand made by Numaligarh Refinery Ltd. shall be conclusive and binding on us irrespective of any dispute or difference raised by the Tendered.

This guarantee shall be irrevocable and shall remain valid up to…… If any further extension of this guarantee is required, the same shall be extended to such required period on receiving instructions from M/s……on whose behalf this guarantee is issued.

In witness where of the Bank, through its authorized officer, has set its hand stamp on this……Day of…….20……at……

WITNESS:
(SIGNATURE NAME)

(OFFICIAL ADDRESS)

(SIGNATURE NAME)
Designation with Bank Stamp
Attorney as per
Power of Attorney No……..
Date……

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Appendix-IV (A) to ITB

Instructions for ONLINE EMD submission through the portal of HDFC Bank

The EMD must be submitted ONLINE within the submission due date & time specified in the NIT and tender document through the online portal of HDFC bank link: https://nrl.procure247.com.

a) User Manual for Bidders is available in NRL Website under https://www.nrl.co.in → Tenders → Tender Manual → EMD Online Deposit Manual (HDFC Bank Payment Portal)

b) Visit HDFC Bank Payment Portal URL: https://nrl.procure247.com
c) Click on 'Bidder Registration'
d) Bidder Registration Screen shall appear – Fill the mandatory details required and complete the process.
e) On successful submission of details in bidder registration form, bidder will get the system generated link to verify his/her email id and login to the website. Without verifying email id bidder may not be able to login to the system.
f) After successful email verification – please login with your user id and password
g) Bidder will receive system generate One Time Password (OTP) on their registered mobile number. In case not receiving of OTP please click Regenerate OTP and login.
h) After login Screen bidder can search the tenders and proceed for EMD payment.
i) Bidders' have to click on Payment Dashboard option available under Action tab
j) Payment Dashboard – Click on Pay to proceed further for the selection of payment mode.
k) Smart Hub – Bidders' can select the online payment and click on Pay to proceed further.
l) After click on Pay – Bidder will get an option for Cards and Net Banking. Bidders can select their preference and proceed further for the payment.
m) On successful payment bidder will receive system generated message on screen stating "EMD paid successfully"
n) Bidders' can also download the Payment receipt from Payment Dashboard.
o) Downloaded payment receipt – Bidders' can easily print the receipt and use it for their bidding purpose.
p) Since the HDFC Bank payment gateway is not under the CPPP/GeM, so the payment mode is mentioned as offline (BG) in the CPP portal and Advisory Bank: HDFC Bank in GeM portal. In case of CPPP tenders, bidder has to make a dummy entry in the EMD fields of CPPP by putting 'Transaction ID' (HDFC Bank payment receipt) as instrument no., payment date as issue date, any date as expiry date, and bank name as issuer details. Please upload the EMD payment receipt along with technical bid.
q) For any technical help, the bidders can contact HDFC Bank executive Mr. Tapan Desai at Mobile No: 8866287104 and email: tapan@tender247.com.

A receipt will be generated after successful payment. Bidder can take print out for onward submission with tender as well as save a soft copy of the receipt.

PROFORMA FOR SURETY BOND FOR BID SECURITY / EARNEST MONEY DEPOSIT

(***To be executed on non-judicial stamp paper of appropriate value***)

Ref…… Surety Bond No…….

To,

Chief General Manager (Commercial)
Numaligarh Refinery Limited,
Pankagrant, PO: Numaligarh Refinery Project,
Dist-Golaghat (Assam), India, PIN-785699

Dear Sir (s)

In consideration of you, Numaligarh Refinery Limited, having its office at [122A, G.S. Road, Christianbasti Guwahati-781005] (hereinafter referred to as the "**NRL**", which expression shall unless it be repugnant to the subject or context thereof include its, successors and assigns) having agreed to receive the Bid of [***insert name of the Bidder***] having its registered office at [***insert address of the Bidder***] (hereinafter referred to as the "**Bidder**" which expression shall unless it be repugnant to the subject or context thereof include its/their executors, administrators, successors and assigns) in relation to [***insert Tender Name***] pursuant to Bidding Documents bearing Reference Number [***insert Tender number***] (hereinafter collectively referred to as "**Bidding Documents**"), we [***insert name of the insurer***] having our registered office at [***insert registered address of the insurer***] and one of its branches at [***insert relevant branch address of the insurer***] (hereinafter referred to as the "**Surety Insurer**" which expression shall include its successors and assigns), at the request of the Bidder, do hereby in terms of the Bidding Documents, irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the Bidding Documents by the said Bidder and unconditionally and irrevocably undertake to pay NRL forthwith on first demand without any demur, reservation, recourse, contest, protest or proof or satisfaction or condition and without reference to the Bidder, an amount of Rs. [***insert amount***] (hereinafter referred to as the "**Surety Bond**") as and by way of [Bid Security/ EMD] as our primary obligation if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Bidding Documents.

NOW, THEREFORE, the Surety Insurer hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. This Surety Bond shall be a continuing guarantee and shall remain in full force and effect for all claims or demands made by the NRL on the Surety Insurer until the NRL discharges this Surety Bond subject, however, that the NRL shall have no claims under this Surety Bond after [***insert time and date including at least eight months from the final bid submission date, plus three months' claim period***] or any written extension(s) thereof.

2. In order to give full effect to this Surety Bond, NRL shall be entitled to treat the Surety Insurer as the principal debtor. NRL shall have the fullest liberty without affecting in any way the liability of the Surety Insurer under this Surety Bond from time to time to vary any of the terms and conditions contained in the said Bidding Documents or to extend time for submission of the Bids or the Bid validity period or the period for conveying acknowledgement of Letter of Acceptance by the Bidder or the period for fulfilment and compliance with all or any of the terms and conditions contained in the said Bidding Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Documents or the securities available to NRL, and the Surety Insurer shall not be released from its liability under these presents by any exercise by NRL of the liberty with reference

to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of NRL or any indulgence by NRL to the said Bidder or by any change in the constitution of NRL or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Surety Insurer from its such liability.

3. It shall not be necessary for the NRL to proceed against the Bidder before proceeding against the Surety Insurer and the Surety Bond herein contained shall be enforceable against the Surety Insurer as principal debtor notwithstanding the existence of any other undertaking or security for any indebtedness of the Bidder to the NRL and notwithstanding that any such security shall at the time when claim is made against the Surety Insurer or proceedings taken against the Surety Insurer hereunder, be outstanding or unrealized.

4. The amount stated by the NRL in any demand, claim or notice made with reference to this Surety Bond shall as between the Surety Insurer and the NRL for the purpose of this Surety Bond be final, conclusive and binding of the amount payable by the Surety Insurer to the NRL hereunder.

5. The liability of the Surety Insurer to the NRL under this Surety Bond shall remain in full force and effect notwithstanding the existence of any difference or dispute between the Bidder and the NRL, the Bidder and the Surety Insurer and/or the Surety Insurer and the NRL or otherwise howsoever related to this Surety Bond or the liability of the Bidder to the NRL, and notwithstanding the existence of any instructions or purported instructions by the Bidder or any other person to the Surety Insurer not to pay or for any cause withhold or defer payment to the NRL under this Surety Bond, with the intent that notwithstanding the existing of such difference, dispute or instructions, the Surety Insurer shall be and remain liable to make payment to the NRL in terms thereof.

6. We, the Surety Insurer, further agree that NRL shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Bidding Documents, and the decision of NRL that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between NRL and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other authority.

7. This Surety Bond shall not be determined or affected by the liquidation or winding up or dissolution or change of constitution or insolvency of the Bidder or any change in the legal constitution of the Surety Insurer or the NRL.

8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Surety Insurer and sent by courier or by registered mail or via email to the Surety Insurer at the address set forth herein.

9. We undertake to make the payment on receipt of your notice of claim on us, addressed to name of Surety Insurer *along with branch address* and delivered at our above branch and/or via email to: [***insert email ID***] which shall be deemed to have been duly authorized to receive the said notice of claim.

10. We, the Surety Insurer, further undertake not to revoke this Surety Bond during its currency except with the previous express consent of NRL in writing.

11. The Surety 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 Surety Insurer.

12. This Surety Bond issued by the us is in full compliance with applicable laws including the guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI), as amended from time to time.

13. This Surety Bond is for the benefit of NRL and its successors and assigns. This Surety Bond is binding not only on the Surety Insurer, but also on the Surety Insurer's successors and permitted assigns. The Surety Insurer shall not assign its rights and obligations hereunder to any person, insurer, company or other entity except as permitted by NRL in writing.

14. Notwithstanding anything contained herein: (i) The Surety Insurer's liability under this Surety Bond shall not exceed [***insert amount of Bid Security/ EMD***]; (ii) This Surety Bond shall remain in force until [***insert***]; (iii) this Surety Bond shall have additional claim period of [***three***] months thereafter; and (iv) the Surety Insurer is liable to pay the Surety Bond amount or any part thereof under this Surety Bond only if NRL serves upon the Surety Insurer a written claim or demand upon the Surety Insurer or any branch thereof on or before the aforesaid claim period.

Signed and sealed this [●] day of [●], [●] at [●].

SIGNED, SEALED AND DELIVERED

For and on behalf of the Surety Insurer by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

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Instructions: -

(a) The surety bond shall be from a Surety Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI) as amended from time to time.
(b) The surety bond should contain the name, designation and code number of the officer(s) signing the surety bond.
(c) The address, telephone number, E-mail and other details of the head office of the surety insurer as well as of issuing branch should be mentioned on the covering letter of issuing branch. The letter may also include any web portal link, from where the Surety Bond can be confirmed by the Company.
(d) The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

PROFORMA OF SURETY BOND FOR CONTRACT PERFORMANCE SECURITY

(To be executed on non-judicial stamp paper of appropriate value)

Ref..... Guarantee No.....

To,

Chief General Manager (Commercial)

Numaligarh Refinery Limited,

Pankagrant, PO: Numaligarh Refinery Project,

Dist-Golaghat (Assam), India, PIN-785699

Dear Sir (s),

In consideration of you, Numaligarh Refinery Limited, having its office at [122A, G.S. Road, Christianbasti Guwahati-781005] (hereinafter referred to as the "**NRL**", which expression shall unless it be repugnant to the subject or context thereof include its successors and assigns) having awarded the Contract to [***insert name of the Contractor***] having its registered office at [***insert address of the Contractor***] (hereinafter referred to as the "**Contractor**", which expression shall unless it be repugnant to the subject or context thereof include its/their executors, administrators, successors and assigns) in relation to [***insert Contract Name/Work Description***] pursuant to the Contract Agreement bearing Reference Number [***insert reference number***] (hereinafter collectively referred to as "**Contract Documents**"), we [***insert name of the Guarantor***] having our registered office at [***insert registered address of the Guarantor***] and one of its branches at [***insert relevant branch address of the Guarantor***] (hereinafter referred to as the "**Guarantor**", which expression shall include its successors and assigns), at the request of the Contractor, do hereby irrevocably, unconditionally, and without reservation guarantee the due and faithful performance, discharge, and compliance of all terms, conditions, and obligations under the Contract Documents by the said Contractor and unconditionally undertake to pay NRL forthwith on first demand without any demur, reservation, recourse, contest, protest, or proof of satisfaction or condition, and without reference to the Contractor, an amount of Rs. [***insert amount***] (hereinafter referred to as the "**Guarantee Amount**") as our primary obligation if the Contractor shall fail to perform, discharge, or comply with any of the terms, conditions, or obligations contained in the said Contract Documents.

NOW, THEREFORE, the Guarantor hereby unconditionally and irrevocably guarantees and affirms as follows:

1. This Performance Guarantee (hereinafter referred to as the "**Guarantee**") shall be a continuing guarantee and shall remain in full force and effect for all claims or demands made by the NRL on the Guarantor until the NRL discharges this Guarantee, subject however that the NRL shall have no claims under this Guarantee after [***insert time and date including at least 03 (three) months beyond the defect liability period, plus six months' claim period***] or any written extension(s) thereof.

2. In order to give full effect to this Guarantee, NRL shall be entitled to treat the Guarantor as the principal debtor. NRL shall have the fullest liberty without affecting in any way the liability of the Guarantor under this Guarantee from time to time to vary any of the terms and conditions contained in the said Contract Documents or to extend time for performance of the Contract or the validity period of the Performance Guarantee or the period for compliance with any obligations by the Contractor or to postpone for any

time and from time to time any of the powers exercisable by it against the said Contractor and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Contract Documents or the securities available to NRL, and the Guarantor shall not be released from its liability under these presents by any exercise by NRL of the liberty with reference to the matters aforesaid or by reason of time being given to the said Contractor or any other forbearance, act or omission on the part of NRL or any indulgence by NRL to the said Contractor or by any change in the constitution of NRL or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to Guarantee would but for this provision have the effect of releasing the Guarantor from its such liability.

3. It shall not be necessary for the NRL to proceed against the Contractor before proceeding against the Guarantor and the Guarantee herein contained shall be enforceable against the Guarantor as principal debtor notwithstanding the existence of any other undertaking or security for any indebtedness of the Contractor to the NRL and notwithstanding that any such security shall at the time when claim is made against the Guarantor or proceedings taken against the Guarantor hereunder, be outstanding or unrealized.

4. The amount stated by the NRL in any demand, claim or notice made with reference to this Guarantee shall as between the Guarantor and the NRL for the purpose of this Guarantee be final, conclusive and binding of the amount payable by the Guarantor to the NRL hereunder.

5. The liability of the Guarantor to the NRL under this Guarantee shall remain in full force and effect notwithstanding the existence of any difference or dispute between the Contractor and the NRL, the Contractor and the Guarantor and/or the Guarantor and the NRL or otherwise howsoever related to this Guarantee or the liability of the Contractor to the NRL, and notwithstanding the existence of any instructions or purported instructions by the Contractor or any other person to the Guarantor not to pay or for any cause withhold or defer payment to the NRL under this Guarantee, with the intent that notwithstanding the existing of such difference, dispute or instructions, the Guarantor shall be and remain liable to make payment to the NRL in terms thereof.

6. We, the Guarantor, further agree that NRL shall be the sole judge to decide as to whether the Contractor is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the aforesaid Contract Documents and the decision of NRL that the Contractor is in default as aforesaid shall be final and binding on us, notwithstanding any differences between NRL and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority.

7. This Guarantee shall not be determined or affected by the liquidation or winding up or dissolution or change of constitution or insolvency of the Contractor or any change in the legal constitution of the Guarantor or the NRL.

8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Guarantor and sent by courier or by registered mail or via email to the Guarantor at the address set forth herein.

9. We undertake to make the payment on receipt of your notice of claim on us addressed to name of Guarantor along with branch address and delivered at our above branch and/or via email to: [***insert email ID***] which shall be deemed to have been duly authorized to receive the said notice of claim.

10. We, the Guarantor, further undertake not to revoke this Guarantee during its currency except with the previous express consent of NRL in writing.

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

12. This Guarantee issued by us is in full compliance with applicable laws of India, as amended from time to time.

13. This Guarantee is for the benefit of NRL and its successors and assigns. This Guarantee is binding not only on the Guarantor, but also on the Guarantor's successors and permitted assigns. The Guarantor shall not assign its rights and obligations hereunder to any person, insurer, company or other entity except as permitted by NRL in writing.

14. Notwithstanding anything herein:
    i. The Guarantor's liability under this Guarantee shall not exceed Rs. [***insert Guarantee Amount***];
    ii. This Guarantee shall remain in force until [***insert***];
    iii. This Guarantee shall have additional claim period of [***six***] months thereafter; and
    iv. The Guarantor is liable to pay the Guarantee Amount or any part thereof under this Guarantee only if NRL serves upon the Guarantor a written claim or demand upon the Guarantor or any branch thereof on or before the aforesaid claim period.

Signed and sealed this [●] day of [●], [●] at [●].

SIGNED, SEALED, AND DELIVERED

For and on behalf of the Guarantor by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

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Instructions: -

(a) The surety bond shall be from a Surety Insurer as per guidelines issued by Insurance Regulatory and Development Authority of India (IRDAI) as amended from time to time.
(b) The surety bond should contain the name, designation and code number of the officer(s) signing the surety bond.
(c) The address, telephone number, E-mail and other details of the head office of the surety insurer as well as of issuing branch should be mentioned on the covering letter of issuing branch. The letter may also include any web portal link, from where the Surety Bond can be confirmed by the Company.
(d) The Insurance Surety Bond should be on Non-Judicial stamp paper/e-stamp paper of appropriate value as per Stamp Act prevailing in the state(s) where the Insurance Surety Bond is submitted or is to be acted upon or the rate prevailing in State where the Insurance Surety Bond is executed, whichever is higher. The Stamp Paper/e-stamp paper shall be purchased in the name of Bidder/Insurer issuing the Insurance Surety Bond.

Instructions to Bidders for e-Tendering

[APPENDIX-V TO INSTRUCTIONS TO BIDDER]

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.

Appendix-VI to ITB

SIGNING & STAMPING OF CONTRACT

To ensure the enforceability of the detailed work order cum contract agreement, proper payment of stamp duty is essential for full enforceability in a court of law. NRL will procure the stamp paper and send it along with the Work Order cum Contract Agreement.

Following standard clause as provided in section 3.20 of the GCC (reproduced below) shall be included in the Detailed Work Orders by NRL, so that this document is binding upon the parties and construed as Contract.

QUOTE [*Documents referred will be suitably removed / added / filled by NRL, as applicable*]

SIGNING OF CONTRACT

"This Order ("*WO/PO/DLoA/FOA No. and date*") is issued pursuant to the Terms and Conditions mentioned in the NIT (including, inter-alia, the General Conditions of Contracts (GCC) 'and/or' the General Purchase Conditions (GPC) including the clause for Arbitration therein; Special Conditions of Contract 'and/or' Special Purchase Conditions; Schedule of Rates (SOR); General Obligations, Specifications, Drawings, Plans, Time Schedule of Completion/Delivery); 'and/or' Terms and Conditions mutually agreed in writing thereafter 'and/or' outlined herein. Acknowledgement of this Order by [*Contractor's Name*] implies an agreement to adhere to these specified terms / documents, forming a binding contract between [*Contractor's Name*] (the Contractor) and Numaligarh Refinery Limited (the Owner)."

[Sealed / Signed & Dated by – *NRL Signatory*]

[Sealed / Signed & Dated in acknowledgement by - *Contractor's Name*]

UNQUOTE

The contractor shall acknowledge receipt of the work order within 7 days of receipt. The contractor shall sign & seal (or digitally sign) the acknowledgement and return the same to NRL.

****

_____

(SIGNATURE OF AUTHORISED SIGNATORY OF BIDDER)

BID DATA SHEET
(BDS)

BID DATA SHEET		
S.NO.	**CLAUSE NO.**	**CONTENT**
1.	Clause No. 1.4 of ITB	Name of Work is: **COOLING TOWER PACKAGE** Bidding Document Reference No. is: **LT / C050-1U68-PB-T-8010 /1004**
2.	Clause No. 12.1 & 10.3.2 Section-I (d) of ITB (Integrity Pact)	Applicable
3.	Clause No. 53 of ITB (Start-up)	No relaxation to Start-up.
4.	Clause No. 37 of ITB (Evaluation and Comparison of Bid)	The evaluation and comparison of bids shall be carried out as per following: The OWNER will determine for each bid the evaluated Bid Price by considering the following items: a) Total Lumpsum Price indicated in FORM SP-0 (BoQ1)) b) Technical Loading on account of Guaranteed utility Consumption as per FORM SP-10 (BoQ5) in line with Annexure A-XII to SCC. c) Any other loading if specified elsewhere in the Bidding Document. Two years Operation and Maintenance Spares after the Defect Liability Period shall not be considered for evaluation. To arrive at the lowest evaluated bid, the following shall be added in the Total Evaluated Price arrived as per Sl. No. I above: No loading on account of GST shall be done being 100% input credit available against GST. Cess under GST amount, if applicable, considering the rate quoted by bidder in FORM SP-8 shall be loaded for the purpose of evaluation.
5.	Clause No. 49 of ITB (Purchase Preference to MSEs)	Purchase Preference to Micro and Small Enterprises/ Bidders is not applicable.
6.	Clause No. 3.8 & 22 of ITB and Clause No. D(2) of Appendix-II to ITB	**MSE bidders are not exempted from submission of EMD.**
7.	Clause No. 50 of ITB [Public Procurement (Preference to Make in India) (PPP-MII)]	Applicable **Both Class-I & Class II Local Suppliers are eligible to bid as per PPP-MII Policy.** Bids received from Non-local suppliers as per PPP-MII Policy shall not be considered for evaluation and shall be rejected. Bidder to submit FORM-2 / FORM-3, as applicable, attached with Annexure-XIX TO SCC.
8.	Clause No. 51 & 10.3.2 (Sec-IX) of ITB (Preference to DMI&SP)	Applicable Bidder to submit FORM-1 as applicable, attached with **Annexure – XVIII to SCC**
9.	Annexure- IV B of ITB (PROFORMA FOR SURETY BOND FOR BID SECURITY / EARNEST MONEY DEPOSIT)	The period of “Eight months” appearing in 4th line of clause no. 1) of Proforma for Surety Bond for Bid Security” shall be read as “Six Months”. Bidder to submit Insurance Surety Bond accordingly.
10.	Clause No. 38.2 of SCC / Clause No. 4.6.1 (a) (i) of	Applicable

	GCC / Clause No. 3.15 (a) (i) of GCC Contract Performance Security (in Percentage of Total Contract Value / Total Order Value)	Contract Performance Security @ 10% (Mode: BG/ISB/Online transfer to NRL A/c) within 30 days LOA. Interest @ SBI MCLR + 1% is applicable for any delay in submission of CPS in LSTK / EPS Contracts.
11.	Clause No. 38.2 of SCC Part-A (Rate of Interest)	Interest rates to be charged (i.e., on delayed period for Security Deposit) shall be as below: Interest rate shall be @ SBI MCLR + 1% as on date of issuance of enquiry.
12.	Schedule of Price FORM SP-09	For calculating the CIF Value, bidder shall consider charges towards Marine Insurance @1% of the CFR value quoted by the Bidder in FORM SP-09 of Schedule of Price.
13.	Clause No. 5.3 of SCC LAND:	The Clause no 5.3 of SCC stands modified to the following extent: - The land required for setting up of temporary facilities for Site office, Fabrication Yard (including blasting & painting), Storage Area, Warehouses and Laydown area (a total area of approximately 2,000 sq. meter) will be provided at free of cost either in the above site and /or inside the Refinery premises by the Owner.
14.	Land Border Policy	Applicable Bidder to submit relevant declarations in line with Clause No Appendix III to ITB
15.	Clause No. 35 of SCC Price Variation	The price variation shall be applicable to the following items 1. Basic price of TMT Bar - INR 47,300 / MT as on 01-April-2026. 2. Basic price of structural steel - INR 46,670 / MT as on 01-April-2026.
16.	**IFB Clause no. 5.1.3**	**In case bidder is qualifying under Technical Experience Criteria clause no. 5.1.3 of IFB, then:** **a) The Bidder shall provide extended warranty of 12 months over & above the guarantee/warrantee period specified in the Bidding document.** **Other documents as requested in cl. no. 5.2.1.5 of IFB**

BIDDING FORMS

TABLE OF CONTENTS

FORM NO.	DESCRIPTION
A	FORM OF BID
B	INFORMATION ABOUT BIDDER
C	DECLARATION BY THE BIDDER REGARDING BIDDING DOCUMENT
D	FORMAT OF LETTER OF WAIVER
E	COMPLIANCE TO BID REQUIREMENT
F	SELF DECLARATION
G	PROFORMAOF DECLARATION OF BLACK LISTING/HOLIDAY LISTING
H	UNDERTAKING FOR NON-ENGAGEMENT OF CHILD LABOUR
I	PROFORMA FOR BIDDER'S QUERIES (TECHNICAL & COMMERCIAL)
J	COMMERCIAL QUESTIONNAIRE
K1	COMMERCIAL EXPERIENCE CRITERIA DETAILS
K2	FINANCIAL DETAILS
L	BANK MANDATE FORM
M	CHECKLIST
N	PAST EXPERIENCE COMPLETED DURING LAST SEVEN YEARS
O	DEPLOYMENT SCHEDULE OF CONSTRUCTION EQUIPMENT TOOLS & TACKLES PROPOSED FOR EXECUTION OF WORK.
P	METHODOLOGY OF EXECUTION
Q	DETAILS OF PROPOSED ORGANIZATION FOR HOME AND SITE OFFICE
R	DEPLOYMENT SCHEDULE OF SUPERVISORY PERSONNEL
S	EXCEPTIONS AND DEVIATIONS (TECHNICAL & COMMERCIAL)
T	UNDERTAKING ON NON-TAMPERING OF INFORMATION QUANTUM OF WORK (REFER TECHNICAL SECTION OF BIDDING DOCUMENT)
U1, U2, U3	COMPLIANCE TO REQUIREMENT OF PAN NO. , TAX RESIDENCY CERTIFICATE AND FORM NO.10 F
V	AFFIDAVIT W.R.T. INTEGRITY PACT
W	SAMPLE FORMAT FOR POWER OF ATTORNEY (POA)
X	INDEMNITY BOND CUM UNDERTAKING

FORM-A

FORM OF BID

(TO BE GIVEN ON BIDDER'S LETTER HEAD)

Serial No. **Date:**

From _____
_____

To,

Engineers India Limited for
Numaligarh Refinery Limited (NRL)
NRL Complex, Numaligarh,
Dist.: Golaghat, Assam-785699

Subject: Bid submission letter against Bidding Document No._____
Name of Work: _____.

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, Contract 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 Engineers India Ltd. in connection with the ---------- (Name of Work) for ····· 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 lumpsum price quoted by me/us in Price Schedule(s) included within the Bid Documents and arrived at by adding the Price of Materials and the Price of Supplies in the format as per the Price Schedule. 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 Contract Agreement forming part of the bid documents and accept the terms and conditions of Contract as laid down therein and undertake to submit within 30 (Thirty) days of issue of the Letter of Acceptance a security deposit as specified in the Letter of Acceptance by way of Bank Guarantee from a Scheduled Commercial Bank in India and to commence work at the job site and to sign the formal Contract in terms of the Proforma of Contract Agreement forming part of Bid Documents within 30 days from the date of issue of Detailed Letter of Acceptance.

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 authorised person signing the Bid on behalf of the Bidder(s)

Full Name and address of the Bidder(s).

FORM -B1

INFORMATION ABOUT TENDERER/BIDDER

(TO BE FURNISHED WITH BID)

(To be furnished with the Bid separately for each consortium/unincorporated JV member in case of bids on consortium/ unincorporated JV basis)

1.0	**IN CASE OF LIMITED LIABILITY COMPANY OR COMPANY LIMITED BY GUARANTEES**	
a)	Amount of paid up capital	
b)	Name of Directors	
c)	Date of Registration of Company	
d)	Copies of the Balance sheet of the company for the last 3 years.	
e)	Whether any of the Directors of the Company is a Director or is related to any Director of NRL, present or within the past 2 (two) years	
f)	Permanent Account Number	
g)	What are the Company's profits/losses for the past 3 (three) years with a copy of the audited Balance Sheet for the past 3 (three) years	
h)	What are the company's concurrent job commitments	
i)	How does the Company propose to finance the work if awarded to it	
j)	Provident Fund Code Number	
k)	ESI Code Number if the job site is covered by the ESI Act	
l)	Field of Business activities	
2.0	**IN CASE OF INDIVIDUAL**	
a)	Name of Business and it's Proprietor	
b)	Whether his business is registered.	
c)	Date of commencement of business.	
d)	Whether he pays Income Tax over Rs.10,000/- per year.	
e)	Field of Business activities	
f)	Whether he is a Director or is related to any Director of NRL present or retired within the past years	
g)	Permanent Account Number	
h)	What are his profits/losses for the past 3 (three) years with a copy of Balance Sheet and Profit & Loss Account for the past 3 (three) years with a copy of the audited Balance Sheets and Profit & Loss account for the past 3 (three) years	

i)	What are his concurrent job commitments	
j)	How does he propose to finance the work if awarded to him	
k)	Provident Fund Code Number	
l)	ESI Code Number if the job site is covered by the ESI Act	
3.0	**IN CASE OF PARTNERSHIP**	
a)	Name of Partners	
b)	Whether the partnership is registered.	
c)	Date of registration of firm.	
d)	If each of the partners of the firm pays income tax over Rs.10, 000/- a year and if so which of them pays the same.	
e)	Age of Partners	
f)	Field of Business activities	
g)	Whether any partner of the firm is a Director or is related to any Director of NRL, present or retired within the past 2 years	
h)	Permanent Account Number	
i)	What are the firm's profits/losses for the past 3 (three) years with a copy of Balance Sheet and Profit & Loss Account for the past 3 (three) years	
j)	What are the firm's concurrent job commitments	
k)	How does the firm propose to finance the work if awarded to him	
l)	Provident Fund Code Number	
m)	ESI Code Number if the job site is covered by the ESI Act	

(Signature & Seal of the Bidder)
Name and address of the Bidder

Form –B2

INFORMATION ABOUT BIDDER

(OTHER DETAILS)

To,

Engineers India Limited for
Numaligarh Refinery Limited (NRL)
NRL Complex, Numaligarh,
Dist.: Golaghat, Assam-785699

S. No.	DESCRIPTION	BIDDER'S REPLY
1.1	Bidder to confirm that Bid has been submitted on "**Individual Capacity**" or "**Consortium Basis**"	_____
1.2	In case of Bidding on "**Individual Capacity**" Legal Name of the Bidder (Company)	
1.3	Date of Business (Company) Establishment	Day Month Year
1.4	Country of registration and Registration Number:	
1.5	Address of Registered Office	_____ _____ City :_____ District :_____ State :_____ PIN/ZIP:_____
1.6	Operation/Working Address if different from above:	_____ _____ City :_____ District :_____ State :_____ PIN/ZIP:_____
1.7	Telephone Number (Incl. ISD & Area code, as applicable):	

S. No.	DESCRIPTION	BIDDER'S REPLY
1.8	Fax Number:	
1.9	Name & Mobile no. of Concerned person(s)	
1.10	E-mail address:	
1.11	Internet Website (If applicable)	
1.12	ISO Certification, if any	
2.0	Affiliates / Associates / Subsidiary Companies details	Name: Address:
		Name: Address:
		Name: Address:
		Name: Address:
3.0	**In case of Consortium Bidding inform the following:**	
3.1	Bidder to indicate type of consortium (out of the types mentioned under NIT)	
3.2	a) Name of Consortium b) Name of the Leader/ Prime Member c) Name of Member	_____ _____ _____

S. No.	DESCRIPTION	BIDDER'S REPLY
3.3	Country of registration and Registration Number of Leader/Prime Member	_____ _____
3.4	Country of registration and Registration Number of Member	_____ _____
3.5	Address of Office of Consortium	_____ _____ City :_____ District :_____ State :_____ PIN/ZIP:_____
3.6	Operation/Working Address if different from above:	_____ _____ City :_____ District :_____ State :_____ PIN/ZIP:_____
3.7	Percentage stake for Leader/ Prime Member	_____
3.8	Percentage stake for Member	_____
3.9	Contact details of Consortium/ Prime Member	Email ID : …….. Mobile ……. Phone Number (with STD/ISD Code) ……
4.0	**GENERAL**	
4.1	Income Tax PAN No. (In India) of the firm.	
4.2	Provident Fund Registration No. of the firm. Tenderer to furnish details of **Employees Provident Fund (EPF)** Registration Registration No.:	

S. No.	DESCRIPTION	BIDDER'S REPLY
	District & State: We hereby confirm that the above PF Account is under operation presently and shall be used for all PF related activities for the labour engaged by us in the present work (if awarded to us).	
4.3	ESI Registration No. of the firm Tenderer to furnish details of ESI Registration: ESI REGISTRATION No.: District & State: We hereby confirm that the above ESI Account is under operation presently and shall be used for all ESI related activities for the labour engaged by us in the present work (if awarded to us). Kindly fill format given on Next Page if ESI Registration not available.	
4.4	GST Registration of the Firm (Please provide GSTIN)	
4.5	Tenderer to furnish details of CIN:	
5.0	**CONTRACTOR's PROFILE**	
5.1	Organisation Profile covering **a)** Contractor's Organization Chart Form the upper hierarchy level to Managers level. Indicate Group or Division who will be responsible for execution of the EPC work and its management team.	
	b) History & structure of the organisations with names of directors & chief executives.	
	c) Copy of Memorandum and Article of Association of the Company or Board Resolution mentioning Chairman/ Chief Executive Officer / Managing Director of the Company.	

S. No.	DESCRIPTION	BIDDER'S REPLY
	d) Memorandum of Understanding among the Consortium partners mentioning their area of responsibility and percent liability in financial terms in executing this contract on LSTK Basis.	
5.2	**Parent Company:** state legal name and country of residence of direct parent company and the ultimate holding company, if any.	
5.3	**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".	
5.4	**Affiliates / Associates / Subsidiary Companies:** Provide details in the form of a graphic representation to clearly identify each of the CONTRACTOR's Affiliates / Associates / Subsidiary Companies and their interrelation to one another.	

(Note: In case of Consortium/ Unincorporated JV bid, these details shall be provided for each member of consortium/ unincorporated JV)

(Signature & Seal of the Bidder)
Name and address of the Bidder

FORM–C

DECLARATION BY THE BIDDER

We _____ (Name of the Bidder) hereby represent that we have gone through and understood the Bidding Documents No. **LT / C050-1U68-PB-T-8010 /1004** (including but not limited to) the Commercial (including Price) & Technical Requirements/ Specifications in the Bidding Document (all volumes/parts) and that our Bid has been prepared accordingly in compliance with the requirements stipulated in the said documents.

We are submitting the Table of Contents (Master index –Technical & Master index –Commercial) of Bidding Documents and amendments, if any, as part of our Bid duly signed and stamped on each page in token of our acceptance. We are not submitting the total Bidding Document as part of our Bid but undertake that said the Bidding Documents shall be deemed to form part of our bid and in the event of award of work to us, the same shall be considered for constitution of Contract Agreement. Further, we shall sign and stamp on each page of these documents as a token of Acceptance and as a part of the Contract in the event of award of Contract to us.

I / we further undertake and confirm that all the documents submitted by us along with the bid are true and genuine to the best of our knowledge and belief. In case at any time, any document / information furnished by us are found to be forged / false / fabricated / misleading, we shall be solely liable for any legal consequences, penal actions including holiday listing by NRL/EIL.

SIGNED FOR AND ON BEHALF OF

_____

(NAME OF BIDDER)

PLACE:_____

DATE: _____

NOTE: This declaration should be signed by the Bidder's representative who is signing the Bid.

FORM–D

FORMAT OF LETTER OF WAIVER

(ON LETTERHEAD OF BIDDER)

NAME OF WORK	**:**	**COOLING TOWER PACKAGE FOR POLYPROPYLENE PROJECT OF M/S NUMALIGARH REFINERY LIMITED**
BIDDING DOCUMENT NO.	**:**	**LT / C050-1U68-PB-T-8010 /1004**

We * hereby agree to fully comply with, abide by and accept without variation, deviation or reservation all technical, commercial and other conditions whatsoever of the tender documents of Bidding /Tender document no. **LT / C050-1U68-PB-T-8010 /1004** and all Addenda/Amendments issued by M/s EIL on behalf Numaligarh Refinery Limited.

We further hereby waive, withdraw and abandon any and all deviations, variations, objections or reservations whatsoever thereto here to-before set out, given or indicated in our offer, clarifications, correspondence, communications, or otherwise with a view that the price bid submitted may be treated to conform in all respects, with the terms and conditions of the said tender documents including all including all Technical and Commercial Amendments.

We further hereby confirm that the price quoted in the price bid are as per the provisions of the tender /Bidding document and there is no deviation to the provisions in the price bid.

**

For & on behalf of

Authorized signatory of Bidder

* Here fill in the name of bidder.

** The Letter of Waiver must be signed by the person(s) authorized to sign

FORM–E

COMPLIANCE TO BID REQUIREMENT

(TO BE SUBMITTED ON THE LETTERHEAD OF BIDDER)

NAME OF WORK	:	**COOLING TOWER PACKAGE FOR POLYPROPYLENE PROJECT OF M/S NUMALIGARH REFINERY LIMITED**
BIDDING DOCUMENT NO.	:	**LT / C050-1U68-PB-T-8010 /1004**

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, issued by M/s EIL on behalf of Numaligarh Refinery Limited (NRL).

We confirm that during detailed engineering, we will review and recommend the required Special tools & tackles and Commissioning spares, wherever specified in the enquiry document and supply the same without any additional cost and time implication to NRL.

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 may be treated to conform to, in all respects, with the terms and conditions of the said Bidding Document including all Technical and Commercial Amendments.

We further hereby confirm that the price quoted in the price bid are as per the provisions of the Bidding document and there is no deviation to the provisions in the price bid.

**

For and on behalf of

Authorised signatory

(Name and signature of authorized signatory)

Date:

* Here fill in the name of bidder.

** The bid compliance letter must be signed by the person (s) authorized to sign.

FORM–F

(Note: In case of Consortium /unincorporated JV bid, these details shall be provided for each member of consortium/unincorporated JV)

SELF DECLARATION

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

SL. NO.	DESCRIPTION	BIDDER'S DECLARATION
1)	We confirm that we [Individual, each consortium member in case of consortium, Sub Contractor as applicable depending on the bidding arrangement] are not on Holiday/ Negative/ Suspension/ Banning List of NRL/EIL as on date of submission of bid.	
2)	We confirm that we [Individual, each consortium member in case of consortium, as applicable depending on the bidding arrangement] are not on Holiday / Negative of EIL / NRL / MoPNG on the due date of submission of Bid.	
3)	We confirm that we are not under Liquidation, Court Receivership or similar proceeding.	
4)	We confirm that the content of the Bidding Document including Schedule of Prices and Corrigendum / Addendum (if any) have not been altered or modified.	
5)	a) We confirm that no previous Transgression occurred in the last three years with any other company in any country conforming to the TI approach or with any other Public Sector Enterprises in India that could justify his exclusion from the tender process. [Refer Section 5 of the Integrity Pact]	
	b) We further confirm that the above declaration/confirmation are true and accurate in all respects, and not in conflict with the declaration mentioned in our any part of our bid / financial statement/any other document.	
6)	We confirm that we have not submitted alternative/multiple bids in line with clause no. 14 of ITB.	

SIGNATUREOFBIDDER : _____

NAMEOFBIDDER : _____

COMPANYSEAL : _____

FORM–G

PROFORMA OF DECLARATION OF BLACK LISTING / HOLIDAY LISTING

NAME OF WORK	:	COOLING TOWER PACKAGE FOR POLYPROPYLENE PROJECT OF M/S NUMALIGARH REFINERY LIMITED
BIDDING DOCUMENT NO.	:	LT / C050-1U68-PB-T-8010 /1004

In the case of a Proprietary Concern:

I hereby declare that neither I in my personal name or in the name of my proprietary concern M/s_____which is submitting the accompanying Bid/ Tender nor any other concern in which I am proprietor nor any partnership firm in which I am involved as a Managing Partner, have been placed on any blacklist or Holiday/ Negative/ Suspension/ Banning List declared by Numaligarh Refinery Limited / Engineers India Limited, except as indicated below:

(Here give particulars of blacklist/ Holiday/ Negative/ Suspension/ Banning, and in absence thereof state "NIL")

In the case of a Partnership Firm:

We hereby declare that neither we, M/s_____submitting the accompanying Bid/ Tender nor any partner involved in the management said firm either in his individual capacity or as proprietor or managing partner of any firm or concern have or has been placed on blacklist/ Holiday/ Negative/ Suspension/ Banning List declared by Numaligarh Refinery Limited / Engineers India Limited, except as indicated below:

(Here give particulars of blacklist/ Holiday/ Negative/ Suspension/ Banning List, and in absence thereof state "NIL")

In the case of Company

We, M/s_____, hereby declare that neither we or a parent, subsidiary or other company under direct or indirect common parent (associate company) have been placed on any blacklist/ Holiday/ Negative/ Suspension/ Banning List declared by Numaligarh Refinery Limited / Engineers India Limited, except as indicated below:

(Here give particulars of blacklist/ Holiday/ Negative/ Suspension/ Banning List, and in absence thereof state "NIL)

It is understood that if this declaration is found to be false in any particular, Numaligarh Refinery Limited or its authorized representative, shall have the right to reject my/ our bid, and if the bid has resulted in a contract, the contract is liable to be terminated without prejudice to any other right or remedy (including Suspension or banning or black listing or holiday listing) available to Numaligarh Refinery Limited.

SIGNATUREOFBIDDER : _____

NAMEOFBIDDER : _____

COMPANYSEAL : _____

FORM–H

UNDERTAKING FOR NON-ENGAGEMENT OF CHILD LABOUR

NAME OF WORK	:	COOLING TOWER PACKAGE FOR POLYPROPYLENE PROJECT OF M/S NUMALIGARH REFINERY LIMITED
BIDDING DOCUMENT NO.	:	LT / C050-1U68-PB-T-8010 /1004

I/ We hereby declare that:

a) We are committed to elimination of child labour in all its forms.

b) Neither we nor any of our nominated sub-contractor(s) are engaging Child Labour in any of our work(s) in terms of the provisions of The Child Labour (Prohibition and Regulation) Act, 1986 and other applicable laws.

c) We as well as our nominated sub-contractor(s) undertake to fully comply with provisions of The Child Labour (Prohibition and Regulation) Act, 1986 and other applicable labour laws, in case the work is awarded to us.

d) It is understood that if I/We, either before award or during execution of Contract, commit a transgression through a violation of Article b /c above or in any other form, such as to put my/our reliability or credibility in question, the Owner is entitled to disqualify us from the Tender process or terminate the Contract, if already executed or exclude me / us from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Owner. Such exclusion may be for a period of 1 year to 3 years as per the procedure prescribed in the guidelines for holiday listing of the Owner.

e) I/We accept and undertake to respect and uphold the Owner's absolute right to resort to and impose such exclusion.

Place: Signature of Bidder:
Date: Name of Signatory

FORM-I

FORMAT FOR BIDDERS' QUERIES (TECHNICAL)

NAME OF WORK : _____

BIDDING DOCUMENT: _____

NAME OF BIDDER: _____

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

NOTE:

1. The Pre-Bid Queries may be sent by e-mail to concern persons, the detail of which is provided in BDS.

2. Also send the editable soft format through email.

SIGNATUREOFBIDDER: _____ **WITHSEAL/STAMP**

FORM-I

FORMAT FOR BIDDERS'QUERIES (COMMERCIAL)

NAME OF WORK : _____

BIDDING DOCUMENT: _____

NAME OF BIDDER: _____

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

NOTE:

3. The Pre-Bid Queries may be sent by e-mail to concern persons, the detail of which is provided in BDS.

4. Also send the editable soft format through email.

SIGNATUREOFBIDDER:_____ **WITHSEAL/STAMP**

FORM-J

COMMERCIAL QUESTIONNAIRE (CQ)

Bidder's reply/ confirmation as furnished in the Commercial Questionnaire (CQ) shall supersede the stipulations mentioned elsewhere in their bid.

SL. NO.	NRL/ EIL'S QUERY	BIDDER'SREPLY/ CONFIRMATION
1.0	Confirm that your Bid is valid for 4 Months from the last date of submission of Bid.	
2.0	Confirm that Bid Security as per bid stipulations have been furnished along with bid.	
3.0	Confirm that the following documents are submitted with Part-I: (Part I – as per our Master Index)	
a)	All documents as per CHECKLIST.	
b)	Master Index as enclosed with Bidding Document is submitted in unpriced part duly signed and stamped on each page.	
c)	Copy of Addendum/ Amendments as a token of acceptance (Applicable, if issued).	
4.0	Confirm that price has been submitted in the e-tender portal as per the manner stated in the ITB.	
5.0	Schedule of Price	
a)	Price must be filled in the SOP uploaded in the e-tender portal in excel. Please note that the format is not to be edited / altered by the bidder.	
b)	Confirm that rate/ price has been quoted for all items of SOP.	
c)	Confirm that deviation/ terms & conditions are not mentioned in the price part. In case any terms and condition is mentioned in the price part, the same shall be treated as null and void.	
6.0	Confirm that you have studied complete Bidding Document including Technical and Commercial part and your Bid is in accordance with the requirements of the Bidding Document.	
7.0	Confirm your compliance to total Scope of Work mentioned in the Bidding Document.	
8.0	Confirm your acceptance for `Scope of Supply' mentioned in the Bidding Document and confirm that all materials shall be supplied as per Standards and Specification.	
9.0	Confirm your acceptance for Completion Period as mentioned in Bidding Document.	
10.0	Confirm that in your quoted price taxes & duties have been considered in accordance with the provision of General Conditions of Contract (GCC) and Special Conditions of Contract (SCC).	
11.0	Confirm that your quoted price includes all types of insurance as per the provisions of GCC and SCC.	
12.0	Confirm that all costs resulting from safe execution of Work, such as safety practices, use of protective clothing, safety glasses and helmet, safety precaution taken during monsoon, or any other safety measures to be undertaken by the Contractor for execution of work are included in the quoted rates/ price.	
13.0	Confirm that you have your own QA/ QC programme for executing this work. In case of award of work, you will submit all QA/QC documents as per ITB documents.	

SL. NO.	NRL/EIL'S QUERY	BIDDER'SREPLY/ CONFIRMATION
14.0	Confirm that while proposing the list of construction equipments, you have considered the following eqpts: Cranes of adequate capacity Induction Pipe Bending Machine DG Sets Compressors Spray Painting Machines Test pumps Adequate nos. of Welding Machines All relevant civil construction eqpts. All Electrical eqpts. All Instrumentation eqpts. Batching plant Any other equipment required for execution of work. Any other equipment specified in the Bidding Document.	
15.0	Confirm that all pages of the Bid have been numbered in sequential manner.	
16.0	Confirm that your Bid is substantially responsive to the requirements of the Bidding Document, and you have not stipulated any material deviation and submitted all details as specified in the Bidding Document	
17.0	Confirm that clarifications/ deviations, if any, are mentioned in Exception and Deviation format provided with the Bidding Document. Confirm that clarifications/ deviations stipulated elsewhere in the Bid shall not be taken into cognizance and is deemed withdrawn by the Bidder.	
18.0	Confirm that you have proposed adequate project/site organisation with supervisory personnel having qualification and experience as per Annexure of Special Conditions of Contract.	
22.0	Please confirm that all safety rules & regulations as mentioned in Bidding Document or notified at later date by OWNER during execution shall be adhered by CONTRACTOR within Lumpsum Price.	
23.0	Confirm that all costs resulting from safe execution of Work, such as safety induction, use of protective clothing, safety glasses and helmet, safety precaution taken during monsoon, or any other safety measures to be undertaken by the CONTRACTOR for execution of Work are included in the Lumpsum Price.	
24.0	Please confirm that your Lumpsum Price includes cost towards third party inspection, if any.	
25.0	Please note that the scope of this Bidding Document is on Lumpsum Turnkey (LSTK) basis, as detailed in the Bidding Document. The scope of work mentioned under various sections shall not be considered as limitative and CONTRACTOR's scope shall include completion of any activities of work not mentioned in the bid package but required to complete the Work in all respects and making it functional.	

SL. NO.	NRL/EIL'S QUERY	BIDDER'SREPLY/ CONFIRMATION
26.0	Please confirm that the CONTRACTOR shall supply all chemicals, consumables, first fill of catalyst, adsorbents, absorbents required for pre-commissioning/ Commissioning/PGTR as per provision of Bidding Document.	
27.0	The safety measures as mentioned in GCC/SCC & NRL's Job Safety Plans shall not be considered as limitative. The CONTRACTOR will be required to develop their stringent safety measures and submit the same to Engineer-in-charge with the provision of a dedicated safety group closely monitoring the construction activities in all working shifts.	
28.0	Please confirm that your sub-contractor for construction shall be meeting the requirements as specified in Special Conditions of Contract including the provision of GCC. Also that the agency for executing Electrical work shall have a valid license for carrying out the Work in the state of Assam.	
29.0	Confirm that you have uploaded the Bid on e-tender portal as per the instructions given in ITB.	
30.0	Confirm that None of the Directors of BIDDER is a relative of any Director of Owner/EIL or the BIDDER is a firm in which any Director of Owner/EIL or his relative is a Partner or the BIDDER is a private company in which none of director of Owner/EIL is a member or Director.	
31.0	Confirm that your offer complies with the policy for providing preference to Domestically (Indian) Manufactured Iron & Steel Products in Government Procurement (DMI&SP) and the minimum prescribed domestic value addition as per Appendix A of this Policy.	
32.0	In case of Consortium Bidding confirm the following: a. Indicate names of consortium members and their country b. Power of Attorney of each member is submitted. c. MOU between consortium members has been provided in unpriced bid duly signed by their respective Power of Attorney holders d. The Leader of the consortium shall represent the Consortium in all dealings with the OWNER and for providing any information or clarification sought from the Consortium, and this authorization shall be evident in legally executed Power of Attorney signed by legally authorized signatories of both the consortium members so as to enable such representative member to be in-charge and to act on behalf of and to bind the other member	
34.0	Confirm that your offer complies with provisions of the ITB clause – "RESTRICTIONS FOR BIDDERS FROM COUNTRIES WHICH SHARE LAND BORDER WITH INDIA"	

SIGNATURE OF BIDDER:_____

NAME OF BIDDER: _____

COMPANYSEAL:_____

Form –K1

COMMERCIAL EXPERIENCE DETAILS

Bidder shall furnish their experience details with reference to the Work, which qualify them in line with Criteria mentioned in Detailed NIT/IFB against **Clause No. 5.2**.

(MARK ✓FOR APPLICABILITY IN BOX)

SR. NO.	DESCRIPTION	DETAILS
1.	Name of project, location	
2.	Description of work	
3.	Contract Value:-	
(a)	**i)** Awarded Value (with currency)	**Currency:**
		Value:
	ii) Awarded Value in (INR/USD)	**Currency Conversion Factor:**
		INR / USD Value:
(b)	**i)** Final Executed Value (with Currency)	**Currency:**
		Value:
	ii) Final Executed Value with Currency (INR/USD) (Excluding GST/Service Tax)	**Currency Conversion Factor:**
		INR / USD Value:
	(iv) Final Executed Value with Currency (INR/USD) (Including all Taxes & duties)	**Currency Conversion Factor:**
		INR / USD Value:
4.	Name of Owner, Postal Address, Phone/Fax No./e-mail	
5.	Name of Consultant, Postal Address, Phone/ Fax No./e-mail	
6.	Above Refer Job Executed as:	
	As Single Bidder :	☐
	As a Leader of The Consortium:	☐
	Through any other Mode (Please Specify)	

SR. NO.	DESCRIPTION	DETAILS
7.	Name of Sector: (As per relevant NIT provision)	

SR. NO.	DESCRIPTION	DETAILS		
8.	ACTIVITY PERFORMED UNDER SCOPE OF WORK	BY SELF / AS A LEADER OF CONSORTIUM	BY MEMBER OF CONSORTIUM	BY SUB-CONTRACTOR
		(MARK ✓FOR APPLICABILITY IN BOX)		
	Overall Project Management			
	Residual process design			
	Detailed Engineering			
	Procurement and Supply			
	Construction including fabrication, erection,			
	Inspection, testing, Start up and pre-commissioning			
	Commissioning Assistance			
	Commissioning			
9.	Completion Status	**Specify Date of**		
		• Effective Date of Contract: _____ • Starting date: _____ • Scheduled Completion Date: _____ • Mechanical Completion Date: _____ • Commissioning Date:_____ • Date of putting into operation:_____ • Actual Date of Completion of Contract:_____ • Delay in months, if any :_____ • Reasons for delay, if any: _____		
10.	Whether following documents enclosed	• Copy of work order/contract Ref. No.:_____Dated:_____		
		• Copy of Proof of Completion Ref.No.:_____Dated: _____		
		• Proof of Commissioning Ref.No.:_____Dated: _____		
		• A proof that plant is Non-Captive in line with BQC requirement Ref.No.:_____Dated:_____		
11.	Confirm that you are meeting the Commercial Experience Criteria of Detailed NIT.	Yes	No	
12.	Confirmed that all supporting documents pertaining to qualification criteria submitted			

SR. NO.	DESCRIPTION	DETAILS
	as evidence are duly authenticated as per requirement mentioned in NIT/IFB and Instructions To Bidders.	Confirmed ☐

Note:

1. In case submitting multiple jobs for qualification, this sheet shall be provided for each job.
2. Confirmed that information furnished as per this format are correct and in case of any original document is required by Owner/Consultant, the same shall be submitted by us for verification.
3. Confirmed that copies of the documents submitted/ uploaded with e-bid for meeting the BQ criteria are authenticated copies and is true image of the original document. In case some area has been omitted while taking the Photocopy of original then in such areas should be identified.
4. To be submitted separately by each member of consortium/unincorporated JV, if applicable as per relevant NIT provisions.

(Signature & Stamp of the Bidder)

Form –K2

FINANCIAL DETAILS

[IN CASE OF CONSORTIUM, THIS FORMAT SHALL BE SUBMITTED SEPARATELY FOR RESPECTIVE CONSORTIUM MEMBERS]

ANNUAL TURNOVER OF LAST 3 YEARS: Bidder shall furnish details, which pre-qualify them in line with Financial Criteria mentioned under **detailed NIT**

A. Annual Turnover data for the last 3 Financial years

FINANCIAL YEAR (F.Y.)	ANNUAL TURNOVER (In INR) [As per Audited Financial Statement]
F.Y._____	
F.Y._____	
F.Y._____	

Turnover shall be calculated excluding GST and other Incomes.

B. NET WORTH

Networth of the immediate preceeding financial year (based on audited financial results)

FINANCIAL YEAR	NET WORTH (In INR) [As per Audited Financial Statement]	NET WORTH (POSITIVE or NEGATIVE)
F.Y._____		

A. ENCLOSE AUDITED ANNUAL AUDITED AND PUBLISHED FINANCIAL STATEMENTS (INCLUDING AUDITOR'S REPORT, BALANCE SHEET, PROFIT & LOSS ACCOUNT STATEMENT AND ALL OTHER SCHEDULES) FOR THE PRECEDING THREE FINANCIALYEARS.

B. **Net Worth calculation:** Net Worth means paid up share capital, Share Application Money pending allotment* and reserves# less accumulated losses and deferred expenditure to the extent not written off. Net worth has been calculated using the following formula, as per provisions of the enquiry document:

Reserves to be considered for the purpose of net worth shall be all reserves created out of the profits and securities premium account but shall not include reserves created out of revaluation of assets, write back of depreciation and amalgamation.

*Share Application Money pending allotment will be considered only in respect of share to be allotted.

Paid up Share capital		XXXX
Add : Share Application Money pending allotment		XXX
Add : Reserves (As defined above)		XXXX
Less : Accumulated Losses		XX
Less : Deferred Revenue Expenditure to the extent not written off		XX
Net Worth		XXXX

Form –L

BANK MANDATE FORM
(For Indian Bidder)

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 multicity 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

NOTE: To be submitted along with Copy cancelled cheque

Form–M

CHECKLIST

Bidder is requested to fill this checklist and ensure that all details/ documents have been furnished as called for in the Bidding Document along with duly filled in, signed & stamped checklist **with each copy of the "Unpriced** bid (Part–I)".

Please tick the box and ensure compliance & mention the page no. of Unpriced bid (Part–I).

Sr. No.	Description	Tick the box and ensure compliance	Mention Page No. of Unpriced Bid (Part-I)
1)	"Form of Bid" as per **FORM-A** (**On Letterhead**). Submitted		Page_____of_____
2)	"Information about Bidder" as per **FORM-B**. Submitted		Page_____of_____
3)	"Declaration by the Bidder regarding Bidding Document" as per **FORM-C**. Submitted		Page_____of_____
4)	"Letter of Waiver" as per **FORM-D** (**On Letterhead**). Submitted		Page_____of_____
5)	"Compliance to Bid Requirement" as per **FORM-E** (**On Letterhead**). Submitted		Page_____of_____
6)	"Self-Declaration" as per **FORM-F**. Submitted		Page_____of_____
7)	"Proforma of Declaration of Black Listing/Holiday Listing" as per **FORM-G**. Submitted		Page_____of_____
8)	"Undertaking for Non-engagement of Child Labour" as per **FORM-H**. Submitted		Page_____of_____
9)	"Proforma for Bidders' Queries" (Technical & Commercial) as per **FORM-I**. [In case of no Query, Bidder to mention "NIL" in the format &submit] Submitted		Page_____of_____
10)	Reply to "Commercial Questionnaire" as per **FORM-J** with Bidder's reply/ confirmation for each Sr. No. Submitted		Page_____of_____
11)	"Financial Details" as per **FORM-K2**. Submitted		Page_____of_____
12)	"Bank Mandate Form" along with Copy cancelled cheque as per **FORM-L**. Submitted		Page_____of_____

Sr. No.	Description	Tick the box and ensure compliance	Mention Page No. of Unpriced Bid (Part-I)
13)	"Check List" as per **FORM-M**. Submitted		Page_____of_____
14)	"Past Experience" as per **FORM-N**. Submitted		Page_____of_____
15)	"Deployment Schedule of Construction Equipment, Tools & Tackles proposed for execution of work" as per Bidding **FORM-O**. Submitted		Page_____of_____
16)	"Methodology for Execution" as per Bidding **FORM-P**. Submitted		Page_____of_____
17)	"Details of proposed Organization for Head and Site Office" as per Bidding **FORM-Q**. Submitted		Page_____of_____
18)	"Deployment Schedule of Supervisory Personnel" as per **FORM- R**. Submitted		Page_____of_____
19)	"Exceptions and Deviations" (Technical & Commercial) as per **FORM-S**. Submitted		Page_____of_____
20)	"Performa of Certificate of Non-Involvement of Agent" as per **FORM-T**. Submitted		Page__of_____
21)	**"Ccompliance to requirement of PAN No., Tax Residency Certificate and Form No.10 F"** as per **FORM-U1, U2 & U3**. Submitted		Page__of____
22)	"Affidavit w.r.t. Integrity Pact" as per **FORM-V**. Submitted		Page__of____
23)	Unpriced copy of Schedule of Prices duly stamped & signed on each page mentioning Quoted/ Not quoted (as applicable) Submitted		Page_____of_____
24)	**Appendix-I to ITB** (Integrity Agreement) - Duly filled, stamped & signed [**To be executed on plain paper**]. Submitted		Page_____of_____
25)	Affidavit w.r.t. Integrity Pact – Dully filled, signed & stamped		Page____of_____
26)	**Annexure-II to IFB** (Undertaking by CEO/ CFO/ Company Secretary (CS) or Proprietor)- Duly filled, stamped & signed. Submitted		Page_____of_____

Sr. No.	Description	Tick the box and ensure compliance	Mention Page No. of Unpriced Bid (Part-I)
27)	**Annexure-III to IFB** (Proforma for Self Declaration of Debarment/ Black Listing / Holiday Listing) - Duly filled, stamped & signed. Submitted		Page____of_____
28)	**Form- I A, Form- I B, Form- II of Appendix-III to ITB** (Certificate/Undertaking to be submitted by the Bidder in connection with "Restrictions for Bidders from Countries which share land border with India") - Duly filled, stamped & signed. (**On *Letter Head)*** Submitted		Page_____of_____
29)	**Form-X -** Indemnity Bond Cum Undertaking - Duly filled, stamped & signed. Submitted		Page__of____
30)	Affidavit of Self certification regarding Domestic Value Addition in Iron & Steel Products to be provided as per Annexure enclosed in tender or Undertaking as per FORM-2 of ANNEXURE-A-XVI to SCC enclosed. Submitted		Page_____of_____
31)	**Documents required for Public Procurement (Preference to Make in India) (PPP-MII) Order, 2017:** a. FORM – 1: Self Certification by bidder under PPP-MII ORDER, 2017- Duly stamped & signed. b. FORM – 2: Certification By Statutory Auditor / Cost Auditor / Practising Cost Accountant / Practising Chartered Towards mandatory minimum local content - Duly stamped & signed. Submitted		Page_____of_____
32)	Power of Attorney in Favour of the Person who has signed the Bid. Submitted		Page_____of_____
33)	EMD or Declaration in lieu of EMD/Bid Security as per NIT Submitted		Page_____of_____
34)	Project Schedule in the form of Bar Chart. Submitted		Page_____of_____
35)	All required authenticated documents for meeting the BQC. Submitted		Page_____of_____
36)	Reply to Technical questionnaire/ Technical Compliance (If enclosed in technical part). Submitted		Page_____of_____

Sr. No.	Description	Tick the box and ensure compliance	Mention Page No. of Unpriced Bid (Part-I)
37)	Technical Details/ Documents specified in Technical part Submitted (Including the format of technical information required for assessing quantum of work)		Page_____of_____
38)	Copy of PF Registration Submitted		Page_____of_____
39)	Copy of PAN Card Submitted		Page_____of_____
40)	Undertaking By the Tenderer(s) for Quoted Price as per e-Portal Additional Document Enclosed with Bid. Submitted		Page_____of_____
41)	Information about the Bidder & following enclosures (Annexure to be submitted separately for each member of consortium, in case of bids on consortium basis) : a) Contractor's Organization Chart Form the upper hierarchy level to Managers level. Indicate Group or Division who will be responsible for execution of the EPC work and its management team. b) History & structure of the organisations with names of directors & chief executives. c) Copy of Partnership Deed/Article of Association & Memorandum of Association of the Company and Board Resolution mentioning Chairman/ Chief Executive Officer / Managing Director of the Company. d) 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 Note: To be submitted for each member of consortium		Page_____of_____
42)	Parent Company: State legal name and country of residence of direct parent company and the ultimate holding company, if any		Page__of
43)	Affiliates / Associates / Subsidiary Companies: Provide details in the form of a graphic representation to clearly identify each of the CONTRACTOR's Affiliates / Associates / Subsidiary Companies and their interrelation to one another		Page__of____
44)	Duly Signed & Stamped Master Index, all Corrigendum and all Addendum. Submitted		Page_____of_____
45)	Quality Assurance: A brief description of the bidder's QA system and a statement detailing how QA will be implemented for the Project. Submitted		Page_____of

Sr. No.	Description	Tick the box and ensure compliance	Mention Page No. of Unpriced Bid (Part-I)
46)	GST Registration certificate in Assam or Undertaking in line with GCC/SCC provision. Submitted		Page_____of
47)	All documentation related to Financial Criteria defined in Detailed NIT		Page_____of_____
48)	Any other information required in the Bidding Documents or considered relevant by the Bidder		Page_____of

CONFIRM THE FOLLOWING

(1) All pages of the bid have been page numbered in sequential manner. YES ☐

(2) Master Index and Copy of Addendum/ Amendment, if any, has been submitted along with offer, duly signed and stamped on each page. YES ☐

(3) The bid has been submitted in line with requirements as specified in Instructions to Bidders. YES ☐

(4) Price bid uploaded by the bidder on designated e- tendering folder in the e-tendering website as per ITB
Submitted YES ☐

SIGNATURE OF BIDDER :_____

NAME OFB IDDER :_____

COMPANY SEAL :_____

FORM – N

SIMILAR EXPERIENCE DURING LAST 10 YEARS

Sl. No.	Description of Work	Name of Owner, Postal Address, Phone / Fax Number/Email	Contract Value	Starting Date	Schedule Completion Date	Actual Completion Date	Actual Completion Value	Number of Years of Operation	Unit Mode (Grass Root / Revamp)

Note: copies of work order(s) and completion certificate(s) for above jobs should be submitted by the bidder along with this Form.

SIGNATURE OF BIDDER :_____

NAME OF BIDDER :_____

COMPANY SEAL :_____

FORM-O

DEPLOYMENT SCHEDULE OF CONSTRUCTION EQUIPMENT

SL. NO.	DESCRIPTION	CAPA - CITY	DEPLOYMENT SCHEDULE																				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	**TOTAL**
1	CRANES																							
1.1	1000 MT																							
1.2	500 MT																							
1.3	300 MT																							
1.4	150 MT																							
1.5	75 MT																							
1.6	50 MT																							
1.7	20 MT																							
1.8	15 MT																							
1.9	10 MT																							
1.10	5 MT																							
2	DIESEL GENERATORS																							
2.1	500 KVA																							
2.2	300 KVA/250KV																							
2.3	150 KVA/125KV																							

SL. NO.	DESCRIPTION	CAPA -CITY	DEPLOYMENT SCHEDULE																				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	TOTAL
3	COMPRESSORS																							
3.1	600 CFT																							
3.2	350 CFT																							
4	WELDING M/CS																							
4.1	DIESEL WELDING M/C																							
4.2	DIESEL GENERATOR																							
4.3	WELDING TRANS FORMERS/RE C- TIFIERS																							
4.4	TIG WELDING M/CS																							
5	GRIT BLASTING M/CS																							
6	SPRAY PAINTING M/CS																							
7	STRESS RELIEVING M/CS																							
8	RADIOGRAPH Y M/CS																							
9	TEST PUMP																							
10	WATER PUMP																							

SL. NO.	DESCRIPTION	CAPA - CITY	DEPLOYMENT SCHEDULE																				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	TOTAL
11	TRANSPORTA-TION EQPT																							
11.1	TRACTOR - TRAILOR																							
11.2	TRUCKS																							
11.3	BUS																							
12	JACKS																							
12.1	MECHANICAL																							
12.2	HYDRAULIC																							
13	CIVIL																							
13.1	EXCAVATORS																							
13.2	DUMPERS																							
13.3	BATCHING PLANT																							
13.4	CONCRETE PUMP CAR																							
13.5	TRANSIT MIXER																							
13.6	MIXER																							
13.7	VIBRATORS																							
13.8	COMPACTORS																							

SL. NO.	DESCRIPTION	CAPA-CITY	DEPLOYMENT SCHEDULE																				
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	TOTAL
13.9	THEODOLITES																							
14.0	OTHERS																							
14.1	INSULATION TESTING EQUIPMENT																							
14.2	SECONDARY INJECTION TESTING KIT																							
14.3	METERS, TOOLS & TACKLES ETC.																							
14.4	CALIBRATION EQUIPMENT																							
14.5	OTHER TOOLS &TACKLES																							
14.6	MULTI METERS CALIBERAT-ORS ETC.																							

(STAMP & SIGNATURE OF BIDDER)

Note: Time for completion shall be as defined in Annexure A - I to SCC.

Bidder to add addition rows / columns to accommodate other equipment's / schedule as required to complete the work in time schedule

FORM - P

SUBJECT: METHODOLOGY OF EXECUTION

In this Proposal FORM, Bidder shall detail out **Methodology of Execution** of work, as applicable for the following:

In this Exhibit, Bidder shall furnish the following:

1. Methodology of execution of residual basic design and detailed engineering considering/ furnishing
   - Availability of 3D modelling with PDS/PDMS software along with details such as number of work stations, available experienced manpower etc.
   - Availability of latest IT communication system and Engineering Documentation Management & control & Transfer of deliverables
   - Exposure of engineering company for above software
   - Key personnel to be deployed by main bidder, either at Bidder's design office or design office of Engineering sub-contractor, for review, approval and monitoring.
2. Methodology of Construction Execution covering.
   - Mobilization of heavy duty crane for installation of heavy lifts mentioned under (3) below.
   - Monsoon working
   - Extent of mechanization of construction processes/equipment
   - Expediting of material/equipment
3. Heavy Lifts
4. Any other

(STAMP & SIGNATURE OF BIDDER)

DATE

FORM-O

DETAILS OF PROPOSED ORGANISATION

The Bidder shall submit herein details of Head Office and Project/Site Organisation proposed to be deployed for execution of work. Bidder shall also furnish the bio-data of Site-in-Charge and key personnel to be deployed meeting the minimum criteria specified in the SCC.

Bidder understand that the said proposal represents the minimum deployment and the Bidder acknowledges that the said deployment may have to be augmented with additional number and/or categories, if required if directed by Engineer-in-Charge in order to compete the work within the completion schedule and quoted lumpsum price.

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

FORM-R

DEPLOYMENT SCHEDULE OF SUPERVISORY PERSONNEL

SL. NO.	DESCRITPION	DEPLOYMENT SCHEDULE																					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	TOTAL MAN-MONTHS
1	PROJECT MANAGEMENT																						
1.1	PROJECT MANAGER																						
1.2	PLANNING MANAGER																						
1.3	PLANNING ENGINEERS																						
2	RESIDUAL DESIGN AND DETAILED ENGINEERING																						
2.1	PROJECT ENGINEERING MANAGER																						
2.2	ENGINEERING COORDINATOR																						
2.3	ENGG. PERSONNEL FOR VARIOUS DISCIPLINE																						
2.3.1	CIVIL STRUCTURAL																						
(i)	ENGINEERS																						
2.3.2	PRESSURE VESSELS																						
2.3.3	MECHANICAL EQPT/ ROTARY EQPT.																						
2.3.4	PIPING																						
(i)	ENGINEERS																						
2.3.5	ELECTRICAL																						
(i)	ENGINEERS																						

SL. NO.	DESCRITPION	DEPLOYMENT SCHEDULE																					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	TOTAL MAN-MONTHS
2.3.6	INSTRUMENTAT-ION																						
(i)	ENGINEERS																						
2.3.7	MISCELLANE-OUS																						
3	PROCUREMENT																						
3.1	PURCHASE																						
3.1.1	PURCHASE MANAGER																						
3.1.2	PURCHASE COORDINATOR																						
3.1.3	PURCHASE OFFICER																						
3.2	INSPECTION																						
3.2.1	INSPECTION MANAGER																						
3.2.2	INSPECTORS																						
3.3	EXPEDITING																						
3.3.1	EXPEDITING COORDINATOR																						
3.3.2	EXPEDITORS																						
3.4	CUSTOM CLEARANCE, IMPORT LICENCE, TRANS- PORTATION PERSONNEL																						
4	SITE CONSTRUCTION																						
4.1	PROJECT MANAGER																						
4.2	CONSTRUCTION MANAGER																						
4.3	CIVIL STRUCTURAL																						
4.3.I	LEAD ENGINEER																						
4.3.2	SITE ENGINEER																						

SL. NO.	DESCRITPION	DEPLOYMENT SCHEDULE																					TOTAL MAN- MONTHS
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
4.3.3	SUPERVISORS																						
4.4	MECHANICAL WORKS																						
4.4.I	LEAD ENGINEER																						
4.4.2	SITE ENGINEER																						
4.4.3	SUPERVISORS																						
4.5	PIPING WORK																						
4.5.1	LEAD ENGINEER																						
4.5.2	SITE ENGINEER																						
4.5.3	SUPERVISORS																						
4.6	ELECTRICAL WORK																						
4.6.1	LEAD ENGINEER																						
4.6.2	SITE ENGINEER																						
4.6.3	SUPERVISORS																						
4.7	INSTRUMENTATION WORK																						
4.7.1	LEAD ENGINEER																						
4.7.2	SITE ENGINEER																						
4.7.3	SUPERVISORS																						
4.8	QUALITY ASSURANCE/ QUALITY CONTROL																						
4.8.1	QC/QA MANAGER																						
4.8.2	INSPECTOR (CIVIL)																						
4.8.3	INSPECTOR (PIPING)																						
4.8.4	INSPECTOR (MECH EQPT)																						

SL. NO.	DESCRITPION	DEPLOYMENT SCHEDULE																					TOTAL MAN- MONTHS
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
4.9	SAFETY ENGINEER																						
4.10	SITE ENGINEERING WORKS																						
4.10.1	ENGINEERS																						
4.10.2	SUPERVISORS																						
4.11	COMPUTER ENGINEER																						
4.12	ADMINISTRAT-ION MANAGER																						
4.13	MISCELLANE-OUS																						
4.14	WAREHOUSE PERSONNEL																						
4.15	MATERIAL MANAGER																						
4.16	COMMISSION-ING																						
i)	COMMISSION-ING COORDINATOR																						
ii)	COMM ENGINEER (SHIFT-IN-CHARGE)																						
iii)	CONTROL ROOM COORDINATOR																						
iv)	FIELD SUPERVISOR																						
v)	TECHNICIAN																						

(STAMP & SIGNATURE OF BIDDER)

Note: Time for completion shall be as defined in Annexure-A-I to SCC.

Bidder to add addition rows / columns to accommodate other Personnel / schedule as required to complete the work in time schedule.

EXCEPTIONS AND DEVIATIONS (TECHNICAL)

Bidding Document No: _____

SL. NO	REF. OF TENDER DOCUMENT		SUBJECT	DEVIATIONS
	PAGE NO.	CLAUSE / PARA NO.		

NOTE: This shall be submitted separately for Commercial & Technical Sections.

The exceptions/deviations taken by bidder to the stipulations of the bidding document shall be brought out in Techno-Commercial bid & not in Price Part as per the format.

Any exceptions/deviations brought out elsewhere in the bid shall not be construed as valid.

(STAMP & SIGNATURE OF TENDERER)

EXCEPTIONS AND DEVIATIONS (COMMERCIAL)

Bidding Document No: _____

SL. NO	REF. OF TENDER DOCUMENT		SUBJECT	DEVIATIONS
	PAGE NO.	CLAUSE / PARA NO.		

NOTE: This shall be submitted separately for Commercial &Technical Sections.

The exceptions/deviations taken by bidder to the stipulations of the bidding document shall be brought out in Techno-Commercial bid & not in Price Part as per the format.

Any exceptions/deviations brought out elsewhere in the bid shall not be construed as valid.

(STAMP & SIGNATURE OF TENDERER)

FORM-T

PERFORMA OF CERTIFICATE OF NON-INVOLVEMENT OF AGENT

NAME OF WORK: _____

BIDDING DOCUMENT/ RFQ NO. : _____

Where Indian Agent / Consultant/ Representative/ Retainer/ Associates is not involved, the bidder shall certify in the proforma given below on their letterhead.

This is to certify that we have not engaged/involved any Indian Agent/ Representative/ Consultant / Retainer/ Associates who is not our employee for the purpose of accompanying bid or any resultant Contract and therefore, no Agent's/ Retainer's/Representative's/Consultant's/Associate's commission is payable in India or abroad against or in connection with any resultant Contract.

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

DATE

FORM –U1

COMPLIANCE TO REQUIREMENT OF PAN NO. , TAX RESIDENCY CERTIFICATE AND FORM NO.10 F (APPLICABLE FOR FOREIGN BIDDER IN CASE OF SERVICES IN INDIA IS REQUIRED AS PER SCOPE OF ENQUIRY DOCUMENT)

It is mandatory for the foreign bidder to furnish the following information in case his receipts are subject to tax deduction at source in India:

A. PAN No.

In case, where site services / site work is applicable, bidder shall furnish Indian Income Tax PAN number and Tax Residency Certificate (TRC).

In case of payments in the nature of interest, royalty, fees for technical services and payment on transfer of any capital asset, bidder has the option to submit the following details and PAN number is not required:

1. Name, email id, contact number; and
2. Address in the country of which the deductee is a resident; and
3. Tax Residency Certificate (TRC) from the Government of that country; and
4. Tax Identification Number / unique number of the deductee in the country of his residence.

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

B. Tax Residency Certificate (TRC)

TRC containing prescribed particulars as per the Bidding Form–Z2 from the Government of foreign country in order to claim the benefits of DTAA as per the Indian Income Tax requirements failing which the relief under DTAA will not be available and consequently the higher rate of withholding tax @25% will be applicable and deducted from the payment made to supplier/Contractor/consultant (i.e., non-resident taxpayer). The TRC shall be duly verified by the Government of the country of which the assessee claims to be a resident for the purposes of tax.

C. Form 10F

In additional to TRC, bidder in order to claim the benefits of DTAA shall also submit additional information in form no. 10F (Form –Z3). Form 10F has to be signed & verified by the assessee himself.

If some information is already contained in TRC, the bidder shall not be required to provide that information in Form no. 10F but even then Form no. 10F is required to be provided by the bidder.

However, the bidder may write Not Applicable in the relevant column in case that information is already contained in TRC.

The above shall be furnished before release of any payment or within one month of the release of Order, whichever is earlier.

Failing submission of the above information, any additional tax liability on Owner, will be deducted from the payment due to the Supplier/Contractor.

FORM –U2

[TRC CERTIFICATE]

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

i. 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 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 purposes of tax;
vii. Period for which the certificate is applicable; and
viii. Address of the applicant for the period for which the certificate is applicable

FORM –U3

FORM-10F

ON THE LETTER HEAD
[See sub-rule (1) of rule 21AB]

Information to be provided under sub-section (5) of section 90 or sub-section (5) of section 90A of theIncome-tax Act, 1961

I. ……..... *son/daughter of Shri .....in the capacity of ……...(designation) do provide the following information, relevant to the previousyear…… *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 to in sub-section (4) of section 90 of sub-section (4) of section 90A from theGovernment 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:

a. ***** Delete whichever is not applicable
b. # 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.

FORM-V

AFFIDAVIT W.R.T. INTEGRITY PACT

[To be submitted on Indian Non-Judicial Stamp Paper as per Indian Stamp Act, 1899 with **Minimum of INR 100/-** by Indian Bidders, OR, as per applicable Laws in Bidder's Country in case of Foreign Bidder as on the date of Affidavit]

Bidding/Enquiry Document No:
Name of Work:
Name of the Project:
Name of the Owner:

I, _____<Insert Full Name>, S/o/D/o of _____<Insert Father's Name>, working as _____ <Insert present Designation> in the Company/Firm _____<Insert full name of Company>, having its registered office at_____<Insert full address of Company with Country Name> and working Office address at _____ <Insert full working office address with Country Name, in case different from registered office >, do hereby faithfully affirm and certify as under:

1) That I am authorized representative and signatory of the above referred Company.
2) That the Bidding Entity is not involved in any case of transgression in terms of Integrity Pact submitted for above referred Enquiry Document.
3) In case of any sub-contractor proposed/ appointed by us for this tender, we also confirm our proposed sub-contractor is also not involved in any case of transgression in terms of Integrity Pact submitted for above referred Enquiry Document.
4) I depose accordingly.

SIGNATURE OF DEPONENT

VERIFICATION

I, _____ <the deponent named above>, do hereby verify that the factual contents of this Affidavit are true and correct. No part of it is false and nothing material has been concealed there from.

Verified at _____on this _____day of _____20____.

SIGNATURE OF DEPONENT

FORM-W

SAMPLE FORMAT FOR POWER OF ATTORNEY (POA)

[To be submitted on Indian Non-Judicial Stamp Paper as per Indian Stamp Act, 1899 with Minimum of INR 100/- by Indian Bidders, OR, as per applicable Laws in Bidder's Country in case of Foreign Bidder as on the date of Affidavit]

Bidding Document No:

Name of Work/ITEM:

I, Mr./Mrs./Miss _____ <Insert Full Name>, S/o/D/o of Mr._____ <Insert Father's Name>, working as _____ _____ <Insert present Designation> in the Company/Firm _____ _____ <Insert full name of Company/Firm>, having its registered office at _____ <Insert full address of Company with Country Name> and working Office address at _____ _____ <Insert full working office address with Country Name, in case different from registered office>, do hereby constitute, appoint and authorize Mr./Mrs./Miss_____(Name and residential address), S/o/D/o Mr._____ <Insert Father's Name>, working as _____ <Insert present Designation> in the Company/Firm and whose signature is attested below as the Attorney of the Company/ Firm to do in the name and on behalf of the Company/Firm all or any of the acts, deeds or things necessary in connection with or incidental to our Bid for the subject Enquiry Document, including but not limited to the signing and submission of application / proposal, participating in the meetings, responding to queries, submission of information / documents and generally to represent us in all the dealings with EIL/OWNER or any person, in connection with the works, without any prejudice, limitations and exceptions.

This POA shall be valid till the completion of the entire Bidding process, and in case the Order is awarded to our Company, till the complete discharge of all the contractual obligations and execution of the Works/Orders or till Completion Certificate (unconditional) is issued by the OWNER or till the settlement of all disputes, if any, whichever is later, unless otherwise replaced with Separate Power of Attorney in due course, in which case all responsibilities, obligations and liabilities with respect to this POA shall be construed to be seamlessly transferred to the newly appointed POA Holder.

For & on behalf of
<Name of Bidder>

_____
Signature of person in whose favour POA is issued
Name:
Designation:
Date:
Signature attested and Accepted
_____ (signature)
(Name, Title and Address) of the Attorney
Designation:
Date & Seal
Note
Wherever required, the executant(s) should submit for verification the extract of the charter documents and/or documents such as board of resolution passed for this purpose (in case of company) in favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the executant(s).

FORM-X

INDEMNITY BOND CUM UNDERTAKING
(In Letter Head of Company /Firm)

Job Name :

Tender No. :

Recipient Name: M/s Numaligarh Refinery Limited

Assam: Address: NRP Complex, NRL site, Numaligarh, Golaghat, Assam-785699 GSTIN No. 18AAACN6984B1ZD

West Bengal: Address: Forth floor, plot no.31, Bharat Bhawan, 118 Prince Gulam Md.Shah Road, Golf Green, Kolkata, West Bengal-700095 GSTIN No.19AAACN6984B1ZB

Delhi: Address: 6th Floor, 15-17, Tolstoy house, Tolstoy Marg, New Delhi-110001 GSTIN No: 07AAACN6984B2ZF

Sub: Payment of GST Amount and filing of GST Return for availing Input Tax Credit (ITC) by Numaligarh Refinery Limited (NRL).

Sir / Madam, With reference to payment of GST amount and filing of GST Return for availing Input Tax Credit (ITC) by NRL as per eligibility provisions for the identified Invoices raised by us, we, M/s _____, having our Registered Office at _____, possessing GST Identification No _____ hereby declare and undertake as follows:

1. We have disclosed all the facts relating to our firm to M/s Numaligarh Refinery Limited
2. We hereby agreed and undertake to file GSTR-1 on time i.e. 11 th of the next month so that NRL can take Input Tax Credit by matching GSTR-2A.
3. We hereby declare that we shall deposit GST for the related invoices by 20th of the succeeding month as per the provision of GST law.
4. We hereby declare that we will file GSTR 3B related to all invoices in time i.e. 20th of the next month.
5. We hereby agree and undertake to indemnify as under:-
    a. The Firm / Company shall take all necessary safeguards to ensure availing of ITC for all invoices raised on NRL without any financial loss to NRL.
    b. In case of rejection of ITC by the concerned Tax Authority, for non-payment of GST amount by us or for any other reasons attributable to us, we hereby undertake and agree to indemnify NRL in full against all consequences, liabilities of any kind whatsoever directly arising from denial of ITC which includes interest and penalty arising out of such irregular availment of ITC by you opined by GST Authority.
    c. We hereby agree and confirm that, any breach of the above indemnification or undertakings shall be construed as breach of the terms and conditions for reimbursement of GST and NRL shall be at liberty to take such action against us including recovering of reimbursed GST amount from
        i. Any of our Bank Guarantee executed in your favour, if any,
        ii. Security Deposit paid for any of your work, if any or
        iii. Other unpaid invoices, if any of us raised with recipient

Authorized Signature of the Indemnifier

Name:

Designation:

Seal:

Date:

NUMALIGARH REFINERY LIMITED **A GOVERNMENT OF INDIA ENTERPRISE**	

GENERAL CONDITIONS OF CONTRACTS 2024

(Effective from 09.09.2024)

NUMALIGARH REFINERY LIMITED
ASSAM, INDIA

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SECTION I

1.0 DEFINITION OF TERMS

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

1. The "OWNER/COMPANY" shall mean followings:

   Numaligarh Refinery Limited or NRL in short having its registered office at 122A, GS Road, Christian Basti,Guwahati-781005.

2. The "CONTRACTOR" shall mean the person or persons, firm or company whose Tender has been accepted by OWNER and includes the Contractor's Legal Representatives, his Successors and permitted Assigns.

3. The “Managing Director” shall mean the Managing Director of the Numaligarh Refinery Limited (NRL) or his successor in office as designated by the Owner.

4. The "Engineer-in-Charge" shall mean the person nominated from time to time by the Consultant/owner and shall include those who are expressly authorised by Consultant/owner to act for and on its behalf for operation of this CONTRACT.

5. The "WORK" shall mean and include all Works, Consultancy services and Non-Consultancy (Other) Services to be executed in accordance with the CONTRACT or part thereof as the case may be and shall include all extras, additional, altered, or substituted works as required for the purpose of the CONTRACT.

6. "PERMANENT WORK" shall mean and include works which will be incorporated in and form a part of the work to be handed over to the owner by the contractor on completion of the contract.

7. "CONSTRUCTIONAL PLANT/EQUIPMENT" shall mean all Appliances/Equipment or things of whatsoever nature required in or for the execution, completion, operation or maintenance of the works or temporary works (as hereinafter defined) but does not include materials or other things intended to form or forming part of the permanent works.

8. "SITE" shall mean the land and waters and other places on, under, in or through which the WORK is to be carried out and any other lands, water or places provided by Owner for the purpose of the CONTRACT together with any place designated in the CONTRACT as forming part of the SITE.

9. The "Contract document" shall mean collectively the Tender Documents, Designs, Specifications Schedule of Rates/Prices, purchase order / outline agreement-contract of Tender, Agreed variation, if any and other documents constituting the Tender and acceptance thereof.

10. The "CONTRACT" shall mean the agreement between OWNER and CONTRACTOR for the execution of the WORK including therein all documents such as the Request for Quotation, Instructions to Tenderers, General Conditions of Contract, Special Conditions of Contract, Specifications, General Requirements, Time Schedule, Prices, Purchase Order, Outline Agreement - Contract, Agreed Variations, if any, etc.

11. "Consultant" shall mean the Consulting Engineers to the OWNER engaged for a particular project/service.

12. The "Sub-contractor" shall mean any person or firm or company (other than the CONTRACTOR) to whom any part of work has been entrusted by the CONTRACTOR, with the complete knowledge of the Engineer- in-Charge, and the Legal Representatives, Successors and permitted Assigns of such person, firm or Company.

13. "SPECIFICATIONS" shall mean all directions, various technical specifications, provisions and requirements attached to the tender document, which pertain to the method and manner of performing the

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

14. "DRAWINGS" shall include maps, plans, sketches and tracings or prints thereof with any modifications approved in writing by the owner/Engineer-in-Charge and such other Drawings as may from time to time be furnished or approved in writing by the Owner/Engineer-in-Charge.

15. The "Tender" shall mean the tender along with supporting documents submitted by the CONTRACTOR for acceptance by OWNER.

16. The “Alteration/Variation/Change Order" means an order given in writing by the Engineer-in-Charge to effect additions to or deletions from and alterations in the WORK.

17. “Virtual completion” means completion of all important/essential works pending certain small value works kept in abeyance by the owner to achieve required co-ordinate completion with other inter linked unavoidable activities.

18. The "COMPLETION CERTIFICATE" shall mean certificate to be issued by the Engineer-in-Charge when the WORK has been completed in accordance of contract document to his satisfaction.

19. The "FINAL CERTIFICATE" in relation to the WORK shall mean the certificate regarding the satisfactory compliance of the various provisions of the CONTRACT by the CONTRACTOR issued by the Engineer- in-Charge after the period of liability is over.

20. The “Period of Liability" in relation to a WORK means the specified period from the date of completion of WORK as indicated in completion certificate upto the date of issue of final certificate during which the CONTRACTOR stands responsible for rectifying all defects that may appear in the WORKS executed by the contractor in pursuance of the contract and includes workmanship defects, warranties against manufacturing/fabrication defects covering all materials, plants, equipment, components and the like supplied by the contractor.

21. The “Appointing Authority” for the purpose of arbitration, if any, shall be the person so designated by the Owner.

22. "TEMPORARY WORK" shall mean all temporary works of every kind required in or about the execution, completion or maintenance of the WORK.

23. “Plans” shall mean all maps, sketches and layouts as are incorporated in the Contract in order to define broadly the scope and specifications of the work or works and all reproductions thereof.

24. "Notice in Writing or Written Notice" shall mean a notice written, typed or printed form, sent by e-mail to the last known e-mail address or otherwise by post/courier, personal delivery, proved to have been received by the addressee by registered post/courier to the last known private or business address or registered office of the addressee and shall be deemed to have been received in the ordinary course of post as if it would have been delivered.

25. "Approved" shall mean approved in writing including subsequent written confirmation of previous verbal approval and “Approval" means approval in writing including as aforesaid.

26. Fax / Letter of Acceptance shall mean intimation by a Fax/Letter to Tenderer that the Tender has been accepted in accordance with the provisions contained therein.

27. “Day” means a day of 24 hours from the midnight to midnight irrespective of the number of hours worked in that day.

28. “Working Day” means any day other than declared to be holiday or rest day by the Owner.

29. “Week” means a period of any consecutive seven days.

30. “Metric System” all technical documents regarding the construction of works are given in the metric system and all work in the project should be carried out according to the metric system. All documents concerning the work shall be maintained in the metric system.

31. “Value of Contract” means the sum accepted or the sum calculated in accordance with the prices accepted in tender and/or the contract rates as payable to the contractor for the entire execution and full completion of the work.

32. “Language of Drawings and Instruction” all the drawings, titles, notes, instruction, dimensions etc. shall be in English language.

33. “Mobilization” shall mean establishment of sufficiently adequate infrastructure by the Contractor at “Site” comprising of construction equipment, aids, tools, tackles including setting of site offices with facilities such as power, water, communication etc., establishing manpower organization comprising of Resident Engineers, Supervising personnel and an adequate strength of skilled, semi-skilled and un-skilled workers, who, with the so established infrastructure shall be in a position to commence execution of work at site (s), in accordance with the agreed time schedule of completion of work. Mobilization shall be considered to have been achieved, if the Contractor is able to establish infrastructure as indicated above to begin work at all site (s) / locations as per the Time Schedule, where so warranted in accordance with agreed schedule of work implementation to the satisfaction of Engineer-in-charge/Owner.

34. “Commissioning” shall mean putting into service of the system including the plant(s), equipment(s), Vessel (s), Pipeline, machiner(ies), or any other section or sub section of installation (s) pertaining to the work of the Contractor after successful testing and trial runs of the same.

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

SECTION II

2.0 GENERAL INFORMATION

2.1 LOCATION OF SITE AND ACCESSIBILITY:

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

Location of Refinery :
Numaligarh Refinery, PO-NR Project, Golaghat, Assam-785699

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

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

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

2.2 SCOPE OF WORK:

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

2.3 WATER SUPPLY:

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

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

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

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

2.4 POWER SUPPLY

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

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

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

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

The Contractor will have to provide and install his own light and power meters duly tested by State Electricity Board /NRL Testing laboratory which will be governed as per Central / State Government Electricity Rules. The meter shall be sealed by the Owner.
The total requirement of powers with equipment wise break - up shall be indicated by the tenderer along with his tender.

2.4.2 At all times IEA regulation shall be followed failing which the owner has a right to disconnect the power supply without any reference to the contractor. No claim shall be entertained for such disconnection by the Engineer-In- Charge. Power supply will be reconnected only after production of fresh certificate from the authorized electrical supervisors.

2.4.3 The owner is not liable for any loss or damage to the contractor's equipment as a result of variation of voltage or frequency or interruption in power supply or other loss to the contractor arising there from.

2.4.4 In case of damage of any of the Owner's equipment on account of fault, intentional or unintentional on the part of the contractor, the Owner reserves the right to recover the cost of such damage from the contractor's bill. Cost of HRC Fuses replace at the Owner's terminals due to any fault in the contractor's installation shall be to contractor's account at the rates decided by the Engineer-in-charge. Ratings of fuses to be provided/use by the contractor shall not be more than the rating approved by owner.

2.4.5 The total requirement of power with equipment wise breakup shall be indicated by the tenderer along with his tender.

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

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

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

2.5.1 PUTTING UP BUILDINGS ON PROJECT SITE:

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

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

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

2.6 SAFETY STANDARDS FOR TEMPORARY BUILDINGS

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

SECTION III
GENERAL INSTRUCTIONS TO TENDERERS

3.0 SUBMISSION OF TENDER:

3.1 Instructions for Online Bid Submission:

i) The bidders are required to submit soft copies of their bids electronically on the designated e-procurement portal, using valid Digital Signature Certificates (DSC).

ii) Bidders are required to enroll on the e-Procurement module of the designated portal.

iii) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

3.2 SUBMISSION OF TENDER:

3.2.1 Tenders must be submitted without making any additions, alterations, and as per details given in other clauses here under. The requisite details shall be filled in by the contractor of tender document. The rates shall be filled in the schedule given in this tender document.

3.2.2 Addenda/Corrigenda to tender document, if issued, must be signed and submitted along with the tender document. The tenderer should write clearly the revised quantities in the schedule of rates of tender document and should price the work based on revised quantities when amendments of quantities are issued in addenda.

3.2.3 Tenderers are advised to submit quotation strictly based on the Terms and Conditions and Specifications contained in the Tender Document and not stipulate any deviations. Should it, however, become unavoidable deviations should be stipulated with reference to the clause and page number of Tender Document. OWNER/Consultant reserves the right to evaluate quotations containing deviations having financial implications after adding the cost for such deviations as determined by Owner/Consultant.

3.2.4 Tender should be submitted in double sealed envelope (in case of manual bid submission) with the name of WORK super scribed thereon. The full name, postal address, telegraphic address and telex/telephone no. of the Tenderers shall be written on the bottom left hand corner of the sealed cover.

3.2.5 All information, correspondence, letters and details accompanying the Tender Document and all further correspondence in connection with the Tender shall be submitted along with the offer, unless otherwise stated.

3.2.6 Instructions for two part bidding:

i) The bid should be submitted in two parts viz.

a) Techno commercial bid

b) Price bid

ii) Techno commercial bid shall have the following information / details

a) Technical deviation if any

b) Commercial deviation if any

c) Copy of price bids with prices blanked off

d) Documents required as per the tender to establish techno-commercial acceptability of the bid.

e) Any other relevant documents/ information.

iii) Priced part of the bid shall have only prices as per schedule of rates.

iv) Techno – commercial bid and priced bid shall be enclosed in two separate envelopes (in case of manual bid submission) with the subject job, type of bid, bidders name superscribed on top. Both these envelopes shall be sealed in a common envelope and submitted as specified above.

3.2.7 Tenderers are deemed to have read through and fully understood all terms and conditions of the tender.

3.2.8 Tender, on submission as mentioned above, shall be the property of the OWNER and it shall not be returned to the tenderer on any account.

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

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

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

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

i) When there is difference between the rates in figures and words, the rate which corresponds to the amount worked out by the Tenderer shall be taken as correct.

ii) When the rate quoted by the Tenderer in figures and words, tallies but amount is incorrect, the rate quoted by the Tenderer shall be taken as correct.

iii) When it is not possible to ascertain the correct rate as prescribed above, then the rate in words shall be adopted.

3.5 CORRECTION AND ERASURES (For Manual Tender):

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

3.6 SIGNATURE OF TENDERER:

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

3.7 DETAILS OF EXPERIENCE:

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

3.8 PURCHASE PREFERENCES:

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

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

3.9 EARNEST MONEY DEPOSIT / BID SECURITY:

3.9.1 Submission of EMD:

The Bid Security (EMD) of applicable amount shall be submitted in the form of Electronic transfer through NEFT using payment gateway mentioned in the tender document, or Bank Guarantee from any of the Commercial Banks, safeguarding the purchaser's interest in all respects. The bid security should remain valid for a minimum period of 60 (sixty) days beyond the final bid validity period. In case Contract Performance Security (CPS) is applicable, the successful bidder has to keep his Bid Security, if submitted in the form of a BG, valid till CPS is submitted. The contractor shall be required to suitably extend the period of such Bank Guarantee. In case of GeM tenders, applicability of EMD will be governed by the built-in/set rules & procedures of GeM.

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

3.9.2 Bid securities of the unsuccessful bidders shall be returned after expiry of the final bid validity period and generally within 30 days after the award of the contract.

3.9.3 Bid security shall be refunded to the successful bidder on receipt of contract performance security as per tender provision.

3.9.4 Where the EMD in the form of Bank Guarantee are submitted, it should be ensured that:

i) Bank Guarantees are strictly in accordance with the proforma mentioned provided with the tender.

ii) Prompt action should be taken by the bidder to renew the Bank Guarantee whenever required.

3.9.5 No interest shall be paid by the OWNER on the Earnest Money deposited by the Tenderer.

3.9.6 A bidder's bid security may be forfeited if the bidder:-

i) withdraws or amends its/ his tender suo-moto after opening of bid & within the bid validity; or
ii) impairs or derogates from the tender in any respect within the period of validity of the tender; or
iii) If the bidder does not accept the correction of his bid price during evaluation; or
iv) If the successful bidder fails to sign/accept the contract; or
v) In case a bidder does not furnish Contract Performance Security within the stipulated time as per tender / LOA or within the extended time allowed by NRL (if any) or is found to have neglected / abandoned the LOA.

3.10 CONVERSION OF EMD TO CONTRACT PERFORMANCE SECURITY:

The earnest money deposit (EMD) of the contractor whose tender may be accepted, if paid in forms other than Bank Guarantee, can be converted to and adjusted with contract performance security (CPS) for due performance of the contract, if the contractor so desires. In such case, the shortfall amount towards CPS (if any) may be deposited through online payment in an acceptable form to designated account of NRL or in the form of BG as per prescribed format for CPS.

3.11 VALIDITY:

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

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

3.12 ADDENDA/CORRIGENDA:

3.12.1 Addenda/Corrigenda to the Tender Document may be issued till closing of Tender submission to clarify documents or to reflect modification in the design or CONTRACT terms.

3.12.2 Each addendum/corrigendum issued by the owner will be published in respective e-tender portal, as applicable. Tenderer will consider this addendum/corrigendum for submission along with his Tender and can keep a copy for him for future reference. All addenda/corrigenda issued by the owner shall become part of Tender Document.

3.13 RIGHT OF OWNER TO ACCEPT OR REJECT TENDER:

3.13.1 The right to accept the Tender will be absolutely with the OWNER. The OWNER, however, does not bind itself to accept the lowest tender, and reserves to itself the authority to reject any or all the Tenders received without assigning any reason whatsoever. The works may be split up between two or more agencies or only part of the work may be awarded to selected tenderer if felt necessary.

3.13.2 Tenders in which any of the particulars and prescribed information are missing or are incomplete in any respect and / or the prescribed Conditions are not fulfilled are liable to be rejected at the discretion of the OWNER without assigning any reason.

3.13.3 Canvassing in connection with tenders is strictly prohibited and tenders submitted by the tenderer who resort to canvassing will be liable to rejection. Tenders containing uncalled remarks or any additional conditions are liable to rejection.

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

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

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

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

i) Only a bidder who has participated in the concerned procurement process (i.e., pre-qualification and bidding) can make such representation;

ii) In case pre-qualification bid has been evaluated before the bidding of technical/ financial bids (in 2 stage bidding process), an application for review in relation to the technical/ financial bid may be filed only by a bidder who has qualified in pre-qualification bid (1st stage);

iii) In case techno-commercial bid has been evaluated before the opening of the financial bid, an application for review in relation to the financial bid may be filed only by a bidder whose technical bid is found to be acceptable.

iv) However, following shall not be subject to review:

a) Determination of the need for procurement;

b) Selection of the mode of procurement or bidding system;

c) Choice of selection procedure;
d) Provisions limiting participation of bidders in the procurement process;
e) The decision to enter into negotiations with the L1 bidder;
f) Cancellation of the procurement process except where it is intended to subsequently re-tender the same requirements;
g) Issues related to ambiguity in contract terms may not be taken up after a contract has been signed, all such issues should be highlighted before consummation of the contract by the vendor/contractor; and
h) Complaints against specifications, except under the premise that they are either vague or too specific so as to limit competition.

3.13(B) CONFIDENTIALITY OF BID EVALUATION PROCESS

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

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

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

3.14 HOLIDAY LISTING:

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

3.15 CONTRACT PERFORMANCE SECURITY (CPS):

To ensure due performance of the contract, contract performance security is to be deposited by the successful bidder awarded the contract [*CPS is also referred to as PBG or ePBG by GeM*]. Contract Performance Security is to be furnished within 10 days from the date of notification of the award (LOA) and it should remain valid for a period of 03 (three) months beyond the date of completion of all contractual obligations of the contractor, including warranty / guarantee / defect liability period (if any).

Detailed contract shall be issued / signed after receipt and verification of the requisite CPS, if applicable.

If the bidder, whose bid has been found to be the lowest evaluated bid (or successful bid) withdraws or whose bid has been accepted fails to honour the procurement contract as may be required, or fails to provide the contract performance security within the time specified/allowed by NRL or otherwise withdraws from the procurement process or is found to have neglected / abandoned the order / LOA, the award may be terminated, the agency may be debarred as per holiday listing policy of NRL and his EMD/Bid security may be forfeited and other penal actions for breach of contract may be initiated, after serving a show cause notice.

The performance security will be forfeited and credited to the procuring entity's account in the event of a breach of contract by the contractor. It should be refunded to the contractor without interest, after he duly performs and completes all obligations under the contract including the Defect Liability Period (DLP).

(a) Rate of Contract Performance Security:

(i) FOR WORKS CONTRACTS:

Type of Contract	Amount of Performance Security
Procurement of works up to an individual contract value of Rs.10 Lakhs.	Nil
Works (including EPC/LSTK) above an individual contract value of Rs.10 Lakhs.	**3%** of contract value
Work contracts lined up as ARC / AMC (Annual Rate Contract / Annual Maintenance Contract) for routine works.	**3%** of annualized contract value (annualized estimated contract value in absence of a contract value). In case the contract period is 1 year or less the performance security shall be 3% of contract value.
Govt. Agencies or Institutions (Other than PSUs), OEM / Proprietary / authorized dealer of OEM/Proprietary, Deposit Works, Departments/Agencies/Autonomous Bodies under control of State/Central Government.	Nil
Plant Emergency / Emergency Works (Emergency to be certified of Chief Emergency Coordinator / Respective Functional Head).	Nil
Nomination works by PSUs.	Nil

Note:-

(1) For the purpose of determining the applicability and amount of Contract Performance Security, the contract / order value excluding reimbursement items and excluding taxes and duties which are paid extra by NRL shall be considered.

2) Annualized contract value shall be total contract value [as defined in (1) above] divided by the number of years [provisional extension period, if any, and corresponding value, shall be excluded].

(ii) FOR SERVICE CONTRACTS:

Type of Contract	Amount of Performance Security
Services up to an individual contract value of Rs. 10 Lakhs.	Nil
Services above an individual contract value of Rs.10 Lakhs.	**3%** of contract value
Contracts lined up as ARC / AMC (Annual Rate Contract / Annual Maintenance Contract) for routine works.	**3%** of annualized contract value (annualized estimated contract value in absence of a contract value). In case the contract period is 1 year or less the performance security shall be 3% of contract value
All manpower-oriented rate display tenders (where manpower component is 70% or above).	**3%** of annualized value
Govt. Agencies or Institutions (Other than PSUs) / OEM / Proprietary / Deposit Works / Departments/Agencies/Autonomous Bodies under control of State/Central Government.	Nil
Plant Emergency / Emergency Works (Emergency to be certified of Chief Emergency Coordinator / Respective Functional Head).	Nil
Nomination services by PSUs.	Nil
Consulting service contract.	**NIL / 3%** of contract value. #

Note:-

(1) For the purpose of determining the applicability and amount of Contract Performance Security, the contract / order value excluding reimbursement items and excluding taxes and duties which are paid extra by NRL shall be considered.

2) Annualized contract value shall be total contract value [as defined in (1) above] divided by the number of years [provisional extension period, if any, and corresponding value, shall be excluded].

Applicability of CPS for consultancy services:-

A. Type of Consulting Services where Performance Security is applicable are:

a) Project Management Consultant (PMC)/EPMC/EPCM
b) EIA consultant.
c) Architectural firm engaged for execution of any civil engineering project.

Note: *The performance security should be valid till 3 months beyond the warranty obligations/defect liability period of the EPC/construction contract*

B. Type of Consulting Services where Performance Security is not applicable are:

a) Individual consultant / Expert engaged for a specialised job.
b) Consultant engaged for submitting project report.
c) Consultant engaged for due diligence.
d) Consultant engaged on nomination basis.

(b) Mode of submission of Contract Performance Security / BG for Security Deposit:

Performance security / BG for SD may be furnished in the form of bank guarantee (including e-Bank Guarantee) issued/confirmed from any of the commercial bank in India in the prescribed format of NRL or through online payment in an acceptable form to designated account of NRL (receipt/acknowledgement of the online transaction to be immediately submitted by bidder to NRL). The performance security shall be denominated in the currency of the contract. In case of GTE tenders, the performance security should be in the same currency as the contract and must conform to Uniform Rules for Demand Guarantees (URDG 758) – an international convention regulating international securities.

The Bank Guarantee shall be issued from:

i) Any schedule Indian Bank or Any Branch of an International bank situated in India and registered with Reserve Bank of India as scheduled foreign bank in case of domestic bidder, or

ii) In case of foreign bidder, the bank guarantee can be accepted from any scheduled bank in India or from International bank who has its branch in India registered with Reserve Bank of India, or

iii) Any foreign Bank which is not a Scheduled Bank in India, provided the Bank Guarantee issued by such Bank is counter-guaranteed by any Branch situated in India of any Scheduled Bank incorporated in India.

iv) Bank Guarantee issued by a Bank, amongst others, must contain the following particulars of such bank:

- Full address.
- Branch Code.
- Code Nos. of the authorized signatory with full name and designation.
- Phone Nos., Fax Nos., E-mail address.

v) The domestic bidders will have to submit the Bank Guarantee from any of the scheduled banks and on non-judicial stamp paper of requisite value as per the Indian Stamp Act, purchased in the name of the issuing banker.

vi) The Bank Guarantee issued by the Bank must be routed through SFMS platform as per details provided in the format for BG.

vii) The foreign bidder will submit the Bank Guarantee from Banks of Indian origin situated in their country. In case no such bank of Indian origin is situated in their country, the Bank Guarantee may be submitted from the bankers as specified above.

viii) In case of GTE tenders, the performance security / security deposit / warranty bank guarantee should be in the same currency as the contract and must conform to Uniform Rules

Note: *In case of GeM tenders the BG format, applicability limits and calculation for performance security as per GeM shall also be accepted.*

(b) Examination / verification of BGs:

All bank guarantees received against a contract/order, shall be verified by NRL for the submitted format, order no., amount of the bank guarantee and name of the party on whose behalf it has been issued along with whether the following, as applicable:-

(i) The BG contains the name, designation and code number of the Bank officer(s) signing the guarantee(s).

(ii) The address and other details (including telephone no.) of the controlling officer of the bank are obtained from the branch of the bank issuing the BG (this should be included in all BGs).

In order to know the authenticity of the bank guarantee submitted by the bidder, NRL shall obtain Structured

Financial Messaging Solutions (SFMS) confirmation (or written confirmation through letter for non-SFMS) from the designated bank of the Company.

3.16 TIME SCHEDULE:

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

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

3.16.2 A joint programme of execution of the work will be prepared by the Engineer-in -Charge and Contractor based on priority requirements of the project. This programme will take into account the time for completion in 3.16.1 and the time allowed for the priority works by the Engineer-In-Charge.

3.16.3 Monthly/Weekly programmes will drawn up by the Engineer-in- Charge jointly with the contractor based on availability of work fronts and the joint construction program as per 3.16.2 above. The contractor shall scrupulously adhere to these targets/programmes by deploying adequate personal, construction tools and tackles and he shall also supply himself all materials of his scope of supply on good time to achieve the target programmes. In all matters concerning the extent of target setout in the weekly and monthly programmes and the degree of achievement, the decision of the Engineer-in-Charge will be final and binding on the contractor**.**

3.17 COLLECTION OF DATA-TENDERER'S RESPONSIBILITY:

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

3.18 RETIRED GOVERNMENT OR COMPANY OFFICERS:

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

3.19 SIGNING & STAMPING OF CONTRACT:

To ensure the enforceability of the detailed work order cum contract agreement, proper payment of stamp duty is essential for full enforceability in a court of law. NRL will procure the stamp paper and send it along with the Work Order cum Contract Agreement.

Following standard clause will become part of the Detailed Work Orders, so that this document is binding upon the parties and construed as Contract.

QUOTE [*Documents referred will be suitably removed / added / filled by NRL, as applicable*]
"This Order ("*WO/PO/DLoA/FOA No. and date*") is issued pursuant to the Terms and Conditions mentioned in the NIT (including, inter-alia, the General Conditions of Contracts (GCC) 'and/or' the General Purchase Conditions (GPC) including the clause for Arbitration therein; Special Conditions of Contract 'and/or' Special Purchase Conditions; Schedule of Rates (SOR); General Obligations, Specifications, Drawings, Plans, Time Schedule of Completion/Delivery); 'and/or' Terms and Conditions mutually agreed in writing thereafter 'and/or' outlined herein. Acknowledgement of this Order by [*Contractor's Name*] implies an agreement to adhere to these specified terms / documents, forming a binding contract between [*Contractor's Name*] (the Contractor) and Numaligarh Refinery Limited (the Owner)."

[Sealed / Signed & Dated by – *NRL Signatory*]

[Sealed / Signed & Dated in acknowledgement by - *Contractor's Name*]
UNQUOTE

The contractor shall acknowledge receipt of the work order within 7 days of receipt. The contractor shall sign & seal (or digitally sign) the acknowledgement and return the same to NRL.

3.20 FIELD MANAGEMENT:

3.20.1 The field management will be under the control of the Engineer-in-Charge. The Engineer-in-Charge may also authorise his representatives to perform his duties and functions.

3.20.2 Clause 5.19 of the General Conditions of Contract shall be referred to in this connection.

3.21 CO-ORDINATION OF WORK

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

3.22 FOREIGN BIDDERS:

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

(a) **PAN No.**

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

(b) **Tax Residency Certificate (TRC)**

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

(c) **Form 10F**

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

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

3.23 SCHEDULE OF RATES:

3.23.1 The schedule of rates should be read in conjunction with all the other sections of the tender.

3.23.2 The tenderer shall be deemed to have studied the drawings, specifications and details of work to be done within time schedule and to have acquainted himself of the conditions prevailing at site.

3.23.3 Rate must be filled in the copies of pages of Schedule of Rates of original Tender Documents. If quoted in separate typed sheet, no variation in item description or specification shall be accepted. Any exception taken by the tenderer to the Schedule of Rates shall be brought out in the terms and conditions of offer, but it does not guarantee acceptance of the same by the owner.

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

3.23.5 The quantities shown against the various items are only approximate. Any increase or decrease in the quantities shall not form the basis of alteration of the rates quoted and accepted. However any likely increase in quantity of any items should be brought to the notice of Engineer-In- Charge well in advance prior to execution. Contractor shall not execute excess quantity other than the ordered quantity without prior approval from EIC.

3.23.6 The owner reserves the right to interpolate the rates for such items if work falling between similar items of lower and higher magnitude.

3.23.7 If a bidder offers suo motu discounts and rebates after opening of the tender (techno-commercial or financial), such rebates/discounts shall not be considered for the purpose of ranking the offer but if such a firm does become L1 at its original offer, such suo motu rebates will be incorporated in the contracts by NRL.

3.24 AWARD OF CONTRACT:

3.24.1 The acceptance of tender will be intimated to the successful tenderer by a Letter (Notification) of Award / Acceptance (LOA), along with the instruction to submit Contract Performance Security (CPS) and any other requirements / clearances that may be applicable as per tender before issuance of detailed work order. [In case of GeM tenders, GeM contract will be issued first, followed by the LOA].

Once the tender is accepted and Letter of Acceptance / Fax of Acceptance is issued, the contract shall be deemed to have been established and the same shall be binding on the contractor to execute the job as per tender agreed terms and conditions.

In case the successful tenderer does not furnish the required performance security within the stipulated target date or extended date (if provided by NRL), such non-compliance will constitute sufficient ground for initiation of further action under the clause for breach of contract including termination of the award and forfeiture of bidder's EMD.

Detailed Work Order shall be issued/signed after receipt and verification of the requisite contract performance security, if applicable [*Please refer section 3.19 above*]. If CPS is not applicable, detailed work order shall be issued/signed without issuing LOA.

3.25 LOCAL CONDITIONS:

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

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

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

3.26 ABNORMAL RATES:

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

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

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

3.27 OTHER INFORMATION w.r.t. BANK GUARANTEES:

(a) e-Bank Guarantees are accepted by NRL. Detailed modality for submission of e-BGs shall be provided in the NIT or respective proforma for BG or provided by NRL on request.

(b) For the following BGs, wherever applicable, the value of the BG shall be calculated as provided under:-

(i) BG against Milestone Payment / RA Bill: The value of the BG, if applicable, shall be equal to the amount of milestone payment(s), excluding any taxes and duties which are paid extra by NRL. GST component shall be paid based on GSTR2B updation by seller. [*Unless otherwise specified in the NIT*.]

(ii) BG against Advance Payment / Mobilization Advance: The value of the BG, where applicable, shall be equal to 110% of the advance amount(s) including any GST/Taxes to be paid extra by NRL. [*Advance Payment / Mobilization Advance is interest bearing and is not accepted by NRL, unless otherwise specifically provided for in the NIT*.]

SECTION IV

GENERAL OBLIGATIONS

4.0 INTERPRETATION OF CONTRACT DOCUMENT:

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

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

4.2 HEADINGS AND MARGINAL NOTES:

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

4.3 SINGULAR AND PLURAL:

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

4.4 SPECIAL CONDITIONS OF CONTRACT:

4.4.1 Special conditions of Contract shall be read in conjunction with the General Conditions of Contract, Specifications of Work, Drawings and any other documents forming part of this CONTRACT wherever the context so requires.

4.4.2 Notwithstanding the sub-division of the documents into these separate sections and volumes, every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the CONTRACT so far as it may be practicable to do so.

4.4.3 Where any portion of the General Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, then unless a different intention appears, the provisions of the Special Conditions of Contract shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail.

4.4.4 Wherever it is mentioned in the Specifications that the CONTRACTOR shall perform certain work or provide certain facilities, it is understood that the CONTRACTOR shall do so at his own cost.

4.4.5 The Materials, Design and Workmanship shall satisfy the relevant Indian Standards Specifications contained herein and Codes referred to. Where the Specifications stipulate requirement in addition to those contained in the standard Codes and Specifications, these additional requirements shall be satisfied.

4.5 CONTRACTOR TO OBTAIN HIS OWN INFORMATION:

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

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

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

No verbal agreement or inference from conversation with any officer or employee of the Owner/ Consultant either before or after the execution of the Contract Agreements shall in any way affect or modify any of the terms or obligations herein contained.
Any change in layout due to site condition or technological requirement shall be binding on the contractor and no extra claim on this account shall be entertained.

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

4.6 SECURITY DEPOSIT

4.6.1 Security Deposit / Retention Money (SD / Retention):

In addition to Contract Performance Security, contracts for works (and services where there is a defect liability period), provide for a percentage of each running bill (periodic / interim payment) to be withheld as Security Deposit / Retention Money until final acceptance.

(a) Rate of Security Deposit/ Retention Money:

(i) For Works Contracts:-

Type of Contract	Amount of Security Deposit / Retention Money
Procurement of works up to an individual contract value of Rs. 10 Lakhs.	Nil
Works (including EPC/LSTK) above an individual contract value of Rs.10 Lakhs.	**7%** of contract value
Work contracts lined up as ARC / AMC (Annual Rate Contract / Annual Maintenance Contract) for routine works.	**7%** of annualized contract value (annualized estimated contract value in absence of a contract value). In case the contract period is 1 year or less the performance security shall be 7% of contract value.
Govt. Agencies or Institutions (Other than PSUs), OEM / Proprietary / authorized dealer of OEM/Proprietary, Deposit Works, Departments/Agencies/Autonomous Bodies under control of State/Central Government.	Nil
Plant Emergency / Emergency Works.	**7%** of contract value
Nomination works by PSUs.	**7%** of contract value

Note 1:
(1) For the purpose of determining the applicability and amount of Security Deposit / Retention Money, the contract / order value excluding reimbursement items and excluding taxes and duties which are paid extra by NRL shall be considered.
2) Annualized contract value shall be total contract value [as defined in (1) above] divided by the number of years [provisional extension period, if any, and corresponding value, shall be excluded].

(ii) For Service Contracts:-

Type of Contract	Amount of Security Deposit / Retention Money
Services up to an individual contract value of Rs. 10 Lakhs.	Nil
Services above an individual contract value of Rs.10 Lakhs.	**7%** of contract value
Contracts lined up as ARC / AMC (Annual Rate Contract / Annual Maintenance Contract) for routine works.	**7%** of annualized contract value (annualized estimated contract value in absence of a contract value). In case the contract period is 1 year or less the performance security shall be 7% of contract value
All manpower-oriented rate display tenders (where manpower component is 70% or above).	Nil
Govt. Agencies or Institutions (Other than PSUs) / OEM / Proprietary / Deposit Works / Departments/Agencies/Autonomous Bodies under control of State/Central Government.	Nil
Plant Emergency / Emergency Works (Emergency to be certified of Chief Emergency Coordinator / Respective Functional Head).	**7%** of contract value
Nomination services by PSUs.	**7%** of contract value
Consulting service contract.	Not Applicable

Note: Same as “Note 1” above

4.6.2 Mode of Submission / Retention / Recovery and Release of Security Deposit:

(i) A sum of Seven percent (7%) of the contract / order value shall be deposited by the CONTRACTOR as Security Deposit with the OWNER (NRL). This will be recovered in instalments through deductions at the rate of Seven percent (7%) of the value of each running account bill till total Security Deposit amount is collected, after which no further deductions from Bills will be made on this account, subject to Clause (iii) below.

(ii) Alternatively, the contractor may, at his option deposit a Bank Guarantee as follows:-

(a) For an amount of Seven percent (7%) of the contract value as Security Deposit, "OR"
(b) For an amount of Ten percent (10%) of the contract value as Security Deposit ("Contract performance Security" retained earlier, shall be released in such case), "OR"
(c) For an amount of Ten percent (10%) of the contract value as Contract Performance Security within the period specified in the notification of the award (covering the Security Deposit).

The Bank Guarantee shall be unconditional and as per prescribed format of NRL. The validity period for the should be 03 months beyond completion of execution of the contract or 03 months beyond end of defect liability period, whichever is later as per the terms and conditions of the particular contract.

(iii) However, if the value of WORK as per actual execution exceeds the awarded contract value, further recoveries towards Security Deposit shall be effected at Ten percent (10%) of the value in excess of the awarded contract value from running Bills and final Bill. Similarly, if the value as per actual execution is less than the awarded contract value, recovery towards Security Deposit, effected in the running Bills, in excess of Ten percent (10%) of the value of WORK as per actual execution shall be refunded to the contractor along with final Bill.

(iv) CONVERSION OF EMD TO CPS / SD: The earnest money deposit (EMD) of the contractor whose tender may be accepted, if paid in forms other than Bank Guarantee, can be converted to and adjusted with contract performance security (or security deposit) for due performance of the contract, if the contractor so desires.

In the event of extension (provisional or firm) of time of the contract , if granted, the contractor shall be required to suitably extend the period of Bank Guarantee(s) if submitted, towards security Deposit/retention money and CPS suitably.

This Retention amount or Bank Guarantee furnished against security deposit and CPS 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.

All compensation or other sums of money payable by the contractor to the owner under terms of this contract may be deducted from or paid by the encashment of a sufficient part of his security deposit or CPS or from any sums which may be due or may become due to the contractor by the owner on any account whatsoever and in the event of his security deposit being reduced by reasons of any such deductions of said, the aforesaid contractor shall within ten days thereafter make good in cash or Bank drafts as aforesaid any sum or sums which may have been deducted from his security deposit, or any part thereof. No interest shall be payable by the owner for sum deposited as security deposit.

4.7 **TIME OF PERFORMANCE:**

4.7.1 TIME FOR MOBILISATION:

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

4.7.2 TIME SCHEDULE

4.7.2.1 The general Time Schedule of construction is given in the Tender Document. CONTRACTOR should prepare a detailed monthly or weekly construction programme jointly with the Engineer-in-Charge immediately on receipt of the LOA / Work Order / outline agreement-contract of Tender. The WORK

shall be executed strictly as per the Time Schedule given in this Document. The period of construction given includes the time required for testing, rectification, if any, re-testing and completion in all respects to the entire satisfaction of the Engineer-in-Charge.

4.7.2.2 The contractor shall submit a detailed PERT net work within the time frame agreed above consisting of adequate number of activities covering various key phases of the work such as design, procurement, manufacturing, shipment and field erection activities within 15 days from the date of LETTER OF ACCEPTANCE OF TENDER. This network shall indicate the interface facilities to be provided by the owner and the dates by which such facilities are needed.

4.7.2.3 Contractor shall discuss the network so submitted with the owner and the agreed net work which may be in the form as submitted with the owner or in revised form in line with the out come of discussions shall form part of the contract, to be signed within thirty (30) days from the date of LETTER OF ACCEPTANCE OF TENDER. During the performance of the contract, if in the opinion of the owner proper progress is not maintained suitable change shall be made in the contractors operation to ensure proper progress. If however owner feels that progress is not as per pre agreed progress which will have re-persuasion on timely completion of the contract, owner will have liberty either to terminate the contract or impose suitable penalty for delay.

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

4.8 FORCE MAJEURE:

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

(i) An act of God: A natural calamity like flood, storm, drought, lightning, tidal wave, tsunami, cyclone other natural disaster; earthquakes, epidemics, plague, quarantine restrictions.

(ii) Or events such as a war, strike, riots, rebellion or sabotage, terrorism or acts of public enemy (including the acts of any independent unit or individual engaged in activities in furtherance of a programme of irregular warfare), acts of belligerence of foreign enemies (whether declared or undeclared), blockades, revolution, or insurrection, exercise of military or usurped power, or any attempt at usurpation of power; lockouts, crimes, hostility, civil commotion.

(iii) Unforeseen incidents such as fires, explosions, accidents, loss or breakage of major equipment or facilities, structural collapse, radioactive contamination or ionizing radiation; air crash, shipwreck, or train wreck.

(iv) Or events like expropriation of facilities by Government authorities, compliance with any order or request of any Governmental authorities, and freight embargoes

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

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

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

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

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

4.9 EXTENSION OF TIME

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

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

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

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

4.10 COMPENSATION FOR DELAY (LIQUIDATED DAMAGES):

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

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

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

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

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

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

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

4.12 RIGHTS OF THE OWNER TO FORFEIT SECURITY DEPOSIT / CPS:

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

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

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

a) To rescind the CONTRACT (of which recession notice in writing to the CONTRACTOR under the hand of the OWNER shall be conclusive evidence) in which case the Retention Amount Deposit of the CONTRACTOR shall stand forfeited and be absolutely at the disposal of the OWNER.

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

in-Charge as to the value of the Work done shall be final and conclusive against the CONTRACTOR. The parties hereby agree that the 15% overhead charge is a pre-estimate of departmental charges incurred by OWNER. There is no need to establish actual departmental charges.

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

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

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

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

4.15 **CHANGES IN CONSTITUTION:**

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

consequence shall ensure as provided in the said clause.

4.16 **IF THE CONTRACTOR DIES**

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

4.17 **EMPLOYEES OF THE OWNER NOT INDIVIDUALLY LIABLE:**

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

4.18 **OWNER NOT BOUND BY PERSONAL REPRESENTATION:**

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

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

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

4.20 **CONTRACTOR'S SUBORDINATE STAFF AND THEIR CONDUCT:**

4.20.1 The CONTRACTOR, on or after award of the WORK shall name and depute a qualified engineer having sufficient experience in carrying out WORK of similar nature, to whom the Equipment, materials, if any ,shall be issued and instructions of work given. The CONTRACTOR shall also provide to the satisfaction of the Engineer-in-Charge sufficient and qualified staff to supervise the execution of the WORK, competent sub-agents, foremen and leading hands including those specially qualified by previous experience to supervise the type of works comprised in the CONTRACT in such manner as will ensure work of the best quality and expeditious working. Whenever in the opinion of the Engineer-in-Charge additional properly qualified supervisory staff is considered necessary, they shall be employed by the CONTRACTOR without additional charge on account thereof. The CONTRACTOR shall ensure to the satisfaction of the Engineer-in-Charge that Sub-contractors, if any, shall provide competent and efficient supervision, over the Work entrusted to them.

4.20.2 If and whenever any of the CONTRACTOR or Sub-Contractor' s agents, sub-agents, assistants, foremen or other employees shall in the opinion of Engineer-in-Charge be guilty of any misconduct or be incompetent or insufficiently qualified or negligent in the performance of their duties or that in the opinion of the OWNER or the Engineer-in-Charge, it is undesirable for administrative or any other reason for such person or persons to be employed in the WORK, the CONTRACTOR, if so directed by the Engineer-in-Charge, shall at once remove such person or persons from NRL site thereon. Any person or persons so removed from the WORK shall not again be employed in connection with the WORK without the written permission of the Engineer-in-Charge. Any person so removed from the WORK shall be immediately replaced at the expense of the CONTRACTOR by a qualified and competent substitute. Should the CONTRACTOR be requested to repatriate any person removed from the WORK he shall bear all costs in connection herewith.

4.20.3 The CONTRACTOR shall be responsible for the proper behaviour of all the staff, supervisor, workmen, and others and shall exercise a proper degree of control over them and in particular and without prejudice to the said generality, the CONTRACTOR shall be bound to prohibit and prevent any employees from

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

4.20.4 If and when required by the OWNER all CONTRACTOR'S personnel entering upon the OWNER'S premises shall be properly identified by badges of a type acceptable to the OWNER which must be worn at all times on OWNER'S premises.
Contractor may be required to obtain entry passes for his staff/employees from Owner to work within operating areas.

4.21 **SUB-LETTING OF WORK:**

i) No part of the CONTRACT nor any share or interest therein shall in any manner or degree be transferred, assigned or sub-let by the CONTRACTOR directly or indirectly to any person, firm or corporation whatsoever except as provided for in the succeeding sub-clause without knowledge of the OWNER.

ii) If Contractor goes for sub contracting any part of the job which includes man power supply also, same will be done with complete knowledge of EIC/OWNER. Formal Work order shall be issued by the Contractor to the subcontractor with scope of work and contractual details. However such sub contractor shall not be in holiday list of NRL.

iii) For certain specialized/urgent nature of job, NRL may specify suitable Pre qualification criteria for selection of Sub contractor by Contractor.

iv) At the commencement of every month the CONTRACTOR shall furnish to the Engineer-in-Charge list of all Sub- Contractors or other persons or firms engaged by the CONTRACTOR for working at the SITE during the previous month with particulars of the general nature of the subcontract or WORK.

v) Notwithstanding any sub-letting with such approval as aforesaid and notwithstanding that the Engineer-in-Charge shall have received copies of any sub-contracts, the CONTRACTOR shall be and shall remain solely responsible for the quality and proper and expeditious execution of the WORK and the performance of all the conditions of the CONTRACT in all respects as if such sub-letting or sub-contracting had not taken place, and as if such WORK had been done directly by the CONTRACTOR.

vi) If any Sub-Contractor engaged upon the WORK at the SITE executes any Work which in the opinion of the Engineer-in-Charge is not in accordance with the Contract Document, the OWNER may by written notice to the CONTRACTOR request him to terminate such contract and the CONTRACTOR upon the receipt of such notice shall terminate such sub-contract and dismiss the Sub-Contractors and the latter shall forthwith leave the WORK failing which the OWNER shall have the right to remove such Sub-Contractors from the SITE.

vii) Any action taken by the OWNER under the clause shall not relieve the CONTRACTOR of any of his liabilities under the CONTRACT or give rise to any right to compensation, extension of time or otherwise, failing which the owner shall have the right to remove such sub-contractors from the site.

viii) Following scope of jobs shall not be allowed to be sub-let and shall be retained with the CONTRACTOR in all cases:

- Safety compliance with all jobs.
- Planning and scheduling activities.
- Quality assurance and quality control activities.
- Resource mobilization including critical machinery.
- All statutory provisions

ix) The total value of sub-contracting work will not be above 50% of the contract on original SOR basis. Sub-contracting will generally be for specialized items of work, such as reinforced earth retaining walls, pre-stressing works, and so on. Procurement of material, hire of equipment or engagement of labour will not mean sub-contracting.

x) All labor related Gate pass formalities, pertaining to the scope of sublet job shall be in the scope of concerned subcontractor, but the same is to be forwarded by SIC of the CONTRACTOR . [Compliance of all statutory and safety requirement related to workers shall be with the CONTRACTOR]

xi) Skilled/ Unskilled manpower (age limit upto 65 years) supply type contract can also be acceptable as subletting of job with all other labor related statutory compliances. [Compliance of all statutory and safety requirement related to workers shall be with the CONTRACTOR]

xii) Subcontractor performance shall also be reported separately along with overall progress status to identify progress and constraint, and concerned EIC of Subcontractor may also be called for Periodic and Monthly review meeting taken by Client.

xiii) Owner shall not allow any process of Sub Contractor to be further sub contracted.

4.22 **POWER OF ENTRY:**

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

i) fail to carry out the WORK in conformity with the Contract Document, or

ii) fail to carry out the WORK in accordance with the Time Schedule, or

iii) Substantially suspend WORK for a period of fourteen (14) days without authority from the Engineer-in-Charge, or

iv) fail to carry out and execute the work to the satisfaction of the Engineer-in-Charge, or

v) fail to supply sufficient or suitable constructional plant and equipment, temporary works, labour materials or things, or

vi) Commit or suffer, or permit any other breach of any of the provisions of the CONTRACT to be performed on his part or observed to persist in any of the above mentioned breaches of the CONTRACT for fourteen (14) days, after notice in writing shall have been given to the CONTRACTOR by the Engineer-in-Charge requiring such breach to be remedied, or

vii) Shall abandon the work, or

viii) During the continuance of the contract shall become bankrupt, make any arrangement or composition with his creditors, or permit any execution to be levied or go into liquidation whether compulsory or voluntary not being merely a voluntary liquidation for the purpose of amalgamation or reconstruction. Then, in any such case the OWNER shall have the power to enter upon the WORK and take possession thereof and of the materials, temporary works, constructional plant and equipment and stock thereon, and to revoke the CONTRACTOR'S licence to use the same, and to complete the WORK by his Agents, other Contractors or Workmen, or to re-let the same upon any terms and to such other person, firm or corporation as the OWNER in his absolute discretion may think proper to employ and for the purpose aforesaid to use or authorise the use of any materials; temporary works, constructional plant and equipment and stock as aforesaid, without making payment or allowance to the CONTRACTOR for the said materials other than such as may be certified on writing by the Engineer-in-Charge to be reasonable, and without making any payment or allowance to the CONTRACTOR for the use of the temporary said works, constructional plant and equipment and stock or being liable for any loss or damage thereto, and if the OWNER shall incur additional expenditure by reason of his taking possession, of the works which are being completed by other Contractor (due account being taken of any

extra work or works which may be omitted) then the amount of such additional expenditure as certified by the Engineer-in-Charge shall be deducted from any money which may be due for work done by the CONTRACTOR under the CONTRACT and not paid for. Any deficiency shall forthwith be made good and paid to the OWNER by the CONTRACTOR and the OWNER shall have power to sell in such manner and for such price as he may think fit all or any of the constructional plant and equipment materials etc. constructed by or belonging to the Contractor and to recoup and retain the said deficiency or any part thereof out of the proceeds of the sale. The owner shall also have right to blacklist/ holidaylist the tenderer from future works/contracts/services etc.
This will be in line with Clause 4.13.

4.23 **CONTRACTOR'S RESPONSIBILITY WITH OTHER AGENCIES:**

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

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

4.24 **OTHER AGENCIES AT SITE:**

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

4.25 **NOTICES:**

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

4.26 **RIGHTS OF VARIOUS INTERESTS:**

i) The OWNER reserves the right to distribute the WORK between more than one Contractor. The CONTRACTOR shall co-operate and afford other Contractor's reasonable opportunity for access to the WORK for the carriage and storage of materials and execution of their Work.

ii) Wherever the Work being done by any department of the OWNER or by other Contractors employed by the OWNER is contingent upon WORK covered by this CONTRACT, the respective rights of the various interests involved shall be determined by the Engineer in Charge to secure the completion of the various portions of the WORK in general harmony.

4.27 RIGHT OF OWNER TO DETERMINE/TERMINATE CONTRACT:

1. The OWNER shall, at any time, be entitled to determine and terminate the CONTRACT, if in the opinion of the OWNER the cessation of the WORK becomes necessary owing to paucity of funds or for any other cause whatsoever. On such determination / termination, the cost of approved materials, brought by the CONTRACTOR and lying at the site, at current market rates as verified and approved by OWNER'S Engineer and of the value of the work done to date by the CONTRACTOR shall be paid for in full at the rate specified in the Contract. A notice in writing from the OWNER to the CONTRACTOR of such determination and termination and reasons thereof shall be the conclusive proof of the fact that the Contract has been so determined and terminated by the OWNER.

2. Should the CONTRACT be determined under sub-clause 1 of this Article and the CONTRACTOR claims payment to compensate expenditure incurred by him in the expectation of completion the work, the OWNER shall consider and admit such claim as are deemed fair and reasonable and are supported by the vouchers to satisfaction of the Engineer-in-Charge. The OWNER'S decision on the necessity and propriety of such expenditure shall be final and conclusive and binding on the CONTRACTOR.

3. The contractor shall not be entitled to get any possible loss of profit that he could have earned had the contract been not determined / terminated under sub clause 1 of this section.

4.28 PATENTS AND ROYALTIES:

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

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

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

4.29 All charges on account of royalty, tollage, rent, terminal or sales tax and/or other duties or any other levy on materials obtained for the work or temporary work or part thereof (excluding materials provided by the owner) shall be done by the contractor.

4.30 The contractor shall not sell or otherwise dispose of or remove except for the purpose of this contract, the sand, stone, clay, ballast, earth, rock or other substances, or materials obtained from any excavation made for the purpose of the work or any building or produce upon the site at the time of delivery of the possession thereof, but all substance, materials, buildings and produce shall be the property of the owner provided that the contractor may with the permission of the Engineer-In-Charge, use the same for the purpose of the work by payment of cost of the same as such as rate may be determined by the Engineer-In-Charge.

4.31 All drawings, blue prints, tracings, reproducible, models, plans, specification and copies thereof, furnished by the Owner as well as drawings, tracings, reproducible, plans specifications, design, calculations etc. prepared by the contractor for the purpose of execution of works covered in or connected with this contract shall be the property of Owner and shall not be used for any other work but are to be delivered to the Owner at the completion of the contract.

4.32 Where so desired by Engineer-in-Charge, the contractor agrees to respect the secrecy of any document, drawings etc. issued to him for the execution of this contract, and restrict access to such documents, drawing etc. to the minimum and further, the contractor agrees to execute an individual SECRECY agreement from each or any person employed by contractor having access to such documents, drawings and to any other agency or individual, without the written approval by Engineer-in-Charge.

4.33 The Contractor shall indemnify and save harmless the Owner from any loss on account of claims against the Owner for the contributory infringement of patent right arising out and based upon the claim that the use by the Contractor of the process included in the design prepared by the Contractor and used in the operation of the plant infringes on any patent right. With respect to any sub contract entered into by contractor pursuant to the provisions of the relevant clause hereof, the contractor shall obtain from the sub contractor an undertaking to provide the owner with the same patent protection that contractor is required to provide under the provisions of clause 4.28.1.

4.34 LIENS

4.34.1 If at any time, there should be evidence of any lien or claim for which the OWNER might have become liable and which is chargeable to the CONTRACTOR, the OWNER shall have the right to retain out of any payment then due or thereafter to become due an amount sufficient to completely indemnify the OWNER against such lien or claim and if such lien or claim be valid the OWNER may pay and discharge the same and deduct the amount so paid from any money which may be or may become due and payable to the CONTRACTOR. If any lien or claim remain unsettled after all payments are made, the CONTRACTOR shall refund or pay to the OWNER all moneys that the latter may be compelled to pay discharging such lien or claim including all costs and reasonable expenses.

4.34.2 The Owner shall have general lien over all tools, equipment, machinery and materials etc. belonging to the CONTRACTOR for any amount due from the CONTRACTOR to the Owner on any account. The owner shall have a general lien, over any amount payable to the contractor on any account whether presently due or not, for any amount due from the contractor to the owner on any account whatsoever including under any previous jobs/contracts and owner shall have full right for adjustments/ appropriation of such amounts without notice to the contractor.

4.34.3 The final payment shall not become due until the contractor delivers to the Engineer-In-Charge a complete release or waiver of all lien arising or which may arise out of his agreement or receipt in full certification by the contractor in a form approved by Engineer-In-Charge that all invoices for labour, materials, services have been paid in lien thereof and if required by the Engineer-In-Charge in any case an affidavit that so far as the contractor has knowledge or information the releases and receipts include all the labour and material for which a lien could be filled.

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

4.35 OPERATION OF CONTRACT:

4.35.1 Law Governing:

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

4.35.2 Non-Waiver of Default:

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

4.36 LIMITATION OF LIABILITY:

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

i. Any liability pursuant to Contractors breach of any Applicable Law; or

ii. Any loss resulting from fraud, intentional or willful misconduct or illegal or unlawful acts or gross negligence or omissions of contractor or its affiliates or any sub-contractor or any supplier or any of its or their respective officers, directors, employees, servants or agents or any other person acting on behalf of the Contractor; or

iii. Any liability to rectify, repair, restore or replace any materials and / or works or deficiencies therein in terms of the Contract; or

iv. In the event of any claim or loss or damage arising out of infringement of Intellectual Property.

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

SECTION V

PERFORMANCE OF WORK

5.0 EXECUTION OF WORK:

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

5.1 CO-ORDINATION AND INSPECTION OF WORK:

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

5.2 ALTERATIONS IN SPECIFICATIONS AND DESIGNS AND EXTRA WORK:

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

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

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

I. <u>FOR ITEM RATE CONTRACT:</u>

a) If the rates for additional, altered or substituted Work are specified in CONTRACT for the WORK, the CONTRACTOR is bound to carry out the additional, altered or substituted Work at the same rates as are specified in CONTRACT.

b) If the rates for the additional, altered or substituted Work are not specifically provided in CONTRACT for

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

c) If the rates for the altered, additional or substituted Work cannot be determined in the manner specified in the sub-clause (a) & (b) above, then CONTRACTOR shall, within seven (7) days of the date of receipt of order to carry out WORK, inform the Engineer-in-Charge of the rate which it is his intention to charge for such class of Work, supported by analysis of the rate or rates claimed, and the Engineer-in-Charge shall determine the rate or rates on the basis of the prevailing market rates of materials, labour cost at schedule of labour plus fifteen percent (15%) thereon to cover CONTRACTOR'S supervision, over-heads and profit and pay the CONTRACTOR accordingly. The opinion of the Engineer-in-Charge as to the current market rates of materials and the quantum of labour involved per unit of measurement will be final and binding on CONTRACTOR.

d) Where the items of work will be execute by the CONTRACTOR through nominated specialist agency as approved by the Engineer-In-Charge, then the actual amount paid to such nominated agency supported by the documentary evidence and as certified by Engineer-In-Charge shall be considered plus 10% (Ten percent) to cover all contingencies, overhead, profits to arrive at the rates.

e) Where the value of addition of new items together with the value of alterations, additions/deletion/substitution lead to execution of the Contract value below 75%, compensation shall be paid on recommendation from EIC for decrease in the value of work as followed:

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

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

II. <u>FOR LUMPSUM CONTRACTS</u>

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

5.3 WORK ON SUNDAYS AND HOLIDAYS:

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

5.4 GENERAL CONDITIONS FOR CONSTRUCTION AND ERECTION WORK:

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

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

5.4.2 The working time is forty-eight (48) hours per week. Overtime work is permitted in cases of need and the OWNER will not compensate the same. Shift working at two (2) or three (3) shifts per day, if necessary and the CONTRACTOR should take this aspect into consideration for formulating his rates for quotation. No extra claims will be entertained by the OWNER on this account.
For carrying out work beyond working hours the contractor will approach the Engineer-In-Charge or his authorized representative and obtain the prior written permission.

5.4.3 The CONTRACTOR must arrange for the placement of workers in such a way that the delayed completion of the WORK or any part thereof for any reason whatsoever will not affect their proper employment. The OWNER will not entertain any claim for idle payment whatsoever.

5.4.4 The CONTRACTOR shall submit to the OWNER reports at regular intervals regarding the state and progress of WORK. The details and proforma of the report will mutually be agreed after the award of CONTRACT.
The contractor shall provide display boards showing progress and labour strength at work site, as directed by the Engineer-In-Charge.

5.5 DRAWINGS TO BE SUPPLIED BY OWNER:

5.5.1 The drawings accompanying the tender document are indicative of nature of work and issued for tendering purpose only. Purpose of this drawing is to enable the tenderer to make an offer in line with requirements of the owner. However no extra claim whatsoever shall be entertained for any variation in the "Approved for Construction" and "Tender Drawings" regarding any change /units. Construction shall be as per drawings /specifications issued/approved by the Engineer-In-Charge during the course of execution of work. Detailed construction Drawings on the basis of which actual execution of work is to proceed will be furnished *to* the contractor progressively based on the detailed construction program evolved after the award of work and also based on construction progressed achieved.

5.5.2 Detailed working Drawings on the basis of which actual execution of WORK is to proceed, will be furnished from time to time during the progress of WORK. CONTRACTOR shall be deemed to have gone through the Drawings supplied to him thoroughly and carefully and in conjunction with all other connected Drawings and bring to the notice of the Engineer-in-Charge discrepancies if any, therein before actually carrying out the WORK.

5.5.3 Copies of all detailed working Drawings relating to WORK shall be kept at the CONTRACTOR's office of the SITE and shall be made available to the Engineer-in-Charge at any time during the CONTRACT. The Drawings and other Documents issued by the OWNER shall be returned to the OWNER on completion of the WORK.

5.6 DRAWING TO BE SUPPLIED BY THE CONTRACTOR:

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

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

Certified true for

…..... Project

Agreement No ……..

Signed …….. ……..

(CONTRACTOR) (Engineer-in-Charge)

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

5.6.4 It shall be the responsibility of the contractor to furnish the manufacturer's drawings wherever supply of equipment is in the scope of contractor in order to facilitate the inspection or erection of equipment supplied by them.

5.6.5 "As-built" drawings showing all corrections, adjustments etc. shall be furnished by the Contractor six copies (either hard or soft as directed by EIC) and one transparency for record purpose of the Owner.

5.6.6 The Contractor will furnish drawings, manufacturers catalogue, operating manual for items manufactured or procured by the contractor in properly bound form/ soft copy. In case the contractor fails to submit these document in time a suitable amount at the discretion of the owner would be retained or recovered from the bills.

5.7 SETTING OUT WORK:

5.7.1 The Engineer-in-Charge shall furnish the CONTRACTOR with only the four (4) corners of the SITE and a level Bench Mark and the CONTRACTOR shall set out the WORK and shall provide an efficient staff for the purpose and shall be responsible for the accuracy of such setting out.

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

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

5.7.4 Pillars bearing geodetic marks located at the SITE of work under construction should be protected and fenced by the CONTRACTOR.

5.7.5 On completion of WORK, the CONTRACTOR must submit the geodetic documents according to which the WORK was carried out.

5.8 RESPONSIBILITY FOR LEVEL AND ALIGNMENT:

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

5.9 MATERIAL TO BE SUPPLIED BY CONTRACTOR:

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

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

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

5.9.2 The CONTRACTOR shall properly store all materials either issued to him/ brought by him to the site to prevent damages due to rain, wind, direct exposure to sun, etc. as also from theft, pilferage etc. for proper and speedy execution of his works. The CONTRACTOR shall maintain sufficient stocks of all materials required by him.

5.9.3 No material /shall be dispatched from the contractor’s stores before obtaining the approval, in writing, of Engineer-In-Charge.

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

5.10.1 If Specification of WORK provides for the use of any material of special description to be supplied from OWNER's stores or it is required that CONTRACTOR shall use certain stores to be provided by the Engineer-in-Charge, such materials and stores, and price to be charged therefore as herein mentioned being so far as practicable for the convenience of CONTRACTOR but not so as in any way to control the meaning or effect of CONTRACT. CONTRACTOR shall be bound to purchase and shall be supplied such materials and stores as are from time to time required to be used by him for purpose of CONTRACT only. The sums due from CONTRACTOR for the value of material supplied by OWNER will be recovered from the running account bill on the basis of the actual consumption of materials in WORK covered and for which the running account bill has been prepared. After the completion of WORK, however, the CONTRACTOR has to account for the full quantity of materials supplied to him as per relevant clauses in this Document.

5.10.2 The value of the stores materials as may be supplied to CONTRACTOR by OWNER will be debited to CONTRACTOR'S account at the rates shown in the schedule of materials and if they are not entered in the schedule, they will be debited at cost price, which for the purpose of CONTRACT shall include the cost of carriage and all other expenses whatsoever such as normal storage supervision charges which shall have been incurred in obtaining the same at OWNER'S stores. All materials so supplied to CONTRACTOR shall remain the absolute property of OWNER and shall not be removed on any account from SITE, and shall be at all times open for inspection to the Engineer-in-Charge. Any such materials remaining unused at the time of the completion or termination of CONTRACT shall be returned to OWNER's stores or at a place as directed by the Engineer-in-Charge in perfectly good condition at CONTRACTOR's cost.

5.11 CONDITIONS FOR ISSUE OF MATERIALS:

i) Materials specified as to be issued by OWNER will be supplied to CONTRACTOR by OWNER from his stores. It shall be the responsibility of CONTRACTOR to take delivery of the materials and arrange for its loading, transport and unloading at SITE at his own cost. The materials shall be issued between the working hours and as per the rules of OWNER as framed from time to time.

ii) The CONTRACTOR shall bear all incidental charges for the storage and safe custody of materials at SITE after these have been issued to him.

iii) Materials specified as to be issued by OWNER shall be issued in standard sizes as obtained from the Manufacturers.

iv) The CONTRACTOR shall construct suitable godowns at SITE for storing the materials safe against damage by rain, dampness, fire, theft etc. He shall also employ necessary watch and ward establishment for the purpose.

v) It shall be the duty of CONTRACTOR to inspect the materials supplied to him at the time of taking delivery and satisfy himself that they are in good condition. After the materials have been delivered by OWNER, it shall be the responsibility of CONTRACTOR to keep them in good condition and if the materials are damaged or lost, at any time, they shall be repaired and / or replaced by him at his own cost according to the directions of the Engineer-in-Charge.

vi) OWNER shall not be liable for delay in supply or non-supply of any materials which OWNER has undertaken to supply where such failure or delay is due to natural calamities, act of enemies, transport and procurement difficulties and any circumstances beyond the control of OWNER. In no case, CONTRACTOR shall be entitled to claim any compensation or loss suffered by him on this account.

vii) It shall be the responsibility of CONTRACTOR to arrange in time all materials required for WORK other than those to be supplied by OWNER. If, however, in the opinion of the Engineer-in-Charge, the execution of WORK is likely to be delayed due to CONTRACTOR'S inability to make arrangements for supply of materials which normally he has to arrange for, the Engineer-in-Charge shall have the right at his own discretion to issue such materials if available with OWNER or procure the materials from the market or elsewhere and CONTRACTOR will be bound to take such materials at the rates decided by the Engineer-in-Charge. This however does not in any way absolve CONTRACTOR from responsibility of making arrangements for the supply of such materials in part or in full, should such a situation occur nor shall this constitute a reason for the delay in the execution of WORK.

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

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

x) The CONTRACTOR shall furnish to the Engineer-in-Charge sufficiently in advance a statement showing his requirement of the quantities of the materials to be supplied by OWNER and the time when the same will be required by him for WORK, so as to enable the Engineer-in-Charge to make necessary arrangements for procurement and supply of the materials.

xi) A day-to-day account of the materials issued by OWNER shall be maintained by CONTRACTOR indicating the daily receipt, consumption and balance in hand. This account shall be maintained in a manner prescribed by the Engineer-in-Charge along with all connected papers viz., requisitions, issues etc. and shall be always available for inspection in the CONTRACTOR'S office at SITE.

xii) CONTRACTOR should see that only the required quantities of materials are got issued. CONTRACTOR shall not be entitled to cartage (CARRIAGE CHARGES) and incidental charges for returning the surplus materials, if any, to the stores where from they were issued or to the place as directed by the Engineer-in-Charge.

xiii) Materials/Equipment supplied by OWNER shall not be utilised for other purpose (s) than issued for.

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

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

5.13 MATERIALS OBTAINED FROM DISMANTLING:

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

5.14 ARTICLES OF VALUE FOUND:

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

5.15 DISCREPANCIES BETWEEN INSTRUCTIONS:

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

5.16 **WORK IN MONSOON AND DEWATERING:**

5.16.1 The execution of the work may entail working in the monsoon also. The Contractor must maintain a minimum labor force as may be required for the job and plan and execute the construction and erection according to the prescribe schedule. No extra rate will be considered for such work in monsoon.

5.16.2 During the monsoon and other period, it shall be the responsibility of the Contractor to keep the construction work site free from water at his own cost.

5.17 **ACTION WHERE NO SPECIFICATION IS ISSUED:**

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

5.18 INSPECTION OF WORK:

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

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

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

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

5.19 ASSISTANCE TO ENGINEER-IN-CHARGE:

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

5.20 TESTS FOR QUALITY OF WORK/QUALITY ASSURANCE:

5.20.1 All workmanship shall be of the respective kinds described in the Contract Document and in accordance with the instructions of the Engineer-in-Charge and shall be subjected from time to time to such test at CONTRACTOR's cost as the Engineer-in-Charge may direct at the place of manufacture or fabrication or on the SITE or at all or any such places. CONTRACTOR shall provide assistance instrument, labour and materials as are normally required for examining, measuring and testing any workmanship as may be selected and required by the Engineer-in-Charge .

5.20.2 All the tests that will be necessary in connection with the execution of WORK as decided by the Engineer-in-Charge shall be carried out at the field testing laboratory of OWNER by paying the charges as decided by OWNER from time to time. In case of non-availability of testing facility with OWNER the required test shall be carried out at the cost of CONTRACTOR at government or any other testing laboratory as directed by Engineer-in-Charge.

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

5.20.4 Bidder shall include in his offer the quality Assurance program containing the over all quality management and procedures which is required to be adhered on during the execution of contract or after the award of the contract detailed quality assurance program to be followed for the execution of the contract under various divisions of work will be mutually discussed and agreed to.
The Contractor shall establish document and maintain an effective quality assurance system as outlined in recognized codes. Quality assurance System Plans/Procedure of the contractor shall be furnished in the form of a QA manual. This document should cover details of the personnel responsible for the quality assurance, plans or procedures to be followed for quality control in respect of design, Engineering, Procurement, supply, installation, testing and commissioning. The quality assurance system should indicate organizational approach for quality control and quality assurance of the construction activities, at all stages of workout at site as well as at manufacturer’s works and dispatch of materials. The Owner/EIL or their representative reserve the right to inspect/witness, review any or all stages of work at shop/site as deemed necessary for quality assurance.

5.21 SAMPLES:

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

5.22 ACTION AND COMPENSATION IN CASE OF BAD WORK:

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

5.23 **SUSPENSION OF WORK:**

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

ii) In case of suspension of WORK ordered in writing by Engineer-in-Charge, for a period of more than three (3) months, CONTRACTOR shall have the option to terminate the CONTRACT, provided that the contractor shall exercise such option forthwith. The contractor shall not be entitled to claim any damages or compensation on this account.

5.24 **OWNER MAY DO PART OF WORK:**

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

5.25 **POSSESSION PRIOR TO COMPLETION:**

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

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

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

5.27 **FAILURE TO RECTIFY DEFECTS DURING LIABILITY PERIOD:**

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

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

5.28 **EXTENDED LIABILITY ON CONTRACT PERFORMANCE GUARANTEE:**

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

5.29 **CARE OF WORKS**:

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

5.30 **DEFECTS PRIOR TO TAKING OVER**:

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

a) Decide that any work done or materials used by CONTRACTOR or any Sub-Contractor is defective or not in accordance with CONTRACT, or that WORK or any portion thereof are defective, or do not fulfil the requirements of CONTRACT (All such materials being hereinafter, called; 'Defects' in this clause), and

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

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

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

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

5.32 The CPS / Retention Money / Bank Guarantee deducted/furnished as per clause 3.15 and 4.6 of NRL GCC shall be retained for the period of liability i.e. for twelve (12) months from the date of issue of completion certificate, as given in clause 5.26 above. This Retention amount or Bank Guarantee furnished against security deposit shall be released only on expiry of the period of liability and also based on the certification of the Engineer- in-charge that no defect/damage has been reported / observed during the stipulated period of liability for the contract.

5.33 **WRONGFUL APPROPRIATION OF MATERIALS**

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

5.34 **GUARANTEE / TRANSFER OF GUARANTEE**:

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

5.35 **PERFORMANCE OF CONTRACTOR:**

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

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

SECTION VI

MEASUREMENTS, BILLING AND PAYMENTS

6.0 SCHEDULE OF RATES AND PAYMENTS:

(I) CONTRACTOR's REMUNERATION:

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

(II) SCHEDULE OF RATES TO BE INCLUSIVE:

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

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

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

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

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

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

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

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

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

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

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

(VII) **SCHEDULE OF RATES CANNOT BE ALTERED:**

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

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

6.1 **MEASUREMENTS**

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

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

6.2 **BILLING:**

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

6.3 SECURED ADVANCE AGAINST MATERIALS BROUGHT TO SITE

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

6.4 DISPUTE IN MODE OF MEASUREMENTS:

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

6.5 LUMPSUMS IN TENDER:

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

6.6 RUNNING ACCOUNT PAYMENTS TO BE REGARDED AS ADVANCES:

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

6.7 NOTICE OF CLAIM FOR ADDITIONAL PAYMENT:

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

6.7.2 Owner shall review such claims within a reasonable period of time and cause to discharge these in a manner considered appropriate after due deliberations thereon. However, Contractor shall be obliged to

carry on with the work during the period in which his claims are under consideration by the Owner, irrespective of the outcome of such claims.
Where additional payments for works considered extra are justifiable in accordance with the Contract provisions, Owner shall arrange to release the same in the same manner as for normal work payments. Such of extra works so admitted by Owner shall be governed by all the terms, conditions, stipulations and specifications as are applicable for the contract. The rates for extra work shall generally be the unit rates provided for in the Contract. In the event unit rates for extra works so executed are not available as per Contract, payments may either be released on day work basis for which
daily/hourly rates for workmen and hourly rates for equipment rental shall apply, or on the unit rate for work executed shall be derived by interpolation of unit rates already existing in the Contract. In all the matters pertaining to applicability rate and admittance or otherwise of an extra work claim of Contractor the decision of Engineer-In-Charge shall be final and binding.

6.8 PAYMENT OF CONTRACTOR'S BILL:

No payment shall be made for work till the whole of the work shall have been completed and a certificate of completion given unless otherwise specified in the Special Conditions of Contracts. OWNER at his discretion may include the payment terms such as monthly payment in the Special Contract Conditions.
CONTRACTOR shall on submitting the Bill thereof, be entitled to receive Payment as per the payment terms after the approval of by Engineer-in-Charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against Payment due to CONTRACTOR. This payment will be made after making necessary deductions as stipulated elsewhere in the contract document for materials, retention money or any moneys due to the Owner etc.

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

6.9 COMPLETION CERTIFICATE:

6.9.1 APPLICATION FOR COMPLETION CERTIFICATE:

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

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

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

6.9.2 COMPLETION CERTIFICATE:

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

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

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

6.9.3 COMPLETION CERTIFICATE DOCUMENTS:

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

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

6.10 FINAL DECISION AND FINAL CERTIFICATE:

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

6.11 CERTIFICATE AND PAYMENTS ON EVIDENCE OF COMPLETION:

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

SECTION VII

TAXES AND DUTIES

7.0 TAXES, DUTIES ETC.:

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

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

7.2 INSURANCE:

7.2.1 GENERAL

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

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

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

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

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

(i) EMPLOYEES' STATE INSURANCE ACT

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

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

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

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

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

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

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

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

(iv) ACCIDENT OR INJURY TO WORKMEN:

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

(v) AUTOMOBILE LIABILITY INSURANCE:

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

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

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

(i) CONTRACTOR shall be responsible for making good to the satisfaction of OWNER any loss of and any damage to all structures and properties belonging to OWNER or being executed or procured or being procured by OWNER or of other Agencies within the premises of all WORK of OWNER if such loss or damage is due to fault and/or the negligence or willful acts or omission of CONTRACTOR, his employees, agents, representatives or Sub-Contractors.

(ii) The CONTRACTOR shall take sufficient care in moving his plants, equipments and materials from one place to another so that they do not cause any damage to any person or to the property of the Owner or any third party including overhead and underground cables and in the event of any damage resulting to the property of the Owner or of a third party during the movement of the aforesaid plant, equipment or materials the cost of such damages including eventual loss of production, operation or services in any plant or establishment as estimated by the Owner or ascertained or demanded by the third party shall be borne by the CONTRACTOR under third party liability risk limited to Rupees Ten lakhs.

(iii) CONTRACTOR shall indemnify and keep OWNER harmless of all claims for damage to property other than OWNER'S property arising under or by reason of this agreement if such claims result from the fault and/or negligence of willful acts or omissions of CONTRACTOR, his employees, agents, representative or Sub-Contractors.

(iv) The agency should consider within his quoted rates, the third party liability insurance.

SECTION VIII

LABOUR LAWS , OTHER REGULATIONS AND ARBITRATION

8.0 LABOUR LAWS:

(i) No labour below the age of eighteen (18) years shall be employed on WORK.

(ii) CONTRACTOR shall not pay less than what is provided as per NRL declared rate for un-skilled, semi-skilled and skilled manpower for workers engaged by him on WORK.

(iii) CONTRACTOR shall at his expense comply with all labour laws and keep OWNER indemnified in respect thereof.

(iv) The Contractor shall pay equal wages for men and women in accordance with applicable labour laws.

(v) In addition to above, rules and regulations as contained in Contract Labour (Regulation and Abolition) Act, 1970 will also be applicable for the CONTRACT. He shall pay the required deposit under the Act appropriate to the number of workmen to be employed by him or through sub-contractor and get himself registered under the Act. He shall produce the certificate or registration granted by the Govt. authority under the Act to the company before commencement of work. The company recognizes only the contractor and not his sub-contractors under the provisions of the Act. The contractor will have to submit daily a list of his employees, who will be entering the Company's premises for the work awarded. He will also keep his wage register available at all times as close to the work site as possible and produce the same for inspection whenever required by designated company officials. If the company so desires, a deposit may be taken from the contractor to be refunded only after the company is satisfied that all the workmen employed by the contractor have been fully paid for the period of work in company's premises.

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

(vi) Contractor's labour shall have no privity with owner nor any Employer Employee relationship with the OWNER nor shall Owner be constructed as principal employer vis-à-vis such Contractor's Labour for whom the principal Employer, for purpose of contract Labour (Abolition & Regulation) Act, shall be the contractor.

(vii) The contractor shall employ labour in sufficient numbers directly or through Sub-Contractors to maintain the required rate for progress and of quality to ensure Contract and to the satisfaction of the Engineer-In-Charge workmanship of the degree specified in the 1st half of the current month (1) the accident that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (2) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act 1961 or rules made there under and the amount paid to them.

(viii) The Contractor shall comply with the provisions of the Payment of Wages Act 1936, Minimum Wages Act 1948, Employers Liability Act 1938, Workmen's compensation Act 1923, Industrial Disputes Act 1947, the Maternity Benefit Act 1961 and Contract Labour regulation and abolition Act 1970, Employment of children Act 1938 or any modifications thereof or any other law relating thereto and rules made there under from time to time.

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

(x) The Contractor shall indemnify the Owner against any payments to be made under and for the observance of the provisions of the aforesaid Payment of Wages Act 1936, Minimum Wages Act 1948, Employers

Liability Act 1938, Workmen's compensation Act 1923, Industrial Disputes Act 1947, the Maternity Benefit Act 1961 and Contract Labour regulation and abolition Act 1970, Employment of children Act 1938 or any modifications thereof or any other law relating thereto and rules made there under from time to time.

(xi) The Engineer-In-Charge shall on a report having been made by an Inspecting officer as defined in Contract Labour (Regulation and Abolition) Act 1970 have the power to deduct from the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions the Contract for benefit of workers, nonpayment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract or non-observance of the said regulations.

(xii) Contractor must comply with requisite permits/licenses or any other such rules related to labour engagement and keep track of validity of such permits/licenses and their renewal without any lapse. In contracts where a labour license is required, the EIC should monitor the validity of the labour license and contractor must not be allowed to engage labourers unless the license is valid / renewed. Appropriate penalty as specified in the SCC for any lapses in labour license or any other such permits/licenses related to labour engagement will be imposed as recommended by the EIC, whose decision shall be final and binding on the contractor.

8.1 IMPLEMENTATION OF APPRENTICES ACT 1964/ PROVIDENT FUND ACT:

8.1.1 CONTRACTOR shall comply with the provisions of the Apprentices Act, 1964 and the Rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of CONTRACT and the Engineer-in-Charge may, at his discretion, cancel CONTRACT. CONTRACTOR shall also be liable for any pecuniary liability arising on account of any violation by him of the provision of the Act.

8.1.2 The Contractor should strictly comply with the provisions of the Employees provident Fund Act.

It is to be noted that the subject contract would be awarded only to those agencies who have fulfilled the following requirements:

a) Obtained License under Labour (Abolition and Regulation) Act 1970and submitted to NRL.

b) P.F. Registration number allotted to them by RPFC and submitted to NRL.

c) The agencies should promptly deposit PF. Deduction of the eligible contract employees plus the employers' contribution to the R.P.F.C. For this purpose agency must submit a certificate in their bill that PF amount has been deducted from the eligible employees and alongwith employers' contribution has been deposited with R.P.F.C. In support of this, the agency must furnish the challan/receipt for the payment to R.P.F.C for the earlier months.

d) If the certificate and the challan/receipt referred to in clause 9.2 (c) above are not furnished, the Finance and Accounts deptt of NRL will deduct 16% (sixteen percent) of the amount of the Contractor's bill and retain it as deposits may only be refunded to the Contractor on production of the Chalan/Receipt.

8.2 EMPLOYEES PROVIDENT FUND ACT, 1952 AND SCHEME:

(i) CONTRACTOR agree to cover all the employees engaged by him or through Sub-Contractor under the employees provident fund scheme and shall submit necessary records to the OWNER in proof of compliance.

(ii) CONTRACTOR further agrees to defend, indemnify and hold OWNER harmless from any liability or penalty which may be imposed by the Central, State, Local or other statutory authorities by reason of any asserted violation by CONTRACTOR or his Sub-Contractor of the provisions of the Employees Provident Fund. Act, 1952 and the schemes thereunder.

8.3 CONTRACTOR TO INDEMNIFY OWNER:

(i) CONTRACTOR shall indemnify OWNER and every member, officer and employees of OWNER, also the Engineer-in-Charge and his staff against all actions, proceedings, claims, demands, costs and expenses whatsoever arising out of or in connection with the matters referred to in clause 7.3 and elsewhere and all actions, proceedings, claims, demands, costs and expenses which may be made against OWNER for or in

respect of or arising out of any failure by CONTRACTOR in the performance of his obligations under the Contract Document. OWNER shall not be liable for or in respect of any demand or compensation payable by law in respect of or in consequence of any accident, death, or injury to any workmen or other person in the employment of CONTRACTOR or his Sub-Contractor and CONTRACTOR shall indemnify and keep indemnified OWNER against all such damages and compensations and against all claims, damages, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

(ii) PAYMENT OF CLAIMS AND DAMAGES:

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

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

(iv) EMPLOYMENT LIABILITY

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

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

8.4 HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS:

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

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

8.5 CONTRACTOR TO PAY WAGES DIRECT TO HIS LABOURERS:

The CONTRACTOR shall effect the payment of wages to his labourers directly without the intervention of

any intermediary and no amount by way of commission or otherwise shall be deducted or recovered from the wages of the workmen. In this regard the CONTRACTOR has to comply the minimum wage category wise as per the prevailing rate at NRL.

8.6 MEDICAL FITNESS:

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

8.7 SETTLEMENT OF DISPUTES

8.7.1 **FOR SETTLEMENT OF DISPUTES WITH PRIVATE PARTIES:**

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

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

8.7.2 **ARBITRATION CLAUSE:**

i. Any dispute or difference of any nature whatsoever, any claim, cross-claim, counter-claim or set off of NRL (hereinafter Company) against the Contractor/Vendors or of the Contractor/Vendors against company or regarding any right, liability, act, omission on account of any of the parties hereto arising out of or in relation to this agreement shall be resolved through Arbitration under Arbitration and Conciliation Act 1996 as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof.

ii. Reference to Arbitration shall be made by writing a letter to the Managing Director of the Company, with copy to the Contractor/Vendor or the company, as the case may be.

iii. On receipt of such letter referring the dispute to Arbitration, Managing Director or any other officer of the Company delegated by Managing Director shall, within 30 days from the receipt of the said letter, suggest to the parties the names of three persons, who are not disqualified to act as such Arbitrator under the Arbitration and Conciliation Act 1996, as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof for selection of one of them for appointment as a sole Arbitrator, to adjudicate the dispute(s) between the parties.

iv. If while referring the dispute to Arbitration the parties mutually agree that the Arbitration will be by a Tribunal consisting of three Arbitrators, then each party will nominate one person, who is not forbidden to act as Arbitrator and the two Arbitrators so nominated will select the third and Presiding Arbitrator to adjudicate the dispute.

v. Subject to the provisions of the Arbitration and Conciliation Act, 1996, as amended by the Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modification or re-enactment thereof, the Award of the Arbitrator or the Arbitrators, as the case may be, shall be final, conclusive and binding on both parties to the Agreement.

vi. The party(ies) against whom the Arbitration proceedings have been initiated, that is to say, the Respondents in the proceedings, shall be entitled to prefer a Cross-Claim, Counter- Claim or set off before the Arbitrator(s) in respect of any matter or issue arising out of or in relation to the Agreement without seeking a formal reference to Arbitration for such Counter-Claim, Cross Claim or set off and the Arbitrator(s) shall be entitled to consider and deal with the same as if the matters arising there from

has/have been referred to him/them originally and deemed to form part of the reference made to Arbitration.

vii. Place of arbitration shall be unless otherwise agreed by the parties, will be Numaligarh Or Guwahati as mutually agreed.

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

ix. Notwithstanding anything contained in the contract between the parties, the aforementioned clause nos. (i) to (viii) shall be applicable only in case where the value of dispute between the parties, including the claim, counter claim, or set off is less than Rs. 10 Crores, for contracts of domestic procurements.

x. In case of a value of the dispute is above Rs. 10 Crores for contracts of domestic procurements, the party shall have to approach the Managing Director, NRL for Mediation.

8.7.3 **MEDIATION**

I. Initiation of Mediation

For disputes valued above Rs. 10 Crores, the concerned party shall approach the Managing Director of NRL with their claim. Upon receiving such a request, the Managing Director shall refer the matter to a High-Level Committee (HLC) for mediation, where applicable.

II. High-Level Committee (HLC)

A High-Level Committee will be constituted by the MD of NRL, comprising a Chairman and two Members, following these guidelines:

a. Chairman
The Chairman will be selected from individuals of high integrity from the following categories:-

- Retired Civil Servant not below the rank of Joint Secretary.
- An officer who has served as an Independent External Monitor (IEM) at any Public Sector Undertakings (PSUs).
- Retired High Court or Supreme Court Judge.

b. Members
Members will be individuals who had superannuated from any Central Oil PSUs not below the rank of CGM.

III. Mediation Procedure

Mediation shall be conducted within the territorial jurisdiction of a court or tribunal competent to decide the subject matter of the dispute in accordance with the Mediation Act 2023. Mediation under this Act must be completed within one hundred and twenty days from the date fixed for the first appearance before the mediators.

IV. Post-Mediation Recourse

In the event of the failure of the mediation process, the parties retain the right to pursue appropriate legal recourse.

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

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

8.7.5 **JURIDICTION**

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

SECTION IX

SAFETY CODE

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

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SECTION X

SECURITY REGULATIONS FOR REFINERY

10.0 INTRODUCTION

10.1 Contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions. All Security Rules shall also be observed by all personnel of Contractor to maintain orderly conditions. Security Regulations as laid down hereunder shall be strictly adhered to.

10.2 The term CONTRACTOR as used in this section shall be understood to include any and all sub contractors performing work on behalf of the CONTRACTOR, who shall be responsible for communicating the information contained herein to the respective sub-contractor and for directing and supervising their work.

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

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

10.4 PLACES OF ENTRY / EXIT

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

10.5 TIMING FOR ENTRY / EXIT AND DAYS OF WORKS

a) Normal entry : 07:45 AM to 8:30 AM
Normal exit : 4:30 PM to 5:30 PM
Lunch Break : 1200 noon to 1:00 PM
b) Contractor employees will not be normally permitted to enter Refinery premises on Sundays and Refinery holidays.
c) Where it is essential for contract work to continue beyond 5.00 pm or for work on Sundays and Holidays, NRL site engineer will arrange for necessary permission etc. by obtaining approval of CISF officer.
d) No contractor's workmen will be allowed to get out at any odd time without written authority from their supervisors and the workmen will have to produce the same at the gate along with the exit pass from NRL site supervisor.
e) Worker going out of the Refinery for lunch will be issued with a lunch pass by their respective authorized supervisor at the exit gate.

10.6 GATE ENTRY / EXIT PROCEDURE & TRAINING

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

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

3. Special permission for holidays / Sundays / Night:

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

4. Material / Equipment Entry and exit:

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

10.7 BIOMETRIC CARD:

a. Proximity punch card / Biometric photo Punch card will be issued to the contractor / Supervisor / AMC workers having a valid photo gate gate pass for a period not less than 6 months. The cost of each punch card is Rs 200/-. The Contractor should make a DD in favour of NRL immediately after receiving a valid photo gate pass for all the workers working under him.

b. For workers whose gate pass is valid less than six months , a simple biometric punch card will be issued . the cost of the card will be Rs 100/- .

c. If the card is lost , FIR should be lodged immediately by the card holder and a penalty of Rs. 100 per card will be imposed which should be paid by the contractor in the form of DD to NRL.

d. Punch card is not transferable at all. If anyone misuse the punch card, his gate pass will be permanently cancelled.

e. It is the responsibility of the contractor to hand over the punch card to the workers / supervisor after collecting from competent authority.

f. The contractor should also collect the punch card from the worker if the gate pass is expired or if the worker is no more working under him.

g. Final payment to the contractor shall be cleared only after the clearance of security in charge to ensure that all the punch cards issued are received by NRL.

10.8 VEHICLE MOVEMENT

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

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

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

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

10.8.1 Permit for Vehicle & Driver:

Vehicle Pass for contractors:

a. Modality: Vehicle pass is not issued to personal cars used by contractors for their outside movement. However, if used for site activities (truck, dumper, maintenance van, etc), gate pass is issued for such vehicles on recommendation from NRL EIC. Only Diesel driven vehicles fitted with CCOE approved spark arrestors will be given gate pass.
b. Validity: Initial for a maximum period of 06 month, which may then be extended further on recommendation from NRL Engineer In-Charge.
c. Format: Printed format available with CISF.
d. Gate pass of driver will be as per procedure for contractors' workmen, based on application along with all relevant documents. However few specific requirements are also shown here.
e. Signatories (in sequence): Signatures of Contractor, NRL EIC, CISF.
f. Necessary documents:

- Completely filled up format along with sign and seal of all signatories.
- Copy of RC, Insurance, PUC Certificate, Fitness Certificate.
- Copy of valid Driving License of the driver.
- The owner must apply for entry pass both for vehicle and driver to CISF through P&A in the prescribed format attaching all necessary documents.
- All vehicles used inside the Refinery must be mechanically sound and having a current vehicle registration applicable as per Motor Vehicle Act. No unauthorized person other than the authorized driver of that vehicle is permitted to drive the vehicle. Action may be taken against the owner in case it is violated.

10.8.2 Dress Code for Driver & Licensee:

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

10.8.3 Fire & Safety Training:

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

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

10.8.4 Diesel Vehicle / Spark Arrestor:

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

10.8.5 Designated Parking Place:

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

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

10.8.6 Speed Limit:

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

10.8.7 Designated Route / No Entry:

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

10.8.8 Precautions / Regulations for Heavy Vehicles:

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

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

Procedures for Contractor's Gate Pass Issue and Extension. **ANNEXURE A**

Sl No.	Pass holder	Type of Gate Pass and purpose of issue	Maximum validity /	Renewal period	Documents required for new issue	Documents considered for Residential proof	Documents required for extension
1	Contractor, vendor/Supervisor	Biometric	Fire Training Card validity or contractual period whichever is earlier	Next Fire Training Card validity or contractual period whichever is earlier	1. Completely filled up application signed and sealed by EIC. 2. Two copies of recent passport size photos. 3. PF / ESI Code 4. Proof of Fire Training taken in NRL 5. Residential proof	Any of the following : 1. PRC (issued by District / Sub Division authority) 2. Certificate issued by Village Head / Municipality Board Head with photograph verified by Police authority) 3. Passport / Driving license / Voter Identity card / Ration Card. 4. Aadhar card	1. Filled in format signed and sealed by EIC. 2. Photocopy of previous Biometric Card. 3. Valid Fire Card
2	Contract worker.	Biometric Card	If Police Verification is available, Fire Training Card validity or contractual period whichever is earlier. Note : 1. If Police Verification is not available, Initially the card will be activated in system for 90 days. 2. If PV is not received from Police Deptt till 90 days, same will be activated	Next Fire Training Card validity or contractual period whichever is earlier.	1. Above documents along with appropriate format 2. Forwarding letter from the concerned contractor along with list of persons 3. PF/ESI/Bank Account No.	Any of the above documents	Above documents, using appropriate format

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

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

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ANNEXURE B

Proof of Date of Birth

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

1. Birth Certificate issued by the Registrar of Births and Deaths or the Municipal Corporation or any other prescribed authority, whosoever has been empowered under the Registration of Birth and Deaths Act, 1969 to register the birth of a child born in India.

2. Transfer/School leaving/Matriculation Certificate issued by the school last attended/recognised educational board having the date of birth of the applicant.

3. PAN Card issued by the Income Tax Department having the date of birth of the applicant.

4. Aadhaar Card/E-Aadhaar having the date of birth of the applicant.

5. Copy of an extract of the service record of the applicant (only in respect of Government servants) or the Pay Pension Order (in respect of retired Government Servants), duly attested/certified by the officer/in-charge of the Administration of the concerned Ministry/Department of the applicant, having his date of birth.

6. Driving licence issued by the Transport Department of the concerned State Government, having the date of birth of the applicant.

7. Election Photo Identity Card/Voter ID issued by the Election Commission of India containing the date of birth of the applicant.

8. Policy Bond issued by Public Life Insurance Corporations/Companies containing the date of birth of the holder of the insurance policy.

SAFETY REGULATION

INTRODUCTION

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

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

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

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1.0 GENERAL SAFETY GUIDELINE

i) General : Safety of Contractor's employees working for Owner on sites should be of the same high standards as that of Owner's own people. The following is a list of rules and regulations which must be observed by any contractor or his sub-contractor working in the Refinery, other property/facilities outside, belonging to the company.

ii) The contractors have to satisfy the provisions of Factories Act, 1948 and the Rules framed there under and other related Acts concerned to the running /construction of the factory/refinery.

iii) The contractor shall take every precaution and provide the facilities necessary for the safety of all workmen employed and shall comply with the safety rules and regulations of the company.

iv) Carrying of matches or any other means of ignition is strictly prohibited in the Refinery. Persons on entering the Refinery must deposit such articles at the security gates.

v) No dry battery or accumulator type of electric hand lamp or torch which is not of the flame proof safety type shall be taken into the Refinery.

vi) All persons engaged at the Refinery, if called upon , shall submit to be searched by the Company's recognized officials for the possession of articles prohibited under rule (iv) above . The search may take place at the time of entry to the Refinery or during the time when the employees is in the Refinery by the security staff.

vii)Warnings and tags shall be placed pointing out hazards.

viii) Hard safety hats shall be worn by all employees when assigned work in the Refinery operating area/unit before entering the unit to protect from head injuries.

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

a) In plant under shutdown maintenance.
b) In areas where maintenance is being carried in the opinion of the company's Engineer helmet should be worn.
c) After entering the 2nd gate of the refinery, safety helmet shall be available with every contract worker.

ix) While walking, be on the side of the roads and the central portion of the road should be left for vehicular traffic.

x) Resolve to keep good housekeeping a habit. If the work place is tidy and the job is being done in neat manner, there are fewer interruptions, delays and above all it helps in controlling accidents. Job site of contractor shall be kept reasonably clean and free from rubbish and debris which, may create tripping of fire hazards. Remove grass/shrubs whenever required to carryout the work in safe manner.

xi) Safety goggles, gloves, gumboots, aprons, hard and other safety equipment shall be used by the contractor's employee where, in accordance with Company's regulation, use of such equipment is prescribed.
Owner's representative will stop the work of contractor whose employees are found not to be wearing safety shoes , not using hand gloves and are not wearing hard hat. The work will be allowed to commence only when these employees are found wearing the personal protective equipments.

No contract worker will be allowed to enter beyond 2nd gate of the refinery without Safety Helmet and Safety Shoe.
xii) Ladders/scaffolds/lifting tackle / tools and equipment used by Contractor shall meet applicable safety codes and rules, unsafe tools equipment hall not be used under any circumstances. In this regard, the decision of the company Representative /Safety section shall be final.

xiii) Oil, rags, cloths or any waste materials are dangerous fire and tripping hazards. Dispose off such materials immediately in the dust bins only.

xiv) Fire extinguishers , water hydrants and steam hoses are there to extinguish fire and should not be used for cleaning tools, washing, etc. Free access must always be maintained to such equipment.

xv) Do not wear oily clothes.

xvi) Report oil leaks promptly to owner's operating personnel. Stop all the hot work in the surrounding areas.

xvii) Do not leave tools, bolts , and other equipment in the walkways, on the beams or in any place where they will cause a tripping hazard.

xviii) Do not turn on steam, water, electricity or set in motion machinery without permission and seeing that any one is in a position to be injured. Never remove a tag from any vessel without proper authorization.

xix) Inspects walk planks, runways and ladders before use and keep them in good conditions.

xx) Do not throw material from high elevation. Lower it by means of a rope.

xxi) Cordon of all excavations and trenches to avoid falls, by fencing, barricading or otherwise and place a sign indicating the same.

xxii) Never point compressed air or steam hoses towards employee/workmen.

xxiii) No contractor will be allowed to work in the Electricity sub-station without a standby from Owner's electrical department.

xxiv) Following completion of work , contractor shall clean up job-site to Company's satisfaction.

xxv) Debris shall be disposed off, at designated location(s). Metal scrap and salvageable materials belonging to the Company shall be moved to the Refinery Salvage Yard/Scarp yard.

xxvi) Contractor's employees shall no enter manufacturing units, office buildings or maintenance shops and store house premises without specific approval. They shall not leave their representative job site without prior approval.

xxviii) Company Representative and Safety section are authorized to correct any conditions which they may consider hazardous.

xxix) Contractor should:

- Make themselves and their employees aware of all the hazards; provide means and organization to comply with the safety & health measures required at the workplace before commencement of any job inside Refinery. Educate workmen about their duties at the workplaces.

- Implement safe methods and practices; deploy appropriate machinery, tools & tackles, experienced supervisory personnel and skilled work force etc. required for execution. Ensure inspection and certification of all tools being used. Remove defective tools immediately.

- Nominate / engaged qualified & trained Safety Engineers / Officers reporting to the Site Incharge for supervision, co-ordination and liaison for the implementation of the safety plans & procedures.

- Ensure that only PPEs of the Owner approved type is used at work site. Arrange suitable facilities in liaison with the Owner for drinking water, toilets, lighting, etc applicable as per Laws / Legislation at site.

- Ensure strict compliance with work permit system after ensuring that all safety precautions / conditions in the permit are complied with and closing the same after job completion. Arrange for fire protection equipment as per the advice of owner.

- Ensure that its employees have completed appropriate health and safety training as required by the statute / regulation and also as per requirements of the Owner / Consultant. The documentation of such training imparted to all its employees should be maintained and produced for verification as required.

- Ensure that workers have proper training for their job assignments, including use of appropriate PPE and first aid fire fighting equipment.

- Report each incident and / or injury in accordance with established procedures and assist in investigation. To maintain accident & near miss record in a register.

- Conduct daily inspections to ensure compliance with safety standards, codes, regulations, rules and orders applicable to the work concerned. Arrange daily toolbox meeting and regular site safety meetings and maintain records.

- Attend training and ensure participation of his workers for training as per schedule arranged by the Owner / Consultant and keeps himself updated.

- Keep records of number of persons working at the site. Also keep a constant liaison with EIC / Owners' representative on safety issues.

2.0 SAFETY MANAGEMENT

2.1 JOB SAFETY ANALYSIS/PLAN

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

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

2.2 WORK PERMIT SYSTEM

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

In generals NRL has the following system of permits.

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

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

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

2.2.2 A) Hot work permits:

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

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

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

b) i) Entry of motor vehicle and equipment fitted with internal combustion engines into the unit limits of operating areas. All engine driven equipment used on plant must be securely fitted with approved exhaust spark arrestors.

ii) Any work on oily water and intermediate sewer systems.

iii) Making any opening in the fire bound-walls enclosing storage tanks.

c) Before starting any work , the contractor must fill in the prescribed form for doing hot work and hand it to the owner's representative. Person authorized to issue work and work permit will be intimated to the contractor by the owner.

II. a) Hot work permits are required for all locations in the Refinery other than those specifically exempted for this requirement.
b) Hot work permits are valid for the period mentioned therein and shall require renewal or extension by the issuing authority if work is to continue beyond the specified hours.

c) Refinery operating personnel and shift-in-charge of Fire & Safety have the authority to withdraw any approved permit and stop work should they consider a hazardous condition exists or is likely to exist during the course of the work.
d) Contractor's personnel assigned to the job requiring Hot work permits shall conduct the job safely and abide by all precautions specified on the permit.
e) Hot work permits shall be endorsed by Fire & Safety Dept., copy of which shall be retained by them and the original shall be in possession of contractor's personnel actually working while work is in progress.

III. Issuance of Hot work permit for carrying out specified" Hot work" does not permit smoking on worksite.

B) Cold work permit:
a) The purpose of a "cold work permit" is to give written permission to a person/contractor to carry out work on a separate item of operating equipment or any facility belonging to an operating plant/area. The permit is to ensure that the equipment and area are safe to carry out the specific work.

b)Cold work permits are required for all work of maintenance, repair , modification or construction nature performed in the operating areas and/ on operating equipment.

c) Work permits are valid only for the duration specified and will require renewal or extension by the issuing authority if work is to continue beyond the specified hours.

d) Work permit must be signed by the Gas Safely Inspector/Office-in-charge responsible for the operation of the equipment/unit or area concerned.

e) Work permit shall be endorsed by authorized NRL employees of different classified areas and copy of which shall be retained by them, original must be in possession of Contractor's personnel actually working while work is in progress.

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

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

2.2.4 Important Notes:

a) No work involving HOT WORK or the opening of equipment and lines may be carried out in the refinery without a Hot work permit and a cold work permit and where necessary a gas certificate. All vessels such as tanks , columns etc. which have contained any inflammable liquids or corrosive chemicals may only be entered by a person after a clearance certificate and cold work permit are issued.

b) All the conditions laid down in permit /clearance must be implemented in totality before start of job/activity and in case of any doubt the same shall be clarified with concerned NRL supervisor in charge of the work. Contractor must keep his workers fully informed of the details and possible dangers of the job in hand in daily meeting conducted at respective site.

c) Workmen must not be allowed to enter any vessel, tank, pump, trench or drain without a work permit issued for the job stipulating the necessary precautions to be taken for the safety of the workmen. It is the responsibility of the contractor to see that the certificate is valid up to date before any work is to proceed.
d) Any job involving dangerous chemicals must be covered by a cold permit, where such jobs required the use of protective clothing for the protection of the workmen; this will be supplied by the NRL in certain cases and it is the responsibility of the contractor to ensure that his workmen wear the protective clothing.

e) Electricity driven appliances such as drills, grinders, etc require a permit before they are to be used on plant plots, refinery reads, etc.

f) In case the diesel generating sets are required to be used for any particular work, the contractor shall arrange for necessary certificates for uses from Govt. Authorized Elect. Inspector. The wiring of DG set shall be with double earthing ELCB and approved by NRL Engineer.

g) All work in connection with roofs of a building must be covered by a work permit and cowling board or Cat Ladders must be used with a safety harness. On no account will any workmen be allowed to stand, walk or crawl over any roof.

2.3 USE OF PERSONNEL PROTECTIVE EQUIPMENTS:

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

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

2.4 INSPECTION / AUDIT

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

2.5 PENALTY FOR NON-COMPLIANCE

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

- Non-usage of PPEs / Safety Belt(Full Body Harness)
- Violation of safety permit conditions
- Non-barricading of area
- Working without valid work permit
- Unauthorized road closure

1. The Penalties on the Contractor or their workmen may be in the form of:
   - Warning
   - Seizure of Gate Pass
   - Denying Entry / Entry Pass renewal
   - Compulsory Training at Contractor's cost
   - Delisting

2. Owner's authorized representatives will report such violations to the concerned departmental head for imposing necessary penalty.
3. The above penalties shall be double in case of violations more than 3 times during the contractual period for a particular contract.
4. Imposing any penalties for violation of HSE norms does not absolve the Contractors from their contractual obligation / responsibility.
5. Contractors shall own full responsibility for any accident and injury to any of their employees or property due to violation of HSE norms.
6. All such financial Penalties imposed on Contractors shall be considered for evaluation of Contractor's performance for tendering.

2.6 ANNEXURE – I : FORM FOR INTIMATION

1. TO: EIC / HOD
2. NAME OF THE CONTRACTOR :
3. DATE & TIME OF VIOLATION :
4. AREA / LOCATION / UNIT :
5. DETAILS OF VOILATION :

Sl	Description of violation (Pl indicate the penalty clause no)	Penalty	Remarks
1			
2			

Name: Signature: Date:

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

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

2.7.1 Hazard communication including fire reporting and control:

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

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

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

2.7.3 Reporting Accident / Injuries and Records :

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

2.7.4 FIRST AID / TREATMENT OF INJURIES:

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

2.8 SAFETY COMMITTEE MEETING:

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

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

2.8.1 Toolbox meeting

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

2.8.2 Site Safety Committee Meeting

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

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

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

2.8.3 Safety Review Meeting

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

2.9 SAFETY TRAINING

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

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

- The Proprietors, Partners, Directors of the Contractors who have ultimate responsibility to carry out the work must undergo a comprehensive safety familiarization programme.
- This programme would be conducted once in a quarter by Fire & Safety / Training & Development Section the schedule of which will normally be notified in advance.

- On completion of the programme a certificate of Attendance / Safety training card will be issued to each participants which will be required for issue of Entry Pass.

b Supervisors' Training:

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

c Workmen's Training:

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

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

2.10 MEDICAL CERTIFICATE

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

3.0 SAFETY PRACTICES AT WORK PLACES:

3.1 SAFE PRACTICES FOR INDIVIDUALS

3.1.1 i) Where walkways are provided use them instead of short-cuts. If walkways not available you must use the roadway keep to the right so you will face approaching vehicle.
ii) As a protective measure employees must not walk through or cut across any operative units unless their duties require them to do so.
iii) Walking on or over any mechanical or roller conveyor is strictly prohibited.
iv) Employees should not walk on rail road tracks if it can be avoided.
v) Passing under railway wagon as a short-cut is dangerous and strictly prohibited.
vi) It is prohibited for any person to ride on the running board of any vehicle or any part of the vehicle without being properly seated.
vii) All stairways, platforms and walkways must be kept clear at all times.
viii) Make shift of any kind are prohibited.
ix) Umbrellas are not permitted to be used while cycling.

3.1.2 i) Before starting a job be sure you know how to do it. If any doubt, consult your supervisor.
ii) Do not touch or attempt to operate or set in motion any machine or equipment, which you are not assigned to operating or repairing.
iii) Only the authorized personnel may operate any switch-gear from routine stopping and starting of motors and lighting.
iv) Never look directly into the arc produced when welding without proper eye protection.
v) When starting any steam pump or machine , make sure the exhaust steam heads are drained, so that hot water will not be sprayed out creating a hazard.
vi) Protruding nails should be pulled out or bent over.
Vii) Goggles or shields must be used when working on emery wheels, brushes, chipping etc… or any other circumstances where there are possible eye hazards.
viii) Gloves must never be worn while grinding materials on an emery wheel. Gloves are not provided to keep hands but to protect against abrasions, silver corrosives an extreme temperatures. Gloves should not be used when operating machinery without sanction from section Head.
ix) When working around moving machinery, the wearing of loose clothing such as Dhotis, lungies etc. Is prohibited.
x) Learn the right way to lift so as to avoid strain. Bend your knees, keep your body erect, and push upward with your legs.
xi) All the tools to be used on job should be of good quality and good condition. Defective tools are dangerous. Do not use them. Never use a tool except for its purpose.
xii) Do not leave tools or materials where they may accidently drop on persons below.
xiii) Do not tamper with or attempt to repair instruments. Only instrument technicians are permitted to work on instrument.

xiv) Process technicians must always be stand on the windward side when taking samples, bleeding or draining lines or equipment .
xv) No work should be started on oil, chemical, gas stream, air, sewer, or water lines or equipment carrying these before a clearance certificated is obtained from Ops. Dept.
xvi) Shift employees must not leave their jobs until the men who relieve them are properly advised of all operating conditions.
xvii) When work is completed, all left over junk and tools are to be removed to the proper places.
xviii) NO WORK is to be started until all permits are obtained.
xix) If an object is too heavy for you, get help.
xx) Watch your hands and footing when you are handling heavy objects.
xxi) The use of safety shoe is mandatory.
xxii) Finger rings should not be worn.

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

xxi) When work is completed all guards ,and rails etc. must be replaced.
xxii) All moving parts of the machinery such as couplings, pulleys, wheels, belts chains, fly wheels etc. must be equipped with proper guards.
xxiii) It is strictly prohibited to use any grade of petrol or any other inflammable liquids or corrosive chemical such as caustic soda or acid for cleaning purposes. Approved paint removers may however be used.
xxiv) Transporting or storing of Petrol/Diesel or light product s or corrosive chemicals etc. in any open container is strictly prohibited.
xxv) Every precaution must be taken to avoid oil splashes when opening lines or other equipments. Oil must be drained into suitable containers wherever possible. In the event of an oil spill the Fire Section should be advised with a minimum of delay . Spills which involve light products must receive immediate attention.
xxvi) Protective Clothing and equipment must be worn by personal handling corrosive chemicals such acid, caustic soda etc. When required gas masks can be obtained from Fire Station.
xxvii) All storage containers such as tanks, drums etc. containing corrosive chemicals must be clearly marked indicating the nature of the contents.
xxviii) All pumps in service on corrosive or dangerous chemicals must have gland guards to prevent spraying . All equipments which comes in contact with corrosive chemicals must be washed with water immediately After finishing the job.
xxix) Before using any types of swinging scaffold, stages of boatswains chairs, it should be tested while close to the guards.
xxx) Don't insert a bolt or nail in a chain to shorten it. The bolt or nail may slip or break and an accident results.
xxxi) Only members of the operating personnel are allowed to change over pumps, open or close valves on the operating lines or vessels etc. or in an emergency at least a member of the plant operating personnel must be in attendance when this is carried out.
xxxii) When loading , unloading or handling pipe joints, a piece of wood or smaller short pipe should be inserted into the ends of the pipe. This will keep the hands free and prevent crushed fingers.
xxxiii) Hand towing of Lister trailers only allowed in plant areas.
xxxiv) Do not transport any material including in process or final products samples by bicycles which are equipped with special carriers.
xxxv) If glass panes or windows ventilators or shutters etc. are broken or cracked, the entre pane must be renewed immediately.

3.1.4 i) Vehicles of all description must be equipped with good exhaust and muffler system to enter the refinery Area. Any unit with a defective exhaust system will be prohibited from entering the refinery area. All Traffic signs and regulations must be complied within the refinery area.
ii) Vehicles must not be driven off roads on the operating plant area without a Hot Work permit and cold work permit.
iii) Diesel must not be siphoned out of tanks of vehicles.

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

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

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

3.1.6 Movement inside Refinery / Marketing Terminal Premises

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

3.2 HOUSEKEEPING

3.2.1 Housekeeping is an important aspect towards maintaining a healthy & safe work environment inside any Industry. If proper housekeeping can be maintained, lots of problems are automatically resolved. The Contractor therefore must ensure for removal of scrap, inflammable material, waste and debris at appropriate interval including proper storage of materials and equipment. The debris, scrap and other unwanted materials generated out of the activities carried out by the Contractors must be removed from site and shifted to the designated location or as instructed by EIC. The Contractor may ensure the following.

- Ensure proper storage of both Owners' / Contractor's materials & equipment at site used for carrying out the maintenance or construction job.
- Remove the loose materials, which are not required for use. Accumulation of these at the site can obstruct means of access to workplaces and passageways. Scrap generated out of the maintenance job should also be removed.
- Workplaces and passageways, that are slippery owing to oil, grease or other causes, should be cleaned up or strewn with sand, sawdust, ash etc.
- The workplace to be kept clean on continuous basis. Even for continued nature of work the work place must be cleaned not later than every four hour basis, non compliance of which shall be treated as major violation of safety norms.

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

3.2.2. Worksite Inspection Clearance Report

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

i Format for worksite Inspection Clearance report

Inspection Date Time

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

3.3 EMERGENCY PROCEDURES

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

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

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

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

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

3.3.2 Important Procedures to be observed during Emergency

- If the Contractors employees notice any oil leak or fire, he should immediately report to Owner's representatives or Fire Station by using any one of the communication mode mentioned above and stop all the jobs.
- Action by contractors in the event of a Major Fire Alarm:

1. Contractor personnel under direct supervisor of NRL :
   On sounding of a general alarm siren, contractor's personnel within the premises will carry on their normal work unless they are directed otherwise by their NRL Supervisors.
2. Contractors personnel under contractors direct supervision :
   a) If not in the immediate vicinity of the incident he is to keep men working as normal
   b) If in the vicinity of the incident, following shall be resorted to :
      - Stop all work, shut off engines/ welding machines etc. and take advise from owner's representatives.
      - Check the number of workforce immediately and if any of his personnel are missing then he is to report this to fire station control room.
      - Assemble the workers at a safe distance from the incident, preferably at the identified "Assembly Point" and wait direction from his normal NRL supervisor.
      - Only when the all-clear siren is blown work should be resumed. Fresh permits should be taken before commencing work in such cases.
   c) Under no circumstance, must the contractor's supervisor allow his men to take part in any emergency action unless so required by a NRL's supervisor.
   d) Any contractor who is driving a vehicle when the Fire Siren sounds should park his vehicle at a suitable location away from the site of fire.
   e) Contractor personnel working at Refinery premises should be given demonstration and should acquire knowledge of the fire prevention and should be able to make use of the fire extinguishers.

- Those who are using firewater for any purpose must immediately stop using the same and must shut off the hydrant valve from which water being taken.
- When a fire extinguisher is operated for firefighting purpose or inadvertently, advice Fire station immediately so that extinguisher may be replaced.
- Any employee contravening the Fire Regulation is liable for instant removal.

4.0 PROCEDURES, REGULATIONS FOR SAFETY DURING EXECUTION OF WORK :

4.1 EXCAVATION OF WORK

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

The basic guidelines for excavation is as under:

4.1.1 General Provisions:

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

4.1.2 Checklist for Excavation Clearance

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

Signature of Contractor's Site In charge Signature of EIC

4.2 LADDERS AND SCAFFOLDS

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

i. Make sure that ladder is not defective or broken and is not a repaired one. All ladders used must be sound construction and the right length for the job in hand. The free length must extend by 1.5 meters above the point of landing but should not be more than 1/4th of the ladder length. No portable single ladder shall be over 9 meter in length.

ii. Short ladder must not be tied together to give greater lengths. All ladders of 6 m or above should be tied to the structure on which they are resting to prevent from slipping. If they cannot be fixed with reasonable security, a worker must be stationed at the base of the ladder to foot it to prevent slipping. Ensure that the ladder is placed at a safe angle to prevent slip or fall back.

iii. Metal ladders may not be used for electrical work.

iv. Every member of scaffolding must be of sound construction. Steel planks used in scaffolds should be carefully inspected and should be tied on both sides with suitable fixing arrangements to the pipes. Scaffolding must not be overloaded.

v. The Steel pipe & clamp to be used must be of good quality. The spacing between the vertical & horizontal members of the scaffolding should not be more than 1.5m and 1 meter respectively. The scaffolding should be further strengthened with cross bracing and stays.

vi. The scaffolds should be provided with short climbs ladders for safe ascending / descending of workmen in the job. Only those men who are well trained / experienced in erecting scaffolding should be engaged for scaffolding work. The men working in the actual erection / dismantling of the scaffolding and all persons using the scaffolding must use suitable PPEs.

vii. Bamboo or other flammable material is not allowed inside refinery for any type of scaffolding work other than specific purposes.

viii. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing.

ix. The Contractor or his representative shall check the approach platform to scaffolding for correctness and shall put a tag with signature that it is checked by them and found as per standard scaffolding norms. If required, necessary certificates regarding stability of such arrangement should be taken from the competent person before it is put to use.

4.3 ELECTRICAL SAFETY

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

4.3.1 Safety Standard: Applicable standards for Electrical Safety are:

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

4.3.2 Electrical License:

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

4.3.3 Procedure for Temporary Electrical Power Connection:

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

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

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

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

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

4.3.4 General Safety Precautions:

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

4.4 DEMOLITION

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

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

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

4.5 WORK OVERHEAD / HOSTING EQUIPMENT

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

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

4.6 CONFINED SPACE ENTRY:

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

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

4.7 Material handling:

4.7.1 Accidents occur in handling materials because of unsafe working practices such as lifting improperly, carrying too heavy a load and failure to use personnel protective equipment.
Following directives should be adhere to:

1. Before lifting and carrying objects size the load and if necessary get help.
2. Survey that the route to be followed is free of obstructions.
3. Lift and carry in the proper position. Lift material with your leg and not your back.
4. When two or more men must carry a single object must have good coordination.
5. Make sure that object carried does not hit anybody or fall on someone working below.
6. While using mechanical hoists and cranes, test hoist , controls and brakes before starting the job.
7. Never carry loads over men working nearby. Signal them out of the way.
8. Move the load on signal from one person only.
9. While handling unusually heavy loads like exchangers and drum, use extreme caution.

4.7.2 The crane lifting tackles, slings, D'shakles etc. used for the work at site shall comply with the statutory requirement and shall accompany with valid test certificates duly approved by statutory authority.
4.7.3 Contractors bringing any equipment into the company premises are required to declare it at the security gates and obtain necessary endorsement on the challans from security department.
4.7.4 Any automobile or container , as well as, any company or personnel property of any kind , brought into or carried out of the plant , is subject to inspection by the security staff and government excise.
4.7.5 A gate pass issued by a designed representative of the company must be presented to the security for inspection of all materials, tools and equipment leaving the premises of the company along with the stamped challans.
4.7.6 Transporting materials from one place to another by a forklift, Escort, Hydra or mobile cram is prohibited. Material must be transported on trailer, truck or handcart of adequate capacity.
4.7.7 Handcart must of good mechanical construction, sound material and adequate strength and must be declared safe to use by competent and authorized person. Display the name of the contractor who owns it. Record of all the Hand carts should be properly maintained which shall include details of purchase, repairs carried out time to time by authorized person . Hand carts must be used with defective wheels or other body parts. Defective hand carts should be discarded from the system and record of such discarded hand carts should be properly maintained in prescribed manner.
4.7.8 Over-hanging loads whether on the sides or at the rear of the hand cart or any vehicle is dangerous and particular care must be exercised.
4.7.9 Trained and experienced riggers only must carry out materials handling.

4.8 USE OF OWNER'S EQUIPMENT & MACHINERY

4.8.1 Use of Owner's Equipment:

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

iii. Contractor is not permitted to make use of the Company's transport, unless special permission is obtained from competent authority.

iv. Work of private nature using Company's or Contractor's equipment and / or materials is not to be performed in the Refinery site.

v. **Tie -in to Owner's Equipment / System** : Contractor shall not open or tie -in their work into Owner's existing pipeline, equipment, sewer systems, electrical power circuits, and other process equipment without specific approval from the Owner's representative.

vi. Safety Equipment :

- All Contractors' must return the safety equipment loaned to them as soon as the work is completed. Loss or damage to this equipment will be charged.
- Safety equipment, barricade ribbon, no entry sign board, etc given during any job as per job safety plan must be removed immediately once job is over. Continuing with such equipment even after completion of work shall also be treated as violation of safety norms.

4.9 TEMPORARY OFFICE / SHED

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

The following are to be followed for getting permission.

i. The Contractor should submit formal application for making temporary shed inside Refinery / Marketing Terminal to EIC who in turn take approval from Maintenance Planning. MP will route it Civil Maint, Electrical Maint and F&S for comments. The details like work order reference, purpose, size & shape, materials of construction, duration, location, power requirement & single line diagrams, etc should be submitted to EIC in the format indicated below.

ii. The shed so constructed should not be at the cost of safety, security or aesthetics. Torn /rusted / repaired items should not be used for construction. The Contractor must ensure housekeeping aspect.

iii. Power connection should be done only after approval by Electrical Maintenance Section.

4.9.1 Format / Checklist for applying for Temporary shed Construction:

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

5.0 STATUTORY / OISD GUIDELINES:

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

6.0 EFFECTIVENESS OF RULES

6.1 Should any Discrepancy occur between the various oral or written instructions furnished to contractor, the Contractor shall refer the same to the Head of Security /Fire & Safety Dept. whose decision will be final And conclusive and no claim for losses alleged to have been caused by such discrepancy between Instructions/doubts/misunderstanding shall in any event be admissible.

6.2 These safety provisions should be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work spot. The person responsible for compliance of the safety regulations shall be named therein by the contractor.

6.3 a) To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Engineer –in-Charge or officer-in-charge of safety or their representatives.
b) Notwithstanding the above clauses there is nothing in these to exempt the contractor from the operations of any other act of rules in force in the Republic of India.
c) The works without including any temporary works shall be carried out in such a manner as not to interfere in any way whatsoever with the traffic on any roads or footpaths at the site or in the vicinity thereto or any existing works whether the property of the Administration or of a third party.
d) In addition to the above the contractor shall abide by the safety code provision as per P.W.D safety Code and Indian Safety Code framed from time to time.
e) Violation of Safety Regulations may lead disciplinary action, even though the particular violation does not result in an accident.

6.4 The violation of following General Rules and Regulations shall be viewed seriously and disciplinary action shall be taken against employee found responsible for the same.

1. Willful or negligent violation of any Safety Rule which has been previously made known to him.
2. Failure to report immediately accident or personal injuries in which the owner may become involved.
3. Violation of criminal low or committing of offence involving moral turpitude.
4. Conduct which offends common decency and morality.
5. Carrying weapons on side.
6. Fighting or attempting to hurt another person on side.
7. Drunkenness on side or while entering Refinery Premises.
8. Malicious mischief resulting in injury to Owner's employees or property.
9. Use of profane language with intent to insult or other abusive language to an employee.
10. Introduction, Possession or use of intoxicating liquor or habit forming drugs on site.
11. Stealing making fraudulent records or knowingly obtain material on fraudulent orders.
12. Insubordination, including refusal to perform assigned work and international disregard or disobedience to instructors.
13. Demonstrated incompetent and inability to do the work.
14. Sleeping on premises.
15. Negligence or carelessness resulting in damage to owner.

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

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

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

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

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

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

APPENDIX-A

SAFETY ACTION PLAN

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

HOUSEKEEPING PLAN

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

ENVIRONMENT CONTROL PLAN

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

DUST CONTROL PLAN

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

I/ We are committed to all the above plans.

Job No:_____ Job Name:_____

APPENDIX - B - FINANCIAL DETERRENCE FOR NON-COMPLIANCE

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

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

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

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

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

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

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

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

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

Please note that :

1. The above penalties will be applicable for all the contracts jobs carried out inside Refinery and covered by NRL Safety Regulations/ norms / work permit system.

2. Site Engineers, Operations Officers, Safety Officers will report such violation through their Department Head /Engineer-in-charge (Reporting Authority) to the respective contracting department (Commercial) for necessary action. Reporting Authority has been indicated against each violation.

3. On advice from Reporting Authority, Commercial department shall make the deductions from the next payment due to the contractor.

4. The above penalties shall be double in case of violations more than 3 times during the contract period for a particular contract. For annual and other rate contracts POs awarded as part of rate contract shall be considered for this.

5. In case of frequent penalties for a particular contractor, necessary action such as holiday listing / delisting will be taken.

6. In addition to the safety conditions mentioned in Special safety Conditions attached, contractors are required to adhere to the following additional safety requirement for which penalties are applicable as above for violation of these conditions :

   a) All contractors shall themselves arrange weekly safety site inspection / audit and monthly safety meeting and record should be maintained.

   b) All contractors shall submit monthly HSE report to respective Engineer-In-Charge by 5th of next month. Report should carry details of precautions against accident and injury to any of the workers or to any person or persons or of weekly safety site inspection / audit, monthly safety meeting, details about records maintained by Safety Supervisor and any other information felt necessary by Engineer-in-Charge for safe execution of job.

7. Implementation of above financial penalties for violation of Safety norms does not absolve contractors from their responsibilities to take at all times due and proper precautions to avoid injuries and accidents.

8. Contractors shall own the full responsibility for any accident and injury to any of the workers or to any person or persons or property arising due to violation of Safety norms by contractors even though financial penalty is not applied for such violation. Implementation of these financial penalties does not absolve Contractors from any of the responsibility as per General Contract Conditions (Latest Revision), General Terms and Conditions and Special Safety Conditions.

9. All such financial penalties imposed on contractors shall be displayed / publicized appropriately by the respective Contracting department.

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SPECIAL CONDITIONS OF CONTRACT (SCC)

(PACKAGE TENDER)

FOR

PPU UNIT

In accordance with Clause 4.0 of the GCC:

(a) following Special Conditions of Contract read along with all annexures and in particular Annexure No. XXVIII shall supplement the General Conditions of Contract (GCC); and

(b) whenever there is a conflict, the provisions herein shall prevail over the provisions of the GCC.

PART-A

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1. DEFINITIONS

- "**EPCM CONSULTANT**" or "**CONSULTANT**" shall mean ENGINEERS INDIA LIMITED (EIL), New Delhi, India, appointed by 'OWNER' M/s NUMALIGARH REFINERY LIMITED and shall include its successors and permitted assigns. The words "EPCM CONSULTANT", "EPCM" & "CONSULTANT" are synonymous.
- **"ITB"** means Instructions to Bidders.
- **"EMD"** means Earnest Money Deposit.
- **"BQC"** means Bidder Qualification Criteria.
- "**DESIGN BASIS**" shall mean requirements as specified in the Contract document and for undertaking Basic and Detailed Engineering of the Plant under Contractor's scope of work.
- "**EPCM**" shall mean the work for the Engineering, Procurement & Construction Management of the Project.
- "**INR**" or "**Rupees**" means the legal currency of the Republic of India.
- "**PLANT**" shall mean the Units and Facilities comprised in the Project.
- "**VENDOR**" shall mean any third party supplying any of the equipment / materials for setting up Plant covered under Contractor's Scope of Work.

2. GENERAL

2.1 Special Conditions of Contract (SCC) (Part-A & Part-B), Annexure- XXVII to SCC shall be read in conjunction with the General Conditions of Contract (GCC), Notice Inviting Tender / Instruction to Bidder, Schedule of Prices, specifications of work, drawings and any other document forming part of this Contract wherever the context so requires.

2.2 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.

2.3 It will be the CONTRACTOR's responsibility to bring to the notice of Engineer-in-Charge any irreconcilable conflict in the Contract documents before starting the work (s) or making the supply with reference to which the conflict exists.

2.4 Wherever it is stated in this Bidding Document that such and such a supply is to be effected or such and such a work is to be carried out, it shall be understood that the same shall be effected/carried out by the CONTRACTOR at his own cost, unless a different intention is specifically and expressly stated herein or otherwise explicit from the context. Contract value (also referred to as Contract Price) shall be deemed to have included such cost.

2.5 In the absence of any Specifications covering any material, design or work(s) the same shall be performed/ supplied/ executed in accordance with standard Engineering practice as per the

instructions/directions of the Engineer-in-Charge, which will be binding on the CONTRACTOR.

2.6 Order of precedence shall be as per Cl. No. 3.1 of Annexure-XXVIII of SCC.

3. SCOPE OF SUPPLY AND SCOPE OF WORK

3.1 General

The scope of work in general includes scope of work specified in various Technical Documents/Specifications provided in Technical portion of the bidding document, Schedule of Prices (SOP) and other related documents enclosed in the Bidding Documents which forms and constitute an integral part.

CONTRACTOR shall perform the work in accordance with the terms of this Contract and to ensure that the works are completed according to the requirements and the terms and conditions of the Contract and in compliance with the completion schedule set forth as described in **Annexure A-I** to this SCC.

3.2 The Scope of Work which CONTRACTOR is required to perform is more particularly described in the technical part of the Bidding document.

3.3 Owner shall have the right at any time and at its own discretion to increase or decrease the SCOPE OF WORK and in such case Clause 7.3 (iii) of the 'General Conditions of Contract' and sub-clauses thereby shall apply.

3.4 EMISSIONS:

Contractor shall follow local applicable emission standards. Contractor shall guarantee that these limits are not exceeded.

3.5 TECHNICAL & SAFETY AUDIT / CERTIFICATION OF DESIGN & ENGINEERING:

a) Notwithstanding the requirements for Statutory Approvals set forth in Clause 10.17 (v) of the General Conditions of Contract, OWNER and / or Consultant shall carry out, or, if it so desires, may appoint independent consultants to carry out technical audit / safety audit / certification of the detailed design and engineering of the work and / or the constructed installations to ensure conformance to the ISO standards and CONTRACTOR shall extend full co- operation to OWNER or the consultant's personnel while performing such activities. Notwithstanding such audit, CONTRACTOR shall not be absolved of its responsibilities nor shall its liabilities, duties or obligations be diminished under this Contract.

b) CONTRACTOR shall review the reports prepared by OWNER and / or the audit team of third party consultants engaged by OWNER and shall perform or re-perform work to remedy any and all deficient design and engineering as identified in the audit team's report, or incorporate sound and viable recommendation to improve such design and engineering at CONTRACTOR's own cost and expense.

4 TIME SCHEDULE/COMPLETION SCHEDULE

4.1 The Work shall be executed strictly as per time schedule given in **Annexure A- I** to this SCC.

4.2 Delay by OWNER in providing Utilities and Feedstock will not be reason for waiver of price

adjustment, if concurrently CONTRACTOR has delayed the completion of the job.

4.3 If the Contractor is also one of the suppliers of items supplied by Owner in the contract, the delay on account of supply of such material against the Owner's Purchase order and or Work order will not be a basis for extension of time without imposition of price reduction schedule on account of such delays.

5 INFORMATION ABOUT EXISTING UNDERGROUND / OVERHEAD STRUCTURES/ UTILITIES/ PIPELINES

5.1 Engineer-in-charge / OWNER shall provide, to the best possible extent, details with respect to existing underground and above ground structures, overhead lines, cables, pipelines and utilities at the job site to the CONTRACTOR. The CONTRACTOR shall execute the work in such a manner that the said structures, utilities, pipelines etc. are not disturbed or damaged and shall indemnify and keep indemnified the OWNER from and against any destruction thereof or damages thereto. Moreover, CONTRACTOR shall prepare drawings showing all the above stated details accurately and submit to Engineer- in-Charge. The Prices quoted in SOP are deemed to be inclusive of the costs towards this activity.

5.2 OWNER will provide the indicative Underground Scanning Report, wherever possible, for reference during Bidding. In case of requirement of re-routing of any U/G line or any other underground facility not appearing in the Scanning Report provided by OWNER, the same shall be done by Contractor to complete the job within the contractual Time Schedule. Any Change Order towards such re-routing job shall be considered by the Owner as per provisions of Contract. Decision of EIC/OWNER regarding the Change-Order shall be final and binding on the CONTRACTOR.

6 SITE ORGANISATION

The following provisions shall be read in conjunction with the provisions of Clause 4.20 of the relevant portion of General Conditions of Contract (GCC). The following provisions shall supersede the GCC provisions to the extent of repugnance and variance, if any:

The Contractor shall without prejudice to his overall responsibilities and liabilities to provide adequate qualified and skilled personnel on the work as per **Annexure-VI 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-VII to SCC**). In addition to this, Contractor shall deploy Safety Supervisors to ensure safer working conditions at site. In case where the works are Sub-contracted by the Contractors, Safety Supervisors are to be provided by the Contractor.

7 GENERAL GUIDELINES DURING AND BEFORE ERECTION:

7.1 The CONTRACTOR shall be responsible for organizing the lifting of the equipment in the proper sequence for orderly progress of the work and to ensure that access routes for erecting the other equipments are kept open.

7.2 Orientation of all foundations, elevations, lengths and disposition of anchor bolts and diameter of holes in the supports and saddles shall be checked by the CONTRACTOR well in advance of the installation. Rectifications, including chipping of foundations, shall be carried out where necessary in consultation with the Engineer-in-Charge. If a structural member needs to be dismantled to

facilitate the equipment erection, this shall be done by the CONTRACTOR after ensuring proper stability of the main structure in consultation with the Engineer-in-Charge. All such dismantled members shall be put back in position to the satisfaction of Engineer-in-Charge after the completion of the equipment erection.

7.3 During the performance of the work the CONTRACTOR shall at his own cost keep structures, materials and equipment adequately braced by guys, struts or other approved means which shall be supplied and installed by the CONTRACTOR as required till the installation work is satisfactorily completed. Such guys, shoring, bracing, strutting, planking supports etc. shall not interfere with the work of other agencies and shall not damage or cause distortion to other works executed by the CONTRACTOR or other agencies.

7.4 The CONTRACTOR shall duly comply with manufacturer(s) recommendations and detailed specifications for the installation of the various equipment and machines.

7.5 Various tolerances required as marked on the drawings and/or in accordance with the specifications and/or instructions of the Engineer-in-charge shall be maintained. Verticality shall be verified with the Theodolite and shall be maintained.

7.6 CONTRACTOR shall comply to OWNER's work permit system before any erection activities.

8 MECHANISATION OF CONSTRUCTION ACTIVITIES AND MOBILISATION OF CONSTRUCTION EQUIPMENT

8.1 Mechanization of Construction Activities

8.1.1 The CONTRACTOR shall mechanise the construction activities to the maximum extent by deploying all necessary construction equipment/machinery in adequate numbers and capacities.

8.1.2 It shall be the responsibility of the CONTRACTOR to carry out leveling / dressing / grading with a proper approach for the movement of equipment and machinery, at his own cost. No extra payment shall be made by the OWNER for leveling / dressing / grading. The CONTRACTOR shall acquaint himself with availability of access, facilities such as railway siding, local labour etc. and the CONTRACTOR may have to build temporary access roads to aid his work and the quoted and agreed Prices shall be deemed to include the same.

8.1.3 For speedy execution of work, CONTRACTOR shall also ensure use of latest computer software for at least the following:

a) Billing
b) Planning & Scheduling
c) Progress Reporting
d) Material Control & Warehousing
e) Safety Records
f) Resource Deployment
g) Communication

8.1.4 CONTRACTOR further agrees that Contract price is inclusive of all the associated costs, which he may incur for actual mobilization, demobilization required in respect of use of mechanized construction techniques and that the OWNER/PMC in this regard shall entertain no claim whatsoever.

8.1.5 Calibration Requirements of Monitoring and Measuring Devices at Construction Site. Refer **Annexure A-II** to this SCC.

8.2 **Mobilization of Construction Equipment**

8.2.1 The CONTRACTOR shall without prejudice to his responsibilities to execute and complete the work as per the specifications and time schedule, progressively deploy minimum construction equipment, tools and tackles and further augment the same depending on the exigencies of work 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. The bidder shall submit a list of construction equipment he proposes to deploy for the subject work along with deployment schedule. No construction equipment shall be supplied by the OWNER, unless specified by Owner specifically in the bidding document.

9 QUALITY ASSURANCE SYSTEM

9.1 CONTRACTOR shall include in his offer the Quality Assurance Program containing the overall quality management and procedures which is required to be adhered to during the execution of Contract. After the award of the Contract, detailed quality assurance program to be followed for the execution of Contract under various divisions of works will be mutually discussed and agreed to.

The CONTRACTOR shall establish, document and maintain an effective quality assurance system as outlined in recognized codes. Specification for Quality Management System using Quality Control Checklists is attached as **Annexure-A-III (EIL Standard Specification No. 6-78-001)** to this SCC for Contractor's reference and developing the Quality program and Formats for approval of Engineer -In-Charge.

9.2 Quality Assurance System plans / procedures of the CONTRACTOR shall be furnished in the form of a **QA Manual**. This document should cover details of the personnel responsible for the quality assurance, plans or procedures to be followed for quality control in respect of Design, Engineering, Procurement, Supply, Installation, Testing and Commissioning. The quality assurance system should indicate organizational approach for quality control and quality assurance of the construction activities, at all stages of work at Site as well as at manufacturer's works and dispatch of materials.

9.3 CONTRACTOR shall establish field laboratory at Site for day-to-day routine test of samples to be taken during construction. CONTRACTOR shall indicate the equipment to be made available at the field laboratory for this purpose.

The CONTRACTOR shall post Quality Assurance and Quality Control Engineer(s) depending upon the quantum of work. This QA / QC group shall be fully responsible to carry out the work as per standards and codes requirement. In case OWNER feels that CONTRACTOR's QA / QC Engineer(s) are incompetent or insufficient in numbers, the CONTRACTOR shall further deploy their experienced Engineer as per Site requirement.

9.4 Contractor shall deploy skilled ASNT Level-III personnel for interpretation and ASNT Level-II skilled personnel for scanning and reporting.

10 TESTS AND INSPECTION OF WORKS

10.1 The CONTRACTOR shall carry out the various tests as enumerated in the bidding document and

as per direction of Engineer-in-charge either on field or outside laboratories concerning the execution of work and supply of the material by CONTRACTOR. All the expenses shall be borne by the CONTRACTOR and shall be considered as included in the quoted price. The inspection shall be done by following:

a) Third Party Inspection agency nominated by the OWNER for all supply items among the following: -

TPI Agencies for Indian Supplies:

i. M/s SGS India Pvt Ltd
ii. M/s TUV SUD South Asia Pvt Ltd
iii. M/s Bureau Veritas India Pvt Ltd
iv. M/s TUV India Pvt Ltd
v. M/s Certification Engineers International Ltd
vi. M/s Irclass Systems and Solutions Pvt Ltd.
vii. M/s Lloyd's Register Marine and Inspection Services India Ltd.
viii. M/S VCS Quality Services Pvt Ltd.
ix. M/s Engineers India Limited (EIL)

TPI Agencies for Foreign Supplies:

i. M/s SGS
ii. M/s TUV
iii. M/s BVQI
iv. M/s DNV
v. M/s Lloyd's Register International
vi. M/s Engineers India Limited (EIL)

b) Representative deputed by Engineer-in-charge.

c) Representative deputed by Statutory Authority.

CONTRACTOR shall give prior notice sufficiently ahead of time to the Engineer-in-charge and also to the authorities / TPI to conduct inspection/ to witness such tests.

10.2 All the tests either on the field or at outside laboratory or at any other place, concerning the execution of the work and supply of materials by the CONTRACTOR shall be carried out by the CONTRACTOR at his own cost.

10.3 The work is subject to inspection at all times by the Engineer-in-charge. The CONTRACTOR shall carry out all instructions given during inspection and shall ensure that the work is being carried out according to the technical specifications of this bidding document, the technical documents that will be furnished to him during performance of work and the relevant codes of practice furnished to him during the performance of the work.

10.4 The CONTRACTOR shall provide, for purposes of inspection, access ladders, lighting and necessary instruments at his own cost including Low Voltage lighting equipment for inspection of work. Compressed air for carrying out works shall be arranged by the CONTRACTOR at his own cost.

10.5 Any work not conforming to the execution drawings, specifications or codes shall be rejected forthwith and the CONTRACTOR shall carry out the rectifications at his own cost.

10.6 All results of inspection and test will be recorded in the inspection reports, pro-forma of which will be approved by the Engineer-in-charge. These reports shall form part of the Completion Documents.

10.7 For materials supplied by OWNER, CONTRACTOR shall carryout the tests, if required by the Engineer-in-charge, and the cost of such tests shall be reimbursed by the OWNER at actual to the CONTRACTOR on production of documentary evidence.

10.8 Inspection and acceptance of the work shall not relieve the CONTRACTOR from any of his responsibilities under this contract.

10.9 Cost towards repeat tests and inspection due to failures, repairs etc. for reasons attributable to the CONTRACTOR shall be borne by the CONTRACTOR.

10.10 Various tests as specified in specifications shall be carried out to the entire satisfaction of OWNER/PMC.

11 DISTINCTION BETWEEN SUB-STRUCTURE AND SUPERSTRUCTURE

11.1 To distinguish between work in sub-structure and superstructures, the following criteria shall apply:

11.1.1 For all equipment pedestals, pipe racks, other foundations and RCC structures, work done upto 300mm level above finished grade level will be taken as work in sub- structure and work above this level will be treated as work in superstructures.

11.1.2 Irrespective of what has been stated above, all pavements, RCC retaining wall, all pipe sleepers and any similar item would be taken as work done in sub-structure irrespective of locations nomenclature, and levels given anywhere. Where not specifically pointed out all works in sumps, drains manholes, tank pads, cable trenches or such similar items would be taken as work in sub-structure.

12 COMPLETION DOCUMENTS

12.1 The CONTRACTOR shall carryout various tests as called for in bidding document either on field or at outside approved laboratories at his own cost. All test results and related documents shall be submitted as per Technical Part of Bidding Document.

12.2 The following documents in-addition to documents specified in GCC shall be submitted in hard binder by the CONTRACTOR as a part of completion documents:

a) Test Certificate from manufacturers for all supply material.
b) Welding Procedure Qualification Report and Welder Qualification Report if applicable.
c) Execution drawing with all corrections / alterations duly marked and carried out during the execution of the work and in as built condition.
d) Field Test report for all Civil, Structural and Electrical, instrumentation system.
e) Material Inspection / Test report for supply of all material.
f) Original “No Demand Certificate” from the Administration & Personnel Department regarding vacation of Land, housing accommodation if any, recovery of rents, hire charges, return of surplus material, reconciliation statement for all the material issued etc.

g) Original "No Demand Certificate" regarding surrendering of Gate Passes etc.
h) All other requirements as specified in the respective specifications.
i) Any other drawing/ document/ report specified elsewhere in the Bidding Document
j) No claim certificate
k) No labour liability certificate

Note: CONTRACTOR shall be eligible to apply for issue of completion certificate only after submission of completion documents as mentioned above.

13 ADDITIONAL WORKS/ EXTRA WORKS

13.1 OWNER reserves their right to execute any additional works/ extra works, during the execution of Work, either by themselves or by appointing any other agency, even though such works are incidental to and necessary for the completion of Work awarded to the CONTRACTOR. In the event of such decisions taken by OWNER, CONTRACTOR is required to extend necessary cooperation, and act as per the instructions of Engineer-in-Charge. This is without prejudice to the rights of the OWNER to get the additional works/ extra works executed by the CONTRACTOR.

14 HEALTH, SAFETY AND ENVIRONMENT (HSE) MANAGEMENT / SAFETY NORMS

Safety is to be given prime importance. During construction, Contractor shall strictly follow the safety procedures, precautions & norms as per JOB SAFETY PLAN (as per Annexure IV of SCC Part-A) EIL specification No:6-82-0001, 6-88-0001 on Health, Safety and Environment (HSE) Management (enclosed as **Annexure V of SCC Part-A**) and requirement of OISD-192, OISD-GDN-207 & OISD-GDN-206 (enclosed as **Annexure-VI of SCC Part-A**).

15 CONDITIONS FOR ISSUE AND RECONCILIATION OF MATERIAL

Free Issue Materials (FIM), if any, **as mentioned in Job Specifications/ Technical Specifications, Schedule of Rates etc. of Bidding Document** shall be issued-from NRL's stores or other issue point**. The contractor has to lift the materials and transport to the worksite at his own cost**

Every month, Contractor shall submit an account for all materials issued by NRL 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 NRL.

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.

The conditions for issue of materials by NRL and reconciliation of such materials shall be as per specification No. **7-82-0001** attached herewith as **Annexure A-VII** to these Special Conditions of Contract. This shall not be applicable for the materials supplied by Contractor.

16 QUALIFICATION AND EXPERIENCE OF KEY SUPERVISORY PERSONNEL

16.1 Qualification and Experience of Key Supervisory Personnel to be deployed for this work shall be as per **Annexure A-VIII (EIL Standard No. 7-82-0003)** to this SCC. CONTRACTOR shall submit bio-data of Key Supervisory Personnel meeting the requirement of this Annexure which will be reviewed and approved by Engineer-in-Charge.

16.2 All key staff employed at the site by the CONTRACTOR shall be considered essential to the

performance of the work, and all key staff shall be subjected to approval of OWNER/ Engineer-in-Charge. However such approval shall not relieve the CONTRACTOR of any of his contractual obligations. No staff including Resident Engineer and other technical supervisory staff shall be removed or transferred from the work with the prior written permission of the OWNER/ Engineer-in-Charge. The OWNER / Engineer-in-Charge shall however have the authority to order the removal of staff from site of any undesirable personnel, the replacement of such personnel shall be carried out by the CONTRACTOR within 15 (fifteen) days from the notification from OWNER/ Engineer-in-Charge. If key staff becomes unavailable for assignment to the work for reasons beyond the CONTRACTOR's control, the CONTRACTOR shall immediately notify the OWNER/ Engineer-in-Charge to evaluate the impact on the project. Prior to substitution or addition of any key staff, the CONTRACTOR shall obtain OWNER's / Engineer-in-Charge's written consent as to the acceptability of replacements or additions to such personnel. The CONTRACTOR shall at all times be fully responsible for the acts, omissions, defaults and neglect of all his representatives, agents, servants, workmen and suppliers and this of his Sub-Contractors.

17 SETTING OUT OF WORK

17.1 OWNER/ CONSULTANT shall furnish the relevant existing grid point with Bench Mark, on the land. It shall be CONTRACTOR's responsibility to set out the necessary control points in and to set out the alignment of the various works. The CONTRACTOR shall employ an efficient survey team for this purpose and the accuracy of such setting out works shall be the CONTRACTOR'S responsibility.

17.2 The CONTRACTOR shall give the Engineer-in-Charge not less than 24 (Twenty four) hours advance notice in writing of his intention to set out or give levels for any part of the work so that arrangements may be made for checking the same.

17.3 Work shall be scheduled so as to enable checking lines and levels on any part of the work.

17.4 The CONTRACTOR shall within the scope of work provide all assistance, tools, gauges and instruments required to enable the Engineer-in-Charge to check the setting out of works.

18 COORDINATION WITH CONSULTANT

18.1 CONTRACTOR shall coordinate with CONSULTANT for his day-to-day activities and provide free access and assistance during the inspections and other activities to be carried out by CONSULTANT. CONTRACTOR shall comply to the requirements of CONSULTANT and obtain all the clearances from CONSULTANT for his work.

19 DRAWINGS AND DOCUMENTS

19.1 The drawings (if any) accompanying the bidding document are of indicative nature and issued for bidding purpose only. Purpose of these drawings is to enable the bidder to make an offer in line with the requirements of the OWNER. However, no extra claim whatsoever, shall be entertained for variation in the "Approved for Construction" and "Bid Drawings" regarding any changes of work. Construction shall be as per drawings / specifications issued / approved by the Engineer-in-charge during the course of execution of work.

19.2 The drawings and documents to be submitted by the CONTRACTOR to OWNER/PMC after award of the work as per the requirements enlisted in the bidding document elsewhere shall be

for OWNER/PMC's review, information and record. The CONTRACTOR shall ensure that drawings and documents submitted to OWNER/PMC are accompanied by relevant calculations, data as required and essential for review of the document / drawings by OWNER/PMC.

19.3 All documents and drawings including those of CONTRACTOR's sub-vendor's manufacturer's etc. shall be submitted to OWNER/PMC after having been fully vetted in detail, approved and corrected by the CONTRACTOR & shall bear CONTRACTOR's seal / certifications to this effect. All documents / drawings & submissions made to OWNER/PMC without compliance to this requirement will not be acceptable and the delay & liability owing to this shall be to the CONTRACTOR's account.

19.4 The review of documents and drawings by OWNER/PMC shall not be construed by CONTRACTOR as limiting any of his responsibility to meet the requirements of specifications, drawings etc. and liabilities for mistakes and deviations. Upon receiving the comments on the drawing / documents reviewed by OWNER/PMC, CONTRACTOR shall incorporate the comments as required and ensure their compliance. The subsequent submission by the CONTRACTOR of the updated drawings / documents shall be accompanied by a compliance report etc. The submissions calling for repeated reviews by the OWNER/PMC shall be avoided by the CONTRACTOR.

19.5 Any inaccuracies, errors and non-compliance to contractual requirements will be rectified by the CONTRACTOR. Delay occurring on this shall be to the account of the CONTRACTOR.

20 SUB-CONTRACTOR FOR CONSTRUCTION WORKS

Clause No. 5.13 of GCC stands modified to the extent as follows:

20.1 Following the issue of the Letter of Acceptance, the CONTRACTOR will submit to the OWNER /Engineer-in-Charge for approval the details of sub-Contractors for construction in the Format attached as **Annexure A-IX.**

20.2 The list of construction sub-contractors proposed by the Bidders in the Bid shall be considered as indicative only.

20.3 Additionally, the CONTRACTOR must deploy its own manpower for planning, supervision and quality of works at site including Project Manager(s), Quality Control Engineer(s) for various disciplines, Planning Engineer(s) and front line supervisors for Civil, Electrical, Mechanical, Piping and Instrumentation jobs. Sub-contracting of these activities shall not be permitted under any circumstances.

20.4 Any bidder who had submitted the bid for this tender and does not get the Contract because of his being not the lowest will be prohibited from working as sub-contractor for execution of this Contract.

21 PROCUREMENT OF TMT BARS, CEMENT AND STRUCTURAL STEEL BY CONTRACTOR

21.1 Clause for acceptance of Structural Steel & TMT Bars

21.1.1 Steel manufactures 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 steel and TMT bars) and contractor shall procure from them with prior intimation to Engineer-in-charge.

21.1.2 **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 from 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.

21.1.3 **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) 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 100MT 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.

21.2 **Contract Clause for acceptance of Cement manufacturer**

21.2.1 Cement manufacturers having valid BIS certificate and listed in the BIS website as on the 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.

21.2.2 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 subject 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.

22 CONSTRUCTION

22.1 The CONTRACTOR shall within the scope of work observe in addition to specifications, all national and local laws, ordinances, rules and regulation and requirements pertaining to the work.

22.2 Various procedures and methods to be adopted by CONTRACTOR during the construction as required in the respective specifications shall be submitted to OWNER/ CONSULTANT in due time and well in advance of the specific work for approval.

22.3 The CONTRACTOR shall carry out required supervision as per Quality Assurance Plan and furnish all assistance required by OWNER/ CONSULTANT in carrying out inspection work. OWNER/ CONSULTANT will have authorized representatives present who shall have free access to the work at all times. If an OWNER/ CONSULTANT representative notifies the CONTRACTOR'S representative of any deficiency in any work or in the supervision thereof, the CONTRACTOR shall make every effort to carry out such instructions consistent with best industry practice.

23 REQUIREMENTS FOR DOCUMENTATION

The CONTRACTOR shall adhere to the requirements for Documentation as per Document No. **Annexure A-X** (EIL Specification No. 6-78-0002).

24 LIST OF CRITICAL TAGGED ITEMS

For the purpose of Payment the list of critical Tagged items(if any) is as per **Annexure A-XI** to this SCC.

25 GUARANTEES

Loading & Guarantees, if applicable shall be as per **Annexure A-XII** to this SCC.

26 ENTRY OF FOREIGN NATIONALS TO REFINERY PREMISES

NRL has an operating Refinery in the State of Assam.

It may please be noted that the aforesaid Refinery is declared as "prohibited place" under Official secrets Act 1923, where entry of personnel is restricted / conditioned. It may also be noted that the Visa to be issued by Govt. of India, normally contains the clause towards no permission for entry / visit to such place, a default condition which if not removed / struck-off by the Visa issuing authorities, will create impediment / restriction in movement of personnel of foreign origin deployed at particular Refinery, to carry out an activity in terms of engagement / Contract with M/s. Numaligarh Refinery Limited. The same should be kept in mind while submitting request for issue of Visa by your office.

27 FREE ISSUE MATERIALS

27.1 The list of Free Issue Materials is indicated in **Annexure A-XIII** to this SCC. With respect to clause no. 5.11 (x) g) of GCC, Contractor shall submit the Indemnity bond as per format enclosed as **Annexure A-XIX to SCC**.

28 PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) (PPP-MII) ORDER, 2017

28.1 Ministry of Petroleum & Natural Gas (MoPNG) vide letter No. FP-20013/2/2017-FP-PNG-Part (4) (E-41432) dated 26.04.2022 issued directive that Public Procurement (Preference to Make in India) (PPP-MII) Order, 2017 issued by DPIIT and as amended from time to time, shall be applicable.

28.2 Under this, buyer reserves the right to give purchase preference as admissible under the prevailing Order, subject to complying with the requirements/ conditions defined herein and submitting documents required to support the same. Refer **Annexure-XIV to SCC** for details.

29 SPARE PARTS

In addition to the GCC provisions for Spare Parts under Cl. 5.14(xi), the CONTRACTOR shall carry out SAP codification of surplus materials/mandatory spares, in consultation with EPCM/ Owner. CONTRACTOR shall also submit Spare Parts Interchangeability List (SPIR) as per OWNER's format.

30 TERMS AND CONDITIONS FOR POST WARRANTY COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (PWCAMC) (IF APPLICABLE):

Terms and conditions for Post Warranty Comprehensive Annual Maintenance Contract (PWCAMC), if applicable shall be as per **ANNEXURE A- XV** TO SCC.

31 POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY (INDIAN) MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT (DMI&SP):

Applicable as per as per Annexure A – XVI to SCC.

32 SETTLEMENT OF DISPUTE BETWEEN GOVT. DEPT. / PUBLIC SECTOR UNDERTAKINGS

Applicable as per GCC Clause no. 8.7 'SETTLEMENT OF DISPUTES'.

33 CORRUPT AND FRAUDULENT PRACTICES

33.1 Bidders are required to furnish the complete and correct information/ documents required for evaluation of their bids. If the information/ documents forming basis of evaluation is found to be false/ fake/ forged, the same shall be considered adequate ground for rejection of the bids and forfeiture of earnest money deposit.

33.2 OWNER requires that the CONTRACTOR observes the highest standard of ethics during the execution of Contract. In pursuance of this policy, OWNER defines, for the purposes of this provision, the terms set forth below as follows:

a) "Corrupt Practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of public official in contract execution;

b) "Fraudulent Practice" means a misrepresentation of facts in order to influence the execution of a Contract to the detriment of OWNER, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive OWNER of the benefits of free and open competition.

c) "False/Fake" means to make or construct falsely. "Faked alibi" is a made, manufactured, or false alibi. Something that is not what is purports to be; counterfeit, an imposter.

d) "Forgery" means the false making or the material altering of a document with the intent to defraud. A signature of a person that is made without the person's consent and without the person otherwise authorizing it. A person is guilty of forgery if, with the purpose to defraud or injure anyone or with knowledge that he is facilitating a fraud or injury to be perpetrated by anyone, the actor (i) alters any writing of another without his authority (ii) makes, completes, authenticates, executes, issues or transfers any writing, so that it purports to be the act of another who did not authorize that act or to have been executed at a time or place or in a numbered sequence other than was in fact the case, or to, be a copy of an original when no such original exists. Utters any writing which he knows to be false in a manner specified in (i) & (ii) above.

33.3 OWNER may terminate the Contract if it discovers subsequently that the CONTRACTOR had engaged in Corrupt Practices or Fraudulent Practices in competing for the Contract.

33.4 In case, the information/ document furnished by the CONTRACTOR forming basis of evaluation of its Bid is found to be false / fake/ forged after the award of the Contract, OWNER shall have the

right to terminate the Contract and get the remaining Works executed by a third party at the risk & Cost of the CONTRACTOR and without any prejudice to other rights available to OWNER under the Contract such as forfeiture of the Contract Performance Bank Guarantee, withholding of payment etc.

33.5 In case, this issue of submission of false/fake documents comes to the notice after execution of the Works, OWNER shall have full right to forfeit any amount due to the CONTRACTOR along with forfeiture of the Contract Performance Bank Guarantee furnished by the CONTRACTOR.

33.6 Further, any CONTRACTOR which is found guilty of any Corrupt or Fraudulent Practice or submission of false/fake /forged documents, shall be put on the negative/ holiday list of OWNER debarring them from future business with OWNER.

34 GENERAL

Entry inside NRL Refinery premises is allowed only with all necessary PPE's required for execution of works at site. The contractor at his own cost shall arrange to provide the facilities to his workmen outside NRL refinery complex so as to ensure no staff/workman is entering inside refinery complex without PPE.

Contractors / suppliers and their concerned persons / workmen engaged for execution of works / services / deliveries / installation / commissioning / testing or any other activity in various operational and non-operational work areas must adhere to the "Personal Protective Equipment (PPE) Policy and Guidelines of NRL". The Personal Protective Equipment (PPE) Policy and Guidelines of NRL is available in NRL Website www.nrl.co.in → Tenders → Download Manuals → **Personal Protective Equipment (PPE) Policy and Guidelines of NRL (Rev-01; 08-10-2024)**.

35 PRICE VARIATION

The price variation shall be applicable to the Steel. For details refer **Annexure A –XVII to SCC.**

36 COMPLIANCE TO VARIOUS ACTS & RULES

The contractor will not engage minor labour below 18 (eighteen) years of age under any circumstances. The contractor will further comply with the provisions of the following act and indemnify the company against all claims, which may arise out of the following Acts, & Rules framed there-under:

i) The Contract Labour (Regulation and Abolition) Act,

ii) The Minimum Wages Act.

iii) The contractor has to accept full & exclusive liability for compliance with all obligations imposed by **Employee State Insurance Act, 1948**.

iv) The Payment of Wages Act,

v) The Payment of Bonus Act,

vi) The Employees Provident Fund & Misc. Provisions Act,

vii) Family Pension Scheme,

viii) Inter State Migrant Workmen (Regulation of Employment & Condition of Service) Act, or any other acts or statute not hereinabove specifically mentioned having bearing over engagement of workers directly or indirectly for execution of work

ix) Any other Acts/Regulation as may be notified by Govt. from time to time

A Labour Liability Certificate, attached as **Annexure- A-XVIII to SCC**, shall be signed by the Contractor.

37 PLANNING AND DESIGNING IN PURVIEW OF VULNERABILITY ATLAS OF INDIA

Vulnerability Atlas of India (VAI) is 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, cyclone 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, administration, municipal commissioners, urban managers, engineers, architects, planners, public etc. to ascertain proneness of any city/location/site to multi-hazard which includes earthquakes, wind, floods thunderstorms, 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 Materials and Technology Promotion Council under Ministry of Housing and Urban Affairs, Government of India and available at their website www.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. Precipitation0

38 MODIFICATIONS TO Annexure XXVIII to SCC

38.1 Following is added at the end of Clause No. 1.1 (lxxiv) of the Annexure XXVIII to SCC:

At any stage during currency of the Contract, while carrying out the design and engineering job as part of this Contract, Contractor shall adhere to/follow the latest revision (notwithstanding that such a revision has taken place after submission of last price bid) of the applicable specifications and standards including but not limited to OISD Standards as mentioned elsewhere in the tender.

Such design and engineering jobs shall be taken up by the Contractor at any stage without any extra cost to the OWNER. However, cost towards supply, construction/erection/modification, testing and commissioning of any facility/system caused due to such revision(s) after submission of last price bid shall be settled as per the Change Order clause of the Contract.

38.2 **Contract Performance Security (CPS):**

Applicable as per Clause no. 3.5 of Annexure XXVIII to SCC.

Clause no. 3.5 of the Annexure XXVIII to SCC related to Contract Performance Security stands modified to the following extant:

i) Contractor may furnish Contract Performance Security (CPS) in the form of Bank Guarantee or through Insurance Surety Bonds (ISB) or Online transfer to NRL account attached as Annexure-A-XXII to SCC.

ii) In case of non-submission of CPS within the period stipulated, required CPS amount along with interest for the delayed period shall be recovered from the first RA bill / first Milestone payment, onwards, on proportionate basis, till full recovery.

However, in case, if the supplier submits CPS before the first RA bill/ first Milestone payment, then interest shall be recovered from the first RA bill/ first Milestone payment, for the delayed period beyond the period stipulated for CPS.

For the purpose of above mentioned, interest rate shall be @ SBI MCLR*** + 1% as on date of issuance of enquiry.

***SBI MCLR (Revised MCLR Rate for 1 year Tenor) applicable on the date of issue of enquiry shall be applicable for this purpose (reference website: https://sbi.bank.in/web/interest-rates/interest-rates/mclr)

iii) Bank guarantee should be routed through SFMS platform. Relevant information are as follows:

1. **Beneficiary bank details:**

   Axis Bank Chhibber House, Ground Floor, G.S Road, Guwahati -781005

   IFSC: UTIB0000140

2. **Advising message to be sent to beneficiary bank:**

   (i) IFN 760 / IFN 760 COV for issuance of bank guarantee

   (ii) IFN 767 / IFN 767 COV for amendment of bank guarantee

   Field number as “7037” and Particulars (to be mentioned in Row 1) as “NRL140025551” should be correctly captured in the above messages.

   The supplier shall submit to NRL the copy of SFMS message as sent by the issuing bank along with the original bank guarantee. Issuing bank mail ID should be invariably mentioned on the face of the bank guarantee.

38.3 The following new Clause is added as Clause No. 3.5 (viii), (ix) & (x) of the Annexure XXVIII to SCC:

3.5 (viii) In case of non-submission of CPS within one month beyond 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 may be initiated, as per the contract provisions.

In case *of occurrence of any of the above specified events, contractor shall be understood to have defaulted and NRL shall have the right to terminate the contract, at its sole and absolute discretion by issuing a Show Cause notice of 10 calendar days to the Contractor/Vendor/supplier, stating the reason and the intention of NRL to terminate the Contract and to take other penal actions in terms of the contract including extant policy for Holiday listing/ Banning/ Debarring of Contractors/ Suppliers of Owner.*

3.5 (ix) Further, in case of submission of CPS within scheduled period, but Contractor being at default in terms of Contract, 7.2 of Annexure XXVIII to SCC shall be applicable.

38.4 **RECOVERY RATE OF MATERIALS ISSUED TO CONTRACTOR ON CHARGEABLE BASIS:**

No material shall be issued to the contractors which are otherwise to be brought by the contractors as part of his own supply. In exceptional cases, in the interest of work, NRL may supply materials (cement and reinforcement bars etc) /equipment to the contractor on chargeable basis on their request (after taking prior security / deposit), subject to availability at NRL. The contractor has to lift the materials from NRL's warehouse and transport to the worksite at his own cost. Wherever materials/equipment are issued to contractor on chargeable basis, NRL shall recover the landed cost of the materials (as per latest executed PO at the time of issuance of materials) plus 15% overhead and applicable GST from contractor's RA bills or any other dues.

38.5 **CONTRACTORS' PERFORMANCE EVALUATION:**

Clause no. 5.25 of the GCC related to Performance of Contractor stands modified to the following extant:

NRL has adopted a dynamic performance monitoring /evaluation procedure for continuous monitoring and evaluation of contractors, to maintain their accountability and performance. A rating, based on performance shall be assigned for each work executed by a contractor. This rating shall be used in determining eligibility of the bidder in subsequent tenders issued by NRL (or by NRL authorized agencies / PMC / EPCM).

Following are the areas to be covered under continuous evaluation process:

a. Compliance of safety and housekeeping at worksite
b. Resource mobilization/delay in completion
c. Quality of works and documentation
d. Compliance of statutory / regulatory guidelines

Contractor whose performance is evaluated as Unsatisfactory based on pre-defined scoring criteria shall be debarred for 1 year from participating in NRL's tenders from the date of issuing notification by NRL.

Detailed Contractors' Performance Evaluation methodology is attached as Annexure-A-XX to SCC.

38.6 **PROGRESS REPORTING & REVIEW:**

Clause no. 4.1 (x) of the Annexure XXVIII to SCC++++++++++++++++++++++++++++++++++++++ related to Monthly Progress Report stands modified to the following extant: - **(To be incorporated Contract Value Rs. 50 Crore and above)**

The monthly Progress Report shall contain the following, apart from whatever else may be required to be specified:

i) Project information, giving the broad features of the contract.

ii) Introduction, giving a brief scope of the work under the contract and the broad structural or other details.

iii) Construction schedule of the various components of the work, through a bar chart for the next three quarters for as may be specified, showing the milestones, targeted tasks and up to date progress.

iv) Progress chart of the various components of the work that are planned and achieved, for the month as well as cumulative up to the month, with reasons for deviations, if any, in a tabular format.

v) Plant and machinery statement, indicating those deployed in the work, and their working status.

vi) Man-power statement, indicating individually the names of all the staff deployed in the work along with their designations.

vii) Financial statement, indicating the broad details of all the running account payments received up to date, such as gross value of work done, advances taken, recoveries effected, amounts withheld, net payments, details of cheque payments received, etc.

viii) A statement showing the extra and substituted items submitted by the contractor, and the payments received against them, broad details of the bank Guarantees, indicating clearly their validity periods, broad details of the insurance policies taken by the contractor, if any, the advances received and adjusted from the department, etc.

ix) Progress photographs, in colour, of the various items/ components of the work done up to date, to indicate visually the actual progress of the work.

x) Quality assurance and quality control tests conducted during the month, with the results thereof.

xi) Any hold-up shall be specified.

xii) Dispute, if any, shall also be highlighted.

Monthly or fortnightly progress review by Engineer-In-Charge or its authorised representative with contractor may be necessary to ensure that contractor deploys sufficient resources to meet the deadlines.

39 CONTRACT WORKERS WAGE PAYMENT:

- The wages and other benefits payable by the contractors to the contract workers at Numaligarh Refinery are governed by the Circular 'Revised Wage Rate Applicable for Polypropylene Unit (PPU) Project Tenders w.e.f. 10.10.2025'. Please refer Annexure **XXI to SCC Part A**

- The contractors will pay wages to their workers in their respective bank accounts through electronic transfer mode and submit the details along with the wage payment sheet (duly certified by Engineer-in-Charge) as the proof of payment.
- In the event of any further revision of minimum wage rates, the contractor will be reimbursed the differential wages arising out of such revision, i.e., the difference between the existing applicable minimum wage rate and the revised minimum wage rate from the date of effect, to be notified by NRL. Such claims for differential amount shall be submitted by the contractors along with monthly wage payment sheets duly certified by the Engineer-in-charges and proof of digital payment of original and arrear wage payment. NRL's decision w.r.t. any enhancement in labour wage related rates against a particular contract shall be final & binding.
- No differential wage on account of wage revision will be reimbursed to contractors where the contract was scheduled to be completed prior to dates of effect as per the terms of the contract, if such delay is attributable to the contractors.
- Contractors will have to comply with all other statutory rules and guidelines in respect of contract workers engaged by them at Numaligarh Refinery pertaining to wages & benefits and all other issues pertaining to engagement of contract workers as per applicable labour laws as on date and the labour codes notified by the Ministry of Labour & Employment, Govt of India and to be effective from Apri1,2021.

40 LABOUR LICENSE

Labour license requirement needs to be adhered by the contractor mandatorily and, if need be, as per progress & requirement of the job contractor to arrange labour license with extended validity at least 1 month prior to expiry of the current validity, same shall be monitored & ensured by EIC.

Further, as workers engaged by contractor with valid labour license are only permitted to work, worker gate pass stands invalid and entry is banned to NRL refinery PPU site (in case of no valid labour license) same shall be ensured by EIC.

41 BIDDER'S UNDERTAKING IN CASE QUOTE LOWER THAN ESTIMATE:

The Tenderers/ Bidders are expected to quote after careful analysis of costs involved for the performance of the complete item/ works considering all specifications and conditions of contract. In cases where the quoted prices are below/lesser than the cost estimate, prior to award, bidder may be asked by Consultant/Owner to submit an undertaking; to confirm that (i) they have read the tender terms and conditions and understood the scope of work completely; (ii) they shall execute the job at their offered price without any deviation to the tendered specification; and (iii) they shall be able to complete the job within the scheduled time. **Failure to provide unconditional confirmation to any and/or all of these points shall be treated as withdrawal of offer and necessary action under NRL's Holiday Listing Policy shall be initiated.**

42 All other terms and conditions: Applicable as per Annexure- XXVIII to SCC.

43 Please note that the provisions in the SCC and Annexure- VVII to SCC will supersede the corresponding provisions in the GCC of NRL. Conditions not covered above shall be governed by GCC of NRL.

TIME FOR COMPLETION

[ANNEXURE-A - I TO SPECIAL CONDITIONS OF CONTRACT]

TIME FOR COMPLETION

NAME OF WORK	TIME OF COMPLETION
WORKS: …… **BIDDING DOCUMENT NO.:** ……	For Mechanical Completion: 14 Months from the date of Letter of Acceptance / Award For Commissioning : 1 (One) Months

Note:

1. The time for completion shall be reckoned from the date of issue of LOA.

(SIGNATURE OF BIDDER)

FRONT AVAILABILITY

JOB SPECIFIC INFORMATION ON MAJOR FRONTS AND THEIR PROPOSED AVAILABILITY TO SUCCESSFUL BIDDER

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	
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. A K Kundu, ED (Construction)

Members: Sh. Janak Kishore, ED (Projects)
Sh. Biswajit Mandal, Sr. GM (SCM)
Sh. Udayan Chakravarty, Sr. GM (Piping)
Sh. Ravindra Kumar, GM (Construction)
Sh. Debasish Ghosal, GM (Construction)
Sh. Pankaj Kumar Rai, AGM (Construction)

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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	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 Error is found, it has to be sent to manufacturers or their 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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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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JOBS SAFETY PLAN-01

☛ **Nature of Job : Working at height in Operating Unit**

☛ **Work Permit No. :**

☛ **Identification of Hazards " What can go wrong? "**

a) Person/Tools/Machinery or equipment may fall from height.
b) Unsafe dropping of materials from higher elevation.
c) Scaffolding/Ladder may slip / break/fall.
d) Presence of hydrocarbon may lead to fire or explosion.
e) Presence of Toxic Gas & release.
f) Presence of High pressure & high temperature equipment adjacent to work area.
g) Presence of steam line.
h) In case of hot work at higher elevation, sparks/welding spatters may fall on persons working below.

☛ **Assessment of hazards potential "How Serious is the hazard" ?**

a) Tools/machinery falling from height may fall on person below causing injury or even death.
b) A fall from height may cause serious injuries and can also prove fatal.
c) Loose/improper scaffolding may lead to falling of scaffolding itself, which might cause injury or even death of person working on or below it.
d) Spark may ignite hydrocarbons & lead to fire/explosion.

☛ **Control of Hazards "What is required to prevent these hazards?"**

a) Person working at height must use safety belt, safety helmet and safety belt must be tied securely with rigid support above shoulder height.
b) Do not climb on any scaffolding unless "Safe to Use" board is placed on it by authorized person.
c) Do not store any material like nut, bolt & spanners etc. on scaffolding platform.
d) Worker should be more attentive while working at height.
e) Horseplay should be avoided.
f) Standard method/material to be used for scaffolding.
g) Secure the ladder with some tieing arrangement or somebody holding the ladder at base.
h) Do not allow working at height during stormy weather.
i) Exit road to be identified.
j) All conditions mentioned in work permit to be followed.
k) Working personnel should be briefed about the site conditions.
l) Standard practice of shifting of materials from height to be followed.
m) If hot job was taken up, running water to be made ready at ground level.
n) Both hands should be free while climbing a ladder.

☛ **Contingency Plan("What Actions are necessary if an unsafe situation arises?"**

a) Escape routes to be kept free of obstacle.
b) Injured Person should be given immediate medical attention.
c) Concerned maintenance/operation personnel to be informed immediately.
d) Extinguisher to be made ready at work site.
e) Informed fire station for necessary help & action.

Prepared by **NRL Performing Officer** **Contractor Supervisor**

JOB SAFETY PLAN –02

☛ **Nature of Job : Hot Work in Plant area**

☛ **Work Permit No:**

☛ **Identification of Hazards "What may go wrong"?**

a) Presence of Hydrocarbon inside the line /Equipment or nearby surroundings.
b) Presence of toxic gas/chemicals.
c) Presence of source of ignition likes welding spatter, looses cable joints, diesel generator exhaust & spark generating tools.
d) Presence of acetylene cylinder.
e) Other activities (Routine/non-routine) being carried out nearby pose unsafe condition.
f) Presence of pyrophoric substances.

☛ **Assessment of Hazards Potential "How serious is the hazards"?**

a) Presence of hydrocarbon may lead to fire situation/explosion.
b) Fire may take place due to spark generated from welding cable joint, welding spatters, generator exhaust or other tools used.
c) Personnel injury may occur due to fire or toxic gas inhalation.
d) Plant & machinery may get damaged due to fire or explosion.
e) Acetylene cylinder may leak and can cause explosion.
f) Pyrophoric iron sulphide scales may auto ignited if exposed to atmosphere.

☛ **Control "What is necessary to prevent Hazards"?**

a) Gas test to be carried out for hydrocarbon prior to the starting of jog. Also it is to be ensured that the hot job area remain hydricarbon free for the entire hot job.
b) Surrounding OWS/CRWS pits funnels/channels to be covered properly with wet Asbestos cloth and hydrocarbon test to be carried out in each point.
c) Proper welding booth to be used to arrest the welding/grinding spatters.
d) Running water hose with nozzle/water curtain/fire extinguishers are to kept ready & worker should convergent with their application. These are used to flush/dillute in case of release of any hazardous chemicals or to quench sparks.
e) Hydrocarbon freeing of hot job site (with proper steaming/water washing/purging with nitrogen) to be ensured.
f) Welding cable should not have any joints. Also do not allow any heavy object to fall on welding cables.
g) Acetylene cylinder should not be stacked but should always be stored up right.
h) Never roll the cylinder for its shifting from one place to another.
i) Pipes carrying gases,flammable liquids or electrical conductors should never be used for ground returns.
j) Disconnect welding machine from power supply when left unattended.
k) Standby person should always be there near the welding machine/DG set & should switch it off immediately in case of fire.
l) All PPEs to be used as mentioned in the permit.
m) Precautionary board to be placed before starting the hot job.
n) Concerned persons to be alerted regarding routine / non- routine activities being carried out nearby.
o) Contractor has to provide the list of worker engaged for the job.

☛ **Contingency Plan (What actions are necessary if an unsafe situation arises?)**

a) Escape routes to be kept free of obstacle.
b) Checked for availability of fire water.
c) Injured person should be given immediate medical attention.
d) If fire occurs try to extinguish with readily available extinguisher & fire water hose.
e) Inform fire-station for necessary help & action through 333/444/MCP or VHF channel-8.
f) Concerned maintenance/operation personnel to be informed immediately.

Prepared By **NRL Performing Officer** **Contractor Supervisor**

JOB SAFETY PLAN – 03

☛ **Nature of Job : Hot work inside a confined space.**

☛ **Work Permit No. :**

☛ **Identification of Hazards "What may go wrong"?**

a) There may be deficiency of Oxygen.
b) Limited / restricted openings.
c) Equipment or line may contain flammable liquid / gas.
d) Toxic / Asphyxiant gases may present.
e) Inadequate light & ventilation.
f) Presence of source of ignition likes welding spatter, loose cable joint etc.
g) Toxic gas may be produce while carrying out hot job(Nitrous fumes may be produced atmosphere when an oxyacetylene flame impinges on metals. And these fumes can caused fatal hazard.)
h) Presence of acetylene cylinder.
i) Other activities(routine/non-routine) being carried out nearby may pose unsafe condition.
j) Presence of pyrophoric substances.
k) Fall of material from above.

☛ **Assessment of Hazards Potential "How serious is the hazards"?**

a) Presence of hydrocarbon may lead to fore situation/explosion.
b) Fire may take place due to spark generated from welding cable joint,welding spatters in presence of hydrocarbon.
c) Personal injury or even death may occur due to fire,toxic gas inhalation or deficiency of oxygen.
d) Plant & machinery may get damaged due to fire or explosion.
e) Acetylene cylinder may leak & can cause explosion.
f) Pyrophoric iron sulfide scales may auto ignited if exposed to atmosphere.

☛ **Control "What is necessary to prevent hazards"?**

a) The equipment has to be prepared properly and the temperature should be as near ambient as possible.[Prepared: Isolated, drained,vented,flushed with water and steamed out]
b) Equipment should be isolated or blinds should be installed close to the vessel.[Isolated: Process wise as well as electrical/instrumentation wise]
c) To provide adequate ventilation, keep all man-ways open.
d) Gas test has to be carried out for presence of hydrocarbon, adequacy of oxygen and presence of hydrogen sulfide. Air monitoring is to be ensured for the entire span of activity.
e) Wear safety equipments like breathing apparatus, safety helmet, safety goggles, safety shoe and hand gloves etc.
f) Limit the number of person working inside the confined space.
g) Ensure that no material can fall down from people working above.
h) Only approved reduced voltage extension light (24 volts) will be allowed for use inside the confined space.
i) A standby person should always be located outside the confined space & he should be adequately trained in rescue operation.
j) Provide one flashlight for man working inside so that he can came out safely in case of power failure.
k) Acetylene should cylinder should not be brought inside the confined space.
l) Running water hose with nozzle and fire extinguishers are to be kept ready & worker should convergent with their application. These are used to flush/dilute in case of any hazardous chemicals or to quench sparks.
m) Disconnect welding machine from power supply when left unattended.
n) Safe to enter board is to be placed before entering any person in to the confined space.
o) Concerned persons to be alerted regarding routine / non- routine activities being carried out near by.
p) Continuos supervision to be ensured.
q) Contractor has to submit the list of worker engaged for the job to the performing authority.

☛ **Contingency Plan (What actions are necessary if an unsafe situation arises)**

a) Escape routes to be kept free of obstacle.
b) Checked for availability of firewater.
c) Injured person should be given immediate medical attention.
d) If fire occurs try to extinguish with readily available extinguisher & fire water hose.
e) Inform fire station for necessary help & action through 333/444/MCP or VHF channel – 8.
f) Concerned maintenance /operation personnel to be informed immediate**ly.**

Prepared By **NRL Performing Officer** **Contractor Supervisor**

JOB SAFETY PLAN – 04

☛ **Nature of Job** : Radiography job in unit and offsite areas.

☛ **Work Permit No** :

☛ **Identification of Hazards "What can go wrong?"**

a) Person may expose to radiation of radioactive material.

☛ **Assessment of hazards Potential "How Serious is the hazards"?**

a) Radiation of radioactive isotopes produced positive and negative ions either directly or indirectly in the medium through which they pass. This radiation's can cause undesirable biological effects in healthy tissues of individual being exposed to such radiation.

☛ **Control of Hazards"What is required to prevent these hazards?"**

a) Radioisotope must be kept in a safe container and should painted in orange colour & properly labeled.
b) Only qualified and licensed persons should perform radiography activities.
c) Cordon off the area up 15-M(minimum) and display radiation warning sign prominently. None other than radiographers should be allowed to enter this area.
d) Employees performing radiography must wear film badges or dosimeter for monitoring the level of exposure to radiation.
e) Carryout radiography at a time , when the occupancy of the surrounding area is least.
f) Placed stand by person at safe distance to alert people not to enter in the cordoned off area.
g) Fire station control room is to be informed before starting & after completion of radiography job.
h) All the conditions mentioned in the cold work permits are to be followed.
i) A list of worker engaged for the job to be submitted to the performing authority.

☛ **Contingency Plan (What actions are necessary if an unsafe situation arises)**

a) in case of fire / emergency in near by area , stop the radiography work and shift radiography camera to a safe distance.
b) All accidents involving radiography materials be reported to BARC.

Prepared By **NRL Performing Officer** **Contractor Supervisor**

JOB SAFTEY PLAN –06

- **Nature of Job : Grinding job by using 230V supply**

- **Work Permit No. :**

- **Identification of Hazards "What can go wrong?"**

a) Hydrogen may present near the electric supply point.
b) Earthing cable may have loose joint.
c) Spark may be observed from loose fittings.
d) Same earthing wire used for more than one machine.
e) Routing of cable through pathways/walkways hindering mobility of working persons.
f) Grinding spatters.
g) Non usage of ELCB.

- **Assessment of hazards Potential "How Serious is the hazard"?**

a) grinding spatter/sparks may lead to fire /explosion.
b) Eye injury may occur from grinding spatters.
c) Electric shock may be experienced from loose fittings, cable, which may lead to injury.
d) Injury may be caused to the persons who get entangled between cables lying in pathways.

- **Control of Hazards "what is required to prevent to these hazards?"**

a) Switchboard to be approved by authorized personnel of NRL.
b) Supply should be switched on only when job is to be started.
c) Grinding machine is to be operated by skilled workman.
d) Use of ELCB to be ensured.
e) PPE's like face shield and leather land gloves to be used.
f) All engineering aspects like safe tools and other safety aspects to be taken care by maintenance supervisor.
g) A list of worker engaged for the job to be submitted to performing authority.
h) Work area to be cordoned off.
i) Treat all electrical circuits as live even though you believe them to be dead.

- **Contingency Plan (What actions are necessary if an unsafe situation arises)**

a) In case of accident, main supplies to be switched off immediately.
b) Injured person to be given immediate medical attention.
c) In case of fire, extinguish using fire extinguisher.
d) Inform fire station for necessary help/action.
e) Concerned maintenance personnel to be informed immediately.

Prepared By **NRL Performing Officer** **Contractor Supervisor**

NUMALIGARH REFINERY LIMITED

JOB SAFETY PLAN -07

- **Nature of Job : Piling**
- **Work Permit No. :**
- **Identification of Hazards "What can go wrong?"**

A. Hazards of buried or overhead services Electrical, instrumentation cables, Telephone & IT lines, Underground sewers, Pipelines.
B. Presence of hydrocarbon may lead to fire or explosion, Toxic Gas & release.
C. Fatal accident due to Collapse of tripod.
D. Contact with plant or machinery during lifting, slewing and pitching of piling elements. the movement of piling rigs.
E. Plant instability caused by gradients, variable ground conditions, and/or inadequate bearing capacity.
F. Health hazards such as contact with contaminated risings or groundwater and contact with hazardous materials or dusts
G. Excessive Noise, vibration .

- **Assessment of hazards potential "How Serious is the hazard?"**

A. Cutting of cable may lead to Plant shutdown, electrocution.
B. A fall in to piling opening may cause serious injuries and can also prove fatal.
C. Detachment of sling and decycle may lead to serious injury and fatal accident.
D. Collapse of tripod legs may lead to dangerous occurrence.
E. Unprotected rotating part of winch machine may lead to injury.
F. Slippery surface due to bentonite flushing may lead to injury/accident.
G. Unbalanced Cage lowering may lead to injury to worker.

- **Control of Hazards "What is required to prevent these hazards?"**

A. Steps to be followed for piling
   a. Excavation/piling clearance to be taken from various sections;
   b. Take the hot work permit for the piling;
   c. Sign and attached the job safety plan along with the piling clearance;
   d. Job safety plan to be thoroughly discussed with the workmen;
   e. Before the start of the job site engineer shall inspect the location of piling;
   f. Intermediate checking shall to be done by Fire & Safety and issuer;

Safety Precautions for Tripod Piling:

A. Keep site surface clean and free from water and slurry.
B. Make sure legs are on hard stable ground and equally spaced.
C. Don't pull or drag anything, which is too heavy for you - get help.
D. Fencing /Barricading shall be provided, wherever necessary, around the working area.
E. Only trained and authorized personnel should drive the winches and other machinery.
F. Keep well clear of tools when picking them up or laying them down
G. Allow only authorised persons to tip shells, keep rope parallel with shell body.

H. Don't leave casing caps suspended - brakes do fail.
I. Inspect wire ropes regularly, cut or replace the rope as and when required.
J. Don’t stand near the rig or winches unless you have a task to do. Make sure that the operator and the other rig helpers should know each other, about their activities.
K. Make sure that the bore hole is covered rigidly when there is no work.
L. Backfill the empty bore immediate after the concreting.
M. Follow proper Procedure for climbing on shear legs, extracting of casing and shifting the rigs in next location.
N. Ensure proper compliance of Personal protective equipment
O. Work during the night lighting of at least 100 lux intensity shall be provided at the work site

Safety Precautions for Driven Piling:

A. Keep clear of all loads, being hoisted.
B. Keep hands and feet clear during pitching of casing and installation of piling work.
C. Set the casing on pile point before driving operation.
D. Fencing /Barricading shall be provided, wherever necessary, around the working area.
E. Keep away all people beyond the swinging area.
F. Never work under a suspended hammer, lower it or use the safety bar (monkey pin).
G. Always wear ear protection whilst driving is in progress. Long exposure on loud noise may damages your hear dram.
H. Wear eye protection during plumbing, setting of rig and concreting. Dropping of concrete from heights can seriously damage your eyes.
I. Make sure that the operator can see you, or know about your all activities.
J. Always use the full body harness attached with fall arrestor while working at a height of 2m or more, unless you are on a fenced platform.
K. Don't put your hands in danger position while driving and changing of packing.
L. Always have a designated banks man during whole operations of piling and reversing of crane.
M. Keep work area tidy to avoid trip hazards.
N. Use a sound wire sling during pitching of pile. Never use the hook along with rope.
O. Ensure smouldering timber, which does not catch fire.
P. Protect exposed re-bar with sand bags after extracting of casing.
Q. Ensure proper compliance of Personal protective equipment
R. Work during the night lighting of at least 100 lux intensity shall be provided at the work site

Contingency Plan “What Actions are necessary in an unsafe situation arises?”

A. Escape routes to be kept free of obstacle.
B. Injured Person should be given immediate medical attention.
C. Concerned maintenance / operation personnel to be informed immediately.
D. Extinguisher to be made ready at work site.
E. Informed Fire Station for necessary help & action.

Prepared by **NRL Performing Officer** **Contractor Supervisor**

NUMALIGARH REFINERY LIMITED

JOB SAFETY PLAN -09

- Nature of Job : Excavation
- Work Permit No. :
- **Identification of Hazards "What can go wrong?"**

A. Any excavation work inside the Refinery & Marketing Terminal Premises may affect -
   a. Electrical, instrumentation cables
   b. Telephone & IT lines
   c. Underground sewers
   d. Pipelines

B. Major /fatal accident by electrocution due to underground cable cut.

C. Presence of hydrocarbon may lead to fire or explosion.

D. Presence of Toxic Gas & release.

E. Presence of high pressure & high temperature pipeline below or adjacent to work area.

F. Presence of stream line.

- **Assessment of hazards potential "How Serious is the hazard?"**
   A. Cutting of cable may lead to shutdown of the Plant.
   B. Cutting of cables may cause electrocution.
   C. Spark may ignite hydrocarbons & lead to fire/explosion.
   D. Falling of loose soil may cause injury.
   E. A fall in to excavated area may cause serious injuries and can also prove fatal.

- **Control of Hazards "What is required to prevent these hazards?"**
   A. Steps to be followed for excavation
      a. Excavation clearance to be taken from various sections;
      b. Take the hot work permit for the excavation;
      c. Sign and attached the job safety plan along with the excavation clearance;
      d. Job safety plan to be thoroughly discussed with the workmen;
      e. Before the start of the job site engineer shall inspect the location of excavation;
      f. Intermediate checking shall to be done by Fire & Safety and issuer;
      g. Initially up to a depth of 1 meter manual excavation shall to be done. In the areas where concrete breaking machine/diamond cutter is to be used additional clearance to taken from area in-charge.

   B. All excavation work should be planned and the method of excavation and the type of support work required should be decided considering the following:
      a. The stability of the ground;
      b. The excavation will not affect adjoining buildings, structures or roadways;
      c. To prevent hazard, the gas, water, electrical and other public utilities should be shut off or disconnected, if necessary;
      d. Presence of underground pipes, cable conductors, etc.;
      e. The position of culvert/bridges, temporary roads and spoil heaps should be determined.

   C. All excavation work should be supervised.

   D. Sites of excavations should be thoroughly inspected:
      a. Daily, prior to each shift and after interruption in work of more than one day;
      b. After an unexpected fall of ground;
      c. After substantial damage to supports;

d. After a heavy rain, frost or snow;

E. Safe angle of repose while excavating trenches exceeding 1.5m depth up to 3.0m should be maintained. Based on site conditions, provide proper slope, usually 450,and suitable bench of 0.5m width at every 1.5m depth of excavation in all soils except hard rock or provide proper shoring and strutting to prevent cave-in or slides.

F. As far as possible, excavated earth should not be placed within one meter of the edge of the trench or depth of trench whichever is greater.

G. Don't allow vehicles to operate too close to excavated area. Maintain at least 2m distance from edge of excavation. No load, plant or equipment should be placed or moved near the edge of any excavation where it is likely to cause its collapse and thereby endanger any person unless precautions such as the provision of shoring or piling are taken to prevent the sides from collapsing.

H. Adequately anchored stop blocks and barriers should be provided to prevent vehicles being driven into the excavation. Heavy vehicles should not be allowed near the excavation unless the support work has been specially designed to permit it.

I. If an excavation is likely to affect the security of a structure on which persons are working, precautions should be taken to protect the structure from collapse.

J. Barricade at 1m height (with red & white band/self glowing caution board) should be provided for excavations beyond 1.5m depth. Provide two entries/exits for such excavation.

K. Water shall be pumped/bailed out, if any accumulates in the trench. Necessary precautions should be taken to prevent entry of surface water in trenches.

L. During rains, the soil becomes loose. Take additional precaution against collapse of side wall.

M. In hazardous areas, air should be tested to ascertain its quality. No one should be allowed entry till it is suitable for breathing.

N. In case of mechanized excavation, precaution shall be taken to not to allow anybody to come within one meter of extreme reach of the mechanical shovel swing distance. The mechanized excavator shall be operated by a well-trained experienced operator. When not in operation, the machine shall be kept on firm leveled ground with mechanical shovel resting on ground. Wheel or belt shall be suitably jammed to prevent any accidental movement of the machine. Suitable precautions as per manufacturer guidelines should be taken for dozers, graders and other heavy machines.

O. Road cutting can hamper the movement of the fire vehicles; initial clearance should be obtained from Fire Department and final approval from the higher designated authorities.

- **Contingency Plan "What Actions are necessary in an unsafe situation arises?"**
  - A. Escape routes to be kept free of obstacle.
  - B. Injured Person should be given immediate medical attention.
  - C. Concerned maintenance / operation personnel to be informed immediately.
  - D. Extinguisher to be made ready at work site.
  - E. Informed Fire Station for necessary help & action.

Prepared by NRL Performing Officer Contractor Supervisor



NUMALIGARH REFINERY LIMITED

JOB SAFETY PLAN -10

- **Nature of Job : Demolition & Dismantling Job**
- **Work Permit No. :**
- **Identification of Hazards "What can go wrong?"**

A. Collapse of structure.
B. Injury from fall of material.
C. Fall from height.
D. Risk from connected service like Electrical cable/IT cable/Instrument cable/Process piping.
E. Incident due to improper traffic management like ingress & egress
F. Excessive Noise, vibration .

- **Assessment of hazards potential "How Serious is the hazard?"**

A. Cutting of cable may lead to Plant shutdown, electrocution.
B. Collapse of structure may lead to fatal accident/property damage.
C. A fall of material from height may lead to serious injury.
D. Person may be trapped due to improper traffic management.
E. Fall from height may lead to fatal accident.
F. Accident due to heavy equipment like Bulldozer, Crane, Excavator etc.

- **Control of Hazards "What is required to prevent these hazards?"**

A. Steps to be followed for piling
   a. Clearance for demolition job to be taken from concern authority.
   b. Take the hot work permit for demolition
   c. Sign and attached the job safety plan along with the demolition job.
   d. Job safety plan to be thoroughly discussed with the workmen;
   e. Before the start of the job site engineer shall inspect the location of demolition job.
   f. Intermediate checking shall to be done by Fire & Safety and issuer;

Safety Precautions during Demolition job

1. Necessary precautions, methods and procedures should be adopted, including those for the disposal of waste or residues under the supervision of a competent person.
2. Structural details, previous hazards from chemicals, structural problems and risks associated with flammable substances, Condition of roof, types of material used for frame work should be obtained and recorded.
3. Before demolishing a Building or structure either protect or disconnect the utility services (gas , steam and electricity etc.)
4. Remove all fragile and hanging materials from inside the building.
5. The area should be cordoned and barricaded .Caution boards and red flags should be displayed at places. The distance of cording will depend on the height at which demolition is taking place.
6. Chutes or container cages should be used to lower down debris.
7. Proper and tested tackle to be used while lowering heavy materials.
8. An experienced supervisor should give signal and supervise.
9. The cages, hoists, tackles should not be overloaded.

10. Debris should be removed at earliest.
11. Water should be sprayed to control dust wherever required.
12. Safe and easy approach to be provided for quick transport.
13. Tracks should not be overloaded or materials should not spill on the way.
14. Materials should not project beyond side or back panels of truck.
15. Materials should not project beyond side or back panels of truck.
16. Before demolishing building with overhung chhajas etc. they should properly supported or demolished first before demolishing super structure of the building

Contingency Plan "What Actions are necessary in an unsafe situation arises?"

A. Escape routes to be kept free of obstacle.
B. Concerned personnel to be informed immediately.
C. Informed Fire Station & medical for necessary help & action.

Prepared by NRL Performing Officer Contractor Supervisor



ई पी सी / एल ई पी सी ठेकेदारों (डिजाइन, अभियांत्रिकी एवं प्रापण) के लिए स्वास्थ्य सुरक्षा एवं पर्यावरण प्रणाली के विनिर्देश

SPECIFICATION FOR HSE MANAGEMENT SYSTEM REQUIREMENTS FROM EPC / LEPC CONTRACTORS (DESIGN, ENGINEERING & PROCUREMENT)

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convener	Standards Bureau Chairman
					Approved by	
0	13.05.2022	Issued as Standard Specification	HSE Standards Committee	HSE Standards Committee	RS	SM

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Abbreviations:

HSE	-	Health, Safety and Environment
HAZOP	-	Hazard & Operability Study
HAZID	-	Hazard Identification
IBR	-	Indian Boiler Regulations
ISO	-	International Organization for Standardization
MoEFC	-	Ministry of Environment, Forest & Climate Change
QRA	-	Quantitative Risk Analysis
SIL	-	Safety Integrity Level study
PESO	-	Petroleum and Explosives Safety Organization
PNGRB	-	Petroleum and Natural Gas Regulatory Board
OISD	-	Oil Industry Safety Directorate
VDMS	-	Vendor Document Management System

HSE Standards Committee

Convener: Mr. R.Sonowal, GM (CQA & HSSE)

Members: Mr Atul Gupta, GGM (Projects)

Mr Ravindra Kumar, Sr.GM (Construction) 19/05/2022

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Mr U.C. Pathak, GM (Piping) 13.05.22

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Mr Amit Parekh, DGM (EWS) 26/05/2022

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Annexure-1: TYPICAL PLAN FOR PROJECT HEALTH, SAFETY & ENVIRONMENTAL (HSE) MANAGEMENT

Annexure-2: INDEX FOR HSE DOSSIER (Indicative List)

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1.0 SCOPE

This specification establishes the HSE Management System requirements to be met by EPC/LEPC Contractors for following purpose:

- HSE Management System requirements to be met by EPC (Engineering, Procurement & Construction) / LEPC (Licensing, Engineering, Procurement & Construction) contractors after award of work/ during contract execution, limited to Design/Engineering & Procurement phase. This specification is not applicable to Package Contractors.

2.0 DEFINITIONS

2.1 Bidder

For the purpose of this specification, the word "BIDDER" means the person(s), firm, company or organization that is under the process of being contracted by EIL / Owner for delivery of some products / service. The word is considered synonymous to supplier, contractor or vendor.

2.2 Project HSE Plan

Document detailing the HSE activities of the project, specifying how the HSE 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.

2.4 EPC / LEPC Contractor

The person(s), firm, company or organization who is executing Engineering, Procurement of the Project, contracted by EIL / Owner

3.0 REFERENCE DOCUMENTS

2-0000-1101 Model Project HSE Plan

4.0 HSE SYSTEM REQUIREMENTS

4.1 EPC / LEPC Contractor shall prepare and submit for review / record, Project HSE Plan for the contracted scope / job to EIL/Owner. The HSE Plan (typical HSE Plan at Annexure-1) shall address, as a minimum the following aspects.

- HSE Policy
- HSE Certificate
- HSE Philosophy
- HSE Organization Chart
- HSE Objectives
- Roles and Responsibilities
- HSE Audits & HSE Closeout Report
- HSE Reviews

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- HSE studies as per scope (e.g., HAZOP, QRA, SIL, RRA,EIA,ENVID)
- List of Statutory and Regulatory requirements including National/International codes

4.2 Contractor shall ensure that the HSE objectives set for the Design/Engineering/Procurement are met by carrying required HSE reviews/assessments, studies throughout the various phases of the project. The records of these reviews/assessments, studies shall be made available for EIL/owner. These records shall also be submitted to EIL / owner at the end of the project, as part of the As-Built/Final Documentation. A Project HSE Dossier as per attached Template or Index (Annexure-2) shall be maintained with log of all design HSE issues and their resolution.

4.3 The following HSE activities shall be carried out as applicable scope of work. Some of the HSE studies carried out during Engg. Design are as follows-

- HAZOP
- HAZID
- QRA
- Hazardous area classification
- SIL/LOPA
- Fire & Gas Detection philosophy
- Fire & Gas system and Alarm system Layout
- Escape route and Muster station Layouts
- Safety signs, specifications and Layout

5.0 AUDITS

Contractor shall plan and carry out HSE audit(s) for the project. HSE audit programme shall cover design, engineering and procurement as applicable including activities carried out by sub-vendors and sub-contractors. This shall be over and above the certification body surveillance audits carried out under Contractor's own OHSAS 18001/ISO 45001/ISO 14001 certification schemes.

The audit programmes and audit reports shall be available with contractor for scrutiny by EIL / Owner. EIL or Owner's representative reserves the right to attend, as a witness, any audit.

In addition to above, EIL/ Owner and third party appointed by EIL/Owner may also perform HSE audits. Contractor 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 Contractor.

6.0 DOCUMENTATION REQUIREMENTS

Contractor shall submit following documents immediately after award of work (Within two weeks) for record / review by EIL / Owner.

- Project HSE Plan
- HSE Management System and Procedures

In addition to above documents, following documentation shall be maintained by the EPC / LEPC Contractor for submission to EIL / Owner at any point of time during execution of the project.

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- Project HSE audit report and Corrective Action Report/Preventive action / recommendation for improvement / HSE Closeout Reports on the audits
- Project HSE Dossier

Documents as specified above are minimum requirements. EPC / LEPC Contractor shall submit any other document/data required for completion of the job as per EIL/Owner instructions. Drawings/documents and data shall be uploaded on the EIL VDMS Portal as per DCI.

The detail guidelines for uploading documents on EIL VDMS Portal are available on following URL

http://edocx.eil.co.in/vportal

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Annexure-1

TYPICAL PLAN FOR PROJECT HEALTH, SAFETY & ENVIRONMENTAL (HSE) MANAGEMENT

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1.0 INTRODUCTION

This document describes the project specific Health, Safety and Environment (HSE) activities across the Project life cycle, in line with the Client's HSE Requirements, Organization's HSE Policy and project's HSE Objectives.

1.1. PROJECT DESCRIPTION

<A brief description of the Project shall be mentioned in this section. Project background, project site, Project scope , Mode of execution, name of the units , products of the plant and any other key information shall be mentioned>

2.0 PURPOSE

The purpose of this HSE plan is to provide the information required to identify and manage the issues related to Health, Safety and Environment, and to establish responsibilities at various execution levels during Design, Engineering, Procurement, Construction, Commissioning and handing over activities.

3.0 TERMINOLOGY

For the Purpose of this document, the words and expressions listed below shall have the meaning assigned to them as follows:

Abbreviations

ALARP	As Low As Reasonably Practicable
DFR	Detailed Feasibility Report
EERA	Evacuation, Escape and Rescue Analysis
EIA	Environmental Impact Assessment
HAZID	Hazard Identification
HAZOP	Hazard and Operability
HSE	Health, Safety and Environment
HSEIA	Health Safety & Environment Impact Assessment
ISO	International Organization for Standardization
MSDS	Material Safety Data Sheet
OHRA	Occupational Health Risk Assessment
OHSAS	Occupational Health and Safety Assessment Series
OSA	Observation on Safety Aspects
PHSER	Project Health, Safety and Environmental Review
QRA	Quantitative Risk Assessment
RCM	Resident Construction Manager
SIL	Safety Integrity Level
SIMOPS	Simultaneous Operations

4.0 REFERENCES

- Statutory requirements applicable to the Project.
- Contract between EIL and Client
- Client's HSE specification/requirement
- Procedure for numbering of Documents (5-0000-0103)
- Procedure for control of HSE records (5-0000-1010)

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- Standard Specification for HSE Management at Construction sites (6-82-0001)

5.0 HSE POLICY

EIL's HSE Management System is certified to ISO 45001:2018 and ISO 14001:2015. EIL's HSE Policy is attached as Annexure -1

6.0 PROJECT HSE GOALS

Aim of implementation of Project HSE Plan is to achieve the following goals:
<Add/Modify/Delete HSE Goals as per Project requirement>

- No harm to People
- Optimize the use of natural resources
- Maximum protection to the Environment.
- Strive for continual improvement.

7.0 PROJECT HSE OBJECTIVES

Purpose of Project HSE Objectives, as defined below, is to achieve the identified Project HSE Goals:
<Add/Modify/Delete HSE Objectives as per Project requirement>

- Comply with Client's HSE Specifications.
- Ensure safe working environment for People Minimize the potential for occurrence of hazardous scenarios that can result in injuries, environmental damage, business interruptions or loss of assets at various stages of project.
- Minimize the risk and consequences of an incident which cannot be completely eliminated.
- Provide satisfactory means of escape and evacuation from any conceivable event.
- Define the applicable codes and standards which shall be adopted in preparation of HSE documents during execution of project.
- Identify and define the specific HSE related studies which shall be undertaken in the project.
- Identify and schedule all HSE activities and deliverables
- Achieve Frequency rate of Less than XX
- Comply to all applicable Statutory , Legal and Regulatory Requirements
- Provide appropriate Fire protection systems , where necessary
- Safe disposal of all pollutants as well as minimizing the potential for pollution of the environment from waste, accident spills, venting or flaring of hazardous materials.
- Deployment of optimum resources for meeting the HSE objectives.

8.0 PROJECT HSE PHILOSOPHY

Project HSE Philosophy will define systematic approach to execute Project HSE activities to meet the Project HSE Goals & Objectives and to ensure safe execution of project during design, engineering, procurement, construction and commissioning phases depending upon the project scope. HSE philosophy shall be providing a clear conceptual visualization to fulfill the requirements arising from Goals & Objectives.
<Project specific philosophy shall be prepared based on the actual scope of work>.

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9.0 PROJECT HSE MANAGEMENT

Project HSE Management covers the following aspects:

- Occupational Health Management
- Safety Management
- Environmental Management

9.1. OCCUPATIONAL HEALTH MANAGEMENT

The objective of occupational health management is to foster a healthy work environment. The main focus in occupational health is on following aspects:

- Improvement & maintaining of working environment (which consists of elements such as illumination, quality of indoor air & potable water, noise levels, safety equipment and gas detectors etc.)
- Development of working environment which supports health at work place and in doing so also promotes a positive social climate and enhances productivity.

9.1.1. **Health Programs**

Health programs shall be in place to cover:

- Regular health checkups to maintain and enhance work efficiency of all project team members during all phases of project.
- Medical management is the provision of medical support in the event of injury or illness, and to enable work in specified jobs or working environments.
- Promotion of activities optimizing the health and well-being of Project Personnel.
- Emergency medical facilities including availability of medical practitioner and emergency vehicle at various construction sites.

9.1.2. **Ergonomic Evaluations**

Accessibility & operability shall be taken care during design stage such as valve access, approach to various structures & platforms along with their connectivity, proper lifting provisions and maintenance space for equipments & instruments, proper lighting facilities etc.

Special attention shall be given to proper orientation of equipments to prevent injuries (e.g. elevation of chairs, elevation of computer monitors etc.) during different stages of project development.

9.2. SAFETY MANAGEMENTS

Safety Management shall primarily be based on 'Risk Management Process'. Risk management aims at reducing the HSE risk to an acceptable low level by inherent safe design and formal safety assessment which aims at identifying and addressing the hazards associated with the facilities and implementing measures to reduce the risks to ALARP (As Low As Reasonably Practicable). This level represents the point, objectively assessed, at which time and cost of further reduction measures become unreasonably disproportionate to the additional risk reduction obtained.

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HSE risks shall be identified, assessed and understood, and shall be kept to an acceptably low level by design. Furthermore, the HSE risks shall be subjected to a program of continual improvement throughout the life cycle of the project:

Risk reduction shall follow the priority:

Elimination and prevention of hazards as the preferred solution,

And,

Where this is not possible, Provision of control measures as a second option only,

And,

Provision of mitigating measures, as the very last option

Appropriate methods of risk reduction shall be used to ensure that basic HSE qualities are inherent in the design of the facilities. The facilities shall be safe to construct, operate & maintain.

9.3. ENVIRONMENTAL MANAGEMENT

Environment conservation, preservation & protection involve various aspects of the environment like air, water, noise, land, etc. Suitable pollution control measures required to meet the prevailing environmental standards shall be planned at the different stages of execution of the project, viz., design, engineering, procurement, construction and commissioning. Established company procedure/guides are followed to take care of environmental aspects.

Project execution at various stages shall set high standards for environmental protection and seek out ways of continual improvement by complying with applicable codes & standards, procedures and statutory/legal/regulatory requirements. Key Environmental Design Aspects of the project are air, water & land environment.

9.3.1. **Air Environment**

The gaseous emissions from various activities of project execution during design, engineering, procurement, construction & commissioning such as flares, fugitive emissions, relief systems, abnormal emissions from emergency events etc. shall be controlled to meet all the relevant standards stipulated by the regulatory authorities.

9.3.2. **Water Environment**

Several measures are proposed to be incorporated at the various stages of project towards minimizing the generation of waste water and treatment of the generated effluent arising from produced water, storm water, treated sanitary water, blow downs, flushing and hydro-test water, potential hydrocarbon or chemical spills due to loss of containment, firefighting water contaminated with oil, foam, etc.

A comprehensive wastewater management system shall comply with treated effluent quality for disposal as specified by Statutory Authorities shall be established.

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9.3.3. **Land Environment**

During project execution due care shall be taken to minimize solid wastes so that their handling, treatment and disposal do not cause impact on the existing land environment. Also, efforts shall be made to recycle some of the spent catalysts by way of returning to the original supplier for reprocessing. Emission of solid waste generated from sources such as Pigging materials, Contaminated soils, Spent Catalyst, Chemicals, Hazardous wastes such as piping gaskets containing asbestos, Lubricants, Domestic and municipal wastes, Abnormal discharges e.g., accidental discharge of hydrocarbons etc.

Non-hazardous, non-recyclable solid waste generated during project execution shall be suitably disposed of.

9.3.4. **Other potential impacts**

Noise from various stages of project is considered as hazard and may impact the environment. Comprehensive measures for noise control shall be followed at various stages in terms of:

- Noise level specification of various rotating equipment as applicable standards.
- Equipment layout considering segregation of high noise generating sources.
- Erecting suitable enclosures, if required, to minimize the impact of high noise generating sources.

A green belt of appropriate width shall be provided around the facility as per local laws & bylaws. This green belt shall help to reduce the noise and visual impact upon the surrounding population as much as possible.

10.0 PROJECT HSE ACTIVITIES

Based on the above considerations, Project HSE plan shall be prepared & implemented to carry out activities at various stages as required for the project scope. The project stages could include:

- HSE activities during DFR (Detailed Feasibility Report) Stage
- HSE activities during Design & Engineering stage
- HSE activities during Procurement stage
- HSE activities during Construction Stage
- HSE activities during Commissioning stage

10.1. HSE ACTIVITIES DURING DFRs

Environmental aspects such as air environment, water environment and land environment are addressed during the preparation of DFR to adopt environment protection measures and adhere to legislations such that the ecology and the habitat of the area are not disturbed.

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10.2. HSE ACTIVITIES DURING DESIGN & ENGINEERING STAGE

HSE related activities, studies & reviews to be performed as part of design & engineering stages include Fire Protection philosophy, Hazardous Area Classification, Hazard and Operability Study (HAZOP), Quantitative Risk Assessment Study (QRA), Health Safety and Environmental Impact Assessment study (HSEIA), Safety Integrity Level (SIL) Study, Escape Evacuation and Rescue Assessment (EERA) Study, Project HSE Review (PHSER), Environmental Impact Assessment (EIA), Constructability Review, SIMOPS (Simultaneous Operations) Study, 3D Model Review Workshop & Report etc.

The engineering and design of the project facilities shall taking in account to the following issues:

<Add/Modify/Delete the following list as per Project scope and requirements>

- Personnel protection
- Protection of the environment
- Plant layout
- Plant operation
- Hazardous area classification
- Instrumentation and control
- Flammable gas detection and alarm systems
- Fire protection systems
- External overpressure for buildings
- Overpressure protection systems
- Materials selection
- Equipment design
- Equipment operation and maintenance
- Vents and flares
- Leakages detection and control
- Drains
- Acoustic protection
- Escape routes
- Alarm systems

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- Fire and safety equipment and other personnel protection devices
- Warning signals
- Lighting levels
- Earthing and lightning protection

The actual activities shall be carried out as per scope mentioned in the project scope. Compliance of HSE requirements during design & engineering stages shall be taken care by use of HSE Checklists by respective departments such as Electrical, Structure, Instrumentation, Process, Rotating etc.

10.3. HSE ACTIVITIES DURING PROCUREMENT / CONTRACTING

The implementation of HSE in procurement process shall be as per the following activities:

- Vendors shall plan for Health, Safety & Environmental aspects and shall ensure that such plan is fully implemented during manufacturing, testing and transportation of items.
- Vendors to submit MSDS (Material Safety Data Sheet) for the safe handling & storage of materials.

All construction tenders shall include the specification for Health, Safety & Environmental (HSE) management at construction sites.

10.4. HSE ACTIVITIES DURING CONSTRUCTION

Construction site HSE activities shall be as per Procedure for Health, Safety and Following sample activities shall be taken for effective implementation of HSE plan at site.

Tool Box Talks

Talks involving work situation, exact site activities, risks and dangers involved in the activities, mitigation measures and do's and don'ts.

HSE Awareness & Training Programs

Periodic HSE awareness and Training programs shall be conducted at site to encourage all team members to comply with and to effectively implement the project HSE plan in order to achieve the project HSE goals and objectives. In order to promote HSE efforts at workplace workshops / seminars / training programs including celebrating HSE awareness weeks & National Safety Day, sharing of the past incidents, conducting quizzes & essay competitions, distributing pamphlets, posters on HSE, etc. shall be organized.

HSE Statistics

For every construction site following HSE statistics shall be maintained and reported to client on regular basis.

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Furthermore, HSE aspects defined in guidelines for filling the format for performance rating of construction contractor (Format No. 5-1844-0011 F1) are also taken into account while evaluating the performance of various contractors. While evaluating the performance of contractors, we give due weightage to Heath, Safety & Environmental Management activities carried out by them.

Work Permit

Work permit system is effectively implemented for all critical activities at construction sites. Permits are issued (by concerned authority, as per contract conditions) to allow safe working environment for the workers and project team members. Critical activities such as working at height or in confined places, welding and gas cutting, radiation works, blasting etc. are a few examples for which work permits are issued to allow incident and accident free completion of construction activities.

Compliance of HSE requirements during construction stage shall be taken care by the use of HSE Checklists.

10.5. HSE ACTIVITIES FOR COMMISSIONING

The Pre-commissioning/commissioning activities are executed by a team of Commissioning Engineers as per the commissioning manual. Lead Commissioning Engineer shall monitor the effectiveness of all safety controls required for Pre-commissioning/commissioning as per the Check list for commissioning procedure. The commissioning activities could be divided into following major categories:

- Pre-Commissioning Activities
- Commissioning
- Handing over the facilities/units.

Before start-up of the pre-commissioning activities, safety audit shall be conducted. Checklist/deficiency generated by safety audit team shall be corrected / rectified by respective contractor.

Commissioning shall be carried out after mechanical completion is over successfully and all pre commissioning activities have been carried out. Standard safety practices which are followed during commissioning include but not limited to the following:

- The facilities/units shall be covered by fencing all around and the entry must be restricted to employees / workers having the work permission.

- Each & every person must use all safeguards, safety devices and proper personnel protective appliances such as hand gloves, safety shoes, helmet, face shield etc. for his/her protection and protection of others.

- After facilities have been declared as `Ready for Commissioning' there shall not be any hot work without prior written permission.

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- Instruction shall be issued to employees concerned including contractor employees for the safe conduct of operating, maintenance and modification activities.

- The typical health risks associated with the works shall be identified such as chemical hazards, radiation hazards, noise hazards etc. before starting commissioning activities.

- The board shall install stating `No Smoking' & boards for other instructions at designated areas such as Danger Zone, Restricted Area, and No Entry etc.

- The area shall be properly barricaded by temporary arrangements to carry out activities such as flushing, blowing, charging the systems etc.

- Details of firefighting facilities/fire protection facilities, Emergency Response Plan (ERP) shall be displayed/provided at site.

- Details of interlock logic shall be available to commissioning crew along with the procedure for bypassing the interlocks to avoid any incident.

- There shall be monitoring of ambient air quality, treated waste water, ground water and ambient noise monitoring to protect environmental sensitivities such as proximity to rivers, lakes, forests, townships, rare habitats etc.

Compliance of HSE requirements during commissioning stage shall be taken care by use of HSE Checklists.

11.0 RESPONSIBILITIES & AUTHORITIES

The responsibilities of the Project Team members as applicable to the Project are as follows:

All Project Team Members shall

- Perform job functions in a manner which prevents accidents, eliminates harm to people or himself / herself and does not damage the environment.

- Identify and report all recognized hazards.

- Acquire training as may be outlined in the HSE Management Plan.

- Apply shared learning to specific job responsibilities and tasks.

- Incorporate requirements of the HSE Management Plan into day-to-day work activities.

- Assist in development and implementation of safe design and work practices.

- Participate in audits, inspections and incident investigations, as required.

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Project Manager

- Shall ensure that a project HSE Manager is deployed.
- Shall ensure that suitably trained and qualified personnel are available to support the HSE Team and the HSE Management Plan.
- Shall chair the Project HSE review meetings at Engineering/Design office.
- Shall coordinate with Resident Construction Manager / Site In-Charge.
- Shall ensure that optimum resources are in place to support an effective HSE management program.
- Shall approve HSE Management Plan prepared by the Project HSE Manager.
- Shall approve HSE audit plan prepared by the Project HSE Manager.
- Shall ensure compliance to Client's HSE requirements including applicable statutory/legal/regulatory requirements.
- Shall ensure adequate specifications as part of procurement documentation for HSE compliance by suppliers / contractors.

Project HSE Manager

- Shall prepare project specific HSE plan defining responsibilities of various disciplines as per contract.
- Shall responsible for monitoring the implementation of HSE plan.
- Shall prepare HSE objectives and audit plan.
- Shall assign responsibility to all project team members for implementing the HSE Management Plan.
- Shall ensure consistent implementation of the HSE Management Plan across all phases of the project.
- Shall ensure that the Project HSE objectives are in alignment with client's HSE requirements.
- Shall monitor HSE performance of project team personnel.
- Shall maintain Project HSE records and documentation.
- Shall prepare and update legal/statutory/regulatory and other requirements related to the project.
- Shall be responsible for effective implementation of HSE system across all participating disciplines.
- Shall conduct project specific internal HSE reviews.

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Discipline Engineers

- Primary responsibility to ensure HSE in design/engineering lies with respective discipline engineers viz. Process, Environment & Safety, Civil, Structure, Instrumentation, Electrical, etc.
- Shall incorporate the various HSE studies/audit recommendations.
- Shall ensure that applicable codes and standards are being followed.

Resident Construction Manager / Site In-Charge – Construction

- Shall be responsible for monitoring HSE implementation at construction site.
- Shall deploy Site HSE In-charge who shall be responsible for maintaining HSE records and statistics.
- Shall chair the HSE review meetings at site and shall report the minutes of such meetings to the Project HSE Manager / Project Manager.
- Shall ensure that necessary resources are available at site for effective implementation of HSE Management Plan.
- Shall identify and ensure that necessary training needs of employees posted at project site are met.
- Shall encourage site HSE In-Charge to conduct various HSE awareness programs at the project site.
- Shall participate in periodic HSE walk through at site.

Site HSE In-charge

- To ensure that project HSE plan for EIL scope of services is duly followed and implemented at site.
- Assess requirement of appliances such as PPEs (Personal Protection Equipments), firefighting equipments etc. as per Appendix-A of Specification No. 6-82-0001 for EIL employees & other staff members (including visitors) and procure the same.
- Arrange & maintain First-Aid Box and firefighting appliances in office and warehouse. Refer EIL Standard specification for HSE management at construction sites 6-82-0001 for detailed content of First Aid Box and types of Fire Extinguishers & their application.
- Maintain and display a list of hospitals, important telephone numbers and emergency services available at or around the site.
- Ensure contractor's compliance with HSE requirements by Review / approve HSE documents and records prepared by contractor(s) as per Standard Specification for Health, Safety and Environmental (HSE) management at construction sites,

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No. 6-82-0001 or other relevant documents forming part of the contract documents.

- Ensure construction hazards are identified by the contractors and their mitigation measures are in place.
- Ensure that EIL Area Coordinators / Field Engineers follow relevant HSE requirements & provisions while planning / programming various types of construction related activities and contractors, in turn, are implementing such plans / programs / advices.
- Physically inspect the site to record HSE violations.
- Arrange periodic of HSE meetings and monitor the extent of compliance to commitments made by contractors during HSE meetings.
- Promote positive culture towards HSE (by recommending / arranging organizing promotional / motivational program), encourage self enhancement techniques and strive for continual improvement in the system.
- Shall monitor statutory/legal/regulatory requirements pertaining to site HSE activities e.g. compliance of HSE measurement & monitoring activities.
- Arrange audits on behalf of RCM at predefined frequencies of construction progresses as per Procedure for Technical Audits at construction sites No.5-1940-8020 and to facilitate all other HSE audits.

Site HSE Personnel

- Physically inspect the site to record HSE violations in standardized format for Observation on Safety Aspects (OSA), to impose penalty (as applicable) and to halt any operation, if it is considered potentially dangerous.
- Arrange display of HSE Policy, calendars, posters and slogans at appropriate places all around the site.
- Carry out Job Safety Analysis (JSA) for all critical activities as per 6-82-0001.
- To carry-out safety walk-through of construction site and to participate in project HSE Meetings conducted at site.
- Review of HSE documents prepared by contractors as per EIL Standard Specification for HSE Management at Construction sites (6-82-0001).
- To follow up with contractors for timely resolution of raised observation on safety aspect (OSA) formats.

Site Engineers

- Primary responsibility lies with respective discipline Engineers to ensure HSE during site activities.

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12.0 PROJECT HSE REVIEWS, AUDITS AND CORRECTIVE ACTIONS

12.1. PROJECT HSE REVIEW

The project HSE reviews shall be part of the Project Review Meetings. The objective of the Project HSE Review shall be HSE performance monitoring. Typical topics for these meetings shall be:

- Review of actions from the previous meeting for each of the phases of project. (Design, Engineering, Procurement, Construction and Commissioning).
- Discussion on audit findings.
- Review of all new and outstanding HSE issues, their status and projected resolution date.
- HSE targets and objectives and the extent to which the objectives have been met.
- Continued suitability of the HSE Management plan in relation to changing conditions, legislation and information.
- Identification of areas requiring immediate resolution.
- Review of allocation of tasks and responsibilities.

Agenda pertaining to Home office will be covered by Project HSE Manager during meetings at Home office and agenda pertaining to Construction site will be covered by Site HSE Manager/Officer during Site HSE Meetings.

12.2. PROJECT HSE AUDIT

Implementation of project HSE plan shall be verified through conductance of audits. A formalized HSE audit program shall be established to:

- Evaluate whether the Project locations (Design & Site offices) conform to planned arrangements for HSE management.
- To verify whether potential hazards related to Health, Safety & Environment are identified and necessary steps are taken to eliminate / control / mitigate the same.

The Projects HSE Manager shall arrange HSE audits on a regular basis depending on scope. HSE audits shall be conducted by experience auditors with participation of all concerned. The Project Manager shall develop the HSE audit program including responsibilities, checklists and schedule for each Project phase.

12.3. TECHNICAL HSE AUDITS

Divisional / Departmental audits shall be conducted during design, engineering, procurement, construction and commissioning phases to verify compliance to technical and HSE requirements as per Corporate/Divisional / Departmental procedures and any other requirements.

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12.4. CORRECTIVE ACTION / PREVENTIVE ACTION AND IMPROVEMENT

HSE Manager shall carry out detailed analysis of the non-conformities and take suitable remedial actions. The data shall also be systematically analyzed to take necessary preventive actions to ensure that the deficiencies in HSE implementation do not recur in future. Procedure for Corrective Action - Document No. 5-0000-0130 shall be followed for this purpose.

13.0 HSE CLOSEOUT REPORT

Upon completion of the Project an HSE closeout report shall be prepared. The closeout report shall include all HSE deliverables completed during the various phases of the Project. The HSE closeout report shall form a part of project closeout report.

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Annexure-2

INDEX FOR HSE DOSSIER (Indicative List)

1. Project HSE Plan
2. HSE Objectives
3. Reports for studies carried out as per Clause No. 4.3.
4. Filled up HSE checklist of different stages.
5. Records of HSE Trainings/Awareness programs.
6. Records of HSE Meetings
7. HSE Audit Reports and Corrective action reports
8. HSE requirements of PESO, PNGRB, OISD, IBR, MoEFC or other local statutory bodies as applicable, complied in the design.

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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

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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 lay 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

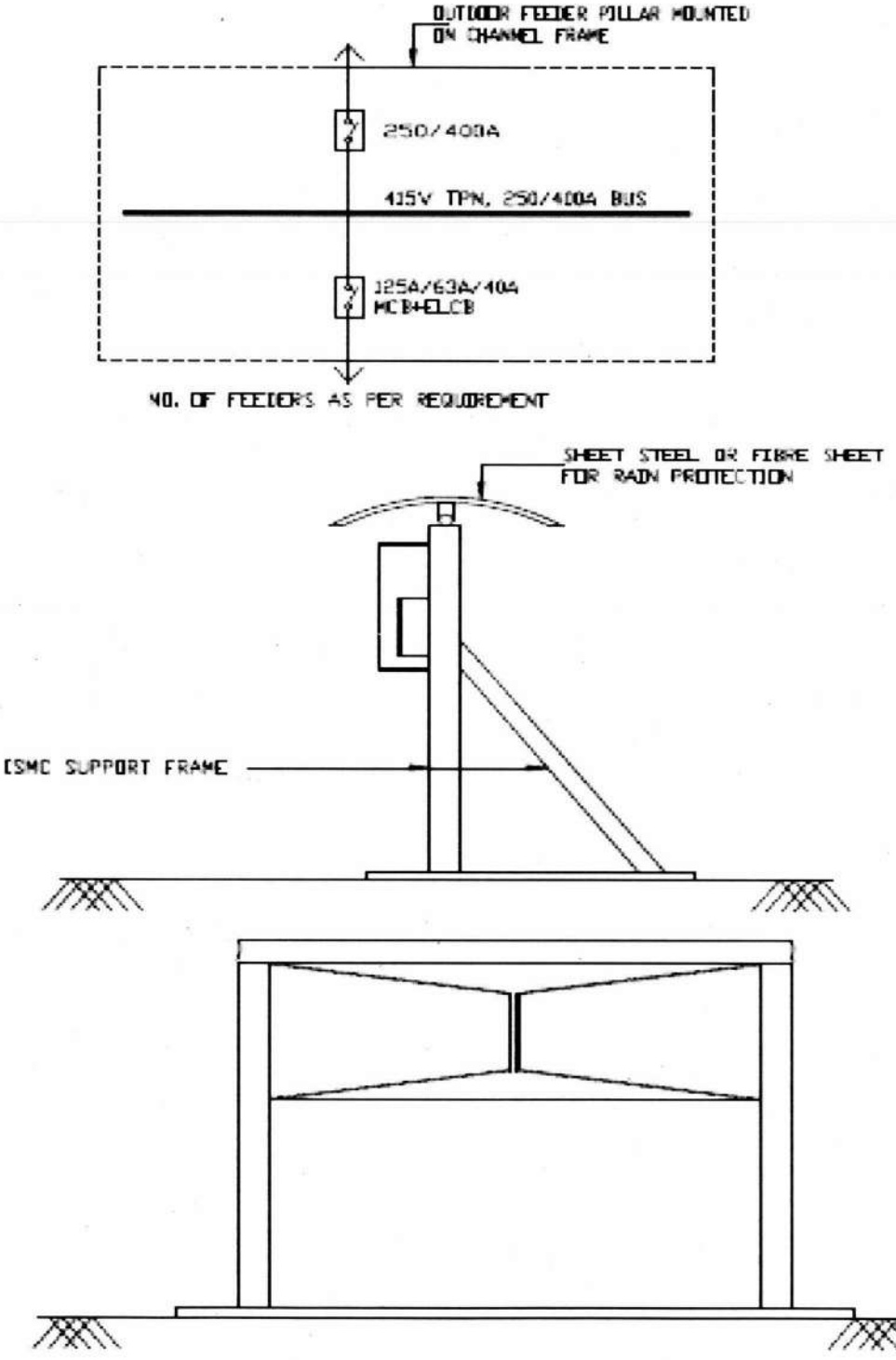
(For contractors' personnel)

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:.....

.....

.....

.....

.....

.....

.....

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

: .....

.....

.....

.....

.....

.....

.....

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:

Signature Not Verified
Digitally signed by MD MAZHER ALI
Date: 2026.04.09 17:44:38 IST
Location: eProcure-EPROC

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