



राष्ट्रीय इस्पात निगम लिमिटेड RASHTRIYA ISPAT NIGAM LIMITED  
विशाखपट्टणम इस्पात संयंत्र VISAKHAPATNAM STEEL PLANT  
(भारत सरकार का उद्यम A Govt. of India Enterprise)

M13 - CHEMICALS  
PURCHASE WING BLOCK-A, VISAKHAPATNAM STEEL PLANT,  
VISAKHAPATNAM - 530031, ANDHRA PRADESH -  
INDIA

CIN: U27109AP1982GOI003404

PHONE: 9701347340,

निविदा निमंत्रण सूचना (एन आई टी) NOTICE INVITING TENDER (NIT)

एन आई टी का प्रकार NIT TYPE: 2-PART MATERL E-RFX  
2024/M13/13/00007 WATER TREATMENT SMS-1

एन आई टी संख्या व तिथि NIT NUMBER & DATE 2100018947 Dated 15.03.2024

OPEN TENDERS IN THE PRESCRIBED FORM ARE INVITED FROM THE REPUTED / EXPERIENCED AGENCIES FOR THE FOLLOWING

1 सामग्री का विवरण DETAILS OF MATERIAL :

WATER TREATMENT OF SMS-1 RCW SYSTEM - REG.

2 आवश्यक जानकारी KEY INFORMATION :

बिड का प्रकार Type of Bid	प्रस्तुति का प्रकार Type of Submission	निविदा शुल्क (भारतीय मुद्रा) Tender Fee in INR	व्ययाना जमा राशि (भारतीय मुद्रा) EMD in INR	प्रस्तुति की अंतिम तिथि व समय Submission Deadline date & time	बिड खोलने की तिथि व समय (घंटे) Bid Opening Date & time in Hours
TWO PART BID	E BID	Not Applicable	Not Applicable	05.04.2024 10:30	05.04.2024 11:00

3 ऑफर की वैध तिथि OFFER VALIDITY DATE :

Your offer should be valid upto 31.07.2024.

4 मुद्रा CURRENCY :

INR.

5 PREQUALIFICATION (PQC) CRITERIA / ELIGIBILITY CRITERIA FOR CONSIDERATION OF TENDERS:

PQC criteria for SMS-1 (GCP & CCD) RCW system chemical treatment

1. Agency should have successfully treated

a) Gas Cleaning Plant re-circulation water system (of either Blastfurnace or Steel Melt shop) in any Integrated Steel Plant of minimum 2million tons per year capacity. Agency should have undertaken treatmentfor a period of at least one year in a single system without anyinterruption in the last 7 years from RFX. date (i.e. ITT date). Agencyshould have undertaken both supply of chemicals and their application.Agency should produce PO copies and satisfactory performancecertificate. Satisfactory performance certificate should be certified bythe agency's customer (bearing name and designation of certifyingauthority and name of the organization), with clear mention of referencePO number, PO date, treatment period and name of the system.

And

b) Continuous Casting Spray Cooling Water System of Steel Melt Shop in any Integrated Steel Plant of minimum 2 million tons per year capacity. Agency should have undertaken treatment for a period of at least one year in a single system without any interruption in the last 7 years from RFX date (i.e. ITT date). Agency should have undertaken both supply of chemicals and their application. Agency should produce PO copies and satisfactory performance certificate. Satisfactory performance certificate should be certified by the agency's customer (bearing name and designation of certifying authority and name of the organization), with clear mention of reference PO number, PO date, treatment period and name of the system.

2. Agency has to submit PO copies and satisfactory performance certificate along with the bid. Agency's offer will not be considered without any PQC documents along with the bid. The above PQC criterion is also applicable for agencies already registered with VSP.

3. After TOD, during PQC and Technical Evaluation, if supplier furnishes a new set of PO copy other than that offered along with tender, against any clarification (if asked), the same shall not be considered for evaluation purpose.

The above PQC criteria are applicable for parties already registered with VSP also.

**6 स्रोतों की संख्या NUMBER OF SOURCES :**

**7 मद का विवरण/बीओ व्यू ITEM DETAILS/BOQ :**

AS PER NIT & ANNEXURES.

**8 निविदा कागजात की सूची LIST OF TENDER DOCUMENTS:**

This document along with those available in cFolders as below, constitute the complete Tender (NIT)

1. NIT DOCUMENT
2. ANNEXURE TO RFX 2100018947
3. OTHER ANNEXURES
4. INTEGRITY PACT

**9 2-PART E-RFX SUBMISSION - OPEN TENDERS:**

RINL is employing SAP SRM 7.0 for Electronic Tendering System. E-RFX Response to be submitted electronically through System only. Bidders need to have UserID and Password to participate in SRM E-Tenders. All enlisted vendors of RINL would be provided UserID and password for participating in RINL E-Tenders. If a Bidder who wish to participate is not presently enlisted with RINL or not having User ID Password can obtain the same through "Initial Registration" link provided in the SRM system by providing requisite details well before the RFX submission deadline.

E-Tendering User Manual available in SRM Portal contains the procedure participating in RINL E-Tenders.

Bidders to ensure that E-RFX Response submission is done before "Submission deadline date & Time" indicated in the NIT Key information at 2 above. RFX can be "withdrawn" and modified as long as "Submission deadline date & Time" is not over. RFX Response cannot be modified once submission deadline time passed.

**10 EMD SUBMISSION PROCEDURE - MM DEPT.:**

10.1 In case of Earnest Money Deposit less than or equal to Rs. 5 Lakhs

Online Payment in SRM portal: 'Online EMD Payment' facility available in the RFX Response Window. Details are given in the User Manual for E-Tendering at Login page of SRM portal.

No other mode of payment will be accepted.

10.2 However, in case EMD exceeds Rs.5 Lakhs, Bidders have the option to submit the same in the form of Bank Guarantee (In the format of Appendix-1 as enclosed to the GCC # NTK03) from any Nationalized Banks or Scheduled Commercial Bank, enforceable at Visakhapatnam. Bank Guarantees shall be valid for a minimum period of 04(Four) months from the Bid opening date. The above shall supersede the instructions regarding Form of EMD elsewhere in the tender document

Bidders should upload the scanned copy of the BG in their Tech RFx cFolder and should submit original BG to Project Contracts department.

## **11 SRM LIVE AUCTION (REVERSE E-AUCTION):**

In case RINL wishes to conduct Reverse auction, the same shall be communicated to all the techno commercially qualified bidders at an appropriate time.

The Auction shall be conducted on SAP SRM LIVE AUCTION PLATFORM. All technically and commercially acceptable bidders would be required to participate in the reverse e-auction and quote from the start Price.

Bidders would be required to quote single price i.e price net of ITC on GST.

No separate User ID and Password is required for participating in Live Auction. User ID and Password used for Participating in E-Tendering to be used for Live Auction also.

### **(a) AUCTION TIME EXTENSION:**

1. Throughout the Auction process, Bidders should keep in view the 'Time Remaining' that appears on the 'Live Auction cockpit' screen and submit their Bids well within the time that gets displayed therein.

2. Bidders to note that System calculates Auction End time during the Auto extension period as under:

If any of the bidder, submits a valid price, in the last "X" minutes, the system will extend the Auction End time to 'Existing End Time + Y minutes'. This will be done "N" number of times.

Here<(>,<)>

Remaining Time Trigger = X

Extension Period = Y

Number of Extensions = N

The Auction time extension is explained below with an example.

Example: Reverse Auction conducted with Auction parameters as:

AUCTION SCHEDULE: 11.00 AM to 12.00 noon, REMAINING TIME TRIGGER: 4 minutes and EXTENSION TIME: 5 minutes

The current Auction End time being 12:00 and in case a bid is submitted by any bidder after 11:56 AM. (in the 'Remaining Time Trigger' i.e., in the last 4 minutes ) of the auction, the auction end time gets extended up to 12:05 PM (12:00 plus 5 Min.). Hence the new end time of the Auction is 12:05 PM. However, In case a bid is submitted prior to 11:56 i.e., before the 'Remaining time trigger', Auction shall not get extended and the same gets closed at 12:00.

Further, during the Auto extension period of the Auction, if a bid is submitted by any bidder after 12:01 PM. (in the last 4 minutes) of the auction the auction end time gets extended up to 12:10 PM. (12:05 plus 5Minutes). In case the bid is submitted by any bidder from 12:00 to 12:01 PM, auction end time will not get extended because it is not within the period of REMAINING TIME TRIGGER of 4 minutes and Auction end time shall be 12:05.

Important Note :

Bidders have to ensure continuous internet connection during the live auction. If the bidders' internet connection gets disturbed, the details in the auction window will not get refreshed upon fresh bids in the auction. Bidders cannot see the latest bids submitted in the auction after the disconnection. If a bidder's Rank is 1 for any item, it will continue to remain as 1 in their screen even if other bids are submitted in the auction if internet connection is not proper/disturbed. Even the time remaining will continue to reduce. It is the responsibility of the bidder to maintain the uninterrupted internet connection during live auction. Since auto refresh is not possible during disconnection, click F5 button in your keyboard to refresh the auction screen. If proper internet connection exists Bidder's screen gets refreshed else if there is any connection problem

Bidder will get error screen/message upon pressing F5. If Bidder gets error screen, bidder should login again and come back to Auction cockpit after restoring proper internet connection to view the latest status in the auction cockpit. It is advisable to click on F5 frequently and every 20 seconds during extension time to manually refresh the live-auction cockpit screen. RINL does not accept any responsibility for issues related to non-participation due to internet connection problems at vendor's end.

## **12 E-RFX EVALUATION PROCEDURE:**

1. All the RFXs shall be evaluated on the basis of landed Net of ITC (LNIP) cost arrived.
2. In case of Import/overseas response, for the purpose of comparison of imported and Indigenous offers, the 'M' rate (i.e. Forex Market Rate which is being obtained through the link: <https://www.cogencisweb.com/Citrix/XenApp/auth/login.aspx> of Citrix Newer Version provided by M/s. Cogencis Information Services Limited, Hyderabad) prevailing one day before the price opening date of SRME\_RFX shall be considered for arriving the price Landed Net of Input Tax Credit (LNITC) in Indian Rupees for evaluation of the offers of both SRM E-auction and Sealed Price Bids.
3. TAL1 LNIP price arrived by the system shall flow automatically to Auction document as Start Bid Price for all cases of Reverse auction and will be visible in the system only after the Start time of Live Auction (E-Reverse Auction). The exchange rate considered for Price RFX opening shall be the exchange rate for Live Auction also.
4. On completion of Live Auction, composite comparative statement is generated by the system considering the RFX Prices and Reverse auction prices. Placement of order shall be considered on the L-1 Price (LNIP) so arrived.
5. VSP at its sole discretion may consider the benefits available under Duty Entitlement Pass Book (DEPB) or any other scheme under Export Import Policy in evaluation of the offers wherever applicable.
6. Notwithstanding anything specified in this Tender Documents, RINL, in his sole discretion, unconditionally and without having to assign any reason, reserves to himself the rights:
  - To accept or reject the lowest RFX or any other RFX or all the RFXs
  - To accept any RFX in full or in part;
  - To reject the response not conforming to the RFX terms and
  - To give Purchase preference to Public Sector Undertakings wherever applicable as per Government policy/ Guidelines.
  - To extend purchase preference to Local SSIs (Micro and Small Enterprises) as per prevailing guidelines of RINL subject to submission of documents as stipulated at 8.3 of Detailed Terms and Conditions of ITT at Annexure as given below.
7. At any time prior to the deadline for submission of the bids, VSP may for any reason modify the RFX terms and conditions by way of an amendment or Corrigendum. Such amendments Or Corrigendum will be notified on RINLs SRM Portal at regular intervals. Therefore the tenderers should refer to RINLs SRM Portal regularly for any corrigendum.

## **13 GENERAL INSTRUCTIONS - OPEN TENDERS:**

- 1) The documents submitted by the tenderers in respect of pre-qualification evaluation criteria are final and no further correspondence / clarifications / submissions in this regard shall be entertained.

2) Scope of work, Bill of Quantities (BOQ), Terms and Conditions, given in the tender documents (placed in the cFolder Publisher area) is final. On verification, at any time, whether the tenderer is successful or not, if any of the documents submitted by the tenderer including the documents downloaded from our website are found tampered /altered/ incomplete, they are liable for actions like rejection of the tender, cancellation and termination of the contract, debarring etc., as per the rules of the company.

3) It will be presumed that the tenderers have gone through the General Conditions, Special Conditions and Instructions to tenderer etc., of the contract available in the website which shall be binding on him / them.

4) The tenderer shall download the NIT documents etc (TENDER SCHEDULE) available in Tech RFX cFolder Publisher Area on the RINLs SRM Portal in totality At any time prior to the DEADLINE for submission of the bids, VSP may for any reason modify the RFX terms and conditions by way of an amendment or corrigendum.

5) Tenders submitted against the NIT / Tender shall not be returned in case the tender opening date is extended / postponed.

6) VSP after opening of tender/bid document may seek in writing, documents / clarifications which are necessary for evaluation of tender/bid document from the Tenderers / bidders or issuing authority for confirmation of eligibility/ pre-qualification

7) If it comes to the notice of VSP at any stage right from request for registration / tender document that any of the certificates / documents submitted by applicant for registration or by bidders are found to be false/ fake/ doctored, the party will be debarred from participation in all VSP tenders for a period of 05(FIVE) years including termination of contract, if awarded. E.M.D/ Security Deposit etc., if any will be forfeited. The contracting agency in such cases shall make good to VSP any

8) Successful tenderer should be in a position to produce, after opening of the price bids, the Original Certificates in support of the attested copies of relevant documents submitted along with tender document. Failure to produce the original certificates at this stage in support of the attested copies submitted earlier would result in disqualification and forfeiture of EMD and also liable for debarring from participation in VSP tenders.

9) RINL will not be responsible for any delay/ loss/ any website related problems in downloading the tender documents etc. RINL reserve the right to (A) Split and award the work to more than one agency, (B) Reject any or all the tenders or to accept any tender wholly or in part or drop the proposal of receiving tenders at any time without assigning any reason there of and without being liable to refund the Tender fee thereupon.

#### 14 INSTRUCTIONS TO TENDERERS ON E-TENDERING/E-AUCTION:

For use of the RINL e-procurement (SRM) system and before submitting bid, a Vendor/Bidder should understand the e-tendering process by going through user manual which is available in our portal <https://srm.vizagsteel.com> and the NIT of related tender(RFX).

Vendor is responsible for all the necessary requirements including infrastructure in proper condition i.e. Computer, operating system and software platform (including browser) , antivirus, network connectivity, internet services, uninterrupted power supply to computer or networking equipment etc., availability of correct user id and password etc so that the participation in the RFX and/or auction during e-procurement process is not affected. Any interruption at vendor's end due to non-availability of the above facilities will not be entertained as reason for review of the RFX and/or Auction participated or intended for participation by the Vendor.

Understanding the bidding method and entry of correct data (Entering Correct Price Information) during e-procurement process against the RFX and/or Auction is totally the responsibility of the Vendor. During e-procurement process (RFX stage and/or Auction) it will not be possible to explain the bidding process to the Vendor. Vendor should ensure all queries and know-how are completed with the help of user manuals and mock/trial auctions available in the SRM portal before the start of e-procurement (RFX or Auction) process to ensure smooth participation in RINL's e-tender/e-auction

आर आई एन एल मतर्कता टोल फ्री नंबर RINL VIGILANCE TOLL FREE NUMBER: 1800 425 8878
--

**मद का विवरण ITEM DETAILS**

क्र.सं. Sl	उत्पाद कोड Product Code	विवरण Description	अपेक्षित मात्रा Qty Required	यू.ओ.एम UoM
1		WATER TREATMENT FOR SMS-1	1	LOT

**1 DELIVERY:****1 DETAILED TERMS AND CONDITIONS OF RFX:****I. DETAILED TERMS AND CONDITIONS OF RFX FOR DOMESTIC RESPONSES:-****1.0 GENERAL :**

1.1 The tender shall be governed by the General Conditions of Contract for supply (GCC), which is available on VSP's website, which can be freely accessed and downloaded.

1.2 Tenders shall be treated as if the GCC has been accepted in toto by the Tenderer unless deviations, if any, are specified in the offer.

1.3. RINL is employing SAP SRM 7.0 for Electronic Tendering System. E-RFX (Electronic Request for Proposal) Response to be submitted electronically through System only. No physical paper/print needs to be submitted. Bidders need to have User ID and Password to participate in SRM E-Tenders. All enlisted vendors of RINL would be provided User ID and password for participating in RINL E-Tenders. The tenderer who responds to this tender needs to upload the scanned copies of his bid documents.

1.4 RINL/VSP shall deal directly with Foreign Suppliers/ Tenderers and would prefer not to entertain involvement of any Agent /Agency/ Intermediary. In case a Foreign Supplier / Tenderer desires to avail services of an Indian Agent/Agency /Intermediary related to their tenders or orders, they should be registered with VSP for which detailed procedure is available on our website for viewing and free downloading. Go to [www.vizagsteel.com](http://www.vizagsteel.com), click on "Tenders", click on "Materials Management Department" and click on Application for Registration of Indian Agents.

1.5 For any particular tender no Indian agent can represent or quote on behalf of more than one foreign suppliers. In case this principle is violated, the relevant offers will be rejected.

1.5.1 The agency commission, if any, shall be clearly indicated and the same shall be deducted from payment due to the supplier and paid directly to the Indian Agent in Indian Rupees only.

1.6.0 Offer received through party/parties to whom Request For Quotation(RFX) was not issued is treated as unsolicited offer.

1.6.1 In case, the RFX is redirected by Principals to whom RFX was issued, to their Agent/Dealer/Stockist/Distributor, such offer may be treated as regular offer, subject to submission of their letter of authorization, as per the format of 'Authorization Certificate' given as Annexure-7. The Authorization Certificate shall be furnished on the letter head of the manufacturing concern/OEM and should be signed by a person on behalf of the Manufacturer/OEM, who is competent to authorize the Agent/Dealer/Stockist/Distributor.

1.6.2 In case the Principal submits the offer with a request for placement of AT/PO on their Agent/Dealer/Stockist/Distributor for execution, then such offer should be accompanied with;

a) The necessary letter of undertaking from the Principal, on their letter head, without any correction in the format as per Annexure-8 of the RFx.

b) The Letter of consent from the respective Agent/Dealer/Stockist/Distributor on their letter head to the effect that they would execute the AT/PO as per the terms and conditions finalized with the Principal supplier by RINL.

## 2.0 PRICES :

### 2.1 In case of Two bid tenders<(,<)>

a. Prices should be quoted preferably on FOR VSP Stores basis. Tenderers shall quote the price of the goods or services, excluding Tax (GST etc.). Applicable GST shall be indicated against each item and will be paid extra on submission of tax invoice. Break up of Packing & Forwarding Freight and Insurance must also be furnished for facilitating evaluation. Prices for the material supplies and commissioning, service charges extra (if any) should also be indicated separately.

b. There shall be no indication of prices in the Techno-commercial bid. If prices are indicated there, such offers are liable to be rejected. Only technical details of the offered items and duly filled in TR format should be uploaded. Offer not accompanied with the TR format is liable for rejection.

c. In case Tenderer opted for composition scheme, GST will not be charged extra and the price quoted includes the GST applicable to composite scheme. Tenderers have to specify that they have opted for composition scheme and GST is included as applicable for composition.

d. In case the Freight and Insurance are not furnished, the loading for the same shall be as follows.

Insurance : 0.09% as per VSP's Open Insurance Policy

Freight charges :

(i) If the Weight of the tendered items is known<(,<)>

Freight charges: VSP's approved Transporter's rates x Distance from the Tenderer's Despatch Station / Town / City

(ii) If the Weight of the tendered items is not known<(,<)>

Freight charges : 3% of basic quoted value if the Tenderer's Despatch Station / Town / City is at a distance of 750 Kms from Visakhapatnam.

: 5% of basic quoted value if the Tenderer's Despatch Station / Town / City is at a distance beyond 750 Kms from Visakhapatnam.

Note :

(a) Distance from Tenderer's Despatch Station / Town / city to Visakhapatnam shall be obtained from Stores-Transport Section of VSP.

(b) Door collection charges shall be loaded as per the VSP's annual contract with the Transporters if the weight of consignment is less than 3 MT

d. It may be noted that Unit Price is to be quoted for each and every item of the tender in figures only. In case of any discrepancy between the two, the price indicated in words shall only be considered.

e. The prices quoted should be firm unless otherwise allowed specifically till completion of delivery.-- VITAL

f. As per prevailing guidelines, RINL shall be conducting reverse e-auction, all technically and commercially acceptable (TA & CA) bidders would be required to participate in the reverse e-auction. Details in regard to reverse e-auction are mentioned at para 17.0 below. During the reverse e-auction the bidders would be required to quote prices only on the basis of landed net of ITC (refer clause 2.1(c)) and only such tenderers whose offers are Techno-Commercially accepted shall be permitted to participate in reverse e-auction. Modalities of evaluation of Landed Net of ITC prices are as follows.

**ILLUSTRATION FOR CALCULATION OF LANDED NET OF INPUT TAX CREDIT (LNIP)- Rs./Unit**

Delivery Terms: Ex Works

A. Basic price-----:	100.00
B. Packing extra (2% on A)-----:	2.00
C. Sub-Total (A + B)-----:	102.00
D. Integrated GST @18% on 'C'-----:	18.36
E. Freight extra (3%) on 'A'-----:	3.00
F. Integrated GST @5% on 'E'-----:	0.15
G. Total Cost (C+D+E+F)-----:	123.51
H. Insurance 0.09 % on G-----:	0.11
I. Integrated GST @18% on 'H'-----:	0.02
J. Landed Cost (G+H+I)-----:	123.64
K. Input Tax Credit (ITC) (D+F+I)----:	18.51
L. Landed Net of ITC (LNIP) (J-K):	105.11

Delivery Terms: Ex Works with Interest Loading

A. Basic price-----:	100.00
B. Packing extra (2 % on A)-----:	2.00
C. Sub-Total (A + B)-----:	102.00
D. Integrated GST @18% on 'C'-----:	18.36
E. Fright extra (3%) on 'A'-----:	3.00
F. Integrated GST @5% on 'E'-----:	0.15
G. Total (C+D+E+F)-----:	123.51
H. Insurance 0.09% on G-----:	0.11
I. Integrated GST @18% on 'H'-----:	0.02
J. Total with Insurance (G+H+I)-----:	123.64
K. Int. loading @19% /annum/30 days short credit on J:-	1.93
L. Landed Cost with interest loading (J + K)-----:	125.57
M. Input Tax Credit (ITC) (D+F+I)-----:	18.53
N. Landed Net of ITC (LNIP) (L-M)-----:	107.04

Delivery Terms: FOR VSP Stores

A. Basic price incl. of Pack, Freight up to VSP Stores :	100.00
B. Integrated GST @ 18% on 'A'-----:	18.00
C. Landed Cost (A+B)-----:	118.00
D. Input Tax Credit (ITC) (B)-----:	18.00
E. Landed Net of ITC (LNIP) (C-D)-----:	100.00

Delivery Terms: FOR VSP Stores with Interest Loading

A. Basic price incl. of Pack, Freight up to VSP Store--:	100.00
B. Integrated GST @ 18% on 'A'-----:	18.00

C. Total Cost (A+B)-----: 118.00  
D. Int. loading @19% /annum/30 days short credit on C: 1.84  
E. Landed Cost with interest loading (C + D)-----: 119.84  
F. Input Tax Credit (ITC) (B)-----: 18.00  
G. Landed Net of ITC (LNIP) (E-F)-----: 101.84

The above calculation is an example only and the Landed cost and LNIP may vary depending on actual rates (GST, Insurance, Interest etc.) prevailing on that day.

g. EVALUATION: "After the Reverse e-auction is conducted, irrespective of whether they have participated in the Reverse e-auction or not, Based on the prices so received through Reverse e-auction and the e-price bids received along with the Techno-commercial offers, a composite comparative statement shall be made considering the lower of the prices (i.e. e-price bid prices and Reverse e-auction prices) of all the tenderers. Placement of order shall be considered on the L-1 price (LNIP) so arrived. "

a. In case of supply of goods or services on which RINL/VSP is eligible to avail GST input tax credit, evaluation of tender shall be on the basis of landed cost excluding GST.

b. In case of supply of goods or services on which the employer (RINL/VSP) is not eligible to avail GST input tax credit, the applicable GST payable by RINL/VSP (in case of unregistered taxable supplies) or GST to be charged by the registered taxable supplier as applicable, shall be added to the landed cost for evaluation purposes.

h. Exchange rate prevailing on one day before the scheduled date of reverse e-Auction will be taken for making composite comparative statement.

i. In the cases where price variation formula for steel is a part of RFX, the price of billets on the date of reverse e-Auction shall be taken as 'P1' value in the price variation formula of VSP (the format of which shall be sent along with RFX) and the same will be followed while preparing the composite comparative statement.

2.2 If the items tendered are covered under DGS<(>&<)>D Rate Contract with your organization, please confirm to supply to RINL at a price not higher than DGS<(>&<)>D rate contract price, terms & conditions, but with better terms and conditions if you so desire and with RINL's payment terms. Also, please enclose a copy of the Rate Contract with your tender.

2.3 In case the manufacturer authorizes his dealer/distributor to submit the bid on their behalf, copy of the DGS<(>&<)>D Rate Contract also to be enclosed with the tender along with authorization letter.

2.4 The offered price should be against each catalogue number covering all the items / parts / bill of material given in the description of the item along with price break-up. If, in the opinion of the bidder, additional parts are also required to be supplied for making the item complete, price should be quoted with detailed break up for each of the additional parts.

2.5 The due date and time for opening of price bids in respect of two bid tenders shall be intimated only to the techno-Commercially accepted tenderers.

2.6,,Any revised bids received after tender (techno-commercial bid in Two-Bid case) opening shall be rejected unless it has been furnished in response to a specific request from VSP.

### 3.0 PAYMENT TERMS:

3.1 100% payment shall be made against receipt and acceptance (GARN) of material on the 60th day (21st day for Local Micro and Small Enterprises and 45th day for non-local MSEs subject to submission of documents as stipulated vide clause 9.1). Payment terms other than the above shall be suitably loaded for evaluation. The loading of interest would be as per the rate as declared by RINL time to time, in case tenderer quotes credit period lesser than the period applicable as above.

3.2 Payment shall be made direct by NEFT/RTGS mode or such other mode of electronic fund transfer offered by banks. In case you have not already furnished the required details, you may download the pro-forma in which the details are to be furnished from the VSP's website and submit along with your offer for updating your database. - VITAL

#### 4.0 TAXES, DUTIES AND LEVIES :

4.1 Tenderers must furnish complete details w.r.t each of the quoted items in the relevant field of 'questions' tab and also in 'conditions' tab.

4.2 Wherever the tenderers quote GST as 'NIL' or at concessional rates (being SSI Unit or due to some other privilege available on the date of offer) but reserves the right to charge at actual on the date of dispatch, suitable loading would be done with maximum GST rates as applicable.

4.3.1 Tenderer's GST Reg. No. notional HSN code etc. is to be necessarily indicated in the relevant field of 'questions' tab.

4.4 In case of supervision for erection, testing & commissioning, the applicable GST and Income Tax is to be stated separately.

4.5 The Indian Income Tax relating to rendering of supervision services at site which the employer may require by law to deduct shall be deducted at source as per provision of Indian Income Tax Act 1961 with subsequent revision. The employer shall provide to the contractor with official tax receipt, evidence of such tax payment.

4.6 Successful tenderer making purchases shall be subjected to TDS provisions as per GST Act.

4.7 Further " Vendor/supplier/contractor shall comply with all the necessary statutory compliances including but not limited to providing GST invoices or other documentation as per GST law relating to the above supply/service to RINL, uploading the details of the invoice, payment of taxes, timely filing of valid statutory returns for the tax period in the Goods and Service Tax Portal.

In case the Input Tax Credit of GST is denied or demand is recovered from RINL on account of any act of the Vendor, including but not limited to non-payment of GST charged and recovered, non-generation of E-Way Bill, non-filing of Returns, non-uploading/improper uploading of valid invoices raised on RINL in the Returns etc., the Vendor/supplier/contractor shall indemnify RINL in respect of all claims of tax, penalty and/or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. Such amount shall be recovered from any payments due to the vendor/ supplier/contractor or from security deposit or any other amount available with RINL in the same contract or in other contracts including future contracts.

If any tax has been paid by the vendor/supplier/contractor in pursuance of any demand on account of suppression, fraud or wilful misstatements of facts; then the same shall not be passed on to RINL through debit notes or invoices or supplementary invoices."

#### 5.0 Samples, DRAWINGS and test certificates

In case the Input Tax Credit of GST is denied or demand is recovered from

5.1 Wherever sample approval is required before manufacture and bulk supply, the sample should be supplied within 3 (three) weeks of date of placement of Purchase Order (PO). In case of any deviation, the time required for submission of sample for approval is to be specified in the offer.

5.2 Drawing submission and approval : Where drawings are required to be furnished for approval upon placement of , PO. the schedule for submission of drawings and for supply after approval are to be clearly indicated in the offer failing which a maximum of 3 (three) weeks from the date of PO. shall be considered to be the period for submission of drawings. (The drawings submitted shall be approved within 15 days of receipt).

5.3 Return of drawings: Wherever applicable drawings sent with the Invitation to Tender are to be returned along with the offer / regret letter.

5.4 Test certificates and all other documents specified in the enclosed schedule of material-cum-specification are required to be furnished to the Inspector at the time of inspection as well as part of dispatch documents at the time of supply of material.

#### 6.0 INSPECTION :

6.1 RINL reserves its right to inspect the stores and alter the place of inspection at its sole discretion.

6.2 Generally, inspection shall be carried out at RINL / VSP Stores for all items such as operational consumables etc.

6.3 The supplier shall furnish the inspection call along with all the internal test reports as well as other test certificates specified in the Schedule of Material Cum Specifications at least 15 (fifteen) days in advance of the scheduled delivery date, to enable VSP to examine the same and issue dispatch clearance/carry out inspection at the suppliers premises. The dispatch of stores by the suppliers shall be only after receipt of dispatch clearance or accepted inspection note/ certificate.

#### 7.0 GUARANTEE:

7.1 Supplies are to be guaranteed for 12 (twelve) months from the date of use or 18 (eighteen) months from the date of receipt and acceptance, whichever is earlier.

7.2 Items having shelf life should confirm to specified guarantee as per RFX, the proof of date of manufacture should be available in the cases either on the label of the item or on the Guarantee certificate.

#### 8.0 PURCHASE PREFERENCE AND OTHER BENEFITS TO MSEs:

8.1 Purchase preference is accorded to Public Sector Undertakings wherever applicable as per Government policy/guidelines.

8.2 Purchase preference is accorded to Local Micro & Small Entrepreneurs (Local SSIs) and non-local MSEs as at 8.3 below, subject to subject to submission of documents as stipulated vide clause 9.1 below. Further, the tender sets shall be provided free of cost and exemption shall be given from submission of Earnest Money Deposit (EMD) for such MSEs.

8.3 Local and non-local Micro and Small Enterprises (MSE) those are technically and commercially acceptable shall be considered for extension of purchase preference, where their offer is within 15% of L-1 offer and they match the L-1 offer.

The quantity shall be divided into N+1 shares, where N is the no.of sources. The distribution shall be done among the L-1 tenderer and other eligible tenderers (Who are in the range of purchase preference and match the L-1 price), as below:

i. The L1 shall be awarded 2 shares of quantity, except in cases where 1 is not a Local MSE and there is/are eligible Local MSE/s. In such cases, the lowest eligible Local MSE shall be awarded 2 shares of quantity and the L1 shall be awarded 1 share from any balance shares of quantity.

ii. One each of any balance shares shall be awarded to the other eligible tenderers in the order of preference given below (in the order of ranking within each preference category):

- a) Local MSEs - Till the total quantity on Local MSEs equals or exceeds 50%
- b) MSEs - Till the total quantity on MSEs (including Local MSEs) equals or exceeds 20%
- c) Others

#### ILLUSTRATIVE DISTRIBUTION

1. Where Local MSE is L1 and

- a. if no. of sources - 1 : 100% L-1 Local MSE
- b. if no. of sources - 2 : 2/3 L-1 Local MSE, 1/3 Others
- c. if no. of sources - 3 : 2/4 L-1 Local MSE, 1/4 Others, 1/4 Others
- d. if no. of sources - 4 : 2/5 L-1 Local MSE, 1/5 Local MSE, 1/5 Others, 1/6 Others
- e. if no. of sources - 5 : 2/6 L-1 Local MSE, 1/6 Local MSE, 1/6 Others, 1/6 Others, 1/6 Others

2A. Where MSE is L1 and in case there is / are eligible local MSEs

- a. if no. of sources - 1 : 100% Local MSE ## (2/3-Local MSE,1/3 L1 MSE)
- b. if no. of sources - 2 : 2/3 Local MSE, 1/3 L-1 MSE
- c. if no. of sources - 3 : 2/4 Local MSE, 1/4 L-1 MSE, 1/4 Others
- d. if no. of sources - 4 : 2/5 Local MSE, 1/5 L-1 MSE, 1/5 Local MSE, 1/5 Others
- e. if no. of sources - 5 : 2/6 Local MSE, 1/6 L-1 MSE, 1/6 Local MSE,1/6 Others, 1/6 Others

2B. Where MSE is L1 and in case there is / are no eligible local MSEs

- a. if no. of sources - 1 : 100% L-1 MSE
- b. if no. of sources - 2 : 2/3 L-1 MSE, 1/3 Others
- c. if no. of sources - 3 : 2/4 L-1 MSE, 1/4 Others, 1/4 Others
- d. if no. of sources - 4 : 2/5 L-1 MSE, 1/5 Others, 1/5 Others, 1/5Others
- e. if no. of sources - 5 : 2/6 L-1 MSE, 1/6 Others, 1/6 Others, 1/6Others, 1/6 Others

3A. Where Non-MSE is L1 and in case there is / are eligible local MSEs

- a. if no. of sources - 1 : 100% Local MSE ##(2/3-Local MSE, 1/3 L1 NonMSE)
- b. if no. of sources - 2 : 2/3 Local MSE, 1/3 L-1 Non MSE
- c. if no. of sources - 3 : 2/4 Local MSE, 1/4 L-1 Non MSE, 1/4 Others
- d. if no. of sources - 4 : 2/5 Local MSE, 1/5 L-1 Non MSE, 1/5 LocalMSE, 1/5 Others
- e. if no. of sources - 5 : 2/6 Local MSE, 1/6 L-1 Non MSE, 1/6 LocalMSE, 1/6 Others, 1/6 Others

3B. Where Non-MSE is L1 & in case there is/are no eligible local MSEs

- a. if no. of sources - 1 : 100% L-1 Non MSE ##(2/3-L1 Non MSE, 1/3 MSE)
- b. if no. of sources - 2 : 2/3 L-1 Non MSE, 1/3 MSE
- c. if no. of sources - 3 : 2/4 L-1 Non MSE, 1/4 MSE, 1/4 Others
- d. if no. of sources - 4 : 2/5 L-1 Non MSE, 1/5 MSE, 1/5 Others, 1/5Others
- e. if no. of sources - 5 : 2/6 L-1 Non MSE, 1/6 MSE, 1/6 MSE, 1/6Others, 1/6 Others

3C. Where Non-MSE is L1 and in case there is / are no eligible local MSEor MSE

- a. if no. of sources - 1 - 100% L-1 Non MSE
- b. if no. of sources - 2 - 2/3 : 1/3
- c. if no. of sources - 3 - 2/4 : 1/4 : 1/4
- d. if no. of sources - 4 - 2/5 : 1/5 : 1/5 : 1/5
- e. if no. of sources - 5 - 2/6 : 1/6 : 1/6 : 1/6 : 1/6

##- Where one source is originally envisaged; but it is possible to split the order and award quantity to a second source based on Purchase Preference, the distribution pattern of 2 sources will be followed.

Note :

1. Others including Non MSE/s and MSE/s
2. In case the quantity offered to Local MSE or MSE as per distribution table do(es) not match the L-1 price, the quantity will be offered to others in order of their ranking.

8.4 Where there is/are eligible Local MSE/s and it is not possible to split the order, 100% of the order quantity shall be placed on the lowest eligible local SSI.

8.5 Quantity reserved for SC/ST MSEs:

"20% from the 20% quantity (i.e 4% of the tendered quantity) offered to the eligible MSEs shall be reserved for MSEs owned by SC/STs, who are eligible by being Technically and Commercially acceptable, quoting price in the range of Purchase Preference and matching the L1 price. In the absence of such agencies, the reserved quantity shall be met from other MSEs".

8.6 MSMEs vendors/Bidders who are willing to utilize the TReDS platform for payment purpose are invited on TReDS Portal.

#### 9.0 CONDITION FOR AVAILING BENEFIT UNDER CLAUSE 3.1 AND 8.0 BY MSEs

9.1 The MSE Unit shall get themselves registered with MSME Data Bank, being operated by NSIC, under SME Division, M/o MSME and submit Notary attested copy of valid SSI / MSE Registration Certificate / Entrepreneur Memorandum acknowledgement Part-II / Udyog Aadhar Memorandum issued by any of the following for the items/item category for which they are registered for availing the relevant benefits as stipulated at Clause No.3.1 & 8.0.

MSEs participating in the tender must submit valid certificate of registration with any one of the below agencies indicating the details of the particular tendered item/item category along with their bid. The Micro and Small Enterprise/s not registered for the particular item/ item category for which the tender is relevant, will not be eligible for any exemption/preference. The registration certificate issued from any one of the below agencies must be valid as on tender opening date (TOD). The successful bidder should ensure that the same is valid till the end of the contract period. The MSEs, who have applied for registration or renewal of registration with any of the below agencies/bodies, but have not obtained the valid certificate as on tender opening date (TOD), are not eligible for exemption/preference.

a) For all MSEs:

- i. District Industries Centre, (Acknowledgement of Entrepreneur Memorandum - EM Part –II)
- ii) Khadi& Village Industries Commission
- iii) Khadi& Village Industries Board
- iv) Coir Board
- v) National Small Industries Corporation (NSIC)
- vi) Directorate of Handicraft & Handloom
- vii) Any other body specified by Ministry of Micro, Small and Medium Enterprises.

b) For Local MSEs:

- i. District Industries Centre of Visakhapatnam
- ii) District Industries Centre of Srikakulam /Vizianagaram / East Godavari district i.e. units located within 100kms of road distance of Visakhapatnam Steel Plant and falling under the Jurisdiction of respective District Industries Centre. In case of refractory items, units located within 200 kms of road distance of Visakhapatnam Steel Plant and following under the jurisdiction of respective District Industries Centre.
- iii) NSIC registered units and other MSEs falling within the above jurisdictions, i.e., in (i) or (ii).

9.2 MSEs owned by SC/ST entrepreneurs are required to submit supporting documents like caste certificate (duly notarized) of the Proprietor / Partners issued by the Tahsildar / MRO / Magistrate or any Government authorized department.

#### 10.0 NUMBER OF SOURCES:

10.1 VSP reserves the right to procure any or all the tendered items/quantities from one or more than one source.

10.2 The number of sources is as indicated in the ITT/ schedule of Material cum Specifications sheet. RINL /VSP reserve the right to procure any or all the tendered items from one or more than one source.

10.3 The distribution of quantity of each item to be ordered shall be normally in the ratio of 100% in case of one source, 2/3 : 1/3 in case of two sources, 2/4 : 1/4 : 1/4 in the case of three sources, 2/5 : 1/5 : 1/5 : 1/5 for four sources, 2/6 : 1/6 : 1/6 : 1/6 : 1/6 for five sources in the order of ranking from lowest technically and commercially acceptable tenderers subject to matching the lowest price.

#### 11.0 DELIVERY SCHEDULE :

11.1 Tenderers are requested to note VSP's delivery schedule and quote their best delivery considering all aspects including drawing submission and approval, sample submission and approval, pre-despatch inspection, transportation time etc., as applicable to the tender.

11.1 VSP reserves the right to reject offers not meeting VSP's schedules/to consider offers with best delivery schedule(s).

11.2 It may be noted that in the event of an order, delivery shall be the essence of the contract. Further, failure to adhere to the delivery schedules committed in the tender shall attract contractual remedies as per GCC. Seven days period is added to the mutually agreed delivery period considering the time required for receipt of PO by the supplier by Registered Post/Courier/Fax.

12.0 VALIDITY :

The tender should be valid for minimum 60 days from the date of opening of tender / extended date of opening of tender

13.0 COMMUNICATION OF NON-PARTICIPATION AND NO RESPONSE:

13.1 In case you choose not to participate in the tender, a regret letter by way of Fax/Letter/E-Mail is to be submitted well before the due date duly super-scribing "Regret" and Tender No. Date and due date on the envelope along with drawings if any, sent with RFX. The reasons for non participation may please be spelt out clearly such as (a) Tendered items not in your manufacturing range (b) Production constraint presently (c) Overbooked and hence can not meet VSP's delivery schedule (d) Not interested to do business with VSP (e) Quantity tendered is small or uneconomical (f) Any other reason.

13.2 If no communication is received by the due date and time, it shall be inferred that you are not interested in participation and your name is liable to be removed from the vendor list.

14.0 EXAMINATION AND REJECTION OF OFFERS:

14.1 RINL evaluates technically and commercially accepted offers on Landed Net of Cenvat Price (LNIP) basis.

14.2 Offers which deviate from the vital conditions ( as illustrated below ) of the tender shall be rejected :

- a) Non-submission of Schedule of Material cum specification sheet duly signed & stamped
- b) Variable price being quoted (without any ceiling limit for such variation and Price Variation Clause ) against requirement of firm price.
- c) Submission of in-complete offers, non-appending signature on the offer and the prescribed formats.
- d) Receipt of offers after the due date & time and, or by Fax / e-mail (unless specified otherwise).
- e) Acceptance of Integrity Pact for ITTs / Tenders for a value of Rs. 1 crore and above.

14.3 Tenders submitted against the NIT/Tender shall not be returned in case the tender opening date is extended/Postponed. Tenderers desirous to modify their offer/terms may submit their revised/supplementary offer(s) within the extended TOD, by clearly stating the extent of updation done to their original offer and the order of prevalence of revised offer vis-à-vis original offer. The Purchaser reserves the right to open the original offer along with revised offer(s).

14.4 In case where RINL/VSP decides to procure the material from one or more than one source, (Only one offer shall be submitted by Companies using same equipment / facilities/address), and if it comes to the notice of RINL/VSP at any stage during the finalization of the tender or after placement of order/execution of the contract that offers have been made by Companies using same equipment/facilities/address, then such offers/orders shall be rejected/cancelled forthwith and business dealings with such Firms/Contractors shall be banned for a period of 2 years. Bid money/EMD Security Deposit etc. if any shall be forfeited. Decision of RINL/VSP in this regard shall be final and binding..

15.0 PUNITIVE ACTIONS TO BE TAKEN AGAINST AGENCIES WHO SUBMIT FALSE/FORGED DOCUMENTS TO VSP:

15.1 If it comes to the notice of RINL at any stage from request for enlistment/ tender document that any of the certificates / documents submitted by applicants for enlistment or by bidders are found to be false/ fake/ doctored, the party will be debarred from participation in all RINL tenders for a period of 5 (five) years including termination of contract, if awarded. EMD/ Security Deposit etc. if any, will be forfeited. The contracting Agency in such cases shall make good to RINL any loss or damage resulting from such termination. Contracts in operation anywhere in RINL will also be terminated with attendant fall outs like forfeiture of EMD/ Security Deposit, if any, and recovery of risk and cost charges etc. Decision of RINL Management will be final and binding.

15.2 In case the commercially and technically acceptable lowest price offered tenderer backs out after tender is opened in single bid tender and in two bid tender after commercial bid / price bid is opened ; or after finalization of contract punitive actions shall be as per prevailing guidelines which include:

(a) If any tenderer backs out after opening of the Techno-commercial bids but, prior to Reverse e-auction and opening of the sealed price bids, they shall be kept under hold without issue of tender enquiries for the next '1' tender or '3' months whichever is later.

(b) If the 'L1' tenderer backs out after opening of the tenders in case of single bid cases ( or) after the Reverse e-auction / opening of the sealed price bids in case of 2-bid cases and within the validity period, they shall be kept under hold without issue of tender enquiries for the next '3' tenders or '6' months whichever is later including barring participation in open tenders.

(c) If the 'tenderer backs out after award of the Contract, they shall be kept under hold without issue of tender enquiries for the next '3' tenders or '6' months whichever is later, apart from proceeding with alternative procurement action (re-tendering) at the risk & cost of the defaulting supplier

16.0 Wherever the supplier quotes on FOR destination / VSP Stores basis supplier should ensure that materials are dispatched through registered common carriers as per the "Carriage by Road Rules 2011" notified on 28.02.2011 and "The Carriage by Road Act 2007". The Act / Rules are available on website [www.morth.nic.in](http://www.morth.nic.in).

#### 17.0 REVERSE e-AUCTION :

RINL will inform the technically and commercially acceptable (TA & CA) tenderers of the date and time of reverse e-auction and they shall participate in the process.

17.1 TA & CA tenderers would be authorized to quote their LNIP prices on only e-reverse auction engine on a fixed time and date.

17.2 After completion of the reverse e-auction the purchase order would be placed in the normal mode after taking appropriate approval by concerned purchase officer either on F O R VSP Stores (or) F O R Destination Station (or) F O R Despatch Station (or) Ex-Works basis, considering the freight charges which is advantageous to RINL / VSP, as the case may be.

#### 18.0 RIGHT TO REJECT TENDERS:

18.1 RINL/VSP does not pledge itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of the tender or portion of the quantity tendered and you shall supply the same at the rate quoted.

#### 19.0 AUTHORISATION:

19.1 Representatives of Tenderers are required to produce letter of authorization, if they are to be permitted to attend negotiation meeting.

#### 20. INTEGRITY PACT:

20.1. Tenderer must submit signed Integrity pact in the prescribed format of VSP available in VSPs website along with the Techno-Commercial RFX wherever applicable and asked for in RFX by uploading into cFolder. The original signed Integrity pact shall be submitted prior to placement of order.

## 21 ESTABLISHMENT OF CREDIBILITY OF UNENLISTED BIDDERS PARTICIPATING IN THE TENDERS:

21.1 If tenderer who responds to this tender notice is not presently enlisted with RINL/VSP, he is requested to furnish copies of the following documents separately in a sealed envelope super scribing "CREDENTIALS" and the ITT REFERENCE or ADVERTISED TENDER REFERENCE as the case may be, along with the tender.

a) Notarised Statutory manufacturing / service industry registration certificate i.e. EM Part II issued by DIC / NSIC registration certificate for the same / similar items of MSEs

(Or)

Notarised copy of Certificate of Registration of Shops and Establishments for a Dealer / Agent / Trader etc.

(Or)

Notarised copy of Certificate of Incorporation along with Memorandum and Articles of Association of the Private / Public Limited Companies.

b) Notarised copy of Proprietary / Partnership deeds in case of Proprietary / Partnership firms.

c) Copy of GST registration certificates and PAN card copy in the name of Company in case of Limited companies or in the name of Individuals in case of Proprietary firms.

d) Self certified Financial worth and audited financial statements for the last 3 years.

e) Self certified Purchase Orders/Contract copies for the same or similar tendered item(s).

f) Self certified ISO certificate if any.

Note: "In the case of STARTUPS, the STARTUPS have to submit a verifiable certificate of recognition from the concerned Govt. Authorities for consideration with respect to Relaxation on prior turnover and prior experience i.e., w.r.to iv to vi above. The above is subject to the condition that the firm has the required manufacturing, testing & inspection facilities and the following documents are to be submitted:

a. Details of Manpower & Machinery (Self certified).

b. Details of Testing & Inspection facilities available (Self certified)

However, for the items related to Public safety, health, critical security operations and equipment, etc., relaxation shall not be applicable".

21.2 Kindly note that the above information is required to assess the credibility of the vendor not presently enlisted with RINL / VSP. The tender of un-enlisted vendor may be rejected in case of non-submission or incomplete submission of the above documents except f) of 21.1 or if RINL/VSP finds that the creditability of the un-enlisted Vendor is not satisfactory on the basis of documents furnished. The vendor shall produce originals of the above documents for verification if RINL/VSP so desires. RINL/VSP's decision in this regard shall be final.

21.3 The tender of un-enlisted vendors received without submission or incomplete submission of the documents listed at 21.1 above to check the credibility will not be considered for further evaluation.

## 22 BANNING / SUSPENSION / REMOVAL FROM THE LIST OF REGISTERED SUPPLIER/ CONTRACTORS

22.1 RINL may ban/suspend the Business Dealing with the agency / remove the agency from the list of registered supplier/ contractors (with/without inter connected agencies) at any stage of the contract viz. Tendering, Awarding, Execution and during or even after expiry of Defect Liability Period/ Warranty/ Guarantee Period on the following grounds:

(a) If the Agency has been convicted of an offence under:

i) The Prevention of Corruption Act, 1988; or

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

The Agency shall be debarred for a period as specified in the General Financial Rules (GFR) issued by Govt. of India;

- (b) If it is determined that the Agency has breached the code of Integrity, the Agency shall be debarred for a period as specified in the General Financial Rules (GFR) issued by Govt. of India;
- (c) In case of violation/ transgression of Integrity Pact (IP);
- (d) If the security consideration, including questions of loyalty of the Agency to the State, so warrants;
- (e) If the Director / Owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or RINL, during the last five years;
- (f) If there is strong justification for believing that the Directors, Proprietors, Partners, owner of the Agency have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolations, etc;
- (g) If the Agency continuously refuses to return / refund the dues of RINL without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or Court of Law;
- (h) If the Agency employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offence;
- (i) If business dealings with the Agency have been banned by the Govt. or any other public sector enterprise;
- (j) If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts and / or fudging / forging / tampering of documents;
- (k) If the Agency uses intimidation / threatening or brings undue outside pressure on the Company (RINL) or its official in acceptance / performances of the job under the contract;
- (l) If the Agency indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;
- (m) Willful indulgence by the Agency in supplying sub-standard material irrespective of whether pre-despatch inspection was carried out by Company (RINL) or not;
- (n) Based on the findings of the investigation report of CBI/ Police against the Agency for malafide/ unlawful acts or improper conduct on his part in matters relating to the Company (RINL) or even otherwise;
- (o) Established litigant nature of the Agency to derive undue benefit;
- (p) Continued poor performance of the Agency in several contracts;
- (q) If the Agency misuses the premises or facilities of the Company (RINL), forcefully occupies, tampers or damages the Company's properties including land, water resources, forests / trees, etc.

(Note: The examples given above are only illustrative and not exhaustive. RINL may decide to ban/suspend business dealing for any good and sufficient reason. Any other banning clauses mentioned elsewhere in the Tender Documents shall also be considered as a ground for banning/suspension of business dealing.)

22.2 'Inter-connected Agency' shall mean two or more agencies having any of the following features:

- (a) If one is a subsidiary of the other.
- (b) If the Director(s), Partner(s) Manager(s) or Representative(s) are common;
- (c) If management is common
- (d) If one owns or controls the other in any manner

22.3 Any allegation(s) against an agency with good and sufficient reasons for banning business dealing with the agency, except for banning of business dealings with foreign suppliers of coal/ coke, shall be put up to Standing Banning Committee (SBC) of RINL for investigation.

22.4 In case of removal of the agency from the list of registered vendors/ contractors of RINL, the agency shall not be disqualified from competing in Global/ Open Tender Enquiries (GTE/OTE) but Limited Tender Enquiry (LTE)/ Single Tender Enquiry (STE)/ Short Open Tender (SOT) may not be given to the agency concerned.

22.5 If the allegations against any agency are of a serious nature, RINL may suspend business dealings with the agency (with / without interconnected agencies) pending investigation, with/ without any show cause notice. The suspension shall be for a maximum period of nine months (six months initial extendable by three months in case investigations are not completed) or till the decision of SBC, whichever is earlier. In case of suspension of the agency, RINL may consider to discontinue all the existing contract(s) with the agency. During the period of suspension, no further business dealing including placement of orders against tenders under finalization shall be made with the agency w.e.f. the date of suspension.

22.6 After issue of suspension order, till the conduct of the agency is under investigation, RINL will not entertain any correspondence /argument from the agency (except receiving reply to the show cause notice).

22.7 If the agency desires some information / clarification or desires to see any document before replying to the show-cause notice, the agency may appear in person in the Standing Banning Committee meeting on the stipulated date and time wherein the agency will be furnished the desired information including sharing of relevant document. If the agency requests for inspection of any relevant document in possession of RINL, necessary facility for inspection of documents will be provided. The agency may correspond only with the SBC.

22.8 Convener SBC shall issue notice to the agency asking him/her to attend the meeting in person or informing him/her that he/she may send his/her representative. The date, time and venue of the meeting shall be clearly mentioned in the notice. To meet the ends of 'Natural Justice', two opportunities will be given to the agency to send their representative. In case of failure, SBC can proceed ex parte.

22.9 Opportunity will be given to the agency to submit any documents or evidence in his defense to SBC. Cross examination of the agency if required shall also be done by SBC.

22.10 The Banning Order based on the investigation by SBC shall be issued to the agency. In case of Banning of Inter -connected agencies the copy of the Banning Order shall be sent to known inter-connected agencies also.

22.11 Banned/Suspended agencies are not eligible for submission of quotations/offers against any type of tender (GTE/OTE/LTE/STE/SOT) during the period for which they have been suspended/banned for business dealings with RINL and if submitted, those quotations/ offers will be treated as unsolicited and shall not be considered.

22.12 The agency may file an appeal against the Banning Order to CMD-RINL within 30 days from the date of issue of the Banning Order.

22.13 Agency, may seek review of the banning order passed originally by RINL, either before or after filing of appeal before the Appellate Authority or after disposal of appeal by the Appellate Authority, upon disclosure of new facts / circumstances or subsequent development necessitating such review.

22.14 RINL may decide to circulate the name of agency with whom business dealings have been banned, to the Government Departments, other Public Sector Enterprises, etc. for such action as they deem appropriate.

22.15 If business dealing with any agency has been banned by the Central or State Government or any other Public Sector Enterprise, RINL may, without any further enquiry or investigation, issue an order banning business dealing with the agency and its inter-connected agencies.

Note: 'Party / Contractor / Consultant/ Supplier / Purchaser / Customer/Bidder/ Tenderer' is indicated as 'Agency'.

-----  
**II. DETAILED TERMS AND CONDITIONS OF RFx (RFx) FOR IMPORTED RESPONSES:-**

**1.0 GENERAL:**

1.1 The tender shall be governed by the General Conditions of Contract for supply (GCC) which is available on VSP's website which can be freely accessed and downloaded.

1.2 Tenders shall be treated as if the GCC has been accepted in toto by the Tenderer unless deviations if any are specified in the offer.

1.3. RINL is employing SAP SRM 7.0 for Electronic Tendering System. E-RFx (Electronic Request for Proposal) Response to be submitted electronically through System only. No physical paper/print needs to be submitted. Bidders need to have User ID and Password to participate in SRM E-Tenders. All enlisted vendors of RINL would be provided User ID and password for participating in RINL E-Tenders. The tenderer who responds to this tender needs to upload the scanned copies of his bid documents.

1.4 RINL/VSP shall deal directly with Foreign Suppliers/ Tenderers and would prefer not to entertain involvement of any Agent /Agency/ Intermediary. In case a Foreign Supplier / Tenderer desires to avail services of an Indian Agent/Agency /Intermediary related to their tenders or orders they should be registered with VSP for which detailed procedure is available through ROS available in RINL/VSP SRM Portal.

1.4.1 For any particular tender no Indian agent can represent or quote on behalf of more than one foreign suppliers. In case this principle is violated the relevant offers will be rejected.

1.4.2 The agency commission if any shall be clearly indicated and the same shall be deducted from payment due to the supplier and paid directly to the Indian Agent in Indian Rupees only.

1.5 Offer received through party/parties to whom RFX was not issued are treated as unsolicited offer.

1.5.1 In case the RFX is redirected by Principals to whom RFX was issued to their agent/ dealer/ stockist/ distributor such offer may be treated as regular offer subject to submission of their letter of authorization as per the format of "Authorization Certificate" given in the cFolder. The Authorization Certificate shall be furnished on the letterhead of the manufacturing concern/OEM and should be signed by a person on behalf of the manufacturer/OEM who is competent to authorize the agent/dealer/stockist/distributor. A Scanned copy of the Authorisation Certificate should be uploaded by the concerned agent/ dealer/ stockist/ distributor while registering through ROS on SRM Portal.

1.5.2 In case the Principal submits the offer with a request for placement of RFX / PO on their agent/ dealer/ stockist/ distributor for execution then such offer should be accompanied with -

a) the necessary letter of undertaking from the Principal on their letter head without any correction in the format as per the RFX.

b) The Letter of consent from the respective agent/ dealer/ stockist/ distributor on their letter head to the effect that they would execute the RFX/PO as per the terms and conditions finalised with the Principal supplier by RINL.

Scanned copies of the Authorisation Certificate should be uploaded by the concerned agent/ dealer/ stockist/ distributor in cFolder while submitting their offers through SRM Portal.

1.5.3 In case the foreign Supplier/ Tenderer desires to submit the Offer through their authorized Indian subsidiary / Agent / distributor / Intermediary in INR currency the "Detailed terms & conditions for Domestic Responses" at I (Detailed Terms & Conditions of ITT(RFX) for Domestic Responses)above shall apply.

## 2.0 PRICES:

2.1 In case of Two bid tenders :

a. There shall be no indication of prices in the Techno-commercial bid. If prices are indicated there, such offers are liable to be rejected. Only technical details of the offered items and duly filled in TR format should be uploaded. Offer not accompanied with the TR format is liable for rejection.

b. It may be noted that Unit Price is to be quoted for each and every item of the RFX.

c. The prices quoted should be firm unless otherwise allowed specifically till completion of delivery.-- VITAL

d. SRM LIVE AUCTION (REVERSE E-AUCTION):

RINL shall have the option of resorting to reverse e-auction on SAP SRMLIVE AUCTION PLATFORM. The bidders are required to submit their E Bids of Techno Commercial Bid and Price Bid through VSP s SRM Portal. After Technical and Commercial evaluation of E Bids the techno commercially accepted bids would be considered for further processing and the price bids of these bidders will be considered for determining the start bid price on Landed Net of ITC basis. The Start Bid Price shall be the Lowest of the E price Bids submitted at the time of E RFX submission. This start bid price shall be displayed in the E Auction System on the scheduled E reverse auction date and Time. All technically and commercially acceptable bidders would be required to participate in the reverse e-auction and quote from a start Price. In reverse e-auction the bidders would be required to quote prices only on the basis of landed net of ITC at the specified VSP stores. Definition of key terms for RINLs SAP SRM Live-auction (E-Reverse Auction)user manual is available in SRM Portal. No separate User ID and Password is required for participating in Live Auction. User ID and Password used for Participating in E-Tendering are to be used for Live Auction also. Illustration of arriving landed net of ITC price is given below. In case of foreign bidders LNIP Calculator would be provided in Auction document for bidders to arrive equivalent LNIP in Bidders Currency.

#### Calculation of LNIP and Landed Cost for Imported Cases (FOB basis/unit)

1. Exchange rate (for ex) 1 EUR=INR-----: 71.04
2. Basic Rate in EUR-----: 100
3. FOB Shanghai Sea port basis (EUR)-----: 100
4. Add: Sea Freight @ 3.09%, since not offered by the bidder: 3.09
5. Sea freight charges in Rs (4\*1)-----: 219.51
6. CFR Chennai/Vizag Seaport basis (3 + 4)-----: 103.09
7. Add: Insurance charges @ 0.035% on CFR i.e on 6-----: 0.036
8. Total CIF CHENNAI/VIZAG SEA port basis EUR (6 + 7): 103.126
9. CIF Chennai / Vizag sea Port in Rs. (8 \* 1)-----: 7326.08
10. Assessable Value in Rs. ( Same as CIF value )-----: 7326.08
11. Basic Custom Duty @ 5% on Sl.No.10 in Rs.-----: 366.30
12. Education Cess @ 3% on Sl.No.11 in Rs.-----: 10.99
13. IGST @ 18% (on Sl.No. 10+11+12) in Rs.-----: 1386.61
14. Customs Clearing & Forwarding (C<(>&<)>F) charges considered notionally @ 0.25% on total Assessable value on Sl.No. 10 in Rs.----- : 18.32
15. IGST @ 18% on C & F charges on Sl.No.14-----: 3.30
16. Inland transport charges from Chennai sea port to VSP Stores @ 5% (assumed) on total assessable value i.e on Sl.No.10 in Rs.: 366.30
17. IGST @5% on inland transport charge on sl.no-16-----: 18.32
18. IGST @5% on inland transport charge on sl.no-5-----: 10.98
19. Landed Cost (Sl.No.9+11+12+13+14+15+16+17+18) in Rs. : 9507.19
20. Total ITC (13+15+17+18)-----: 1419.19
21. LNIP (Sl.No. 19-20)-----: 8087.99

#### Note:

1. Above Landed cost & LNIP may vary depending on the actual freight, insurance, import customs duties, foreign exchange rate and C<(>&<)>Fcharges and inland transport charges, etc. that will prevail and will be incurred at actuals by VSP at the time of shipment.

2. For Inland transport charges indicated at sl.no-14 above, if the GST is paid by RINL on reverse Charge basis the rate applicable is 5 % for GTA services. If the GST is paid by GTA in his invoice, the rate will be 12% on forward charge basis and ITC can be claimed by GTA on his inputs and input services.

#### Calculation of LNIP and Landed Cost for Imported cases (CFR Basis/Unit)

1. Exchange rate (for ex) 1 EUR=INR-----: 71.04
2. Basic Rate in EUR-----: 100
3. CFR Chennai / Vizag Seaport basis (EUR)-----: 103.09
4. CFR Chennai / Vizag Seaport basis (3) (EUR)-----: 103.09
5. Add: Insurance charges @ 0.035% on CFR i.e on 4-----: 0.036

6. Total CIF CHENNAI/VIZAG SEA port basis EUR(4+5)--:	103.126
7. CIF Chennai / Vizag sea Port in Rs. (6 * 1)-----:	7326.08
8. Assessable Value in Rs. ( Same as CIF value )-----:	7326.08
9. Basic Custom Duty @5% on Sl.No.8 in Rs.-----:	366.30
10. Education Cess @ 3% on Sl.No.9 in Rs.-----:	10.99
11. IGST @18% (on Sl.No. 8+9+10) in Rs.-----:	1386.81
12. Customs Clearing & Forwarding (C<(>&<)>F) charges considered notionally @ 0.25% on total Assessable value on Sl.No. 8 in Rs.----- :	18.32
13. IGST @18% on C & F charges on Sl.No.12-----:	3.30
14. Inland transport charges from Chennai sea port to VSP Stores @5% (assumed) on total assessable value i.e on Sl.No.8 in Rs.----:	366.30
15. IGST @5% on inland transport charge on sl.no-14-----:	18.32
16. Landed Cost (Sl.No.7+9+10+11+12+13+14+15) in Rs. --:	9496.21
17. Total ITC (11+13+15)-----:	1408.22
18. LNIP (Sl.No. 16-17)-----:	8087.99

**Note:**

1. Above Landed cost & LNIP may vary depending on the actual freight, insurance, import customs duties, foreign exchange rate and C<(>&<)>F charges and inland transport charges, etc. that will prevail and 1 be will be incurred at actuals by VSP at the time of shipment.

2. For Inland transport charges indicated at sl.no-14 above, if the GST is paid by RINL on reverse Charge basis the rate applicable is 5 % for GTA services. If the GST is paid by GTA in his invoice, the rate will be 12% on forward charge basis and ITC can be claimed by GTA on his inputs and input services.

e.EVALUATION: After the Reverse e-auction is conducted the E Price Bids of all the TA & CA tenderers irrespective of whether they have participated in the Reverse e-auction or not shall be considered for Evaluation. Based on the prices so received through Reverse e-auction and the E Price Bids received along with the Techno-commercial RFx a composite comparative statement shall be made considering the lower of the prices (i.e. E price bid prices and Reverse e-auction prices) of all the tenderers. Placement of order shall be considered on the L-1 price (LNIP) so arrived.

f. Exchange rate prevailing on one day before the scheduled date of Price Bid Opening will be taken for making composite comparative statement.

**2.2. PRICE BASIS:**

**a) Delivery by Sea:**

i) In case the Gross weight of the consignment is more than 250 Kgs the mode of delivery shall be preferably by Sea. The prices shall be quoted on FOB-loadport and CFR-Chennai or Visakhapatnam Seaport basis inclusive of packing charges as per Incoterms 2010. For prices on CFR basis seaport of destination shall be Visakhapatnam for FCL consignments and Chennai for LCL consignments. Sea-port of destination (either Chennai or Visakhapatnam) is to be clearly indicated in case prices are quoted on CFR basis.

ii) However after receipt of packing details RINL / VSP at its sole discretion reserves the option to amend the delivery term from FOB to "CFR-Chennai / Visakhapatnam port" subsequent to placement of Order. The option of exercising FOB or CFR delivery shall be provided in the Purchase Order (PO).

**b) Delivery by Air:**

i) In case the Gross weight of the consignment is less than 250 Kgs the mode of delivery shall be preferably by Air. The prices shall be quoted on Ex-works or FCA- international air port (load-port) basis or CPT-Indian international airport inclusive of packing charges as per Incoterms 2010. In case the tenderer quotes prices only on ExW / FCA basis the prevailing contractual freight of VSP shall be loaded on quoted ExW / FCA prices based on packing details.

ii) However after receipt of packing details RINL / VSP at its sole discretion reserves the option to amend the delivery term from "ExWorks" to "FCA International airport" or "CPT- Indian International Airport" subsequent to placement of Order. The option of exercising the above delivery terms shall be provided in the Purchase Order (PO).

c) In case the foreign tenderer quotes prices only on ExWorks/FOB/FCA basis evaluation shall be done by loading 3.125% on the quoted Ex Works/FOB/FCA price towards Sea/Air Freight and Insurance.

d) In case of delivery by both Sea and Air Transit-Insurance shall be to VSP's account and loading of 0.035% (prevailing which is subject to change) shall be done on quoted CFR/CPT prices towards insurance.

e) However VSP may choose the mode of transport (by AIR or SEA) as per its choice and requirement before or after placement of order.

### 2.3 PACKING:

Necessary air/sea worthy packing as the case may be shall be provided to the material to avoid damages in transit. The tenderer must indicate the approximate NET/GROSS weight and dimensions of the packing for the goods offered.

2.4 The offered price should be against each catalogue number covering all the items / parts / bill of material given in the description of the item along with price break-up. If in the opinion of the bidder additional parts are also required to be supplied for making the item complete price should be quoted with detailed break up for each of the additional parts.

2.5 The date and time for conducting Reverse E-Auction in respect of two bid tenders shall be intimated only to the techno-commercially accepted tenderers.

### 3.0 PAYMENT TERMS:

3.1 100% payment shall be made through irrevocable Letter of Credit (L/C) or Cash Against dispatch Documents (CAD). Bank charges in India for the Letter of Credit / CAD mode of payment shall be to VSP's account and all charges outside India (including confirmation charges if applicable) shall be to beneficiary's / Supplier's account. Pre-payment term (payment in Advance prior to shipment) is NOT acceptable to RINL VSP.

3.2 Payment shall be made direct by NEFT/RTGS mode or such other mode of electronic fund transfer offered by banks against the required details provided by the tenderer through ROS on SRM Portal.

### 3.3 SHIPPING DOCUMENTS:

The following documents are to be submitted by supplier:

a) AWB / BL b) Signed Commercial Invoice c) Packing list d) Manufacturer's test certificate (wherever applicable) e) Certificate of Origin from Chamber of Commerce or Trade Association f) Certificate to the effect that the consignment has been dispatched through the nominated freight forwarding agent stipulated in the Order g) Certificate to the effect that the contents in each case are not less than those entered in the invoice and packing list and quality of goods guaranteed as new and as per relevant technical specifications. h) other applicable documents if any.

After shipment Supplier shall immediately send TWO sets of non-negotiable documents by airmail / courier to RINL-VSP (one set to AGM-Purchase and other set to DGM (T<(>&<>)S-smalls) in advance). However original negotiable documents shall be sent through bank for payment and for customs clearance of the consignment by VSP at destination port.

### 4.0 TAXES DUTIES AND LEVIES:

4.1 All taxes and duties outside India are to Suppliers account.

4.2 The tenderer should indicate the following in their Offer (Techno-Commercial bid):

- i) Customs Tariff number
- ii) Tenderer's bank account details including SWIFT code
- iii) Item-wise packing details: No. of packages dimensions of each package Gross weight & Net weight
- iv) Country of Origin of the items offered.

4.3 In case of supervision for erection testing & commissioning the existing applicable Good and Services Tax and Income-tax percentages are to be stated separately.

4.4 The Indian Income Tax relating to rendering of supervision services at site which the employer may require by law to deduct shall be deducted at source as per provision of Indian Income Tax Act 1961 with subsequent revision. The employer shall provide to the contractor with official tax receipt evidence of such tax payment.

4.5 Further " Vendor/supplier/contractor shall comply with all the necessary statutory compliances including but not limited to providing GST invoices or other documentation as per GST law relating to the above supply/service to RINL, uploading the details of the invoice, payment of taxes, timely filing of valid statutory returns for the tax period in the Goods and Service Tax Portal.

In case the Input Tax Credit of GST is denied or demand is recovered from RINL on account of any act of the Vendor, including but not limited to non-payment of GST charged and recovered, non-generation of E-Way Bill, non-filing of Returns, non-uploading/improper uploading of valid invoices raised on RINL in the Returns etc., the Vendor/supplier/contractor shall indemnify RINL in respect of all of claims tax, penalty and/or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. Such amount shall be recovered from any payments due to the vendor/ supplier/contractor or from security deposit or any other amount available with RINL in the same contract or in other contracts including future contracts.

If any tax has been paid by the vendor/supplier/contractor in pursuance of any demand on account of suppression, fraud or wilful misstatements of facts; then the same shall not be passed on to RINL through debit notes or invoices or supplementary invoices."

#### 5.0 SAMPLES DRAWINGS AND TEST CERTIFICATES:

5.1 Wherever sample approval is required before manufacture and bulk supply the sample should be supplied within 3 (three) weeks of date of placement of Purchase Order (PO). In case of any deviation the time required for submission of sample for approval is to be specified in the offer.

5.2 Drawing submission and approval : Where drawings are required to be furnished for approval upon placement of PO the schedule for submission of drawings and for supply after approval are to be clearly indicated in the offer failing which a maximum of 3 (three) weeks from the date of PO shall be considered to be the period for submission of drawings. (The drawings submitted shall be approved within 15 days of receipt).

5.3 Return of drawings: Wherever applicable drawings attached with the RFX are to be returned along with the offer / regret letter.

5.4 Test certificates and all other documents specified in the Technical Response (TR) format are required to be furnished to the Inspector at the time of inspection as well as part of dispatch documents at the time of supply of material.

#### 6.0 INSPECTION:

6.1 RINL reserves its right to inspect the stores and alter the place of inspection at its sole discretion.

6.2 Generally inspection shall be carried out at RINL / VSP Stores for all items such as operational consumables etc.

6.3 The supplier shall furnish the inspection call along with all the internal test reports as well as other test certificates specified in the Technical Response (TR) format at least 15 (fifteen) days in advance of the scheduled delivery date to enable VSP to examine the same and issue dispatch clearance/carry out inspection at the suppliers premises. The dispatch of stores by the suppliers shall be only after receipt of dispatch clearance or accepted inspection note/ certificate.

#### 7.0 GUARANTEE:

7.1 Supplies are to be guaranteed for 12 (twelve) months from the date of use or 18 (eighteen) months from the date of receipt and acceptance whichever is earlier.

7.2 Replacements of defective items / parts if any during the guarantee period must be delivered by the Supplier free of charge up to VSP stores on DDP basis (Incoterms 2010).

7.3 Items having shelf life should conform to specified guarantee as per RFX the proof of date of manufacture should be available in such cases either on the label of the item or on the Guarantee certificate.

#### 8.0 NUMBER OF SOURCES:

8.1 VSP reserves the right to procure any or all the tendered items/quantities from one or more than one source.

8.2 The number of sources is as indicated in the RFX. RINL /VSP reserves the right to procure any or all the tendered items from one or more than one source.

8.3 The distribution of quantity of each item to be ordered shall be normally in the ratio of 100% in case of one source, 2/3 : 1/3 in case of two sources, 2/4 : 1/4 : 1/4 in the case of three sources, 2/5 : 1/5 : 1/5 for four sources, 2/6 : 1/6 : 1/6 : 1/6 : 1/6 for five sources in the order of ranking from lowest technically and commercially acceptable tenderers subject to matching the lowest price.

#### 9.0 DELIVERY SCHEDULE:

9.1 Tenderers are requested to note VSP's delivery schedule and quote their best delivery considering all aspects including drawing submission and approval sample submission and approval pre-dispatch inspection transportation time etc. as applicable to the tender.

9.2 VSP reserves the right to reject offers not meeting VSP's schedules/to consider offers with best delivery schedule(s).

9.3 It may be noted that in the event of an order delivery shall be the essence of the contract. Further failure to adhere to the delivery schedules committed in the tender shall attract contractual remedies as per GCC.

#### 10.0 VALIDITY:

The tender should be valid for minimum 90 days from the date of opening of tender / extended date of opening of tender

#### 11.0 COMMUNICATION OF NON-PARTICIPATION AND NO RESPONSE:

11.1 In case the tenderer chooses not to participate in the tender the same can be intimated by way of Do Not Participate button in the RFX. The reasons for non-participation may be spelt out clearly such as (a) Tendered items not in manufacturing range (b) production constraints presently (c) over booked and hence cannot meet VSP's delivery schedule (d) not interested to do business with VSP (e) quantity tendered is small or uneconomical (f) any other reasons.

#### 12.0 INTEGRITY PACT:

12.1. Tenderer must submit signed Integrity pact in the prescribed format of VSP available in VSP's website along with the Techno-Commercial RFX wherever applicable and asked for in RFX by uploading into cFolder. The original signed Integrity pact shall be submitted prior to placement of order.

### 13.0 EXAMINATION AND REJECTION OF OFFERS:

13.1 RINL evaluates technically and commercially accepted offers on Landed Net Of ITC Price (LNIP) basis.

13.2 Offers which deviate from the vital conditions ( as illustrated below ) of the tender shall be rejected :

- a) Non-submission of Technical Response (TR) format in the cFolder.
- b) Variable price being quoted (without any ceiling limit for such variation and Price Variation Clause) against requirement of firm price.
- c) Submission of incomplete offers.
- d) Acceptance of Integrity Pact for ITTs / Tenders for a value of Rs. 1 crore and above and wherever applicable and asked for in the RFX.

13.3 Tenderers within / extended submission deadline time can withdraw their RFX response and resubmit a revised response.

13.4 In case where RINL/VSP decides to procure the material from one or more than one source (Only one offer shall be submitted by Companies using same equipment / facilities/address) and if it comes to the notice of RINL / VSP at any stage during the finalization of the tender or after placement of order / execution of the contract that offers been made by Companies using same equipment / facilities / address then such offers / orders shall be rejected / cancelled forthwith and the for a period of 2 years. Bid money / EMD / Security Deposit etc. if any shall be forfeited. Decision of RINL / VSP in this regard shall be final and binding.

### 14.0 PUNITIVE ACTIONS TO BE TAKEN AGAINST AGENCIES WHO SUBMIT FALSE/FORGED DOCUMENTS TO VSP:

14.1 If it comes to the notice of RINL at any stage from request for enlistment/ tender document that any of the certificates / documents submitted by applicants for enlistment or by bidders are found to be false/ fake/ doctored the party will be debarred from participation in all RINL tenders for a period of 5 (five) years including termination of contract if awarded. EMD/ Security Deposit etc. if any will be forfeited. The contracting Agency in such cases shall make good to RINL any loss or damage resulting from such termination. Contracts in operation anywhere in RINL will also be terminated with attendant fall outs like forfeiture of EMD/ Security Deposit if any and recovery of risk and cost charges etc. Decision of RINL Management will be final and binding.

14.2 In case the commercially and technically acceptable lowest price offered tenderer backs out after tender is opened in single bid tender and in two bid tender after commercial bid / price bid is opened; or after finalization of contract punitive actions shall be as per prevailing guidelines which include:

- (a) If any tenderer backs out after opening of the Techno-commercial bids but prior to Reverse e-auction they shall be kept under hold without issue of RFX for the next 1 tender or 3 months whichever is later.
- (b) If the L1 tenderer backs out after opening of the tenders in case of single bid cases ( or) after the Reverse e-auction / opening of the sealed price bids in case of 2-bid cases and within the validity period they shall be kept under hold without issue of RFX for the next 3 tenders or 6 months whichever is later including barring participation in open tenders.
- (c) If the tenderer backs out after award of the Contract they shall be kept under hold without issue of RFX for the next 3 tenders or 6 months whichever is later apart from proceeding with alternative procurement action (re-tendering) at the risk & cost of the defaulting supplier

### 15.0 RIGHT TO REJECT TENDERS:

15.1 RINL/VSP does not pledge itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of the tender or portion of the quantity tendered and the supplier shall supply the same at the rate quoted.

## 16.0 AUTHORISATION:

16.1 Representatives of Tenderers are required to produce letter of authorization if they are to be permitted to attend RFx opening (simultaneous log on process).

## 17.0 ESTABLISHMENT OF CREDIBILITY OF UNENLISTED BIDDERS PARTICIPATING IN THE TENDERS :

17.1 If the tenderer who responds to this tender notice is not presently enlisted with RINL/VSP he is requested to furnish copies of the following documents separately along with the Techno-Commercial RFx wherever applicable by uploading into cFolder (hard copies are to be submitted immediately on e-submission of RFx):

- a) Notarised registration Certificate from Chamber of Commerce / their respective designated Govt Agency in English Version.
- b) Self certified Financial worth and audited financial statements for the last 3 years.
- c) Self certified Purchase Orders/Contract copies for the same or similar tendered item(s).
- d) Self certified ISO certificate if any.

17.2 Kindly note that the above information is required to assess the credibility of the vendor not presently enlisted with RINL / VSP. The tender of un-enlisted vendor may be rejected in case of non-submission or incomplete submission of the above documents except d) of 17.1 or if RINL/VSP finds that the creditability of the un-enlisted Vendor is not satisfactory on the basis of documents furnished. The vendor shall produce originals of the above documents for verification if RINL/VSP so desires. RINL/VSP's decision in this regard shall be final.

17.3 The tender of un-enlisted vendors received without submission or incomplete submission of the documents listed at 17.1 above to check the credibility will not be considered for further evaluation.

## 18.0 PROCEDURE FOR ORDERS TO BE PLACED ON CFR/CIF/CPT/ CIP / DAT / DAP INCOTERMS :

The following procedure may be adopted in case of orders placed with the above delivery terms for Custom clearing and taking delivery from the supplier's agent at destination port :

- i) Supplier or their authorized freight forwarder shall forward the Cargo Arrival Notice (C.A.N.) along with soft copy of shipping documents and AWB / BL to the consignee at least 3 to 5 days before arrival of Cargo at Destination Port. Also provides the contact details and address of their forwarder's agent (Local agent) at Destination Port to get delivery order.
- ii) Purchase Dealing section shall arrange original AWB/BL duly endorsed by the bank authorities as the case may be before arrival of Cargo to obtain the delivery order from Supplier's Freight forwarders Agent at Destination Port.

OR

Alternatively supplier shall instruct their agent at destination port to issue delivery order without insisting for original AWB / BL or the same may be stipulated on AWB/BL copy.

- iii) As the free time allowed for Air Cargo is only 72 hours for custom clearance and take delivery of Cargo if any delay takes place in providing the above information before arrival of Cargo and could not able to Custom Clear and take delivery of the Cargo within free time on account of the above reasons or due to discrepant shipping documents such Demurrage will be attributable to the Supplier.
- iv) In case of CIF or CIP delivery terms the supplier should take insurance coverage up to Central Stores Department / Visakhapatnam Steel Plant Visakhapatnam.
- v) While issuing AWB/BL supplier may include RINL/VSP's Custom House Agent (CHA) as one of the notifying party.

## 2 GENERAL CONDITIONS FOR ACCEPTANCE OF TENDER-SUPPLY:

### GENERAL CONDITIONS OF CONTRACT FOR SUPPLY

In ERP System the following terms mentioned in GCC for Supply may be read as follows :

Invitation to Tender (ITT) : RFX

Tender Specifications : RFX specifications

Acceptance of Tender (AT, A/T) : Purchase Order (PO)

Article No. Particulars

1. Definitions
2. Parties to the Contract
3. Responsibility for execution the contract
4. Specification & Samples
5. Return of Specifications. Drawing, Certified samples etc.
6. Packing
7. Delivery and Risk Purchase
8. Inspection & Rejection
9. Recovery of Sums due
10. System of payment
11. Laws governing the contract
12. Indemnity
13. Bribes, commission, corruption, gift etc.
14. Insolvency and breach of contract
15. Force Majeure
16. Arbitration clause for contract where contract price is Rs.5 lakhs & above.
17. Arbitration clause for contracts where contract price less than Rs.5 lakhs.
18. Headings of articles
19. Non-Waiver of Defaults
20. General
21. Jurisdiction.
22. Liquidated Damages

#### Article-1: DEFINITIONS

The following terms or expressions as used in the General Conditions of Contract and in the appertaining RFX and RFX specification, shall have the meaning defined, hereunder:

1.1 Purchaser shall mean The Rashtriya Ispat Nigam Ltd, Visakhapatnam Steel Plant incorporated under the companies Act 1956 having their registered office at Main Administrative Building, Visakhapatnam - 530031 and shall include their successors or assignees.

1.2 "The Contractor" shall mean the person firm or Company whose tender has been accepted and shall be deemed to include his/its/their successors, (approved by the Purchaser), representatives, heirs, executors and administrators unless excluded by the Contractor.

1.3 The "Contract" shall mean and include RFX, PO (Purchase Order) and amendments to PO thereof issued by the Purchaser in writing and General Conditions of Contract for supply.

1.4 "Stores" shall mean all or any part of materials and/or services as per the description of Stores in the PO.

1.5 "Delivery" shall mean delivery of the stores acceptable to Purchaser as per the PO and as per delivery schedule indicated in the PO.

1.6 "The Inspector" shall mean any person or agency nominated by or on behalf of the Purchaser to inspect Stores under the Contract.

1.7 "Contract price" shall mean the sum accepted by Purchaser or the sum calculated in accordance with the prices accepted by the Purchaser as indicated in the PO.

1.8 "Test" shall mean such test or tests as are prescribed by the specification or considered necessary by the Inspector.

#### Article -2: PARTIES TO THE CONTRACT

2.1 The parties to the Contract are the Contractor and the Purchaser

2.2 Authority of person signing documents: A person signing the tender or any other documents forming part of the Contract on behalf of another shall be deemed to warrant that he has authority to bind such other.

2.3 Notices on behalf of the Purchaser: Notices on behalf of the Purchaser, in connection with the Contract, may be given by any authorised officer of the Purchaser dealing with the contract.

### Article-3: RESPONSIBILITY FOR EXECUTING THE CONTRACT

3.1 General: The Contractor is to be entirely responsible for the execution of the Contract in all respects in accordance with the terms and the conditions as specified in the PO. Any approval which the Inspector may have given in respect of the Stores (whether with or without the Test carried out by the Contractor or the Inspector) shall not bind the Purchaser and notwithstanding any approval or acceptance given by the Inspector, it shall be lawful for the Purchaser to reject the Stores on arrival at the destination or when put to use if it is found that the Stores supplied by the Contractor are not in conformity with the terms and the conditions of the Contract.

3.2 Subletting of Contract: The Contractor shall not sublet, transfer or assign the contractor any part thereof to any one without the written permission of the Purchaser. In the event of Contractor contravening this condition, the Purchaser shall be entitled to cancel the Contract and to purchase the same or similar Stores elsewhere on the Contractor's account and at his risk and cost.

3.3 Acceptance of the higher tender: If a contract is placed on a higher tender as a result of this RFX in preference to the lowest acceptable offer on consideration of offer of earlier delivery, the tenderer will be liable to pay to Visakhapatnam Steel Plant the difference between the contract rate and that of the lowest acceptable tender in case of failure to complete supplies in terms of such contract within the date of delivery specified in the tender and incorporated in the contract. This is without prejudice to other rights under the terms of contract.

#### 3.4 TAXES AND SURCHARGES:

##### 3.4.1 GOODS AND SERVICES TAX(GST):

- i) Any variations in the rate of GST as applicable on account of amendments made to the respective Acts made after the date of PO but during the contractual delivery schedules shall be borne by the Purchaser.
- ii) In case of acceptance of stores beyond the original delivery schedules, the rate of GST on the last day of original delivery schedule or the actual rate of GST on the date of delivery whichever is lower, shall be to the account of Purchaser.
- iii) The Purchaser shall reimburse the variation as above based on documentary evidence like relevant Gazette Notification or any other documents to the satisfaction of the Purchaser after considering any credit / relief /concession etc allowable or allowed to the Supplier under the respective Act or Rules made after the date of PO.

##### 3.4.2 GENERAL:

- i) Any new taxes, surcharges and duties leviable on the subject contract due to change in legislation during the contract period shall be reimbursed subject to the applicability of the said Act to the contract to the satisfaction of Purchaser and production of documentary evidence after availing of statutory concessions, benefits etc.
- ii) The Contractor shall pay and bear all other liabilities, taxes and duties not specifically agreed to by the Purchaser in the contract.
- iii) Where the contract price is indicated in Indian Rupees, Foreign Exchange variations shall not be payable by Purchaser to the Contractor unless specifically provided in the PO.

### Article-4: SPECIFICATIONS AND SAMPLES

4.1 The Contractor shall supply the Stores in accordance with the specification / description of Stores given in the PO.

4.2 The Purchaser reserves the right to alter the description of Stores including Drawings given in the PO. In the of event any such alteration results in any implication to the delivery and price, such implications shall be mutually agreed between the Purchaser and the Contractor.

4.3 In case certified sample has been issued by the Purchaser and the specifications/drawings also exists in the PO then the certified sample will govern the supply only to the extent of material (if material specifications are not stipulated in PO), workmanship and finish. However, if neither a specification nor a drawing has been mentioned in the PO then certified sample issued by the Purchaser shall govern the supply of Stores in all respects.

4.4 Where neither specifications/drawings nor samples have been given by the Purchaser and a sample submitted by the Contractor has been approved, the Stores shall conform to the sample submitted by the Contractor and approved by the Purchaser.

4.5 If any discrepancies are noticed in the drawings, the Contractor shall bring such discrepancies to the notice of the Purchaser whose decision shall be final. If certified/approved sample differs with the specification/description of Stores given in the PO, the Contractor shall bring the discrepancy to the notice of the Purchaser and obtain the decision of the Purchaser with regard to final specification/description of the Stores to be supplied.

4.6 Submission of samples: Submission of samples will be governed by the following:

4.6.1 Marking: All samples submitted must be clearly labelled with the Contractors name and address and the PO number and date.

4.6.2 Advance sample: Where an advance sample is required to be approved before effecting the bulk supplies, the Contractor shall submit the sample within the time specified in the PO. If the Contractor is unable to do so, he must apply immediately to the office issuing the PO for extension of time, stating the reasons for the delay. If the Purchaser is satisfied that a reasonable ground for an extension of time exists such additional time may be allowed as considered to be justified (and, the decision of the Purchaser shall be final) with or without alteration in the Delivery period stipulated in the PO and on such conditions as deemed fit. In the event of the failure of the Contractor to deliver the advance sample by the date specified in the PO or any other date to which the time may be extended as aforesaid by the Purchaser or the rejection of the sample, the Purchaser shall be entitled to cancel the Contract and, purchase the Stores at the risk and cost of the Contractor.

4.6.3 Free: All samples required for Test shall be supplied by the Contractor free of cost unless the Contract provides otherwise. Where the samples which is supplied free is rejected after examination and test, the same or whatever remains of the sample after examination and test will be returned to the Contractor at his cost on request made, within one month of the date of rejection.

4.6.4 If the Contractor submits a sample with his tender the same shall not govern the standard of supply except when it has been specifically stated in the PO.

#### Article - 5 : RETURN OF SPECIFICATIONS, DRAWINGS, CERTIFIED SAMPLES ETC.

5.1 The Purchaser reserves the right to ask and receive in good condition from all the parties to whom RFx has been sent the specifications/drawings/ certified samples, if any, issued by the Purchaser.

5.2 The specifications, drawings and other technical details indicated in the RFx are exclusive property of RINL, VSP and the party to whom the RFx has been sent, has no right to use these documents for purposes other than for use by RINL, VSP<(>,<)>

#### Article - 6: PACKING

6.1 The Contractor shall be responsible for the Stores being properly packed for transport by Rail, Road, Air and Sea (as the case may be) so as to ensure their being free from loss or damage on arrival at their destination. The Contractor should comply with the standard packing conditions prescribed by the Railway/Transport companies/Steamer/Air carries.

##### 6.2 Marking of Packages

Each package shall be marked by and at the expense of the Contractor with indelible paint / metallic tags as follows:

- i) PO No. & Date
- ii) Description and quantity of Stores.
- iii) Gross weight
- iv) Net weight (if applicable).
- v) Name of the Contractor/distinct mark for identification of the Contractor.
- vi) Name of the Purchaser with full address.

6.3 All packing materials shall be the property of the Purchaser unless otherwise stated in the PO.

6.4 Each package shall contain a packing note giving the details of each item of the PO, giving Sl. No. of PO, Qty, Catalogue No. as applicable as marked on the package.

6.5 For wagon loads, necessary instructions provided in the PO shall be followed. Further the Contractor shall ensure that the freight is charged on right weight and under the correct classification through most economical route.

6.6 If the Stores are not packed and marked in accordance with the instructions, the consignments are liable to be rejected by Purchaser whose decision as to the sufficiency or otherwise of compliance with the instructions shall be final.

#### Article -7: DELIVERY AND RISK PURCHASE

7.1 The time for and the date of delivery of the Stores stipulated in the RFx shall be deemed to be the essence of the contract and delivery must be completed as per delivery schedule specified in the PO.

7.2 The Contractor shall deliver the Stores at the place specified as per the PO. No Stores shall be deliverable at the Purchaser's Consignee's premises on Sunday and Public Holidays without written permission of the Purchaser.

7.3 As soon as it is apparent to the Contractor that the delivery dates as stipulated in the contract cannot be met, he should apply for extension of the delivery dates to the Purchaser giving reasons for delay along with supporting documents, if any, and also the date upto which the extension of delivery period is required. The Purchaser will consider such request depending on the nature of the case and either agree for such extension suitably or reject the said request of the Contractor. In case of non supply during the stipulated delivery period, the Purchaser will be free to cancel the Contract or a portion thereof and also purchase stores at the risk and cost of the Contractor. In any case the Contractor shall have no claims whatsoever in respect of cancellation of the contract.

7.4 The Purchaser reserves the right to cancel the contract or a portion thereof and purchase the stores at the risk and cost of Contractor after giving due notice to the Contractor even before completion of the contractual delivery schedule if it becomes apparent that Contractor will not be able to fulfil the contractual obligations.

7.5 In case the Contractor fails to complete the supply of stores or a portion thereof within the contractual delivery schedule, the Purchaser has the right to purchase the stores or a portion thereof at the risk and cost of Contractor without serving any notice to the Contractor.

7.6 In the event of cancellation of the contract by Purchaser at the risk and cost of the Contractor, the Contractor shall be liable for any loss which the Purchaser may sustain on account of risk purchase but the Contractor shall not be entitled to any gain on such purchase made against such default. The manner and method of such purchase shall be at the entire discretion of the Purchaser, whose decision will be final.

7.7 The Purchaser reserves the right to suspend the business with such Contractors who default in adhering to the contractual delivery schedule, quality of stores etc as per the contract after giving show cause notice to the Contractor and considering his reply if any.

#### Article-8: INSPECTION AND REJECTION

8.1 At Supplier's premises.

8.1.1 Inspection Notice: Where inspection at Supplier's premises is stipulated in the PO, adequate advance notice in writing shall be sent by the Contractor to the Inspection Authority mentioned in the PO intimating that the Stores are ready for inspection with a copy to the officer issuing the PO. On receipt of such notice the Purchaser shall depute the inspecting officer within a reasonable time. However, if the inspecting officer finds that the Stores are not ready for inspection at Supplier's premises as per the aforesaid advance notice, the Purchaser reserves the right to recover the expenses incurred in deputing the inspecting officer.

8.1.2 Facilities for Test and Examination.

8.1.2.1 The Contractor shall provide the Inspector at his own expense all reasonable space and facilities for satisfying himself that the Stores are being or have been manufactured in accordance with the specification and for this purpose the Inspector shall have full and free access at any time during the Contract to the Contractor's work premises and may require the Contractor to make arrangements for anything to be inspected at his premises or at any other place and the Contractor shall reserve similar right as regards any sub-contract he may make.

8.1.2.2 The Contractor shall also provide and deliver, free of charges at such a place as the Inspector may direct such material as he may require for Tests by analysis (e.g. Chemical, Biological, Pharmacological and by other means of testing commonly in use according to the nature of Stores) or at a place where an independent testing machine is available.

8.1.2.3 In case of failure to provide these facilities (in regard to which the Inspector will be the sole judge) at his own premises for making the Tests, the Contractor shall bear the cost of carrying out such Tests elsewhere.

8.1.3 The inspector shall have the right to conduct any necessary tests to ascertain whether the stores are in accordance with the provided in specification PO. The Contractor shall bear all costs towards testing of Stores unless specifically mentioned in the PO.

8.1.4 The Inspecting Officer shall issue an Inspection Certificate indicating acceptance/rejection of the Stores, as the case may be.

8.1.5 Wherever inspection at Supplier's premises is stipulated in the PO, Stores shall be delivered or dispatched as per terms of PO only after the Stores have been inspected and Inspection Certificate has been issued by the inspector indicating acceptance.

8.2 At Purchaser's premises.

8.2.1 Where the PO stipulates inspection at Purchaser's site, the Purchaser will arrange inspection of the Stores immediately after receipt at Purchaser's premises and a certificate of acceptance/rejection will be issued.

8.3 The Purchaser shall have the power to reject the Stores if it is found that the same have not been manufactured in accordance with the standard engineering practices for manufacture of such Stores.

8.4 The Inspector's decision as regards rejection of the Stores shall be final and binding on the Contractor.

8.5 Removal of Rejections: Any Stores submitted for inspection and rejected by the Inspector must be removed by the Contractor within thirty days from the date of the receipt of the intimation of rejection, provided that in case of dangerous, infectious or perishable Stores the Inspector (whose decisions shall be final) shall inform the Contractor to remove such Stores within 48 hours of the intimation of the rejection and it shall be the duty of the Contractor to remove them accordingly. Such rejected Stores shall lie at the Contractor's risk and cost after the expiry of aforementioned period and if not removed within this period the Purchaser shall have the right either to return the rejected Stores to the Contractor at his risk and cost by such modes of transport as the Purchaser may select or to dispose off or segregate such Stores as they may think fit at the Contractor's risk and cost and on his account or to retain such portion of the proceeds as may be necessary to recover any loss or expenses incurred by the Purchaser in connection with the said sale. Freight to Contractors destination on Stores rejected after examination at destination shall be recoverable from the Contractor at the Public Tariff Rate.

8.6 If Stores are rejected after inspection at Purchaser's premises, and by the nature of the stores segregation of rejected stores with that of earlier accepted Stores is not possible, the Purchaser shall not be under obligation to return such rejected Stores to the Contractor as per the Article 8.5 above. Such rejected stores shall be paid by the Purchaser as considered reasonable and the Purchasers decision shall be final in this regard.

#### Article -9: RECOVERY OF SUMS DUE

9.1 Whenever under this Contract any sum of money is recoverable from and payable by the Contractor, the Purchaser shall be entitled to deduct such sum from any amount then found payable to the Contractor by the Purchaser or which at any time thereafter may be found to be payable to the Contractor by the Purchaser under this or any other contract with the Purchaser or any other unit of Rashtriya Ispat Nigam Ltd. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the Purchaser on demand the remaining balance amount. This action is without prejudice to the right of the Purchaser to take legal action against the Contractor for the breach of the contract.

#### Article -10: SYSTEM OF PAYMENT

10.1 Unless otherwise agreed to between the parties, the payment for the delivery of the Stores will be made through NEFT/RTGS.

#### Article-11 : LAWS GOVERNING THE CONTRACT

11.1 The Contract shall be governed by the Laws of India for the time being in force.

11.2 The marking of all stores supplied must comply with the requirement of the Indian Acts relating to the merchandise marks and the rules made under such Acts.

#### Article -12: INDEMNITY

12.1 The Contractor shall at all times indemnify the Purchaser against all claims which maybe made in respect of the Stores for infringement of any right protected by patent Registration of Design or Trade Mark and shall take all risk of accidents or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all means used by him or the fulfilment of the Contract, provided, always that in the event of any claim in respect of alleged breach of patent Registered Design or Trade Mark being made against the Purchaser, the Purchaser shall notify the Contractor of same, and the Contractor shall be at liberty at his own expense, to settle any dispute or to conduct any litigation that may arise there from.

#### Article -13: BRIBES, COMMISSION, CORRUPTION, GIFT ETC.

13.1 Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner, agent or servant, or any one of his or on their behalf to any officer, servant, representative or agent of the Purchaser or any person on his or on their behalf in relation to the obtaining or to the execution of this or any other contract with the Purchaser or disfavoured to any person in relation to this or any other contract as aforesaid shall result in cancellation of this and all or any other contract as aforesaid and the Contractor shall also be liable for payment of any loss or damage resulting from such cancellation to the extent as is provided under Article 7 hereof.

#### Article -14: INSOLVENCY AND BREACH OF CONTRACT

14.1 The Purchaser may at any time by notice in writing summarily determine the Contract without compensation to the Contractor in any of the following events that is to say:

14.1.1 The Contractor, he being an individual, or if a firm, any partner in the Contractor's firm shall at any time be adjudged insolvent or shall have a Receiver appointed or order for administration of his Estate made against him or shall take any proceedings for liquidation or composition under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or enter into any arrangement or composition with his creditors or suspend payment or if the firm be dissolved under the Partnership Act.

Or

14.1.2 If the Contractor being a company shall pass a resolution or the Court shall make an order for the liquidation of its affairs or Receiver or Manager, on behalf of the debenture holders shall be appointed or circumstances shall have arisen which entitled the court on behalf of the debenture holders to appoint a Receiver or Manager

Or

14.1.3 If the Contractor commits any breach of this contract not herein specifically provided for, provided always that such determination shall not prejudice any right of action or remedy which shall have accrued or shall accrue thereafter to the Purchaser and provided also that the Contractor shall be liable to pay the Purchaser of any extra expenditure he is hereby put to but shall not be entitled to any gain on re-purchase.

#### Article -15 : FORCE MAJEURE

15.1 If at any time during the continuance of this contract the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reasons of any war, hostility, acts of public enemy, civil commotion, sabotage, fire, floods, explosions, epidemics, quarantine restriction, or acts of God (herein after referred to as eventualities) and provided notice of the happenings of any such eventuality (duly certified by International Chamber of Commerce in case of foreign parties) is given by either party to other within 21 days from the date of occurrence thereof, neither party shall by reasons of such eventuality be entitled to terminate this Contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance. Deliveries under this Contract shall be resumed as soon as practicable after such eventuality has come to an end or ceased to exist and the decision of the Purchaser as to whether the deliveries have so resumed or not shall be final and conclusive. Provided further that if the performance in whole or in part of any obligations under this Contract is prevented or delayed by reasons of any such event for a period exceeding 60 days either party may at its option terminate the Contract. Provided also that the Contract, if terminated under this clause, the Purchaser shall be at liberty to take over from the Contractor at a price to be fixed by the Purchaser which shall be final, all unused, undamaged and acceptable material, bought out components and stores in course of manufacture in the possession of the Contractor at the time of such termination or such portion thereof as Purchaser may deem fit except such material, bought out components and stores as the Contractor may, with the concurrence of the Purchaser, elect to retain.

#### Article -16: ARBITRATION CLAUSE FOR CONTRACTS WHERE CONTRACT PRICE IS RS.5.00 LAKHS AND ABOVE

16.1. All disputes or differences whatsoever arising between the parties out of or relating to the construction, meaning and operation or effect of this contract or breach thereof shall be settled by arbitration in accordance with the rules of arbitration of the Indian Council of Arbitration and the award made in pursuance thereof shall be binding on the parties.

16.2. The arbitration bench shall make a reasoned award. The venue of arbitration shall be at Visakhapatnam, Andhra Pradesh, India.

16.3. Work under the contract shall be continued by the Contractor during the arbitration proceedings, unless otherwise directed in writing by the Purchaser or unless the matter is such that the work cannot possibly be continued until the decision of the arbitrators is obtained and save as those which are otherwise expressly provided in the contract, no payment due or payable by the Purchaser shall be withheld on account of such arbitration proceedings, unless it is the subject matter or one of the subject matter thereof.

16.4. The Arbitrator's fee, expenses and all other costs and other expenses relating to the holding of arbitration shall be borne by both the parties equally. However the fees and expenses of Advocates and expenses relating to presentation of witnesses shall be borne by the respective parties. Should the arbitrator give a specific award in respect of costs then it would prevail.

16.5 In the event of a dispute between PSE and Govt. Department / Ministry, the following be noted and acted upon to resolve the dispute:

(i) Public Sector Enterprises means a Govt. Company as defined under Section 617 of Companies Act, 1956.

(ii) If at any anytime, any question, dispute or difference whatsoever shall arise between the Purchaser and the Contractor / Supplier upon, or in relation to or in connection with the Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the difference shall be referred to the adjudication of the arbitrator in the Permanent Machinery of Arbitration in the Department of Public Enterprises of Govt. of India.

(iii) However, if the dispute / difference relates to an amount of the value of less than Rs.2,00,000/-, the same shall be settled by the Purchaser and the Contractor / Supplier by mutual consultation.

(iv) The Purchaser and the Contractor / Supplier agree to the inclusion of the following Arbitration clause in the Contract .

"In the event of any dispute or difference relating to the interpretation and application of the provisions of the contracts, such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Govt. of India in-charge of the Deptt., of Public enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Deptt., of Legal Affairs, Ministry of Law & Justice, Govt. of India. Upon such reference, the dispute shall be decided by the Law Secretary or the Special Secretary / Addl. Secretary, when so authorized by the Law Secretary, whose decision shall bind the parties finally and conclusively. The parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator".

#### Article -17: ARBITRATION CLAUSE FOR CONTRACTS WHERE CONTRACT PRICE IS LESS THAN RS. 5.00 LAKHS

17.1 If at anytime, any question, dispute or difference whatsoever shall arise between the Purchaser and the Contractor upon, or in relation to or in connection with the Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of an Arbitrator to be nominated by the Purchaser. The award of the arbitrator shall be final and binding on both the parties and the provisions of the Arbitration and Conciliation Act, 1996 and the rules there under and any statutory modification thereof shall be deemed to apply to and be incorporated in this Contract.

17.2 The arbitrator shall make a reasoned Award. The venue of arbitration shall be at Visakhapatnam, Andhra Pradesh, India.

17.3 Work under the contract shall be continued by the Contractor during the arbitration proceedings. Unless otherwise directed in writing by the Purchaser or unless the matter is such that the work cannot possibly be continued until the decision of the Arbitrator is obtained and save as those which are otherwise expressly provided in the contract, no payment due or payable by the Purchaser shall be withheld on account of such arbitration proceedings, unless it is the subject matter or one of the subject matter thereof.

17.4 The Arbitrator's fee, expenses and all other costs and other expenses relating to the holding of arbitration shall be borne by both the parties equally. However, the fees and expenses of Advocates and expenses relating to presentation of witnesses shall be borne by the respective parties. Should the arbitrator give a specific award in respect of costs then it would prevail.

#### Article -18: HEADINGS OF ARTICLES

18.1 The marginal headings of Articles hereto shall not affect the construction thereof.

#### Article -19: NON-WAIVER OF DEFAULTS

19.1 Failure of the Purchaser to insist upon strict performance of any terms and conditions of the contract will not be deemed a waiver of any rights or remedies that the Purchaser may have and will not be deemed a waiver of any subsequent default under the terms and conditions of the contract. No right or remedy of the Purchaser will be exclusive of any other right or remedy and the Purchaser will have all rights and remedies given under the Contract and now or hereafter existing in law or by statute. The dispatch or delivery by the Contractor or receiving of or payment by the Purchaser for the stores under this contract, will not be deemed a waiver of any rights for any prior failure by the Contractor to comply with any of the provisions of the contract.

Article -20 : GENERAL

20.1 In case of any conflict between the provision of General Conditions of Contract and PO, the provision of Purchase Order shall prevail.

Article-21 : JURISDICTION

21.1 That in case any legal proceedings are instituted against Rashtriya Ispat Nigam Ltd, Visakhapatnam Steel Plant they shall be instituted in the appropriate Civil Courts of Visakhapatnam and the Courts at Visakhapatnam only shall have jurisdiction.

Article-22 : LIQUIDATED DAMAGES :

22.1 To recover from the supplier / contractor , liquidated damages not by way of penalty a sum of 0.5% of the price of any stores which the supplier / contractor has failed to deliver as aforesaid for each week or part of week, during which the delivery of such stores may be in arrears subject to a maximum of 10% of value of such stores/item(s).

\*\*\*\*\*

**3 GENERAL CONDITIONS FOR ACCEPTANCE OF TENDER-SUPPLY:**

3.1 This is a mandatory requirement to all tenderers for formally certified skilled workforce or commitment by the bidders / service providers to the effect that they would ensure that all their workers would be skilled through Recognition of Prior Learning (RPL) within two months from the date of commencement of work under the project, at the cost of the service provider/vendor wherever it is applicable.

## **ANNEXURE - A to Rfx No.2100018947 Dated 07-03-2024**

### **OPEN TENDER NOTICE FOR CHEMICAL TREATMENT OF SMS- 1 GCP CIRCUIT AND CCD SECONDARY SPRAY SYSTEM**

- 1.0 Rashtriya Ispat Nigam Limited (RINL), Visakhapatnam Steel Plant (VSP),  
Hereinafter referred to as PURCHASER, hereby invites tenders for CHEMICAL TREATMENT OF SMS- 1 GCP CIRCUIT AND CASTER SPRAY SYSTEM, chemical conforming to Technical specifications at **Annexure -I** of tender documents.
- 2.0 **QUANTITY:** To be specified by the tenderer
- 2.1 **NO OF SOURCES:** One
- 2.2 **INTEGRITY PACT:** Applicable
- 3.0 **DELIVERY:** The present on-going treatment will end 01.05.2024. The successful Tenderer has to start the treatment within two weeks' time from the date of LOI for a period of 365 DAYS PLUS 15 DAYS OF PASSIVATION and continue supplies at the offered monthly scheduled quantity basis till completion of treatment period.
- 4.0 Tenderers should submit their tenders / response in accordance with the instructions given in the tender document, **Click on “Tenders”, Click on “MM” and Click on G C C.**
- 4.1 Tenderers shall submit their offers in the following manner:
- a) **Techno-Commercial Bid and**
  - b) **Price Bid**

**As per the instructions given in the Tender document and Documents are to be uploaded in the C-Folder of the Rfx (as per Cl. No. 8 of Special Instruction of Annexure to Rfx)**

Techno-commercial Bid should contain:

- 1) **Technical Specification duly signed on all pages.**
- 2) **CHEMICAL QUANTITY SHEET (ANNEXURE.1 OF ANNEXURE-I TO RFX) (VITAL),**
- 3) **EMD (if applicable, as per Cl.No. 6 of Special Instruction of Annexure to Rfx)**
- 4) **CREDENTIALS (if applicable, as per Cl.No. 1 of Special Instruction of Annexure to Rfx),**
- 5) **BLANKED PRICE BID. (PART-F of Annexure-I to Rfx),**
- 6) **Commercial and Technical Checklist (Part-E of Annexure I to RFX)**
- 7) **PQC DOCUMENTS (as per CL.NO. 1.1 of Special Instruction of Annexure to Rfx)**
- 8) **Integrity Pact (as available in VSP's website)**

- c) **Price bid should contain no caveat conditions.**

**Parties are required to quote for the lumpsum basic price for supply and application cost on FOR VSP Site basis in their online / SAP price bid. As regard to**

taxes and duties a separate provision has been provided to enter the same, however, the rate of GST and surcharge, if any, should be indicated either in lumpsum amount or as percentage. Insurance and freight, if applicable extra, is to be clearly mentioned in the commercial questionnaire and should be shown as lumpsum amount extra on the basic price.

**Post reverse e-auction, the L1 firm (i.e. firm offering the Lowest LNITC on total basis) shall have to submit the price break-up as price bid format at Part-F of Annexure of Rfx.**

No revision in the price (s), terms and Conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.

**Offer with variable price shall not be considered**

**5.0 Reverse-e-auction:** RINL-VSP shall have the option of conducting **SRM Live Auction** (Reverse E-Auction) in SAP-SRM platform. All technically and commercially acceptable bidders would be required to participate in the Live Auction through VSP's **SRM portal <https://srm.vizagsteel.com/> with the same User ID and Password.** User manual for participation in e-auction is available in our portal mentioned above. In the e-auction, the bidders would be required to quote lumpsum / lot price only on **LNITC (Landed Net of ITC Price) basis. Lowest LNITC price arrived by the system from the Price RFX Responses i.e. F-Price Bids shall flow automatically to Auction Cockpit as Start Bid Price** and will be visible in the system only after the Start time of SRM Live Auction.

All the tenders shall be evaluated on the basis of lumpsum / lot basis of landed Net of CENVAT / ITC cost on lot basis but not on individual item.

5.1 Tenders are required to keep their offers valid for a minimum 120 days from the date of tender opening and/ 30 days from the actual date of Reverse-e-auction/price bid opening. The date and time of Reverse-e-auction shall be intimated separately to technically and commercially acceptable tenderers.

5.2 **EVALUATION:** After the Live Auction is completed, composite price comparative statement is generated by the system considering the RFX Response Prices and Reverse Auction prices. The TA & CA Lowest firm on lumpsum / lot LNITC basis (i.e. L1 firm) shall have to submit the detailed price break-up based on the chemical quantities quoted in the final quantity sheet of the Annexure-I. The detailed price break-up to be submitted should be in line with Part-F as price bid format of Annexure of Rfx within the given stipulated time failing which the PO / LOI shall be placed accordingly matching the L1 LNITC. It is mandatory for the parties to quote application charge separately for each chemical & the various taxes and duties are also to be mentioned.

6.0 Tenders will be accepted by the system up to **10.30 Hrs. (IST) on the date of tender opening.** Techno-Commercial part of the Tender will be opened immediately thereafter in the presence of the Tenderers or Authorized Representatives of the Tenderers, who may choose to be present. The date and time of reverse e-auction shall be intimated separately to technically and commercially acceptable tenderers. It is brought out that

the price bid prices will remain hidden / concealed in the system and the L1 price of price bids will be revealed / flow automatically at the start of auction only. Price Bids (Part-F) of those Tenderers who have been Techno-Commercially accepted shall be opened in the system beforehand, if any Tenderers or Authorized Representatives of the Tenderers who want to witness the opening of price bid may inform the same prior to opening of price bids so that the date and time can be informed to them in advance.

**6.1 TENDER DOCUMENTS:** Tenderers who are interested to participate in the tender can download the tender documents from our **Website: WWW.VIZAGSTEEL.COM<TENDERS><MATERIALS MANAGEMENT TENDERS><TENDERS>** and submit their offer on or before **10.30 (IST) on last date of receipt of tender as per the instructions given in the tender documents.**

6.2 All the tenders shall be evaluated on the basis of LANDED Net of ITC (LNITC) cost.

**6.3 Notwithstanding anything specified in these Tender Documents, RINL, in its sole discretion and without having to assign any reason reserves to itself the rights:**

- a) To accept or reject the lowest tender or any other tender or all the tenders;
- b) To accept any tender in full or in part;
- c) To reject the offers not conforming to the tender terms and
- d) To give Purchase preference to Central Public Sector Enterprises (CPSE) as per Government of India guidelines if any.

**6.4 Notwithstanding anything that is stated in the various documents specified in the tender notice, in case of contradiction, the interpretation shall be in accordance with the statements contained in the Open tender notice FOR CHEMICAL TREATMENT of SMS-1 and special instructions to tenderers of Annexure to RfX.**

Detailed Terms and Conditions of the Rfx and General Conditions of contract (G C C) of VSP which is available at VSP's website: [www.vizagsteel.com](http://www.vizagsteel.com) are a part of this tender.

--- GM (MM)

## SPECIAL INSTRUCTIONS TO TENDERERS

### 1.0 ESTABLISHMENT OF CREDENTIALS OF VENDORS WHO ARE NOT ENLISTED PRESENTLY WITH RINL/VSP:

If a tenderer who responds to this tender is not presently enlisted with RINL / VSP, he is requested to furnish copies of the following documents separately in a sealed envelope super scribing “**CREDENTIALS**” and the Rfx **REFERENCE** as the case may be along with the tender:

- i) Notarized Statutory manufacturing / service industry certificate, i.e., EM-Part II issued by DIC / NSIC registration certificate for the same / similar items for MSEs.  
(Or)  
Notarized copy of Certificate of Registration of Shops and Establishments for a dealer / Agent /Trade etc.  
(Or)  
Notarized copy of Certificate of Incorporation along with Memorandum and Articles of Association of the Private / Public Limited companies.
- ii) Notarized Copy of Proprietary / Partnership deals in case of Proprietary / Partnership firms.
- iii) Notarized copy of GST, Service Tax Registration certificates and PAN card copy in the name of company in case of Limited companies or in the name of individuals in case of Proprietary firms.
- iv) Copy of GST registration certificates and PAN card copy in the name of Company in case of Limited companies or in the name of Individuals in case of Proprietary firms.
- v) Self-certified financial worth and audited financial statements for the last three (3) years.
- vi) Self-certified Purchase Orders / contracts copies for the same or similar tendered item/s.
- vii) Self-certified ISO certificate, if any.

**Note:** “In case of STARTUPS, the STARTUPS have to submit a verifiable certificate of recognition from the concerned Govt. Authorities for consideration with respect to Relaxation on prior turnover and prior experience i.e., w.r.to iv to vi above.. The above is subject to the conditions that the firm has the required manufacturing, testing & inspection facilities and the following documents are to be submitted:

- a. Details of Manpower & Machinery (Self certified)
- b. Details of Testing & Inspection facilities available (Self certified)

However, for items related to Public safety, health, critical security operations and equipments, etc. relaxation shall not be applicable”

Kindly note that the above information is required to assess the credibility of the vendor not presently enlisted with RINL / VSP. The tender of un-listed vendor may be rejected in case of non-submission or incomplete submission of the above documents except vii) above or if RINL/VSP finds that the credibility of the un-listed Vendors is not satisfactory on the basis of the documents furnished. The Vendor shall produce originals of the above

documents for verification, if RINL / VSP so desires. RINL / VSP's decision in this regard is final.

## **1.1 PRE QUALIFICATION CRITERIA (VITAL)**

### **POC criteria for SMS-1 (GCP & CCD) RCW system chemical treatment**

#### **1. Agency should have successfully treated**

a) Gas Cleaning Plant re-circulation water system (of either Blast furnace or Steel Melt shop) in any Integrated Steel Plant of minimum 2 million tons per year capacity. Agency should have undertaken treatment for a period of at least one year in a single system without any interruption in the last 7 years from RFX date (i.e. ITT date). Agency should have undertaken both supply of chemicals and their application. Agency should produce PO copies and satisfactory performance certificate. Satisfactory performance certificate should be certified by the agency's customer (bearing name and designation of certifying authority and name of the organization), with clear mention of reference PO number, PO date, treatment period and name of the system.

And

b) Continuous Casting Spray Cooling Water System of Steel Melt Shop in any Integrated Steel Plant of minimum 2 million tons per year capacity. Agency should have undertaken treatment for a period of at least one year in a single system without any interruption in the last 7 years from RFX date (i.e. ITT date). Agency should have undertaken both supply of chemicals and their application. Agency should produce PO copies and satisfactory performance certificate. Satisfactory performance certificate should be certified by the agency's customer (bearing name and designation of certifying authority and name of the organization), with clear mention of reference PO number, PO date, treatment period and name of the system.

2. Agency has to submit PO copies and satisfactory performance certificate along with the bid. Agency's offer will not be considered without any PQC documents along with the bid. The above PQC criterion is also applicable for agencies already registered with VSP.

3. After TOD, during PQC and Technical Evaluation, if supplier furnishes a new set of PO copy other than that offered along with tender, against any clarification (if asked), the same shall not be considered for evaluation purpose.

The above PQC criteria are applicable for parties already registered with VSP also.

## **2.0 GENERAL INFORMATION / DATA / DOCUMENTS TO BE FURNISHED BY TENDERERS:**

Tenderers who may be the Manufacturers or the Suppliers of the system shall furnish information / data / documents / printed and illustrated literature / brochures covering the following aspects:

a) Detailed information of the Manufacturer along the latest copies of the

Executed / ongoing orders (during the last 1 year) of similar system with different clients in India.

- b) Documents showing the exact nature of ownership.
- c) Tenderers who may be suppliers, offering on behalf of a Principal Manufacturer, shall furnish in original the Letter of Authority of the concerned manufacturer, as per the proforma available at detailed terms and conditions of Invitation to tender (Available at VSP website), specifically authorized the said supplier to make an offer in response to this Invitation to Tender. This Letter of Authority should be submitted along with Techno-commercial bid.

2.1 Only one offer should be received from each principal manufacturer either directly or through their Agents. **In case more than one offer is received from the same Principal Manufacturer, then all the offers of the same Principal Manufacturer will be rejected including the direct offer, if any.**

2.2 The tenderers are requested to submit the Check-List as at Part-E of Annexure- I to annexure to Rfx of the Tender document.

### **3.0 SUBMISSION OF OFFERS & QUOTING OF PRICE(S):**

**3.1.1 PRICE BASIS:** The price quoted should be on FOR VSP Site basis inclusive of applicable taxes, duties, levies, Insurance and Freight. However, the rate of GST and surcharge, if any, Insurance and freight considered are to be indicated separately. **It is mandatory to quote application charges separately when the price break-up shall be sorted post reverse e-auction. The prices shall remain firm and fixed during the tenure of the contract.** However, any change in statutory taxes and duties shall be reimbursed at actuals during the original contractual delivery period. Any change in taxes and duties beyond the original contractual delivery period is to be borne by the Supplier. **Part-D of Application Contract of Annexure-I to annexure to Rfx is applicable. Offer with variable price shall not be considered**

**Parties are required to quote for the lumpsum basic price for supply and application cost on FOR VSP Site basis in their online / SAP price bid.** As regard to taxes and duties a separate provision has been provided to enter the same, however, the rate of GST and surcharge, if any, should be indicated either in lumpsum amount or as percentage. Insurance and freight, if applicable extra, is to be clearly mentioned in the commercial questionnaire and should be shown as lumpsum amount extra on the basic price.

**Post reverse e-auction, the L1 firm (i.e. firm offering the Lowest LNITC on total basis) shall have to submit the price break-up as price bid format at Part-F of Annexure to Rfx.**

No revision in the price (s), terms and Conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.

**Offer with variable price shall not be considered**

3.1.2 Tenderers must furnish complete details w.r.t each of the quoted items about the HSN number, applicable GST rate, any other cess, in the Question and Answer of the Rfx.

Wherever the tenderers quote GST as `NIL# or at concessional rates (being SSI Unit or due to some other privilege available on the date of offer) but reserves the right to charge at actual on the date of dispatch, suitable loading would be done with maximum GST rates as applicable.

**3.1.3 The price shall remain firm and fixed during the period of contract. Offer with variable price shall be rejected (VITAL)**

**3.1.4 However, in case tenderers quote any other terms, other than those mentioned in these tender documents, the same shall be loaded as per VSP norms while evaluating their offer.**

**4.0 TERMS OF PAYMENT:**

**4.1 a) Payment for supply of Chemicals**

100% payment along with 100% taxes and duties (i.e. GST) shall be released on monthly basis for the quantity of chemicals consumed and as certified by the User Department regarding actual consumption & satisfactory performance certificate within 60 days from the date of Receipt and Acceptance of Material against submission of following documents:

- i) Tax Invoice in duplicate for quantity consumed during the month.
- ii) Copy of GARN.
- iii) Certificate from User Department towards satisfactory performance of the chemicals.

**b) Payment for Application Charges :**

Application charges along with applicable GST, shall be released within 15 days based on Satisfactory Performance Certificate to be issued by Use dept, as per Application Contract (Part - D of Annexure of Rfx).

4.1.1 In case of indigenous offers, PURCHASER encourages Electronic Fund Transfer for payment direct to Seller's Bank account on due date for which Seller has to furnish Bank account details in the format prescribed by PURCHASER. Cheque date will be considered for arriving at 60<sup>th</sup> day wherever payment is made by Cheque. Any other mode of payment term will be suitably loaded while evaluating the tender.

4.1.2 The price bid should only contain the price quoted and other financial terms should be given in the techno-commercial bid and not in any other accompanying documents or statement. No extra weightage shall be given for any extra credit offered beyond ITT payment terms of 60 days interest free credit from the date of acceptance of material for ranking / evaluation purpose.

4.1.3 In case an offer with deviations to payment terms is considered by RINL/VSP, it shall be loaded suitably for the purpose of comparison with other offers. The general principal is to load for the additional financial implication to which RINL / VSP may

possibly be exposed on account of such deviation. The decision of RINL / VSP in this regard shall be final and binding.

5.0 **VALIDITY OF THE OFFER:**

The offer shall be firm and valid for a period of **120 days (one hundred and twenty days)** from the date of opening of tenders.

6.0 **BID MONEY: (VITAL)**

6.1 **BID SECURITY:** The bidders are required to submit/ upload "Bid Security Declaration" in the Offer with an undertaking that if they withdraw or modify their bids within Offer validity (or) fails to submit Performance Guarantee Bond/Security as stipulated in the Bid, they will be suspended (kept under hold) by the Buyer for the time specified in the NIT under Punitive actions.

7.0 **STATEMENT OF DEVIATIONS:**

7.1 If any tenderer is unable to accept any particular term(s) as incorporated in the Tender document, or proposes any deviation there from, the Tenderer shall enclose along with his offer, a statement of deviations clearly spelling out the deletions / deviations proposed, which may, however, have an impact on the **evaluation of his offer or rejection by RINL**. Each tenderer shall give an undertaking along with his offer confirming his acceptance to all the terms and conditions of the Tender document, except for the deletions / deviations specifically proposed by them in their offer.

7.2 **Offers with any deviation to the following terms and conditions contained in the tender document such offers are liable for rejection:**

(a) Specification (b) Validity of offer (c) Liquidated damages,  
(d) Weightment (e) Risk Purchase (f) Consent for opening Performance Guarantee Bond  
(g) Penalty (h) Arbitration and Jurisdiction and (i) Default (j) offers received by cable, e-mail, telex, fax or Telegram or hard copy (except EMD (as per cl.no.6 of Special Instructions of Annexure of Rfx) and credentials(as per cl.no.1 of Special Instructions of Annexure of Rfx)) (k) late / delayed offers (l) non-submission of chemical quantity sheet (Annexure-1 of Annexure-I to Annexure of Rfx)

8.0 **OTHER GENERAL POINTS RELATING TO THE PREPARATION / SUBMISSION THE OFFER:**

8.1 The detailed offer together with all the documents should be uploaded / submitted in the C-Folder in two parts:

- 1) Techno-Commercial Bid
- 2) Price Bid

Techno-Commercial Bid should contain all details on technical specifications (along with filled in chemical quantity sheet at annexure- (vital), other information/ data/ documents/ confirmations/ deviations, if any, should be uploaded in the C-Folder of the Response. The blank price format (as per part-F of Annexure-I and as will be

submitted after reverse e-auction) after **blanking the prices** is also to be submitted / uploaded in the C-Folder of the Response / Offer. **However, no indication of price in any form, shall be given in the documents submitted in the C-Folder of the Rfx.** Confirmation with regard to information/ data/ documents to be furnished by tenderers above are also to be submitted in the C-Folder of the Rfx.

- 1) **Technical Specification duly signed on all pages.**
- 2) **CHEMICAL QUANTITY SHEET (ANNEXURE.1 OF ANNEXURE-I TO RFX) (VITAL),**
- 3) **EMD (if applicable, as per CL.No. 6 of of Special Instruction of Annexure to Rfx)**
- 4) **CREDENTIALS (if applicable, as per CL.No. 1 of Special Instruction of Annexure to Rfx),**
- 5) **BLANKED PRICE BID. (PART-F of Annexure-I to Rfx),**
- 6) **Commercial and Technical Checklist (Part-E of Annexure I to RFX)**
- 7) **PQC DOCUMENTS (as per CL.NO. 1.1 of Special Instruction of Annexure to Rfx)**
- 8) **Integrity Pact (as available in VSP's website)**

**IT IS TO BE NOTED THAT THE ALL DOCUMENTS ARE TO BE SUBMITTED / UPLOADED IN THE C-FOLDER OF THE RFX AND HARD COPY FOR EMD (REFER CL.NO.6 OF SPECIAL INSTRUCTION OF ANNEXURE TO RFX) AND CREDENTIALS (REFER CL.NO.1-SPECIAL INSTRUCTION OF ANNEXURE TO RFX) FOR UNLISTED VENDOR SHALL ONLY BE ACCEPTED FOR FIRMS WHO HAVE SUBMITTED THEIR OFFER / RESPONSE IN ONLINE / SAP.**

**Price Bid:**

Parties are required to quote for the lumpsum basic price for supply and application cost on FOR VSP Site basis. As regard to taxes and duties a separate provision has provided to enter the same, however, the rate of GST and surcharge, if any, should be indicated either in lumpsum amount or as percentage. Insurance and freight, if applicable extra, is to be clearly mentioned in the commercial questionnaire and should be shown as lumpsum amount extra on the basic price.

8.2 The envelopes containing the EMD (Bid Security Declaration) and credentials only referred to in para 8.1 above should be placed in an envelope which should be addressed to the **Executive Director (MM), Administration Building, Block-A, Purchase Dept, Visakhapatnam Steel Plant, Visakhapatnam 530 031, Andhra Pradesh, India** and should bear in Block Capital Letters the superscription **“EMD AND / OR CREDENTIALS TO Rfx NO.Pur.2100016872 Dated 13.10.2022.** This envelope should be sealed. **The name, address and vendor code of the Tenderer should be mentioned on this envelope.**

8.3 Tenders will be accepted upto **10.30 Hrs (IST), on tender opening.** The Techno-Commercial bid of the tenders shall be opened immediately in the system and envelopes, if any, thereafter in the presence of the tenderers or authorized representative of the tenderers, who may choose to be present. **The date and time of reverse e-auction shall be intimated separately to technically and commercially acceptable tenderers.** It is brought out that the price bid prices will remain hidden / concealed in the system and the L1 price of price bids will be revealed / flow automatically at the start of auction only. Price Bids

(Part-F) of those Tenderers who have been Techno-Commercially accepted shall be opened in the system beforehand, if any Tenderers or Authorized Representatives of the Tenderers who want to witness the opening of price bid may inform the same prior to opening of price bids so that the date and time can be informed to them in advance.

**8.4 In case any tenderer is silent on any clauses mentioned in this tender document, VSP shall construe that the tenderer had accepted the clauses as per this Invitation to Tender.**

**8.5 The price quotations should not contain any other accompanying documents or statement. No revision in the price (s), terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.**

**8.6 Offers received by VSP by cable, e-mail, telex, fax or telegrams and tenders received late / delayed will not be considered under any circumstances.**

**9.0 Inspection:** No pre despatch inspection shall be carried out by VSP. However, the party should submit test certificate for the supplies made.

**10.0 WEIGHMENT:**

The weight recorded at VSP Weigh bridge shall be the basis for release of payment. The payment shall be restricted to the weight recorded at VSP Weigh bridge or LR or the Invoice weight , whichever is lower.

**11.0 LIQUIDATED DAMAGES:**

Delivery is the essence of the Contract and hence should any consignment be delayed, liquidated damages @ 0.5% of the price of the delayed consignment, for each week or part thereof shall be levied and recovered subject to a maximum of 10% of the total order value.

For levy of LD in case of late delivery, date of receipt of material by RINL-VSP Stores along with necessary documents shall be considered as date of delivery, subject to acceptance of material by RINL-VSP after inspection.

**12.0 PERFORMANCE GUARANTEE: (VITAL)**

The successful tenderer shall submit **performance bank guarantee as per VSP format (Annexure-II of Annexure to Rfx) or Demand Draft or Banker's Cheque (both subject to realization) drawn on any Scheduled Bank and payable to RashtriyaIspat Nigam Ltd. at Visakhapatnam** to the tune of 10% of the total landed value including application charges

**13.0 DEFAULT :**

Should the SELLER fail to provide the MATERIAL for delivery by the time or times agreed upon or should the SELLER IN ANY MANNER OR OTHERWISE FAIL TO

PERFORM THE ACCEPTANCE TO Tender should a receiver be appointed on its assets or make or enter in any arrangements or composition with Creditors or suspend payments (or being a company should enter into liquidation either compulsory or voluntary), the PURCHASER shall have power to declare the Acceptance to Tender as at an end at the risk and cost of the SELLER in every way. In such a case, SELLER shall be liable for any expenses, damages or losses which the PURCHASER may incur, sustain or be put to by any reason of or in connection with SELLER'S DEFAULT. This Clause is however subject to Force Majeure, as specified in the General Conditions of Contract, available in VSP's website.

14.0 **RISK PURCHASE**

The PURCHASER reserves the right to take Risk Purchase action at the cost and risk of the SELLER, in case he fails to deliver the materials in the specified schedule and the differential cost shall be recovered. The cancellation of the Acceptance to Tender as stated in para 10 herein above may be either for whole or part of the Acceptance to Tender at PURCHASER's option. In the event of the PURCHASER terminating the Acceptance to Tender in whole or in part, he may procure, on such terms and in such manner as he deems appropriate, supplies similar to those so terminated and the SELLER shall be liable to the PURCHASER for any excess costs for such similar supplies. However, in case of part termination of Acceptance to Tender by the PURCHASER, the SELLER shall continue the performance of the Acceptance to Tender to the extent it is not terminated under the provisions of this Clause.

15.0 **FORCE MAJEURE:**

15.1 If either the SELLER or the PURCHASER be prevented from discharging his or their obligation under this Acceptance to Tender by reason of arrests or restraints by Government of people, war blockade, revolution, insurrection, mobilization, strikes, civil commotion, Acts of God, Plague or other epidemics, destruction of the MATERIAL by fire or flood or other natural calamity interfering with the production, loading or discharge, the time for delivery shall be extended by the time or times not exceeding one year, during which production, loading or discharge is prevented by any such causes as herein above mentioned. The party invoking protection under this clause shall within 15(fifteen) days of the occurrence of Force Majeure causes put the other party on notice supported by Certificate from the Chamber of Commerce or concerned Governmental authority and shall likewise intimate the cessation of such causes. The delivery shall be resumed by the Party/Parties within 15 (fifteen) days from the cessation of the Force Majeure causes.

15.2 Should there be any interruption in the delivery of the MATERIAL due to Force Majeure circumstances detailed in para 15.1 herein above, it is hereby mutually agreed between the PURCHASER and the SELLER that the period of offtake of the MATERIAL by the PURCHASER/period of delivery of the MATERIAL by the SELLER shall automatically stand extended by a period not exceeding one year, equal to the actual duration of the causes interrupting the offtake by the PURCHASER and/or delivery of the MATERIAL by the SELLER plus a period

of six weeks to enable the affected party to make suitable arrangements for normalization of shipments.

**16.0 ARBITRATION AND JURISDICTION:**

16.1 All disputes arising out of or in connection with the Acceptance to Tender shall be finally settled by Arbitration in accordance with the rules of Arbitration of the Indian Council of Arbitration and the Award made in pursuance thereof shall be binding on the parties. The Arbitration bench shall give a reasoned award. Cost of arbitration to be borne by the losing party. The venue of arbitration shall be Visakhapatnam, India and language of arbitration shall be in English.

16.2 In case of any legal proceedings are instituted against RashtriyaIspat Nigam Limited, Visakhapatnam Steel Plant, they shall be instituted in the appropriate Civil courts of Visakhapatnam and the Courts at Visakhapatnam only shall have Jurisdiction.

**17.0 RECOVERY OF SUMS DUE:**

17.1 Whenever under this Acceptance to Tender any sum of money is recoverable from and payable by the SELLER, the PURCHASER shall be entitled to deduct such sum from any amount then found payable to the SELLER by the PURCHASER or which at any time thereafter may be found to be payable to the SELLER by the PURCHASER under this or any other Acceptance to Tender with the PURCHASER. Should this sum be not sufficient to cover the full amount recoverable, the SELLER shall pay to the PURCHASER on demand the remaining balance amount. This action shall be without prejudice to the right of the PURCHASER to take legal action against the SELLER for the breach of the Acceptance to Tender.

**18.0 RESPONSIBILITY:**

18.1 The PURCHASER on the one hand and the SELLER on the other hand shall be responsible for the performance of all their respective obligations under this Acceptance to Tender.

**19.0 TRANSFER AND SUB-LETTING:**

19.1 The SELLER shall not sublet, transfer, assign or otherwise part with the Acceptance to Tender or any part thereof, either directly or indirectly, without the prior written permission of the PURCHASER.

**20.0 COMPLETENESS OF THE AGREEMENT AND MODIFICATION:**

20.1 This Acceptance to Tender cancels all previous negotiations between the parties hereto. There are no understandings or agreement between the PURCHASER and the SELLER which are not fully expressed herein and no statement or agreement, oral

or written, made prior to or at the signing hereof shall affect or modify the terms hereof or otherwise be binding on the parties hereto. No change in respect of the terms covered by this Acceptance to Tender shall be valid unless the same is agreed to in writing by the parties hereto specifically stating the same as an amendment to this Acceptance to Tender.

**21.0 LEGAL INTERPRETATIONS:**

21.1 The Acceptance to Tender and the arbitration shall be governed by and construed according to the laws of India for the time being in force.

**22.0 LIABILITY OF GOVT. OF INDIA:**

22.1 It is expressly understood and agreed by and between the SELLER and the PURCHASER that the PURCHASER is entering into this Acceptance to Tender solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that the Govt. of India is not a party to this Acceptance to Tender and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that the PURCHASER is an independent legal entity with power and authority to enter into contracts solely in its own behalf under the applicable laws of India and general principles of Contract Law. The SELLER expressly agrees, acknowledges and understands that the PURCHASER is not an agent, representative or delegate of the Govt. of India. It is further understood and agreed that the Govt. of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of this Acceptance to Tender. Accordingly, the SELLER hereby, expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Govt. of India arising out of this Acceptance to Tender and covenants not to sue the Govt. of India as to any manner, claim, cause of action or thing whatsoever arising of or under this Acceptance to Tender.

**23.0 Tenderers shall fill up and confirm their acceptance with signature and stamp to our Technical specification (Annexure-I) and submit it back along with the Techno commercial bid Part-G of Annexure-I to RFX else the offer shall not be considered**

**24.0** All other terms and conditions shall be as per VSP's other G.C.C for supply of Material. as uploaded in RINL/VSP website: [www.vizagsteel.com](http://www.vizagsteel.com)

**25.0 PUNITIVE ACTIONS TO BE TAKEN AGAINST AGENCIES WHO SUBMIT FALSE/FORGED DOCUMENTS TO VSP:**

If it comes to the notice of VSP at any stage from request for enlistment/ tender document that any of the certificates / documents submitted by applicants for enlistment or by bidders are found to be false/ fake/ doctored, the party will be debarred from participation in all VSP tenders for a period of 5 years including termination of contract, if awarded. BID MONEY/ Security Deposit etc. if any, will be forfeited. The contracting Agency in such cases shall make good to VSP any loss

or damage resulting from such termination. Contracts in operation anywhere in VSP will also be terminated with attendant fall outs like forfeiture of BID MONEY/ Security Deposit, if any, and recovery of risk and cost charges etc. Decision of VSP Management will be final and binding.

\*\*\*\*\*

**CHECK LIST TO BE FILLED UP AND SUBMITTED / UPLOADED IN THE C-FOLDER OF THE RFX**

			<b>TO BE CONFIRMED BY PARTY</b>	
<b>SL. No.</b>	<b>TENDER TERMS</b>	<b>AS REQUIRED BY VSP</b>	<b>ACCEPTED / NOT ACCEPTED</b>	<b>DEVIATIONS, if any</b>
1	Name and address of the Tenderer			
2	Quantity offered	To be confirmed as per Para 2.0 of OPEN Tender notice of Annexeure to RFX		
3	Technical specifications	To be confirmed as per Annex-I of tender document		
4	Delivery schedule	To be confirmed as per para 3.0 of OPEN Tender notice of Annexeure to RFX		
5	Payment terms	To be confirmed as per Cl.4.0 of Special Instruction of Annexure to RFX		
6	BID MONEY	To be confirmed as per Cl. 6.0 of Special Instruction of Annexure to RFX		

7	Price Basis	To be confirmed as per Cl.3.1.1 of Special Instruction of Annexure to RFx		
8	Price firmness	To be confirmed as per Cl. 3.1.3 of Special Instruction of Annexure to RFx		
9	Insurance	To Tenderer's a/c		
10	Weighment	To be confirmed as per Cl.No.10.0 of Special Instruction of Annexure to RFx		
11	Validity of offer	To be confirmed as per Cl.5.0 of Special Instruction of Annexure to RFx		
12	Test certificate	To be confirmed as per Cl.9.0 of Special Instruction of Annexure to RFx		
13	Default	To be confirmed as per Cl.12.0 of Special Instruction of Annexure to RFx		
14	Other General conditions of contract for supply (GC C)	To be confirmed as uploaded & available in VSP's Website:www.vizagsteel.com		

## Blank Price Bid

Party Name

S.No	Item Description	Qty Accounting Unit(kgKg / Mt etc.)	Basic Price (in figures)	Basic Price (in words)	P&F Charges, if any	Freight & Insurance, if any	Sub-Total (Basic Price+P&F+Freight)	GST Charges / Rates	Application Charges, if any	GST Charges / Rates
1	Item No.1									
2	Item No.2									
3	Item No.3									
4	Item No.4									
5	Item No.5									
6	Item No.6									

**The above format should be submitted blanking all the prices along with the Techno-Comml. Bid, whichever column is applicable should be indicated as "Appl." and whichever column is not applicable should be indicated as "Not Appl.". Also the respective percentage whether extra or included for the various taxes and duties should be mentioned.**

Note: Except the above details, any other condition / information if any, given in the format shall not be considered for evaluation. Specify APVAT and TIN No. if supplies are from Andhra Pradesh

Station :

Date :

SIGNATURE OF THE TENDERER / THEIR  
AUTHORISED REPRESENTATIVE WITH  
SEAL



**PROFORMA OF BANK GUARANTEE FOR PERFORMANCE GUARANTEE BOND**

(To be submitted on Non-judicial stamp paper of value of Indian Rupees one Hundred drawn on the name of the issuing Bank)

**TO BE ESTABLISHED THROUGH ANY OF THE NATIONALISED BANKS (WHETHER SITUATED AT VISAKHAPATNAM OR OUTSATTION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH ATVISAKHAPATNAM OR ANY SCHEDULED BANK (OTHER THAN NATIONALISED BANK) SITUATED AT VISAKHAPATNAM. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.**

To  
RashtriyaIspat Nigam Limited,  
Visakhapatnam Steel Plant,  
3<sup>rd</sup> floor, purchase dept  
Administrative Building,  
Visakhapatnam-530031

Bank Guarantee No Dt

**LETTER OF GUARANTEE**

WHERE AS \_\_ hereinafter referred to as the SELLER) and M/s RASHTRIYA ISPAT NIGAM LIMITED (hereinafter referred to as the PURCHASER) have entered into an AGREEMENT vide ACCEPTANCE TO TENDER No. \_Pur. .... dt. .... (hereinafter called the said A/T) for the supply of \_Chemicals( hereinafter referred to as the MATERIALS) on the terms and conditions mentioned therein.

2. We, ..... (name of bank & branch) at the request of the SELLER, do hereby undertake and indemnify and keep indemnified the PURCHASER to the extent of Rs. ..../--(Rupees..... only)against any loss or damage that may be caused to or suffered by the PURCHASER, by reason of any breach by the SELLER of any of the terms and conditions of the said A/T and/or in the performance of the said A/T by the SELLER. We agree that the decision of the PURCHASER as to whether any breach of any of the terms and conditions of the said A/T or in the performance thereof has been committed by the SELLER and the amount of loss or damage that has been caused to or suffered by the PURCHASER shall be final and binding on us and the amount of the said loss or damage shall be paid by us forthwith to the PURCHASER on demand and without protest or demur.

3. We, ..... (name of bank & branch) hereby further agree that the guarantee herein contained shall remain in full force and effect during the period that would betaken for satisfactory performance and fulfillment in all respects of the said AGREEMENT and that it shall continue to be enforceable for (a) 120 days after the date of L/R of the last consignment of the MATERIALS under the said AGREEMENT or (b) in the event of any dispute(s) between the PURCHASER and the SELLER, until such period(s) the dispute is settled fully, whichever date is the latest and that if any claim accrues or arises against us, .....(name of bank & branch)by virtue of this guarantee before the dates referred to at (a) and (b) herein above, the same shall be enforceable against us, ..... (name of bank & branch), notwithstanding the fact that the same is enforced after the dates referred to at (a) or (b) herein above, whichever date is the latest, provided that

notice of any such claim has been given by the PURCHASER before the dates referred to at (a) or (b) herein above, as the case may be. Payments under this LETTER OF GUARANTEE shall be made promptly upon our receiving the notice to that effect from the PURCHASER on demand and without protest or demur.

4. We, ..... (name of bank & branch) undertake not to revoke this Guarantee during its currency without the prior written consent of the PURCHASER.

5. We, ..... (name of bank & branch) hereby further agree that the PURCHASER shall have the fullest liberty, without affecting in any manner our obligations here under, to vary any of the terms and conditions of the said A/T or to extend the time of performance of the said A/T by the SELLER from time to time or to postpone for any time or from time to time any of the powers exercisable by the PURCHASER against the SELLER and to forbear or to enforce any of the terms and conditions relating to the said A/T and We, ... (name of bank & branch) shall not be released from our liability under this Guarantee by reason of any such variation or extension being granted to the SELLER or any forbearance and/ or omission on the part of the PURCHASER or any indulgence by the PURCHASER or by any other matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so releasing us from our liability under this Guarantee.

6. We, ..... (name of bank & branch) hereby further agree that the Guarantee herein contained is initially valid upto 30/05/2014 and that the same shall be extended further according to the provisions contained herein above.

7. We, ..... (name of bank & branch) hereby further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the SELLER and/ or the PURCHASER.

8. We, .....(name of bank & branch) hereby further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our Branch office at Visakhapatnam situated at ..... ([Address of local branch at Visakhapatnam](#)).

“Issuance of this bank guarantee may also be got confirmed from our [Controlling Branch/Office/Higher Authority \(Name & Address\)](#)”

Note: The expression "SELLER" wherever appearing in this Performance Guarantee Bond shall also include the "PRODUCER".

FOR AND ON BEHALF OF

(name of bank & branch)

Signature:

Name:

DULY CONSTITUTED ATTORNEY  
& AUTHORISED



**PART-A**  
**CHEMICAL TREATMENT OF SMS GCP WATER CIRCULATION  
SYSTEM (PH-9 GROUP III, CT-9)**

**1 Introduction and System Details:**

Visakhapatnam Steel Plant is the only shore based integrated steel plant in India. Presently the Plant is producing (operate at a capacity of) 7.5 Million Tonnes per annum. Steel Melt Shop -1 (SMS-1) is under operation from 3.6 MTPA stage.

**1.1 DESCRIPTION OF THE SYSTEM AND OVERALL PROCESS:**

To cater the water requirements of SMS-1, following different systems of recirculation water are provided in Recirculation Pump House (RCPH) of Steel Melting Shop -1 (SMS-1) zone.

This specification consists of following 2 parts.

1. PART-A: Direct cooling water system for SMS 1 GCP circuit (PH-9 Gr-III RCW System).
2. PART-B: Direct cooling water system for SMS 1 caster spray system (PH-16 Gr-II)

### **PART-A**

#### **2 Direct cooling water system for SMS 1 GCP circuit (PH-9 Gr-III RCW System):**

Visakhapatnam steel plant has taken up Revamping of LD converters at Steel Melt Shop-1 (SMS-1). Gas Cleaning Plant (GCP) system details of revamped LD converters are as follows.

In the Steel Melt shop, there are 3 numbers of LD Converters with a volume of 150 m<sup>3</sup> capable of producing 150 MT of liquid steel. Each converter releases fumes rich in carbon monoxide laden with a significant amount of dust. Of the process gas arising in the converter, 90% are CO and 10% CO<sub>2</sub> (approximately), which is removed by the connected gas exhaust system directly at the converter mouth and admitted to the gas cooling system above the converter lip ring. The hot gases collected above the converter mouth are cooled in water cooled cooling stack from 1600 °C down to 900 °C. Cooling stack is connected to a scrubbing tower. In scrubbing tower, the dust laden gas is cleaned in two stage scrubbing system. The first stage separates the coarser particle by means of water spraying in venturi throat and also reduces the gas temperature. The second stage cleans the finer particles by the SMS SIEMAG Baumco venturi and water spraying system which is called the "heart" of cleaning system. The second stage outlet gas is passing through a whirl vane separator which knocks out the water particle entrapped with dust.

After the converter gases have passed through the cooling stack, they pass into the first stage of the gas cleaning plant (quencher Venturi unit) with a temperature of app. 900°C.

In the first stage the gas is cooled by direct contact with the quench water. Depending on the actual gas temperature a part of the water evaporates while passing with the gas through the quencher throat. In quencher throat, the velocity of the gas is increased which causes the separation of the coarser particles. Dust particle along with water droplet is collected in the first stage basin from which the slurry of dust and water are drained by a drain pipe to the launder through a hydraulic seal tank.

#### **First Stage (Primary Venturi):**

The Primary venturi unit is the first stage of the gas cleaning system and will be suitable for pre-cleaning and for cooling down the gas to the saturation temperature. The saturator venturi is designed conical with converging part, throat with adjustable flap and diverging part. Spray nozzles are inserted which are served from the saturator pumps to spray scrubbing water into the gas for quenching and pre-cleaning. The connection to the inlet scrubber duct will be done by a transition piece with metallic expansion bellow.

## **Nozzles at the scrubbing tower first stage**

### ***Direct cooling water spray nozzle***

Number	1
Water flow rate	35.5m <sup>3</sup> /hr
Pressure	2.6 bar

### ***Saturation nozzle (discharge of quencher pump)***

Number	6
Water flow rate	6 x 71.2 m <sup>3</sup> /hr

### ***Channel cleaning nozzles***

Number	3X2
Water flow rate	6 x 69 m <sup>3</sup> /h
Pressure	1.5 bar

## **Second Stage Venturi**

The pre-cleaned gases from primary venturi leaving the impingement separator via two internal gas ducts then pass into the second cleaning stage of the gas scrubber (with SMS-SIEMAG-Baumco venturi throat) for separation of the fine particles (accounting for approx. 10% of total dust load). At the entrance of the second cleaning stage some of the scrubbing water will be injected through four spray nozzles installed at one water lance above the SMS-SIEMAG-Baumco venturi throat. This special feature is made for improving the gas cleaning efficiency and to keep the convergent venturi throat area clean.

In the confuser part of this second cleaning stage the gases are accelerated to a high velocity before the gas impact in the venturi throat against the scrubbing water perpendicularly injected to the gas stream whereby the water is scattered into fine lamellas. These fine lamellas form a multi-layer filter continuously renewing itself, in which even the finest dust particles are collected. During this procedure the gas is cooled further down to a temperature of approximately 70°C.

The venturi throat is equipped with an adjustable damper which is automatically controlled by an electro-hydraulic actuator. This allows optimal adaptation to the gas volume exhausted in the various phases of the steelmaking process, by using the cooling stack pressure measurement and hood pressure control loop.

The tap point of this hood pressure measurement is located in the cooling stack. The gas pressure is used as a leading value for the "hood pressure control loop". By aid of this control loop the required differential pressure across the venturi throat is maintained to assure an effective dust removal from the gases.

In the diffuser part below the venturi throat, which leads into the whirl vane separator the lamellas forms droplets as surface tension becomes effective with decreasing gas velocity.

### ***Nozzles upstream of venturi throat***

Number	4
Water flow rate	4 x 28.625 m <sup>3</sup> /h

Pressure 2.5 bar

Total water flow through these 4 nozzles and perpendicular injection at venturi throat is more than 430 m<sup>3</sup>/hr.

#### Lower level bottle

Lower level bottle is used to measure the level of water in lower basin of scrubber. A constant water head has to be maintained in the lower basin to provide the quencher pump sufficient and steady water head.

#### Hydraulic seal pot

The hydraulic seal pot serves as an intermediate water seal between launder and scrubber which connects drain lines from scrubber top cone. Hydraulic seal pot prevents ambient air ingress inside the scrubber which is under negative pressure due to ID fan suction

Number	1
Overflow Water flow rate	4 x 28.625 m <sup>3</sup> /h
Capacity (effective)	3.7 m <sup>3</sup>
Overflow line size	DN 400

#### Quencher pump unit

Water coming from second stage cleaning is recirculated to the first stage cleaning with the help of quencher pump situated at the bottom of the scrubbing tower. This water is then collected in the first stage basin and goes to the launder through the drain pipe.

Number	3 (1 working/ 1 reserve/ 1 standby)
Water flow rate	427 m <sup>3</sup> /h
Pressure increase	65 mwc
Inlet Pressure	≈ 1 bar

After the converter gases passed through the cooling stack, they are directed with a temperature of approx. 1,000°C into the gas cleaning plant for cleaning the gas from the dust particles. The converter gases are heavily laden with dust particles (~120 g/sm<sup>3</sup>) from the converter process, mainly with iron oxide but as well as other particles from slag, flux charges (lime and others). The range of particle sizes runs from approx. 0.1 micron up to some mille meters. The gas cleaning system is designed as a two-stage high efficiency SMS Siemag Baumco Scrubbing Tower following the cooling stack discharge.

#### 1st stage (quencher stage):

In the **first cleaning stage** (quencher, with saturator throat) the gases are cooled down and fully saturated by first direct contact with the scrubbing water. In the **convergent part (confuser)** of this first cleaning stage scrubbing water is injected via five (5) **quencher nozzles**. This arrangement ensures uniform gas cooling and gas saturation. The scrubbing water is supplied by the **quencher pump** from the bottom cone of 2nd cleaning stage separator.

Depending on the actual gas temperature part of the scrubbing water evaporates while passing with the converter gas through the saturator throat. After the quencher, the saturated gas temperature cools down to approx. 75°C during the blowing time (based on designed blowing data). In this first cleaning stage a big portion (around 90%) of the

entrained dust particles are separated by the water, mainly the coarse grain particles. The **saturator throat** is equipped with a **damper** which is manually adjustable.

In the diffuser part of the quencher, the cooled and saturated gases are slowed down and guided to the **impingement separator**. Water is injected through 1 no of quencher nozzle at the top of this impingement separator. In this section, the gases are separated from the scrubbing water containing now the dust particles from the converter gas. The dust-containing slurry water will exit at the separator bottom discharge, flow by gravity through a connected pipe, an overflow seal tank via the slurry trough back to the water treatment plant/thickeners for slurry separation and cleaning. The cleaned water will be re circulated.

### **2nd stage (venturi stage):**

The pre-cleaned gases leaving the impingement separator via two internal gas ducts then pass into the second cleaning stage of the gas scrubber (with **SMS-SIEMAG-Baumco venturi throat**) for separation of the fine particles (accounting for approx. 10% of total dust load).

At the entrance of the second cleaning stage some of the scrubbing water will be injected through four spray nozzles installed at one water lance above the SMS-DEMAG-Baumco venturi throat. This special feature is made for improving the gas cleaning efficiency and to keep the convergent venturi throat area clean.

In the confuser part of this second cleaning stage the gases are accelerated to a high velocity before the gas impact in the venturi throat against the scrubbing water perpendicularly injected to the gas stream whereby the water is scattered into fine lamellas. These fine lamellas form a multi-layer filter continuously renewing itself, in which even the finest dust particles are collected. During this procedure the gas is cooled further down to a temperature of approximately 70°C.

The ID fan is designed to draw off the clean gas with following operating conditions.

During the blowing phase:

- at the beginning and end of the blow with the full opening of venturi scrubber.
- for remaining period with venturi throat in regulation.

During non blowing phase:

- with venturi throat closed to 50% with ID fan in waiting speed.

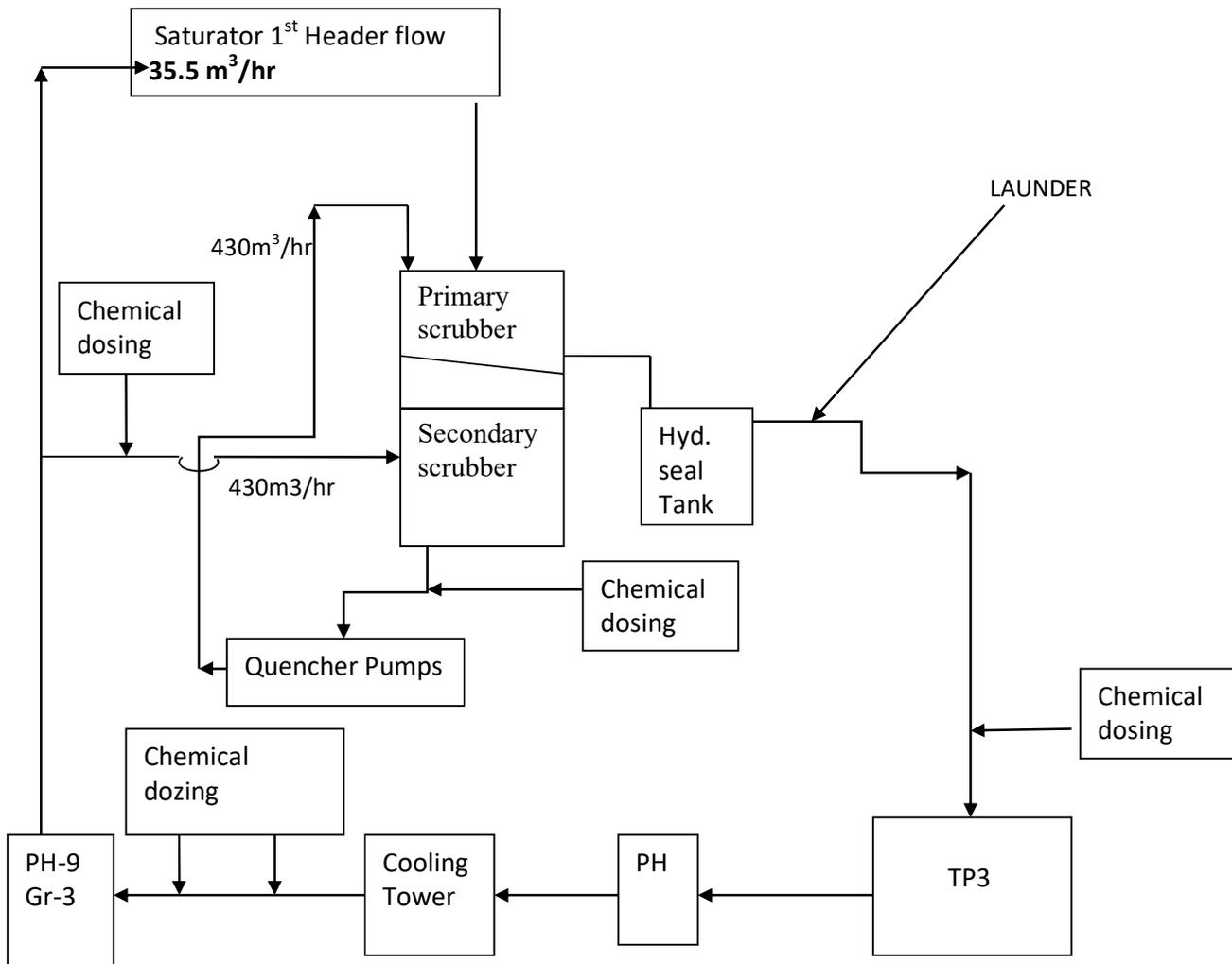
The fan capacity is controlled during the blowing and non-blowing period by operating the fan at its maximum and reduced speeds as given below.

Waiting/Pause speed :	600 RPM
Pre heating Speed :	800 RPM
Blowing speed :	1250 RPM
Gas recovery Speed :	1300 RPM

Metal charge balance into the converter generally has Hot metal charge (135t -145 t), Scrap charge (8t --12 t), Lime (5t -- 10t), Iron ore (3t-- 5t), Cal dolo (3t---5t) and Raw dolo (0.5t--1t). However there can be wide variation in the range and components as per process requirement. Blow time is 18 min with an oxygen injection at rate of 460m<sup>3</sup>/min to 520m<sup>3</sup>/min.

Input raw Materials will have Dust content in the form of Charged lime, Content of iron ore particles, Content of Dolomite chips and others like LD slag etc which will be added in the system.

## SMS GCP clarified water flow diagram



### 2.1 SYSTEM PARAMETERS:

The clarified water circuit which is fed from pump house (PH-9) Group III pumps (5 nos each capacity 600 m<sup>3</sup>/hr at 90 MWC) supply water to the following consumers:

#### 2.1.1 SMS area:

- First water injection header of the stack.
- Venturi scrubber.
- Re circulation pumps

#### 2.1.2 ID Fan House area:

- ID fan Blade washing.
- Hydraulic seal sump.
- Change over valve tank.
- Change over valve hydraulic seals.
- U seals in the gas duct between change over valve and

- Common gas duct.

### 2.1.3 **Electrostatic Precipitator Area:**

- U seals in the gas duct.
- Electrostatic precipitator.
- Hydraulic seal sump.

## 2.2 **General characteristics of gas cleaning section.**

### 2.2.1 **GAS temperature & flow rates:**

Inlet gas temp. 950<sup>0</sup> - 1050<sup>0</sup>C.

Inlet gas flow 125000 Nm<sup>3</sup>/hr.

Water injection flow rate:

-- At pre-scrubbing saturator: Clarified water 35.5 m<sup>3</sup>/hr

-- At Primary venture quencher Nozzles: Recirculation water from venturi: 430 m<sup>3</sup>/hr

-- At venturi scrubber: Clarified water of 430 m<sup>3</sup>/hr flow is to be taken for the calculation of chemical consumption.

### 2.2.2 **Converter side:**

Initial vibration of ID fan after cleaning and balancing will be set between 1.0 to 2.0 mm/sec.

#### NOTE:

1.Total flow rate per converter is (35+50+430+50) = 565 m<sup>3</sup>/hr. Average flow for two converter operation is 1030 cum/hr (with 2 pumps in service at PH-9) and for three converter operation it is 1695 m<sup>3</sup>/hr (with 3 pumps in service at PH-0 9). However, for chemical consumption at PH-9, an average of 2.8 converter operation to be considered for which flow rate will be 565 x 2.8 =1582 m<sup>3</sup>/hr. The dosage rate and yearly quantities will be arrived at based on this flow rate. For the chemical quantity at secondary venturi, an average of 75 heats per day and 16 minutes blow time to be considered. Actual consumption at site will be based on the number of converters in operation and heats made.

2. Supply water temperature is normally up to 38<sup>0</sup>C to 40<sup>0</sup>C and may go to 45<sup>0</sup>C at times

3. 70-80 cub. Meter per hour water goes to Electrostatic precipitator (3 working + 1 stand by) of EMD. First water gets filled up in the pond and then slowly enters in every pipe and flows downwards all along the wall of the pipes cleansing the particles stuck on the inner circumference of the pipe. Operation voltage on the electrode is maintained at 30 – 25 KV. Gas enters electrostatic precipitator with a dust content appx. 100 mg / NM<sup>3</sup> of Gas. Outlet gas from electrostatic precipitator should contain max. 10 mg / NM<sup>3</sup> of Gas. During the shift each ESP is flushed twice for 5 minutes with a flow of 120 cub. meter of water at 6 kg/sq.cm.

The return contaminated water from the above consumers is taken through open launder to Treatment Plant TP-3 where the water is clarified in thickeners and clarified water having TSS less than 20 ppm is taken to Group VI sump in PH9 from where it is pumped to cooling tower CT-9 and cooled clarified water is recirculated. The losses in the system are made up by adding make up water of following quality given at 2.2.3. In case of any system corrections during the course of treatment acid will be provided at free of cost. If required, even soda ash may also be dosed in the treatment plant or in a suitable place in the system to reduce hardness. Soda ash will be provided by VSP. After acid dosing, proportionately water has to be drained from the system as per requirement.

### 2.2.3 **Quality of Make up Water:**

pH

: 7.8 - 8.5

conductivity	mho/cm	: 300 - 400
calcium Hardness (as CaCo3)	mg/l	: 40 - 60
Magnesium Hardness (as CaCo3)	mg/l	: 40 - 60
Total Hardness (as CaCo3)	mg/l	: 80 - 120
P. Alkalinity	mg/l	: 0 - 10
M. Alkalinity	mg/l	: 100 - 150
Turbidity	NTU	: 5 - 20
Total Dissolved solids	mg/l	: 180 - 250
Sulphates as SO4	mg/l	: 10 - 30
Chlorides as Cl2	mg/l	: 20 - 30
Sodium as Na	mg/l	: 40 - 60
Iron as Fe	mg/l	: 0.1 - 0.3
Total suspended solids	mg/l	: 10 (max)
Silica as SiO2	mg/l	: 18 - 30
TVC Count	colonies/ml	: less than 30000
Oil & Grease	mg/l	: less than 10

Party shall consider seasonal variations in the make up water quality, especially the turbidity level and the dust ingress into the system from the atmosphere in cooling tower area while designing the chemical treatment programme.

Present Quality of Gr-3 Recirculation Water and other analysis, given below is indicative.

		TP-3 INLET	TP-3 OUTLET
pH	:	10.5 -12.5	10.5 -12
conductivity	mho/cm	1420-7000	1010-2700
calcium Hardness (as CaCo3)	mg/l	20-1200	12-450
Magnesium Hardness (as CaCo3)	mg/l	15-20	12-40
Total Hardness (as CaCo3)	mg/l	35-1220	24-490
P. Alkalinity	mg/l	150-1500	100-530
M. Alkalinity	mg/l	40-170	30-140
Turbidity	NTU	-----	10-20
Chlorides as Cl2	mg/l	270-480	270-480
Total suspended solids	mg/l	6000	<20

#### 2.2.4 **Composition of LD gas:**

CO	: 63-69%
H <sub>2</sub>	: 2-3%
CO <sub>2</sub>	: 16-17%
N <sub>2</sub>	: 14.5 - 19.5%
Temp.	: 1050 °C at I header
Dust content	: 20-25 kg/T of Steel.

Dust content at flare stack : 50 mg/Nm m<sup>3</sup> (Max)  
Dust content at ESP outlet (Gas recovery plant): 10 mg/Nm m<sup>3</sup>

#### 2.2.5 **Chemical Composition of incoming solids to Treatment Plant:**

Appearance	: Black.
Action on Acid	: Brisk effervescence
Loss on ignition	: Nil.
Acid insoluble	: 1.7 - 2.5%
Iron (Feo)	: 43.3 - 60%
Calcium (Cao)	: 30 - 40.0%
Magnesium (Mgo)	: 2.5 - 4%
Silica (Sio2)	: 10.5 - 12%
Phosphates	: 1.5 - 3%
Manganese (Mno)	: 1.3 - 2%

Titanium Tio 2 : 0.26 – 0.5%

**2.2.6 Granulometry of incoming Solids to Treatment Plant:**

Mesh size	%
+ 250 microns	: 0.01 – 1.5
+ 120 - 250 microns	: 0.08 – 1.5
+ 63 - 120 microns	: 1.15 – 2.5%
- 63	: Rest
TSS of incoming water to treatment plant:	6000 mg/l
Specific gravity	: 3.5 - 4.5

Heavy and hard deposits is observed in pipe lines, Cooling tower basin, pump impeller of the Gr-3 pump, header 1 and quencher nozzles, Electrostatic precipitator and in venturi 1, 2 and 3 if chemical treatment is found to be ineffective. Deposition is also observed whenever chemical treatment is found to be ineffective.

**2.2.7 Water characteristics during blow Samples at Hydraulic Seal tank & Quencher pumps discharge**

pH	:	8.6-12.5	7.2 -10.6
conductivity	mho/cm	: 1060-5500	660-2200
calcium Hardness (as CaCo3) mg/l	:	60-1050	40-350
Magnesium Hardness (as CaCo3) mg/l	:	05-100	05-60
Total Hardness (as CaCo3) mg/l	:	65-1260	45-410
P. Alkalinity	mg/l	: 20-650	0-40
M. Alkalinity	mg/l	: 50-350	50-375
Chlorides as Cl2	mg/l	: 250-320	250-320
Total suspended solids	mg/l	: 5524-21296	5964-10050

2.3 **PROBLEMS:** Without chemical treatment and in case of ineffective treatment the following problems were being experienced:-

2.3.1 Severe deposition in the system especially deposition in supply pipes to SMS and deposits found at mouth of secondary venturi, Primary Quencher nozzles and severe erosion / deposits on ID fan blades causing high vibration and shutdowns causing production losses.

2.3.2 Erosion of DM water pipe lines causing leaks from outside wherever the pipes come in contact with clarified water at times.

2.3.3 Deposition at gas channel areas.

2.3.4 Deposition at nozzle/pipes in first header, Gas channel cleaning nozzles, Venturi throat central nozzle and Quencher nozzles.

2.3.5 Due to very high rate of deposition, carrying capacity of the pipe lines and drain lines is reduced causing overflow, there by wastage of water.

2.3.6 Deposition on the pump internals, valves, NRVs etc. which is causing jamming of pumps and valves, reverse rotation of pumps due to deposition on NRV flaps.

2.3.7 Shutdown on the pumps becoming impossible because of nonfunctioning of valves, NRVs etc. and coating of impellers reduces the pump efficiency.

- 2.3.8 High TSS in TP - 3 outlet water.
- 2.3.9 Scaling, deposition in water is difficult to bring under control.
- 2.3.10 Heavy deposition inside Electrostatic precipitator supply pipes causing reduction in voltage below 25 KV. Deposition in the pipes reduces the flushing water flow and temperature drastically. Increased deposition on ID fan blades causes abnormal increase in the frequency of Fan Balancing of booster.
- 2.3.11 Nozzles of 1st header water flow comes below 35.5 m<sup>3</sup>/hr and Quencher Nozzles water flow comes below 430 m<sup>3</sup>/hr during a campaign of 1200 heats.
- 2.3.12 Gas flow rate comes below (during non-blow time) 1,25,000 m<sup>3</sup>/hr during a campaign of 1200 heats.
- 2.3.13 Calcium Hardness of TP-3 outlet water crosses 450 mg/l (as CaCO<sub>3</sub>)

#### **2.4 TREATMENT SPECIFICATION:**

The system is under continuous treatment. The system is to be treated to overcome the problems mentioned in the clause no 2.3. VSP is committed and expected to go for 4500 and above heats in a campaign without experiencing the problems as depicted at point 2.3.

- 2.4.1 Specification for Chemicals:
- 2.4.2 The formulation offered by the party shall be best suited to take care of scaling, deposition in the system and to take care problems mentioned at clause 2.4 in SMS gas cleaning water recirculation system including pump house, treatment plant-3, Electrostatic precipitator and LD gas cleaning system. The formulation shall be selected to take care of the Iron ore & lime fines charged into the converter along with flux.
- 2.4.3 The formulation shall be supplied in carbuoys (returnable)/ tankers, whichever the case may be, properly sealed and labeled.
- 2.4.4 The formulation shall be effective at the following operating parameters of the system pH 9 to 13, water temp 80 - 90 deg.C, total Hardness : 900-1300 ppm, and other parameters as depicted in 2.2.7 during blow at Hydraulic seal and Quencher pumps and also mentioned in pt. 2.2.3 for TP-3 outlet.
- 2.4.5 Vendor shall recommend chemical in Kgs., the quantity of formulation to be dosed daily in to the system. Any extra dosage required to achieve 100% scale inhibition efficiency during treatment program shall be exclusively to vendors account and No payment will be made to this effect.
  - a) Constant flow rate of water and gas should be maintained through out the campaign and for this inflow to GCP on the first day is to be recorded jointly by WMD, Converter (SMS) operation and the party. This recorded inflow to GCP must be maintained through out the treatment period during the campaign.
  - b) There should not be any deposit/chokage in pump internals, valves, pipes and at the nozzles of kinpactor and quencher.
  - c) Blow down from pump house 9 Group III system will be provided incase Calcium levels exceeds more than 100 ppm/ Chloride of 300ppm.
  - d) Party has to submit weekly reports to Engineer incharge

- e) Dispersant and wetting agent may be added if required at ID fan of SMS GCP and Electrostatic precipitator to avoid any deposition by precipitation. Agency should ensure that there is no deposition in Electrostatic precipitation.
- 2.4.6 The agency should depute one technical expert in the site during the treatment program to inspect effectiveness of the programme and should be in a position to take instant decisions for increasing or decreasing the doses as required keeping the annual dosage quantity or quantity mentioned in the total contract period constant to maintain 100% effectiveness of treatment programme. This is to be informed to the pump house incharge and GCP Shift Incharge immediately or the next day. He has to supervise the daily chemical dosing and monitoring system through out the year.
- 2.4.7 Party may change the chemical for the improvement of the system keeping the annual / total contract value same. However party has to obtain prior approval from VSP before making these changes.
- 2.4.8 The system has heavy deposits through out the circuit. The vendor should offer suitable chemical like Iron dispersant, wetting agent etc. which shall be completely miscible with water to avoid deposition.
- 2.4.9 Chemical formulation should be able to take care Metal charge balance in the converter during charging and its wide variations and should work effectively even for simultaneous charging of Lime up to 10 T and Cal Dolo up to 5T.
- 2.4.10 The formulation offered shall be compatible with polyelectrolyte used for coagulation and clarification in treatment plant-3.
- 2.4.11 The formulation shall be stable at very high temperature of the LD gas with which it is coming in contact while scrubbing.
- 2.4.12 Formulations shall be easily biodegradable. Party shall extend specific confirmation in this regard in the offer. Party shall provide certification/confirmation for biodegradability of the chemicals offered before starting the treatment.
- 2.4.13 The tenderer shall submit the most effective dosage rate for the formulation offered by them.
- 2.4.14 **The list of chemicals is mentioned at Annexure-II. The list is only indicative. Chemicals list covers all the possible chemicals appropriate to the system by their generic nature. Parties are free to offer their choice of chemicals combination which need necessarily not cover the entire list. However, it is expected that number of chemicals do not exceed the number given in the list.**
- 2.4.15 No shutdown is possible in the system. Passivation / precleaning, if required to be done, is the responsibility of the party and is to be carried out on line without affecting the process or the equipment of the system.
- 2.4.16 Chemicals shall be stored in the designated place and housekeeping at the storage area is party's responsibility. MSDS and relevant safety precautions shall be displayed by the party prominently at the storage area.
- 2.4.17 Party shall submit product profile/description of each chemical in the offer and the test certificate submitted at the time of delivery of chemicals and should be in line with the above.
- 2.4.18 Party shall consider local dosage of necessary chemicals in water lines at Secondary venturi and Quencher (Re circulation) system for all converters to avoid frequent

chokage problems. In absence of local recirculation the same chemical quantity has to be dosed at a suitable location as desired by site incharge.

## **2.5 GUARANTEE:**

With the offered treatment program, the party shall guarantee the following performance.

- 2.5.1 TSS at TP-3 outlet will be maintained at less than 20 ppm.
- 2.5.2 Maximum allowable ID fan vibration for blowing operation to take place will be less than 4.5 mm/sec. ID fan vibration will be less than 4.5 mm/sec through out the campaign period without any forced mid-campaign fan balancing except planned mid-campaign fan balancing and without any reduction in the fan speed. Campaign period is normally 180 days with an approximate converter life of 4500 heats.
- 2.5.3 Path from 1st header to ID fan should be deposit free and abrupt gas flow reduction is considered as the result of deposition in the gas path. However, consideration will be given in such cases where ID fan speed reduction etc takes place due to operational problems.
- 2.5.4 For monitoring of the above, the party will provide and maintain the following monitoring equipments at site throughout the period of treatment programme.
  - a) Electronic dosing pumps (with one standby) including polyelectrolyte dosing pumps (with one standby) to all 3 streams at TP-3.
  - b) pH, Conductivity, Spectrophotometer along with TSS analytical kit with required lab chemicals for measurement of all parameter at site. Parameters to be checked are ph, conductivity, p Alkalinity, M Alkalinity, calcium hardness, Total hardness, iron, TSS, Chlorides on daily basis at the outlet of the treatment plant.
  - c) Weekly once any one converter, recirculation water sample analysis to be carried out at Hydraulic seal tank outlet and quencher recirculation (in case of local recirculation is in operation) for all the parameters mentioned in point "b" of 2.5.4 during blow time.
  - d) The party shall provide the above facilities during the entire period of treatment without any commercial implications to VSP. Party may take back the above monitoring tools after the completion of treatment. However the existing dosing equipment such as Alum/polyelectrolyte dosing pumps and stirrers are allowed to use by the party. Power for operation of dosing equipment shall be provided by VSP free of cost.
  - e) Water flow for 1st header should be maintained at 35.5 m<sup>3</sup>/hr, Quencher water flow should be 430 m<sup>3</sup>/hr till 1200 heats made during fresh campaign or after mid campaign.
  - f) Gas flow rate at the start of converter operation (during non-blow time) is approximately 1,25,000 m<sup>3</sup>/hr at the start of the campaign. Initial gas flow has to be recorded in the protocaol at the beginning of campaign. Same exercise has to be done during mid campaign as well. Initial recorded Gas flow rate should be maintained till 1200 heats made during fresh campaign or after mid campaign.
  - g) Chemical analysis of incoming and outgoing water of the system is to be carried out once in a day and report to be submitted to Engineer l/c as per annexure-D.

## **2.6 PENALTY:**

Party may please note that the system is already under treatment and no stabilization period is allowed. Party shall maintain the guaranteed performance throughout the period of treatment. In case of any deviation from the prescribed limits, penalty shall be levied as below.

#### 2.6.1 Total Suspended Solids in TP-3 Outlet is to be carried out daily basis.

The TSS level on the outlet of the thickeners in TP- 3, the penalty imposition is as below.

A. When more than one clarifier is in operation (Normal operation):

For TSS less than or equal to 20 ppm: No penalty.

Above 20 ppm: No payment for the polyelectrolyte consumed during the week.

B. When one clarifier is in operation due to non availability of the other clarifiers in the system:

For TSS less than or equal to 40 ppm: No penalty

Above 40 ppm : No payment for the polyelectrolyte consumed during the week

#### 2.6.2 ID fan vibrations:

**2.6.2.1 If the ID fan vibrations are more than 4.5 mm/sec interlock automatically will not allow blowing operation. In such cases to continue blowing, fan RPM is reduced such that the ID fan vibration is kept below 4.5 mm/sec. In order to continue blowing, if the ID fan vibrations are kept below 4.5 mm/sec by reducing the ID fan RPM, even for a single day, the penalties will be:-**

If the ID fan RPM is more than or equal to 1250 RPM and ID fan vibrations are less than or equal to 4.5 mm/sec: No penalty

If the ID fan RPM is kept intentionally in the range 1201 to 1249 to continue blowing in order to keep the ID fan vibration below 4.5 mm/sec: Deduction of 10% of the quantity of all chemicals except polyelectrolyte consumed (at converter side and at PH-9) as penalty for the day.

If the ID fan RPM is kept intentionally in the range 1050 to 1200 to continue blowing in order to keep the ID fan vibration below 4.5 mm/sec: Deduction of 30% of the quantity of all chemicals except polyelectrolyte consumed (at converter side and at PH-9) as penalty for the day.

If the ID fan RPM is kept intentionally below 1050 to continue blowing in order to keep the ID fan vibration below 4.5 mm/sec: No payment for the quantity of all chemicals except polyelectrolyte consumed (at converter side and at PH-9) as penalty for the day.

Normally operating speed is 1250-1300 rpm and balancing is done at 1300 rpm. Shift ID fan vibration readings are generally taken at 1250 to 1300 rpm.

2.6.2.2 For reasons attributable to VSP i.e. any mechanical problems in ID fan beyond the specified limits etc, if system performance is not within the specified limits, in such cases, treatment will be accepted after giving due consideration to the upset conditions in the system. VSP's decision is final in this regard. A joint record is to be generated in such cases as enclosed in annexure-III and SMS (Mech) shall clearly mention the reasons for ID fan vibration if the value is more than 4.5 mm/sec.

Clause no: 2.6.2.2 is further clarified as follows:-

I.D.fan balancing shall be taken up for every 1200 heats, which becomes cycle for campaign performance evaluation. All other clauses of 2.6.2. remaining same, it is further clarified that if mid campaign balancing is warranted below 1200 heats, penalty shall be imposed as per clause 2.6.2.3 for next 1200 heats. During the period of 2<sup>nd</sup> and 3<sup>rd</sup> mid campaign balancing, penalties shall be imposed as per 2.6.2.3 (ii), (iii) up to next 1200 heats.

If mid campaign balancing is taken up after 1200 heats, no penalty shall be imposed but the next cycle starts immediately after the balancing.

2.6.2.3 In case of a mid campaign balancing, payment will be made for all chemicals except polyelectrolyte consumed for the remaining period of the campaign for that converter as below:

i) First mid campaign balancing -50% payment for all chemicals except polyelectrolyte consumed in the remaining period of the campaign of 1200 heats cycle.

ii) Second mid campaign balancing -25% payment for all chemicals except polyelectrolyte consumed in the remaining period of campaign.

iii) Third mid campaign balancing - No payment for all chemicals except polyelectrolyte consumed in the remaining period of the campaign.

2.6.2.4 As VSP intends to achieve above 4500 heats per campaign, ID fan balancing shall be taken up for every 1200 heats or during available opportunity. However, If intermediate balancing is done at less than or equal to 4.5 mm/sec ID fan vibration levels, and to read with clause 2.6.2.2 & 2.5.3; it will be taken as the operational requirement for the above and party shall not be penalized on that account.

Chemicals consumed include the chemicals dosed at the converter side and quantity of chemicals dosed at -PH-9.

2.6.3 Gas flow rate at the start of converter operation (during non-blow time) is approximately 1,25,000 m<sup>3</sup>/hr at the start of the campaign. This has to be recorded in the protocol at the beginning of campaign. Same exercise has to be done during mid campaign as well. Significant reduction in gas flow is considered as the result of deposition in gas path i.e. deposition from I header to ID fan and penalty is imposed as the details given below:

(i) For gas flow reduction of 10% - 15% from the campaign beginning flow 25% penalty on all chemicals except polyelectrolyte consumed for the duration.

(ii) For gas flow reduction of above 15% - 20% from the campaign beginning flow 50% penalty all chemicals except polyelectrolyte consumed for the duration.

(iii) If mid campaign gas channel,, secondary venturi cleaning is carried out due to very less flow of gas leading to more than 20% reduction from the campaign beginning flow, no payment will be made for all chemicals except polyelectrolyte consumed thereafter till the campaign end period (end of the converter running campaign).

2.6.3.1 However, if gas flow rate is fluctuating over the penalty slab values for a brief period (for a day or two) which may occur due to instrument error or due to the dynamic nature of the system, in such cases, a consideration of 5% reduction in gas flow from the campaign beginning flow on either side will be made up to the gas flow to decide on penalty imposition/waiver.

2.6.3.2 Water flow for primary quencher Nozzles should not come down below 250 m<sup>3</sup>/hr before 1200 heats made during fresh campaign or after mid campaign. Here one campaign cycle means total life of a converter from lining to lining. 4500 heats will be made in one campaign cycle.

(i) For Water flow below 250 m<sup>3</sup>/hr and up to 225 m<sup>3</sup>/hr - 25% payment for all chemicals except polyelectrolyte consumed in the remaining period of the campaign of 1200 heats cycle.

(ii) For Water flow below 225 m<sup>3</sup>/hr and up to 200 m<sup>3</sup>/hr - 50% payment for all chemicals except polyelectrolyte consumed in the remaining period of campaign.

(iii) For Water flow below 200 m<sup>3</sup>/hr - no payment will be made for all chemicals except polyelectrolyte consumed thereafter till the campaign end period.

2.6.3.3 Campaign data sheet and Inspection reports which are signed jointly are to be submitted for performance evaluation.

2.6.3.4 At the time of changeover of treatment from previous A/T to next A/T, the starting of new cycle (1200 heats) is taken as the starting point for performance evaluation.

**Note:** While imposing the penalty, the higher slab of penalty rate is considered in case of simultaneous applicability of penalties of different clauses for the same duration.

2.6.4 In case of discontinuation of the treatment due to intentional stock out or intentional stoppage of dosing or decrease in the quantity of chemicals dosed after mid campaign balancing and/or reduction in the speed of the ID fan, penalty equivalent to the cost of one day chemicals for each day of stock out may be imposed on the party. VSP's decision is final in this regard.

2.6.5 General Terms & Conditions are covered under Clause No: 4.0

-----  
AGM (T)/Engineer I/c

-----  
GM/EMD

-----  
Sr Mgr (T)  
(Pl / Chem.-WMD)

-----  
GM(T) (Section-I/c - WMD)

-----  
SMS Representative

## **PART- B**

### **CHEMICAL TREATMENT OF RECIRCULATION WATER SYSTEMS IN CCD, SMS ZONE (PH-16: GR-II SECONDARY SPRAY)**

#### **3 SYSTEM:**

Pump house-9 Gr-II (PH-9GR-II) pumps supplies clarified water to process tables, handling & finishing lines and sludge drains of continuous casting machines of CCD. The return water from process tables and handling & finishing lines is collected at Pump House-15GR-II (PH-15GR-II) sump from where the water is pumped to Cooling Tower-7(CT-7).From CT-7 the

water goes to PH-9GR-II sump by gravity. The sludge drain water returns to scale pit of PH-15GR-I.

A tapping was taken from PH-9GR-II header pipe and connected to High Rate Deep Bed (HRDB) Pressure Filters. The out let of the HRDB pressure filters has been taken to the existing secondary spray water storage tank and the back washing out let water (400m<sup>3</sup>/day) of filters to scale pit. There are 4 HRDB pressure filters and back washing shall be done once in 12 hours. Pump House-16GR-II (PH-16GR-II) horizontal pumps supplies filtered water to secondary spray & GIGA/ALBA gas cutting machines and vertical pumps supplies clarified water to sludge granulation & torch cutting of continuous casting machines of CCD. The return water is collected at PH-15GR-I scale pit through a scale flume from where scale, oil & grease are removed. Part of the water (1200m<sup>3</sup>/hr) is supplied to scale flushing and the remaining part (2150 m<sup>3</sup>/hr) is supplied to Treatment Plant-4 (TP-4) for further treatment. In the treatment plant the water is passed through two thickeners to remove suspended particles, oil & grease. The clarified water from TP-4 returns to PH-9GR-V sump by gravity. It is pumped to CT-7 for cooling and finally the water goes to PH-9GR-II sump for recirculation.

FLOW AND WATER BALANCING DIAGRAM IS ENCLOSED AT ANNEXURE-7

**MAKEUP WATER:**

No makeup water is used at present. Ingress water from group-I and F&D water is used as makeup. Water addition to CCD system is expected to be around 200 m<sup>3</sup>/hr. This may vary depending upon the ingress of water from equipment cooling and other miscellaneous users.

**BLOW DOWN:**

Part of the clarified water (100m<sup>3</sup>/hr) is used at slag yard and other places for miscellaneous purposes and remaining excess water is given as blow down.

**DETAILS OF EXISTING COOLING WATER SYSTEM:**

**3.1 System operating parameters:**

1. Holdup volume at scale pit=1500 m<sup>3</sup>.
2. Holdup volume at TP-4=7000 M<sup>3</sup>. (2 Thickeners) Flow rate=2150 m<sup>3</sup>/hr.
3. Holdup volume at secondary water storage tank=105 m<sup>3</sup>. Flow rate=600m<sup>3</sup>/hr.
4. Total holdup volume of CCD clarified water recirculating system=12000 m<sup>3</sup>.
5. Two filters are in operation and 600 m<sup>3</sup>/hr water is being used for Secondary Spray circuit.

### Details of cooling towers

	CT-7
Make	PAHARPUR-MARELY
Type	Induced Draft Double Cross flow
Frame work	Treated pine wood
Filling	G.R.P
Design Capacity m <sup>3</sup> /hr	1850
Basin volume, m <sup>3</sup>	310 (each cell)
Sump volume, m <sup>3</sup>	1000
Cooling Water circulation rate (Normal) m <sup>3</sup> /hr	1800
Temp in/out °C, ΔT	20
Maximum supply Temp °C	34
Average Return Temp °C	36
Maximum Return Temp °C	40
No of Cells	03+02
Capacity of each cell, m <sup>3</sup> /hr	310
Cycles of Concentration(COC)	---
Drift losses (estimated) m <sup>3</sup> /hr	0.05%
Nozzle details	POLYPROPYLENE

### 3.2 System Metallurgy:

The water which is to be treated will be passing through the following equipment whose metallurgy is given below.

1. Pipes : Carbon Steel
2. Nozzles : Brass
3. Filters & Tanks : M.S.
4. Pumps: :Impeller & body materials are of Cast Steel CA6NM and cast iron IS: 210-Gr20.

### 3.3 Existing Quality of Recirculation Water-(HRDB OUT LET)

pH		: 8.0 - 8.4
Conductivity	mho/cm	: 1060-1400
Turbidity	NTU	: 10-20
P Alkalinity	mg/l	: 6 - 20
M Alkalinity	mg/l	: 102- 190
Chlorides	mg/l	: 240-290
Ca Hardness	mg/l	: 80 - 120
Mg Hardness	mg/l	: 60 - 90
Total Hardness	mg/l	: 140 - 210
Oil and Grease		: Traces of oil

### 3.4 Present Inlet and Outlet Quality Of Water At Treatment Plant-4:

	<u>Inlet</u>	<u>Outlet</u>
pH	8.5	8.5
Conductivity	900 mho/sqcm	900 mho/sqcm
Turbidity	36ntu	16ntu
P-Alkalinity	8ppm	8ppm
M-Alkalinity	120ppm	120ppm
Hardness Ca	90ppm	90ppm
Mg	70ppm	70ppm
Total Hardness	160ppm	160ppm
TSS	100ppm	<20ppm
Oil & Grease	30ppm	<10ppm
Fe	1ppm	0.1ppm
TVC	10 lacs col/ml	10 lacs col/ml.
Temperature	45°C	43°C

#### Filtration:

100 % water after passing through HRDB Filters is used.

### 3.6 The Group 1 water quality is as follows:

Ingress water from group-I water is used as makeup. This may vary depending upon the ingress of water from equipment cooling and other miscellaneous users.

pH		: 8.3 - 8.6
Conductivity	mho/cm	: 300 - 750
Turbidity	NTU	: 20 - 50
P Alkalinity	mg/l	: 0 - 20
M Alkalinity	mg/l	: 130 - 180
Chlorides	mg/l	: 30 - 160
Ca Hardness	mg/l	: 60 - 100
Mg Hardness	mg/l	: 40 - 85
Total Hardness	mg/l	: 100 - 185
Oil and Grease		: Traces of oil

Some times plant makeup water is used to compensate the system losses. The makeup water analysis is generally in following range.

### 3.7 The makeup water quality is as follows

pH		: 7.8 to 8.5
Conductivity		: 300 to 400 Mho/cm
Calcium Harness (as CaCo <sub>3</sub> )		: 40 to 60 mg/l
Magnesium Hardness (as CaCo <sub>3</sub> )		: 40 to 60 mg/l
Total Hardness (as CaCo <sub>3</sub> )		: 80 to 120 mg/l
P-Alkalinity (as CaCo <sub>3</sub> )		: 0-10 mg/l
M-Alkalinity (as CaCo <sub>3</sub> )		: 100 to 150 mg/l
Silicon (as SiO <sub>2</sub> )		: 18 to 30 mg/l
Turbidity		: 5 to 20 NTU
Total Dissolved solids		: 180 to 250 mg/l
Sulphates as So <sub>4</sub>		: 10 to 20 mg/l
Chlorides as Cl <sub>2</sub>		: 20 to 40 mg/l
Sodium as Na		: 40 to 60 mg/1
Iron as Fe		: 0.1 to 0.3 mg/l
Total suspended solids (max)		:20 mg/l
Copper as cu (max)		: 0.001 mg/l
T V C count		: less than 30000 cols/ml

Party shall take in to consideration the seasonal variations in the makeup water quality, especially the turbidity level and dust ingress into the system from the atmosphere while designing the treatment program. Make up water analysis for the last one year (month wise) is enclosed as Annexure-III.

### **3.8 Present cooling water Treatment Programme**

The present cooling water treatment Programme uses the following chemicals:

- Corrosion inhibitor
- Antiscalent
- Oxidizing biocide
- Non-Oxidizing biocide basic
- Bio dispersant
- Oil dispersant
- Oil De-emulsifier
- Filter Backwash Aid
- Flocculent

### **3.9 TREATMENT OBJECTIVE AND PROBLEMS:**

#### **OBJECTIVE:**

Treatment programme is aimed at controlling of corrosion and microbiological growth in the system and presence of oil and resultant problems such as deposition of iron, microbiological fouling, chokage and microbiological induced corrosion in the secondary spray system.

**PROBLEMS:** The following problems are exists in the system:

1. Improper cooling of rolls/blooms due to chokage of nozzles leading to breakouts of blooms resulting rejection.
2. Microbiological growth due to presence of oil in the system and related problems.
3. Shells formation and chokage of duplex filters.
4. Further the iron buildup may take place due to continuous addition of casting powder/slag forming mixture (SiO<sub>2</sub>-30%-33%,CaO-24%-27%,Free Carbon-21%-23%,Na<sub>2</sub>O-4%-7%,CO<sub>2</sub>-6%,Al<sub>2</sub>O<sub>3</sub>-4%-7%,CaF<sub>2</sub>-4%-6%,Fe<sub>2</sub>O<sub>3</sub>-2%-4%).

**3.10 Parameters to be maintained after treatment in Recirculation water:**

Parameter	Unit	Normal	Maximum/control limit
PH		8.3 - 8.6	8.8
Conductivity	Mho/cm	<720	900
Calcium Harness (as CaCo <sub>3</sub> )	mg/l	<130	200
Magnesium Hardness (as CaCo <sub>3</sub> )	mg/l	<130	180
Total Hardness (as CaCo <sub>3</sub> )	mg/l	<260	380
P-Alkalinity (as CaCo <sub>3</sub> )	mg/l	<30	40
M-Alkalinity (as CaCo <sub>3</sub> )	mg/l	<290	350
Silicon as SiO <sub>2</sub>	mg/l	<55	100
Turbidity	NTU	<72	100
Total Dissolved solids	mg/l	<410	510
Sulphates as So <sub>4</sub>	mg/l	<45	60
Chlorides as Cl <sub>2</sub>	mg/l	<270	300
Sodium as Na	mg/l		
Iron as Fe	mg/l	<0.6	1
Total suspended solids (max)	mg/l	<20	20
Copper as cu (max)	mg/l	<0.002	0.005

**3.11 REQUIREMENTS OF PROPOSED COOLING WATER TREATMENT PROGRAMME:**

**3.11.1 General requirements of cooling water treatment package**

3.11.1.1 VSP requires Party to provide cooling water treatment package for chemical supply, dosage, control and monitoring of cooling tower no:7 with the following chemicals.

1. Effective corrosion inhibitors to protect MS from corrosion.
2. Effective antiscalent to prevent the precipitation of alkaline earth salts.
3. Effective Scale dispersant to retard the deposition of corrosion products & other suspended material etc.
4. Effective bio dispersant to prevent the accumulation of deposits of silt and biological products.
5. Effective biocides (non-oxidizing) to control microbiological fouling. To avoid microbiological growth Naocl and ClO<sub>2</sub> addition can also be considered in such a way that cost of treatment is minimum and competitive.
6. Effective biocide activator/ biocide supplement to improve the performance of the biocides.

3.11.2 The treatment is to be done in 5 stages as given below:

1. At Scale Pit suitable oil de-emulsifiers may be thought of to separate Oil/grease which shall be removed by Oil Skimmers provided.
2. At Thickeners of TP-4 suitable flocculants are to be dosed for reducing the suspended solids, oil & grease.

3. At the secondary spray water storage tank suitable non-oxidizing biocides and bio-dispersants to be dosed to prevent shell growth, bio-mass and dosing of other chemicals for prevention of iron fouling choking the spray nozzles. Suitable chemicals at the HRDB Pressure Filters backwash storage tank are to be given as backwash aids to avoid filter bed clogging.
  4. Oxidizing biocides and corrosion inhibitors are to be dosed with suitable pumps in the system.
  5. 10% of the oxidizing, non-oxidising and bio-dispersants are to be quoted extra for dosing at Treatment Plant-4 Out let to keep the underground gravity pipelines clean.
  6. Frequent nozzles/strainers problem is noticed for CCM 2. Extra care shall be taken to address the problem before offering chemical treatment and satellite chemical dosing of oil/bio dispersants, anti scalants and corrosion inhibitors are required to be dosed at the inlet of CCM 2 (Corus CCM) water line to avoid chokage of nozzles and strainers.
- 3.11.3 **In view of above, party is required to quote dosage rate and chemical consumption for oil de-emulsifiers, flocculants, corrosion/scale inhibitors, bio-dispersants, iron dispersants and biocides etc. based on recirculation rates at each stage. However for reduction in recirculation rates during machine stopping / starting, the dosage rate / chemical consumption shall not change. Similarly, dosage / consumption of chemicals remain unaltered in case of occasional excess water in recirculation which may arise due to system imbalances**
- 3.11.4 **The list of chemicals is mentioned in the ANNEXURE-II. The list is only indicative. Chemicals list covers all the possible chemicals appropriate to the system by their generic nature. Parties are free to offer their choice of chemicals combination which need not necessarily cover the entire list. However, it is expected that number of chemicals do not exceed the number given in the list. The order quantity will be based on the specified dosage rate in PPM, based on the recirculation rates for corrosion inhibitors and biocides.**
- 3.11.5 No shutdown is possible in the system. If Party feels the necessity of Passivation / precleaning, it has to make all necessary arrangements to execute the same online with approval from the site incharge.
- 3.11.6 VSP will not supply any chemical. Chemicals like sulphuric acid and chlorine dioxide, gas chlorine (if required) shall be in the scope of party including storage and handling of these chemicals.
- 3.11.7 Party has to comply with the existing VSPs ISO procedures like EMS-14001 & QMS-9001& OHSAS-18001 for ensuring the green and safe handling, storage of all chemicals.
- 3.11.8 Formulations shall be easily biodegradable. Party shall extend specific confirmation in this regard in the offer. Party shall provide certification/confirmation for biodegradability of the chemicals offered before starting the treatment. And party's chemicals should not fall under banned category as per APPCB & CPCB.
- 3.11.9 Formulations shall not show any signs of deterioration like separation of solids at least for a period of 90 days after the date of receipt of materials at site.
- 3.11.10 The formulation offered shall be compatible with chemicals used in treatment plant viz. polyelectrolyte & alum.
- 3.11.11 Treatment shall be effective in the specified range of pH and temperature.
- 3.11.12 Supplier should ensure that there should not be any corrosion in the fittings at injection point because of low PH of chemicals.

3.11.13 Treatment programme should be capable of sustained operation under the prevailing conditions as well as momentary disturbed conditions like dust ingress into the system etc.

### **3.12 Scaling and Corrosion:**

3.12.1 The corrosion inhibitor formulation offered shall take care of corrosion, scaling and deposition in the system. The formulation shall contain suitable Antiscalents with proper dispersants and corrosion inhibitors for MS. Party should guarantee that scaling and fouling will be controlled to the negligible level so that it will not pose any limitation to the process.

3.12.2 The formulation shall be effective for all operating parameters as mentioned at clauses 3.1 to 3.8.

### **3.13 Biological Growth:**

3.13.1 The biocide formulation offered must take care of the microbiological growth, shell growth and related problems like corrosion and sulphur reducing bacteria in the system. The biocide shall contain suitable bio-dispersants.

3.13.2 The formulation shall be compatible with anticorrosion inhibitor formulation and other chemicals like polyelectrolyte used in the system.

3.13.3 The biocide should be effective for specified range of pH and temp.

3.13.4 The formulation shall be non-corrosive and should have surface-active agents for proper cleaning action on fouled surfaces.

3.13.5 It should be compatible with Antiscalents /corrosion inhibitors and all other chemical/ formulation offered by the party.

3.13.6 If required dosing of NaOCl, or ClO<sub>2</sub> can be done continuously to maintain a positive free residual chlorine level in the supply header of the consumer. Any excess of chlorine should be avoided due to its harmful effects. All statutory regulations in this connection shall be followed by the party.

3.13.7 On site generation is allowed for ClO<sub>2</sub>.

3.13.8 Biological control program shall be designed for effective micro-biological control and pay special attention to the following.

- Total bacterial count.
- Sulphur reducing bacteria.
- Iron forming bacteria.
- under deposit corrosion
- Prevention of algae growth.

### **3.14 Supply of Chemicals**

3.14.1 Chemicals shall be supplied in HDPE carbuoys (returnable)/ tankers/sealed containers whichever the case may be, properly sealed and also shall be labeled properly with name, brand name, batch number, Gross weight, net weight, tare weight and Expiry date. Each batch of chemicals should have test certificate.

3.14.2 Material shall be delivered to the VSP stores. Transportation of chemical(s) from VSP store to dosing site will be in the scope of supplier with out any extra cost to VSP. No inspection is required at stores as the material formulation is proprietary in nature.

3.14.3 In case of intentional stock out situation at site a penalty equivalent to the cost of one-day chemical consumption for each day of stock out would be imposed on the party. VSP's decision is final in this regard.

3.14.4 Extra/Exigency supply and extra consumption of chemicals to achieve performance parameters beyond the specified dosages is permitted without any commercial implications to VSP. In such cases, party shall give details of extra consumption to WMD and properly account for the same at site. While bringing in such chemicals, party shall ensure proper entry at the plant security gates. The free supply chemicals can be directly delivered to the site with out routing through stores. No GARN will be raised against this material.

3.14.5 Party is totally responsible for their handling of chemicals, dosing and maintenance of the connected system throughout the treatment period. The party shall maintain stock of these chemicals at site with clear and simple operating instructions for tackling emergency situation.

**3.15 GUARANTEE:**

With the above treatment the party shall guarantee the following: -

3.15.1 **Corrosion:** This is measured on monthly basis. Corrosion rate in the circulation water shall be kept under control and shall be maintained

**MS Corrosion at PH-16GR-II (secondary spray) out let : Less than 5.00mpy**

3.15.2 **Suspended solids:** Suspended solids at the outlet of TP-4 Thickeners<20 ppm.

3.15.3 **Oil & Grease:** Oil & grease at the outlet of TP-4 Thickeners<10 ppm.

3.15.4 **Deposition:** There should be no scaling/deposition in the system. Measurement of the deposition rate by stainless steel coupon method through a deposition rack similar to corrosion coupon rack as per IS: 8188-1999. Deposition rate in the circulation water Should be maintained below 0.005 grams/coupon/day.

3.15.5 **Microbiology:** This is measured fortnightly.

**TVC count :Less than 5, 00,000 col. / ml.**

**SRB : 150 counts/100ml.**

At the inlet of the secondary spray Duplex Filters of the consumer end, prior to the addition of biocide into the system.

3.15.6 **STOCK LEVELS OF CHEMICALS:** In case of intentional stock out situation at site, a penalty equivalent to the cost of one day chemical consumption for each day of stock out may be imposed on the party. VSP's decision is final in this regard.

**3.16 PENALTY:**

Party may please note that the system is already under treatment and a stabilization period of 15 days can be provided. The performance evaluations shall start after completion of 15 days stabilization. **However, the payment for 15 days stabilization chemicals shall be released only after satisfactory performance in the next month wherein the results do not cross the no payment prescribed limits viz. MS Corrosion <5.0mpy, and TVC <5.0x10<sup>5</sup> col/ml,SRB<150 counts/100ml,Suspended solids at TP-4 out let <20ppm, deposition less than 0.005gm/coupon/day, Oil and grease<10ppm. In case of penalty imposition next month penalty rate is applicable to stabilization chemicals also.** The performance evaluations shall start after completion of 15 days stabilization. Party shall maintain the guarantee performance parameters throughout the period of treatment. In case of any deviation from the guaranteed parameters mentioned above, penalty shall be levied as below.

- 3.16.1 **Corrosion rate for MS:** Measured on monthly basis Average of two/One MS coupons shall be considered for performance evaluation.

For less than or equal to 5.0 mpy -No penalty.

Above 5mpy and up to 6.0 mpy- Deduction of 20% of the quantity of corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

Above 6.0 mpy and up to 7.0 mpy - Deduction of 50% of the quantity of corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

Above 7.0 mpy- No Payment for the quantity of chemicals viz corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

- 3.16.2 **Suspended solids:**

For less than or equal to 20ppm- No penalty.

Above 20ppm and up to 30ppm-Deduction of 20% of Quantity of the flocculants dosed during the period.

Above 30ppm and up to 40ppm-Deduction of 50% of the Quantity of the flocculants dosed during the period.

Above 40ppm -No payment.

- 3.16.3 **Oil & Grease:**

For less than 10ppm-No penalty.

Above 10ppm and up to 15ppm -Deduction of 20% of the Quantity of chemicals dosed for the purpose during the period.

Above 15ppm and up to 20ppm-Deduction of 50% of the Quantity of the chemicals dosed for the purpose during the period.

Above 20ppm -No payment.

For analysis of suspended solids and oil & grease sample is to be collected once in a week at the TP-4 Thickeners out let.

- 3.16.4 **Deposition rate:** Measured on monthly basis Average of two/One deposit coupons shall be rounded off to first four decimal points and considered for performance evaluation.

For less than or equal to 0.005 grams/coupon/day - No penalty

For deposition rate above 0.005 grams/coupon/day and below 0.0065- deduction of 20% of the Quantity of corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

For deposition rate above 0.0065grams/coupon/day and below 0.0080- deduction of 50% of the Quantity of corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

For deposition rate above 0.0080 grams/coupon/day– No payment for the Quantity of corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

**Note :** it may please be noted that if the above parameters i.e corrosion rates for MS, and Deposition ( as detailed in clause no 3.16.1 and 3.16.4 ) attracts penalty then the highest rate of penalty out of the two will be imposed on all the chemicals consumed for corrosion inhibition, iron dispersant and Antiscalent purpose during the period.

### 3.16.5 **TVC & SRB counts:**

For TVC up to 500000 col/ml & SRB up to 150 counts/100 ml-- No Penalty

For TVC above 500000 col/ml and up to 550000 col/ml & SRB above 150 counts/100 ml and below 200 counts/100 ml--Deduction of 20% of the Quantity of the biocides and relevant chemicals dosed during the period.

For TVC above 550000 col/ml and up to 600000 col/ml & SRB above 200 counts/100 ml and below 250 counts/100 ml--Deduction of 50% of the Quantity of the biocides and relevant chemicals dosed during the period.

For TVC above 600000 col/ml. & SRB above 250 counts/100 ml --No Payment to the Quantity of the biocides and relevant chemicals dosed during the period.

For the analysis of TVC& SRB sample is to be collected once in fortnight for performance evaluation at the location specified in the clause 3.15.5.

**Note-1:** it may please be noted that if the above parameters i.e TVC and SRB ( as detailed in clause no 3.16.5 ) attracts penalty then the highest rate of penalty out of the two will be imposed on above relevant chemicals consumed during the period

**Note-2:**Evaluation of Corrosion rate for both MS coupons, deposition rate for deposit coupons and TVC, SRB counts will be carried out at our VSP lab as per VSPs existing procedure.

3.17 In case simultaneous imposition of penalties is levied under the clauses 3.16.1 to 3.16.6 for the same duration, the penalties applicable shall be summed up. However, the sum of all penalties imposed for any particular chemical shall not exceed 100 %.

3.18 For reasons attributable to VSP, i.e. any major deviation in operating parameters, systems disturbances due to operational constraints etc, if the system performance is not within the limits specified, in such cases, treatment will be evaluated after giving due consideration to the constraints. VSP's decision is final in this regard.

3.19 General Terms & Conditions are covered under Clause No: 4.0

**4. General terms and conditions for all parts of the above specification:**

**4.1. Payment terms:**

Party claim for payment on monthly basis shall be processed on receipt of Invoice by Engineer In charge with due calculation of penalties from the party along with following relevant documents. Party should provide detailed calculation of penalties and it should take due care in calculation of penalties and is responsible for claiming the correct eligible quantities for payment. After submission of bill if any discrepancy is found bill will summarily be returned and a new bill with corrected quantities is to be submitted by the party. Payment will be released as per relevant clause in PO from the date of approval of bill by WMD. Format for invoice is to be collected from engineer incharge at the time of start of treatment. Request for the performance certificate has to be submitted by the party within a week of the evaluation of performance along with all required documents

**4.2. Documents related to technical requirement**

1. Monthly consumption reports for the period of performance evaluation.
2. Relevant system Corrosion reports of MS, SS deposition reports, for the period of performance evaluation.
3. Relevant system Microbiology reports (TVC, SRB) for the period of performance evaluation (as applicable).
4. Water analysis reports.
5. Converter related reports from consumer departments.
6. GARN copies of Material Invoices supplied during that period.

**4.3. Documents related to fulfillment of statutory requirement**

1. Wage sheets of contract labor for the period of performance evaluation.
2. Copy of ESI payment, remittance challan/slip.
3. Copy of PF remittance challan/slip.
4. Copy of insurance policy of contract labor (for an amount of Rs.5 lakhs) with 1<sup>st</sup> bill.
5. Copy of Public liability with 1<sup>st</sup> bill.

4.4. The party shall visit the site, study in detail and understand the system before offering the treatment programme. The party may collect samples of water for their study at their R&D centre, if required.

4.5. The list of chemicals is mentioned at Annexure-2. The list is only indicative. Chemical list covers the possible chemicals appropriate to the system by their generic nature. Parties are free to offer their choice of chemical combination, which need not cover necessarily the entire list. However, it is expected that number of chemicals does not exceed the number given in the list. However, the quantities offered shall be

effective for Make up rate/recirculation rate and hold up volume as mentioned in the relevant clause for variations up to 10%.

4.6. Party may change the chemical for the improvement of the system keeping the annual / total contract value same. However party has to obtain prior approval from VSP before making these changes.

4.7. No shutdown is possible in the system. If Party feels the necessity of Passivation / pre-cleaning, it has to make all necessary arrangements to execute the same online with approval from the Engineer- in –charge (EIC).

4.8. **SYSTEMS, STANDARDS AND STATUTORY REGULATIONS:**

a. Party has to comply with the requirements of existing VSP Standard systems like EMS-14001, QMS-9001, OHSAS-18001 and 5S for ensuring the safe handling, storage of all chemicals.

b. Party has to comply with the various acts, rules and regulations stipulated by State govt. of AP & Govt. of India.

c. Material Safety Data Sheet (MSDS) and Biodegradability certificate for all the chemicals offered shall be provided before starting the treatment and MSDS to be displayed at site prominently.

d. Safety instructions for handling the chemicals/Fire hazards including the application /usage of Fire extinguishers etc. shall be displayed clearly in the chemical handling area.

e. Precautions shall be taken to avoid spillage of chemicals.

f. Party shall ensure to maintain “EMERGENCY PREPAREDNESS & WASTE DISPOSAL PROCEDURES for the chemicals etc. as per the existing OHSAS/EMS procedures of VSP in consultation with EIC

g. Party shall train their personnel in environmental aspects & safe handling of the chemicals at the start of the treatment and provide required Personal Protection Equipments (PPE's) to their personnel/workers.

h. While taking back empty carboys, party must ensure that carboy's lids, cups, seals etc. are fully cleared and taken back in compliance with VSP's procedures.

i. Chemicals containers shall be stacked neatly in the designated area at site, with separate stacking of empty and full containers.

j. The chemicals quoted by the Party shall be easily biodegradable. Party shall extend specific confirmation in this regard in the offer. Party shall provide certification/confirmation for biodegradability of the chemicals offered before starting the treatment. The chemicals quoted by the Party should not fall under banned category as per APPCB & CPCB.

4.9. The chemicals quoted by the Party shall not show any signs of deterioration at least for a period of 90 days after the date of receipt of materials at site.

- 4.10. Party shall submit product profile/description of each chemical in the offer.
- 4.11. Treatment shall be effective in the specified range of pH and temperature (65°C of Recirculation water).
- 4.12. Treatment programme should be capable of sustained performance under the prevailing operating conditions as well as momentary disturbed conditions like dust ingress into the system etc.
- 4.13. Any chemical/ chemicals supplied by the party shall be compatible with the system and also with other chemicals supplied by the party and VSP.

4.14. **Supply of Chemicals**

- a. Chemicals shall be supplied in sealed HDPE carboys, containers (returnable)/ tankers/ and shall be properly labeled with the details of the Chemicals such as Chemical name, Supplier name, batch number, Gross weight, net weight, tare weight, Expiry date and name of the VSP site for its application. Every batch of chemicals should have test certificates. The packing & forwarding charges if any are to be included in the basic price. Weighment will be done at VSP weighbridge. For the purpose of material accounting VSP's weighbridge weighment or weight indicated in party's invoice whichever is less shall be taken.
- b. Material shall be delivered to the VSP stores. Transportation of chemical(s) from VSP store to dosing site will be in the scope of supplier without any extra cost to VSP. No inspection is required at stores as the material formulation is proprietary in nature.
- c. Extra chemicals other than quoted/ Additional quantities of quoted chemicals and their dosing to achieve and maintain systems guarantee parameters is permitted without any commercial implications to VSP. In such cases, party shall give details of extra consumption to WMD and properly account for the same at site. While bringing in such chemicals, party shall ensure proper entry at the plant security gates. The free supply chemicals can be directly delivered to the site without routing through stores. No GARN will be raised against this material.
- d. Party is totally responsible for handling of chemicals, storage, dosing and maintenance of the connected system throughout the treatment period. The party shall maintain stock of these chemicals at site with clear and simple operating instructions for tackling emergency situation.
- e. Party shall submit 'Test Certificates' of all the chemicals supplied for the chemical treatment programme.

4.15. **Performance Monitoring Tools :**

- a. For monitoring the Performance, the party should provide and maintain the following monitoring tools throughout the period of treatment program.

Sl. No.	Monitoring Tools	Cooling Water System	No. of coupon racks
		PH-16 Gr-II Direct	1 No. of 1" pipe dia. as per IS: 8188-1999 (for MS corrosion and SS deposition coupons )
1.	Spectro photometer	For all the circuits	<b>1No</b>

- b. The coupons shall be provided by VSP and the coupons will be inspected for measuring the corrosion rates as per IS: 8188-1999 procedures. Corrosion rate of the coupon will be taken for payment purpose.
- c. Electronic metering pumps for dosing the each formulation with measuring facilities to be necessarily provided by agency. In case of breakdown of a pump it has to be rectified or replaced with a new metering pump with in '24' hrs. To achieve this party shall ensure the stand-by pumps as per requirement.
- d. The party shall provide and maintain the above facilities during the entire period of treatment without any commercial implications to VSP. Party has to take back the above monitoring tools after the completion of treatment.

4.16. **Monitoring services:**

4.16.1. Cooling water treatment program should be carefully chosen and implemented to achieve un-interrupted operation, Successful treatment of cooling water depends upon maintaining proper concentration of chemicals in the recirculation water, and promptly taking the necessary steps to counter the adverse effects of upsets, leaks etc.

4.16.2. **WATER SAMPLING AND ANALYSIS:**

- A. Water samples are to be collected weekly and analysed by the party. The results of the analysis are to be reported to Engineer In-charge.
- B. Parameters to be checked are ph, conductivity, p Alkalinity, M Alkalinity, calcium hardness, Total hardness, iron, TSS, Chlorides on daily basis at the outlet of the treatment plant.
- C. On weekly basis recirculation water sample, Hydraulic seal tank outlet and primary quencher pumps out let analysis to be carried out ensuring blow time for all water parameters.
- D. In addition to the above, the party shall collect the water samples and analyze water samples as and when the necessity arises. EIC shall decide the necessity of sampling depending on the system disturbance or any other exigencies arising.

4.17. **Laboratory facilities to be provided by the party:**

Party shall set up a laboratory facility with the following provisions for daily monitoring.

- a) Spectro-Photometer (DOUBLE BEAM) for phosphates, iron, chlorides, sulphates, active ingredient of supplied chemical. Turbidity meter & filtration kit for determination of turbidity and suspended solids.
- b) Digital P<sup>H</sup> meter, TDS & conductivity measurement devices
- c) Test sieves for measuring particle size distribution.
- d) Standard titration equipments with standard reagents.
- e) Required laboratory apparatus and miscellaneous items for carrying out routine & non-routine water, chemical and biological analyses.
- f) All consumables/reagents including necessary apparatus.

**Note:** Facilities should be provided to check all the required parameters of the system (like sulphates, sodium, silica etc.) including active ingredient as per site requirement.

**Note-1:** The above laboratory is for SMS-PH-9Gr-III (PART-A) and PH-16 Gr-II system s (PART-B). Facilities should be provided to check all the required parameters.

**Note-2:** Offer will be rejected if party is not confirming to the above laboratory facility.

4.18. The above facilities shall be arranged by the party on returnable basis during the entire period of treatment without charging additional cost to VSP. Laboratory space and utilities like water, power will be provided by WMD.

4.19. Party shall provide operating manual for laboratory analysis activities. It should also contain chemical analysis procedure for positive identification of the chemicals as supplied and also residuals in Recirculation water.

4.20. **Monitoring services:**

- a. Daily visual inspection shall be carried out for monitoring health of CW system and inspection of heat exchangers/coolers and sample coolers for any abnormality. Leakages from any coolers or system pipelines must be reported in the daily service report.
- b. Regular once/day monitoring of CW inlet/outlet temp to Cooling towers, Blow down rate, make up rate.
- c. Party will have to regularly monitor and report as a part of monitoring corrosion rates, fouling tendency and inlet/outlet temperatures at a frequency of '30' days through identified equipments related to recirculating water at consumer end using field thermometer/ non contact type pyrometer. Cooling water flow rate is to be measured & reported at a frequency of twice / year using non contact type flow meter.
- d. Once in 3 months party's senior technical expert (other than site supervisor) should visit the system for technical review and further improvement of system.
- e. Party shall inspect as and when intimated by EIC, all opened equipments (related to recirculating water) at the consumer end and also at the pump house end. Party shall also take photographs, collect scale/deposit samples, analyze samples with in 48 hrs

of inspection at its own laboratory and submit the report within 72 hrs of inspection for further reference. The permission for photography shall be arranged by EIC. All these costs shall be borne by the party.

4.21. **Abnormality detection and Response**

- f. As and when party is not able to meet technical specification/ guarantee parameters/any other abnormality observed (based on monthly evaluation), immediately party should depute a senior technical expert (other than site in charge) and the senior technical expert shall stay at VSP till the system is normalized to the satisfaction of VSP.
- g. If the corrosion/deposition rate (as measured by monthly corrosion coupons test report) exceeds guarantee limits as given at relevant clause, party's senior technical expert should bring instantaneous corrosion meter and the increase dosage to control the corrosion rate within guarantee limits. The adjusted dosage is to be further continued till the end of the treatment programme to maintain the Guarantee Performance Parameters without any price implication to VSP by supplying the chemical/chemicals as Extra/additional supply as mentioned at relevant clause.

4.22. **Party's Scope:**

Party's scope of work, supply and services is detailed in the various clauses of the specification. The summary of the party's scope of work is given below

- a. Design of suitable cooling water treatment programme to meet the system requirements and technical specifications.
- b. Supply and application of chemicals for passivation, normal operation.
- c. Taking care of all the safety requirements and housekeeping while dosing the chemicals as per the relevant clause in the specification.
- d. To provide monitoring tools corrosion coupon rack, deposit coupon rack etc, metering pumps for chemical dosing, and special instruments for monitoring the treatment programme, at free of cost to VSP on returnable basis.
- e. Supervision by Party's supervisor/ application engineer.
- f. Weekly, fortnightly and monthly Reports as per the relevant clause in the specification.
- g. Deploying sufficient number of work men as per site requirement.
- h. Establishing Party's lab facility for testing, analysis etc.
- i. Fulfilling the Statutory requirements.
- j. Submission of bill and results with all required documents on monthly basis as per the relevant clause in the specification.
- k. In case of direct system, application of soda ash and arrangement of necessary dosing equipments for dosing.

4.23. **VSP's Scope:**

- a. Providing laboratory space for the party to establish its lab.
- b. All Utilities like Power, water for the party's metering pumps and lab will be provided.
- c. VSP shall provide corrosion test coupons.
- d. Testing of water samples for microbiology will be done at VSP lab.

- e. Supplying of Soda ash to control hardness, Supply of H<sub>2</sub>SO<sub>4</sub> and Hcl as per requirement.
- 4.24. The installation of corrosion coupon shall be as per IS: 8188-1999 procedures.
- 4.25. The test corrosion coupon analysis shall be done as per IS: 8188-1999 procedures at QATD lab of VSP.
- 4.26. TVC & SRB analysis of recirculation water shall be carried out at QATD /WMD lab of VSP at a frequency of '15' days.
- 4.27. For reasons attributable to VSP, i.e. any major deviation in operating parameters, system disturbances due to operational constraints etc, if the system performance is not within the limits specified, in such cases, treatment will be evaluated after giving due consideration to the constraints. VSP's decision is final in this regard.

Consideration constraints from VSP side are as follow-

4.27.1 As per IS 8188 – 1999 (Reaffirmed 2020), 30 l/min continuous water flow rate has to be maintained to corrosion coupon rack throughout the coupon exposure period. There are occasions of No flow/reduced flow to coupon rack during the coupon exposure period due to the operational constraints attributable to VSP like system shut down, pipeline chokages or power failure.

Considering the deviation, If the flow to the coupon rack is not maintained as per IS;

a) For more than 24 hrs up to 72 hrs from the time of receipt of complaint during the corrosion and deposition rate evaluation period----"One step down penalty" than the incurred penalty to be imposed for corrosion/deposition.

b) For more than 72 hrs from the time of receipt of complaint during the corrosion and deposition rate evaluation period----"No penalty" to be imposed for corrosion/deposition.

4.27.2 Corrosion/Deposition Coupon dislodged from Coupon holder assembly and found settled at the bottom of the coupon rack pipe and not exposed as per IS 8188 – 1999 (Reaffirmed 2020) during the coupon exposure period. As per IS 8188 – 1999 (Reaffirmed 2020), The coupon assembly should be kept sufficiently steady so that the strip containing specimen coupon is held firmly at the centre of the water stream through pipe and should not touch the pipe throughout the coupon exposure period.

Considering this deviation,

a) If it happens during the 1st coupon evaluation period of new treatment----"One step down penalty" than the incurred penalty to be imposed for the particular dislodged corrosion/deposition coupon.

b) If it happens during further periods----Average value of corrosion/deposition rates obtained by that particular dislodged coupon in all previous months to be considered as the rate of corrosion/deposition for the dislodged period during performance evaluation.

NOTE:

- In Recirculation Water Systems where ever two coupons of similar metallurgy are installed average rate of these 2 corrosion/deposition coupons of same metallurgy is considered for performance evaluation. In such cases if any one of Corrosion/Deposition Coupon gets dislodged and not exposed as per IS, performance

evaluation to be done based on the remaining similar metallurgy coupon corrosion/deposition rate.

4.27.3 Accidental Acid leakage from acid storage tank due to malfunctioning of storage, handling and dosing equipments resulting in extra dosage of acid causing decrease of pH to less than 5 in Recirculation Water System (RCWS).

Considering the deviation, during performance evaluation "no penalty" to be imposed for Corrosion/ Deposition.

4.27.4 Change in scope of the treatment program due to operational requirements, like addition of any new unit for checking its effectiveness, trial runs for implementation of water conservation schemes, etc.

Considering this deviation, during performance evaluation for Corrosion, Deposition and Microbiological control "no penalty" to be imposed.

4.28. PARTIES SHALL SUBMIT THE TECHNICAL AND PRICE BIDS SEPERATELY. THE PRICE BID SHOULD CLEARLY INDICATE THE PRICE OF CHEMICALS AND THE APPLICATION PART OF EACH CHEMICAL SEPERATELY. HOWEVER THE L1 PARTY SHALL BE DECIDED ON THE SUM OF THE BOTH CHEMICALS AND APPLICATION PARTS (I.e sum of PART-A,B,C &D).

4.29. Bidder shall furnish details of the treatment programme including the following:-

- A. Description of programme
- B. Chemicals used giving name, code name and function i.e. passivating agent, anti-scalent, dispersant and any other specific chemicals.
- C. Dosing rates, monthly consumption as well as yearly consumption of chemicals.
- D. The treatment program for each system should be separately indicated for (1) precleaning and passivation, (2) Normal treatment, Party has to give complete procedure.

4.30. **The treatment program is for the period of 365 Days** excluding the passivation period of 15 days. 15 days of passivation chemicals are to be given separately which is not connected with regular dosing of 365 days. However VSP reserves the right to extend the treatment programme for further 180 days.

4.31. **Regarding PART-A (PH-9 Gr-III/SMS-1 GCP System) quantity mentioned in the tender is only indicative. Ordering quantity will be on the requirement of chemicals for 380 days (i.e. 365 days of treatment plus 15 days of passivation) based on the dosage rate specified by the party. However due to variations in the blow time there may be variations in quantities of the chemicals used at quencher and secondary venturi. In case the quantities are left out, party may take back the same with VSP's gate pass.**

4.32. Party shall quote all the quantities in kilograms (kgs) only.

4.33. Prices quoted by the party should be exclusive of packing charge as the carboys/bags/containers are returnable. The party has to collect the carboys/ bags/containers from the site and take them out from the VSP premises. Necessary gate passes will be issued by EIC.

- 4.34. The party shall specify clearly in the cases where application contract will be subletted. In such cases the firm on whom it is to be awarded shall be explicitly specified with address and details of PF code, ESI etc in the techno commercial bid. Else their subsequent request for subletting of application contract will not be entertained
- 4.35. Offers without the relevant details and confirmations will be treated as incomplete and will be liable for rejection.
- 4.36. THE PARTY MUST FILL THE ANNEXURE-I PROPERLY AND SUBMIT ALONG WITH THE TECHNICAL BIDS.
- 4.37. VSP reserves the right to cancel the full or the part order at any point of time in case it is found that the formulation offered by them is not meeting the specification and not giving the required guaranteed performance as specified in the tender. If the successful tenderer becomes defaulter in execution of the order, the order shall be diverted at his risk and cost on other firm as per the procedures in vogue.  
Party shall provide bank guarantee for an amount equivalent to 10% of total value which includes both supply and application. Bank Guarantee will be released after CLC Clearance.
- 4.38. Usually Corrosion /deposit Coupons are evaluated after a min exposure Period of 30 days. As per IS 8189:1989 reaffirmed in 2015 Corrosion Coupons exposure period can be extended up to 90 days (With the use of multiple coupons). Based on the process requirement, Production & its auxiliary Systems may undergo for Shutdown with a short notice. Due to these Shutdowns of units there can be unforeseen discontinuity/extension of installed Corrosion Coupons evaluation schedules may happen. In such cases an MOM will be conducted along with concerned parties i.e EIC, Zone Chemical I/c, Section I/c convened by Chemical Planning I/c regarding Corrosion Coupons evaluation and passivation on case to case basis as per the instructions of HOD. While starting the treatment after the shutdown, system will be allowed for passivation (at the regular rate of dosage of chemicals) for a maximum period of 15 days or the shutdown period days whichever is less. Corrosion/ deposition coupons will be installed after the completion of passivation. Payment for the chemicals used during passivation will be released based on the results of coupons installed immediately after passivation
- 4.39. VSP reserves the right to cancel the full or the part order at any point of time, if it is found that the vital parameters specified in the specification are not prevailing and and there is no benefit to VSP in further continuation of chemical treatment. In such cases VSP can serve a short notice to suspend full or the part of order.
- 4.40. Satisfactory Performance certificate will be issued to the agency, if agency meets the performance guarantee parameters i.e. corrosion rate and microbiology results without incurring 100 % penalty for atleast 50 % of total treatment period.

-----  
AGM (T)/Engineer Incharge

-----  
Sr.Mgr(T)  
(PI/Chem - WMD)

-----  
GM(T) (Section I/C / WMD)

## **PART – C**

### **APPLICATION CONTRACT**

#### **I) Scope of Work:**

Transportation from VSP stores, loading, unloading, stacking at site, cleaning, formation and dosing of chemicals quoted and supplied by the party .The scope includes monitoring, sampling, testing and submission of test reports.

**II ) Quantity :** To be given by party.

**III ) Unit Price :** To be mentioned by party for each chemicals.

**IV) Total Ordering Price:** Total Application charges to be mentioned by party. The deduction for GST or any other taxes will be charged as per the 18% prevailing rates, it varies time to time.

#### **V ) Quality of job :**

Supplier shall post qualified personnel suitable for the above jobs. Party representative/Application engineer shall be well Qualified and experienced. He should be science graduate and must have at least 3 years of experience in the field of cooling water treatment. And he should be conversant in using laboratory equipment and chemical analysis procedures. The complete responsibility for the quality of work rests with supplier

#### **VI ) PAYMENT TERMS :**

100% Application charges is payable on the chemicals recommended in the performance certificate. As mentioned in PART-A,– the performance will be based on meeting the guarantee parameters and deduction of penalty if any calculated during performance evaluation for the period.

Party shall provide bank guarantee for an amount equivalent to 10% of total value which includes both supply and application. Bank Guarantee will be released after CLC Clearance.

Application charge along with Service Tax etc will be released within 30 days from the date of submission of Application by the party to Engineer Incharge (Required documents like payment towards PF, ESI, monthly wage sheet and satisfactory Performance Certificate to be submitted by party).

#### **VII ) ENGINEER IN CHARGE :**

AGM (T) / WMD of SMS Zone pump house incharge is the Engineer Incharge for execution of contract.

**VIII) SUPPLIER SCOPE :**

- a) The Party representative/Application engineer is responsible for initial commissioning and stabilization of treatment package followed by regular monitoring, performing required analysis and initiate actions based on test results, as well as dosing the chemicals in the system and checking possible leakages in the system & reporting to the concerned In charge. He should be familiar with objectives of chemical treatment.
- b) Party representative /Application engineer should make routine spot checks, preferably once in a day, for Chemical levels, monitor and control growth of micro-organisms, anticipate any difficulties that may be developing, and submit a periodic status report to the concerned Incharge.
- c) Party representative /Application engineer should be equipped with online facilities like e-mail account (for sending daily electronic reports), mobile phone for being in contact with VSP and with their main office for any required technical backup is absolutely essential. It is not acceptable that site staffs depend on monthly or fortnightly spot checks by VSP/WMD/service representatives.
- d) Party has to engage sufficient number of work men for carrying out following jobs
  - A. Loading & Un-loading of Chemicals.
  - B. Stacking & storage of chemicals.
  - C. Preparation of chemicals for dosing.
  - D. Cleaning of cooling towers & Nozzles.
  - E. Water Sample collection.
  - F. Grass cutting of walk way to cooling towers and dosing points.
  - G. Maintaining overall house keeping in chemical storage and handling area.
  - H. Inspection for water leakages.
- e) Any other services required as per the scope of work shall be done by the party without any extra cost to VSP.
- f) **Technical support:** Periodic visit by senior technical representatives, say once in a quarter or as and when required by Pump house incharge, for a joint review of the treatment program. This will help in arriving at the level of efficiency and effectiveness achieved, mid course corrections, when required, and in extreme case, to decide about continuation of the program. This report will be given to respective pump house in-charge, consumer dept in-charge and WMD HOD.
- g) Party is required to fulfill the conditions laid down by Safety Engg Department of VSP for carrying out the job. Before starting the work Safety clearance from Safety Engg Department has to be obtained and certificate is to be submitted. All the work men engaged in the application should possess valid safety certificate issued from Safety Engg Department of VSP.
- h) Supplier has to fulfill the conditions and statutory obligations of contract Labour cell of VSP. The deployment of manpower (skilled and unskilled workers) beyond the norms for working hours is prohibited.
- i) As the application involves manpower for dosing of chemicals, loading, unloading works, cleaning, monitoring etc., party has to take care of fulfilling all the statutory requirements of Govt. of india / Govt of AP/Factories act etc. During the quotation itself, party has to submit the details of PF CODE, ESI CODE, LABOUR LICENCE etc.

- j) **The party shall specify clearly in the cases where application contract will be subletted. In such cases the firm on whom it is to be awarded shall be explicitly specified with address and details of PF code, ESI etc in the techno commercial bid. Else their subsequent request for subletting of application contract will not be entertained.** Any such consent shall not relieve the supplier from any obligation, duty or responsibilities under the contract.
- k) **PARTY HAS TO COMPLY VARIOUS STATUTORY CONDITIONS AND HAS TO FOLLOW THE TERMS AND CONDITIONS (WHICH MAY CHANGE FROM TIME TO TIME) AS GIVEN BELOW.**

### **Terms and Conditions**

*'Employer' means Rashtriya Ispat Nigam Limited (RINL), Visakhapatnam Steel Plant / VSP, Administrative building, Visakhapatnam - 530 031 A.P. and includes Employer's Personal representative or successors or assignees.*

'Engineer' means an engineer appointed from time to time by the employer and shall include the Chief Engineer of the employer.

Contractor/Agency means person or persons, firms or Company whose tender has been accepted by the employer and who has entered into contract with the employer and includes the contractor's heirs: executors, administrators, legal representatives, personal representatives, successors and permitted assignees.

1. Immediately on receipt of Work Order/LOI, the successful tenderer shall obtain and submit the following documents to the representative of RINL/VSP (in the present case Engineer Incharge AGM(T)/WMD) with a copy to Zonal Personnel Executive (ZPE) i.e. Zonal Contract Labour Cell before commencement of contract.
  - a) Copy of the Labour Licence issued by appropriate government i.e. presently Asst Labour Commissioner (Central), Govt. of India, Ministry of Labour, Visakhapatnam. In case of Marketing Dept or any other department situated outside Visakhapatnam, they may obtain the Labour Licence from the nearest above mentioned Labour Department at their respective place or agencies particulars shall be modified suitably in the Labour Department of Appropriate Government at the place of Registered Office, Visakhapatnam.
  - b) The tenderer shall submit a copy of their Provident Fund Registration Certificate issued by Provident Fund Organisation, Government of India indicating their Provident Fund code number and a certificate from the Regional Provident Fund (RPF) authorities confirming that the Provident Fund account is under operation and also giving the details of the deposits credited to their RPF account during the last one year. In case the same is not available, they shall submit a letter of undertaking to submit the same before commencement of contract.
  - c) The tenderer shall submit a copy of their Employees' State Insurance Registration Certificate indicating their Employees' State Insurance code

number under Employees' State Insurance Act, 1948. In case the same is not available, they shall submit a letter of undertaking to submit the same before commencement of contract. In case, the Employees' State Insurance Act, 1948 is not applicable by any reason to any employee of the contractor, the Employees' Compensation Act, 1923 is applicable for such employee engaged by the Contractor. In such case the contractor is required to submit insurance policy under the Employees' Compensation Act, 1923 before commencement of contract.

- d) Insurance policy covering ex-gratia payment of ₹.5,00,000/- (Rupees five lakhs only) per head for deaths arising out of accidents on duty to the contract labour engaged by him. As and when death takes place arising out of accidents on duty, the contractor is required to pay the above mentioned exgratia amount within 30 days to the legal heir of the deceased from the date of death takes place. This insurance is in addition to the statutory insurances under the provisions of the Employees State Insurance Act, 1948 / Employees' Compensation Act, 1923, Public Liability Insurance Policy (Third Party insurance) or any other insurance taken by the contractor or any other agency to cover the workmen. The Agency shall update the said insurance policy from time to time as per RINL/VSP rules.
- e) Copy of the insurance policy for the third party insurance (Public Liability Insurance Policy) for ₹.50,000/- (Rupees fifty thousand only). The Agency shall update the said insurance policy from time to time as per RINL/VSP rules.
- f) Safety clearance from the Safety Engineering Department of RINL/VSP.

Further the following may be ensured.

## 2. LABOUR LICENCE :

The agency shall obtain necessary License issued by the appropriate Government under the Contract Labour (Regulations and Abolition) Act, 1970 and rules framed there under (including amendments thereof ) within the time limit allowed by the appropriate Government (presently the contractor shall obtain licence from Asst. Labour Commissioner (Central), Visakhapatnam, Ministry of Labour, Government of India) and shall obtain and produce copy of such License before commencement of contract. On his failing to do so, the contract shall automatically come to an end immediately on the expiry of such time limit and earnest money / security deposit shall stand forfeited.

## 3. LABOUR RULES :

In respect of all contract labour directly or indirectly employed on the works, the Agency shall comply with all legislations and rules of State and / or Central Government or other local authority as the case may be including those governing the protection of health, sanitary arrangements, wages, welfare and safety applicable for Labour employed. The Contract Labour (Regulation and Abolition) Act

1970 and rules framed there under by the appropriate Government, The Minimum Wages Act, 1948, Payment of Wages Act, 1936, Employees' Provident Funds and Miscellaneous Provisions Act, 1952, Employees' State Insurance Act, 1948 / Employees' Compensation Act 1923, Payment of Bonus Act, 1965, Payment of Gratuity Act, 1972, Factories Act, 1948, Industrial Disputes Act, 1947, Child Labour (Prohibition and Regulation) Act, 1986 and Maternity Benefit Act, 1961 and Andhra Pradesh Labour Welfare Fund Act, 1987 and other statutes and amendments thereof and other statutory obligations with regards to fair wages, welfare amenities and safety measures, maintenance of registers etc. will be deemed to be the part of the contract. On failure to do so, the contract shall automatically come to an end immediately on the expiry of such limit and earnest money / security deposit shall stand forfeited.

04. As security for fulfillment of the obligations, the agency will be deemed to have authorized the RINL / VSP to set off any claims under various Acts and Rules in force from time to time, against the bills payable to him and also to withhold the payments due to him till such time as the requirements of laws are complied with or to adjust payments to be made to and / or on account of the employees of the agency from the amounts payable to him.

05. The agency shall have to maintain the following registers in the forms, as prescribed under various statutes / Rules framed there under and show such registers to the concerned officer in charge of RINL /VSP or his nominee as and when called for :-

S.NO.	NAME OF THE REGISTER	FORM No. as per C.L (R&A) Central Rules, 1971
1	MUSTER ROLL	XVI
2	REGISTER OF WAGES	XVII
3	REGISTER OF DEDUCTIONS FOR DAMAGE OR LOSS	XX
4	REGISTER OF OVER-TIME	XXIII
5	REGISTER OF FINES	XXI
6	REGISTER OF ADVANCES	XXII
7	WAGE SLIP	XIX
8	REGISTER OF WORKMEN EMPLOYED BY CONTRACTOR	XIII
9	EMPLOYMENT CARD	XIV
10	SERVICE CERTIFICATE	XV

06. The agency shall furnish to RINL / VSP a copy of the half-yearly returns in the Form XXIV prescribed under the Contract Labour ( R & A ) Act, 1970 and rules framed thereunder by the appropriate Government (presently Asst. Labour Commissioner (Central), Visakhapatnam, Ministry of Labour, Government of India). Further the agency shall furnish the details such as name and address of the contractor, period of contract, nature of work, Work Order number and date, Department/Zone, maximum number of workers employed, Number of days worked and Number of man-days worked for every calendar year to RINL/VSP at the end of the calendar year / on completion of the work.

07. PAYMENT OF MINIMUM WAGES : Wages paid to the workmen by the Agency should not be less than the rates notified by the appropriate Government (presently Regional Labour Commissioner (Central), Ministry of Labour, Government of India) published in the Gazette / as communicated by them to RINL/VSP from time to time with regard to the minimum wages applicable to the respective category of workmen and ad-hoc amount @ of ₹.11-54 ps. per day per contract worker on actual attendance subject to a maximum of Rs.300/- (Rupees three hundred only) per month. Wages with ad-hoc amount to the workmen should be paid on or before the 7<sup>th</sup> of the subsequent month after the last day of wage-period. If 7<sup>th</sup> falls on a holiday or weekly off day, the payment should be made one day prior to that. The agency shall submit a certificate to RINL/VSP within a week after disbursement of wages, details showing quittance and wage period. If it is found that workers are not paid wages and others, if any regularly, the contract is liable to be terminated.

This time to time revision in wages (amount) has to be paid to the respective category of workmen by the contractor. The above escalation amount will not be reimbursed to the Agency by RINL/VSP.

Payment of Provident Fund for the month, both the employer's (in this case-contractor/agency) and employee's (in this case-workman employed by the contractor) contributions should be deposited in any branch of State Bank of India in the permanent Provident Fund code numbers of the contractor or in RINL/VSP sub-code number, if permitted and challan obtained on or before the 15<sup>th</sup> of the subsequent month as per Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and forwarded to the Representative of RINL/VSP/Engineer." Further, Payment of Employees' State Insurance Fund for the month, both the employer's (in this case-contractor/agency) and employee's (in this case-workman employed by the contractor) contributions should be deposited in the designated State Bank of India by Employees' State Insurance Corporation for this purpose in the permanent Employees State Insurance code number of the contractor or in RINL/VSP sub-code number, if permitted and challan obtained on or before the 21<sup>st</sup> of the subsequent month as per the Employees' State Insurance Act, 1948 and forwarded to the Representative of RINL/VSP/Engineer."

08. The tenderer shall consider the ad-hoc payment ₹.11.54 Ps. per working day per contract labour on actual day of attendance subject to a maximum of ₹.300/- (Rupees three hundred only) per month to those contract labour working with the contractors on prorated basis payable to the contract labour while quoting the rates.

09. In case of failure of the Agency to comply with any of the above, the following action will be taken by VSP:

<b>LAPSE</b>	<b>ACTION BY VSP</b>
1. Payment of wages at rates less than those notified under the minimum wages notification.	An amount equivalent to the differential amount between wages to be paid under Minimum wages notification of the Govt. applicable for the period less actual wages paid shall be recovered from the bills of the contractor as certified by the Representative of RINL/VSP/Engineer.
2. Non-payment of wages.	An amount equivalent to wages payable by the contractor applicable for the relevant period shall be recovered from the bills of the contractor as certified by the Representative of RINL/VSP/Engineer.
3. Non-payment of PF.	Recovery of PF amount and an amount equivalent to maximum penalty and interest livable by Regional Provident Fund Commissioner for the delayed period under the provisions of Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and Rules framed thereunder for delayed remittance of Provident Fund contributions (both the employee's and employer's (in this case Contractor's) contributions and administrative charges), shall be recovered from the bills of the contractor as certified by Representative of RINL/VSP/Engineer.
4. Delayed payment of PF	An amount equivalent to maximum penalty and interest livable by Regional Provident Fund Commissioner for the delayed period under the provisions of Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and Rules framed there under for delayed remittance of Provident Fund contributions (both the employee's and employer's (in this case Contractor's) contributions and administrative charges), shall be recovered from the bills of the contractor as certified by Representative of RINL/VSP/Engineer.
5. Non-payment of ESI	Recovery of ESI contributions amount and an amount equivalent to maximum penalty livable by Employees' State Insurance Corporation Authorities for the delayed period under the provisions of Employees' State Insurance Act, 1948 and Rules framed there under for delayed remittance of Employees' State Insurance contributions (both the employee's and

	employer's (in this case contractor's) contributions), shall be recovered from the bills of the contractor as certified by the Representative of RINL/VSP/Engineer.
6. Delayed payment of ESI	An amount equivalent to maximum penalty and interest livable by Employees' State Insurance Corporation Authorities for the delayed period under the provisions of Employees' State Insurance Act, 1948 and Rules framed thereunder for delayed remittance of Employees' State Insurance contributions (both the employee's and employer's (in this case contractor's) contributions), shall be recovered from the bills of the contractor as certified by the Representative of RINL/VSP/Engineer.
7. Non-payment of ad-hoc amount of ₹.300/- per month.	An amount equivalent to actual payable towards ad-hoc <u>amount</u> to the workmen engaged for relevant period shall be recovered from the bills as certified by the Representative of RINL/VSP/Engineer.

- a) The recovered amount under clauses 1,2,3,4,5,6 and 7 will be refunded along with subsequent Running Account Bill/final bill on certification by as certified by Representative of RINL/VSP/Engineer that the contractor has since complied with the provisions of payment of wages, Provident Fund and Employees' State Insurance contributions etc.
- b) In the case of completed works, the recovered amount under clause No.4 & 6 above will be refunded to the contractor along with final bill of the subject work on submission of no due/no claim certificate from the concerned Zonal Contract Labour Cell of RINL/VSP that the contractor has since made with the payments under the provisions of Employees' Provident Funds and Miscellaneous provisions Act, 1952 and Employees' State Insurance Act, 1948.

10. (a) Penalty for delayed payment/non-payment of wages:

If the contractor fails to pay wages within the stipulated time i.e., by 7<sup>th</sup> working day of the subsequent month, a penalty up to 1% of the gross wages (Basic, DA & Overtime (if any) except Adhoc, SMA, ASMA and other allowances) of the workers will be levied for every day of lapse subject to a maximum of 10% in any calendar month. This is without prejudice to appropriate action against the contractor including debarring, in case of perpetual/habitual default.

(b) Payment of wages through banks:

The contractor shall pay wages not less than the minimum wages notified by the appropriate Government from time to time to the workers deployed by him. The payment shall be made on the due dates either by way of crossed cheques or crediting the wages to the bank accounts of the concerned contract workers. Proof

of such payment shall be submitted by the contractor to the Engineer In charge by 10<sup>th</sup> of the subsequent calendar month.

11. The Agency shall make regular and prompt payments of wages to their workers engaged in the work and in no case shall the payment be delayed more than 7 days, following the period for which the wages are due. If it is found that workers are not paid wages and others, if any, regularly, the contract is liable to be terminated.
12. The contractor has to follow all the statutory provisions that are applicable to Contract Labour and also to pay terminal benefits (full and final benefits) i.e., notice pay, retrenchment compensation (Service Pay), un-availed Leave with Wages and Bonus as per the payment of Bonus Act, 1965. The impact of revision in wages, on final benefits i.e. Notice pay, Retrenchment compensation, un-availed leave with wages and Bonus during the operation period of the contract should form part of escalation calculations, since the benefits are to be paid on prevailing rate of last month pay. The agency has to pay all the above payments and submit proof of such payments. Zonal Personnel Executive (Zonal Contract Labour Cell) shall give clearance on submission of required valid / correct and complete documents for such clearance. On producing such proof and clearance from the concerned Zonal Contract Labour Cell, the final bill of the contractor will be released, on 30th day from the date of submission of required valid / correct and complete documents in all respects.

The following deductions per workmen deployed category-wise shall be made from the bills / amounts due to the contractor as applicable for the work done and such deducted amounts shall be released as follows :

S. No.	Component	Recovery amount per Labor per every WORKING DAY (in Rupees)			To be released when
		UN-SKILLED	SEMI-SKILLED	SKILLED	
01	Notice pay	₹ 52.86	₹ 59.64	₹ 70.02	After the Contractor makes payment to the workmen in the presence of <b>Engineer I/c and CLC representatives</b> . A certificate to this effect is to be enclosed with pre-final bill. This terminal benefits are to be paid by the contractor to the labor, reimbursement will not be given by RINL/VSP.
02	Retrenchment compensation	26.43	29.82	35.01	
03	Leave with wages	32.53	36.70	43.09	
<b>Sub-total</b>		111.82	126.16	148.12	
04	Bonus	52.84	59.61	0.00	After the Contractor makes payment to the workmen in the presence of <b>Engineer I/c and CLC representatives</b> . A certificate to this effect is to be enclosed with RA bill / pre-final bill. This terminal benefits are to be paid by the contractor to the labor, reimbursement will not be given by RINL/VSP.
<b>Grand total (To be paid to the Laborers)</b>		<b>164.66</b>	<b>185.77</b>	<b>148.12</b>	

## NOTE

- i The above recovery rates are effective from 01.04.2023. In case of any statutory revision in minimum wages payable to contract workmen as notified by the Regional Labour Commissioner (Central), Hyderabad, Government of India, Ministry of Labour from time to time, the above recovery amounts for workmen category-wise will be revised by RINL / VSP and will be notified accordingly.*
- ii Payment against the above components is to be made to the workmen based on effective wages of last drawn pay.*

Considering the minimum wages notified by the Regional Labour Commissioner (Central), Hyderabad, Government of India, Ministry of Labour from time to time, and other statutory applicable benefits & allowances to be provided by the agency to the workers as mentioned above clauses.

13. The agency will be required to furnish to the RINL/VSP the following particulars regarding the payments to be made by him to his workers, immediately after the commencement of the work in question;
  - a) Wage period
  - b) Place of disbursement of wages
  - c) Payment and date of disbursement of wages.
14. Notices showing the rates of wages, hours of work, wage periods, dates of payment of wages, names and addresses of the Inspectors having jurisdiction, and date of payment of unpaid wages, shall be displayed in English and Hindi and in the local language understood by the majority of the workers in conspicuous places at the establishment and the work-site by the contractor. The notices shall be correctly maintained in a clean and legible condition. A copy of the notice shall be sent to the Inspector under the Contract Labour (R&A) Act, 1970 and rules framed there under by the appropriate Government from time to time (Presently Asst. Labour Commissioner, Visakhapatnam, Government of India, Ministry of Labour). All payments shall be made on working days at the work place and during working hours, as provided in the rules framed under the said Act.
15. The agency shall undertake and be responsible for providing canteen facilities for the workers employed by him in compliance with Chapter - V of the Contract Labour (Regulation & Abolition) Act, 1970 and Contract Labour (Regulation & Abolition) Central Rules, 1971 and also provide First Aid Box, equipment with contents, as prescribed under the Rules framed under the Contract Labour (Regulation & Abolition) Act, 1970 and Contract Labour (Regulation & Abolition) Central Rules, 1971 at every location where labour is employed by him. Wherever the contractor execute works in the state of Andhra Pradesh and a state other than Andhra Pradesh, the contractor shall register himself with the

appropriate Government, concerned Labour Department under the Contract Labour (Regulation & Abolition) Act, 1970 and the Contract Labour (Regulation & Abolition) Central Rules and comply with all the provisions of various statutes governing the service conditions of the contract labour in that State.

16. The agency shall not allow the use or sale of ardent spirits or other intoxicating beverages in the working area or in any of the buildings, premises occupied by him in connection with the work in question.
17. The Agency should clearly understand and comply with the Factories Act 1948 and relieve the FEMALE WORKERS from their work site within the restricted working hours prescribed therein under section 66 (b).

The agency shall ensure that the working hours for female workers, if any, employed by him shall be regulated as per the requirements of the statute and that no female worker is engaged for work at the work place except between 6.00 AM to 7.00 PM on any working day.

18. No child will be allowed in the premises.
19. The agency shall further ensure that proper discipline and decorum is maintained by the workers / employees engaged by him, in the area of work.
20. If any loss arises due to theft, pilferage or damage of articles which have happened during the work, the agency will be responsible and cost of articles and quantum of damages as assessed by RINL / VSP will be recovered from him. The agency shall, if necessary, provide adequate security against such incidents at their own cost.
21. The agency should register themselves with the Regional Provident Fund Commissioner and will be required to follow the provisions of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 failing which payments due to them will be withheld.

The contractor should deposit Employees' Provident Fund contributions (employee's + employer's (in this case contractor) contributions) on or before 15th of the subsequent month of the wage period in their independent Employees' Provident Fund code number or in RINL/VSP Provident Fund sub-code number, if permitted as per the provisions of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and thereafter amended from time to time, failing which payments due to them will be withheld. The contractor should submit the Provident Funds remittance copy of challans containing the work order number along with list of workers with contribution details to the representative of RINL/VSP and Zonal Personnel Executive every month.

22. The contractor should submit returns to Regional Provident Fund Commissioner under the provisions of the Employees' Provident Funds and Miscellaneous

Provisions Act, 1952 and rules framed there under from time to time and copy of the same shall furnish to RINL/VSP representative and Zonal Personnel Executive. The contractor should maintain the records such as attendance, wage registers, contribution registers, etc as per the provisions of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and rules framed thereunder from time to time.

23. The Agency shall ensure strict compliance with the provisions of the Employee's Provident Funds and Miscellaneous Provisions Act, 1952 and the schemes framed there under from time to time in so far as they are applicable to their establishment and agencies engaged by them. The contractor is also required to indemnify the employer against any loss or claim or penalties or damages whatsoever resulting out of non-compliance on the part of the contractor with the provisions of the aforesaid act and the schemes framed there under from time to time.

24. **Employees' State Insurance Act:** The successful agency should follow the procedure that shall be implemented in order to comply with the provisions of the Employees' State Insurance Act, 1948 and submit a copy of the Employees' State Insurance registration certificate indicating their Employees' State Insurance code number. The contractor should give all the particulars of workmen including Employees' State Insurance number(s) engaged by them before commencement of work and changes during the course of work shall be intimated by the contractor to the representative of RINL/VSP along with insurance code number where necessary.

The contractor should deposit Employees' State Insurance Fund contributions (employee's + employer's (in this case contractor) contributions) on or before 21st of the subsequent month of the wage period in their independent Employees' State Insurance code number or in RINL/VSP ESI sub-code number, if permitted as per the provisions of the Employees' State Insurance Act, 1948 and thereafter amended from time to time, failing which payments due to them will be withheld. The contractor should submit the remittance copy of challans containing the work order number along with list of workers with contribution details to the representative of RINL/VSP and Zonal Personnel Executive every month. The contractor should submit Return of contributions to Employees' State Insurance Corporation authorities under the provisions of the Employees' State Insurance Act, 1948 and rules framed there under from time to time and copy of the same shall furnish to RINL/VSP representative and Zonal Personnel Executive. The contractor should maintain the records such as attendance, wage registers, contribution registers, etc as per the Employees' State Insurance Act, 1948.

25. The Agency shall at all times indemnify the Employer against all claims for compensation under the provisions of the Employees' State Insurance Act, 1948 / Employees' Compensation Act, 1923, as amended from time to time or any other law for the time being in force by or in respect of, any workmen employed by the Contractor in carrying out the contract and against all costs and expenses

or penalties incurred by the employer in connection there with and (without prejudice to any other means of recovery) the employer shall be entitled to deduct from any money due or to become due to the Contractor (whether under the contract or any other contract) all moneys paid or payable by the employer by way of Compensation aforesaid or for costs or expenses in connection with claims thereto and the contractor shall abide by the decision of the employer as to the sum payable by the Contractor under the provisions of this clause.

26. Reporting of accidents to the employer and other local authorities concerned pertains to labour: The contractor shall be responsible for the safety of all employees and / or workmen employed or engaged by him on and in connection with the work and shall report to the employer and other local statutory authorities concerned, all cases of serious accidents howsoever caused and wherever occurring on the works and shall make adequate arrangements for rendering immediately all possible aid to the victims of the accidents.

27. Where any accident causing disablement or death occurs, the agency shall be liable for such injury or death caused as a result of such accident either within or outside the working place in the course of work. The agency shall be responsible for such contingencies and will make good all claims for compensation claimed by his labour or staff or under Employees' State Insurance Act, 1948 / Employees' Compensation Act, 1923 / Tribunal and other relevant laws of the land as the case may be. He shall also indemnify the RINL/VSP and pay all such sums as may be awarded in respect of claims for compensation arising out of or consequent to any accident to any staff or Labour working under him pursuant to the provisions of the Employees' State Insurance Act, 1948 / Employees' Compensation Act, 1923 or any subsequent modifications or amendments to the Act thereof. All costs incurred by the RINL / VSP in connection with any such claims should be made good by the agency and the RINL / VSP reserves the right to pay in the first instance such amount of compensation as is payable under the said Act or any other Act / rules and recover the amount so paid from the agency's bills, security deposit or other ways.

28. ADDITIONAL INSURANCE COVERAGE :

The agency shall take insurance policy for payment of an ex-gratia amount of ₹.5,00,000/- (Rupees five lakhs only) per head for deaths arising out of accidents on duty to the contract labour engaged by him. As and when death takes place arising out of accidents on duty, the contractor is required to pay the exgratia amount within 30 days to the legal heir of the deceased from the date of death takes place arising out of accidents on duty. This insurance is in addition to the statutory insurances under Employees State Insurance Act, 1948 / Employees' Compensation Act, 1923, Public Liability Insurance Policy (Third Party insurance) or any other insurance taken by the contractor or any other agency to cover the workmen. The Agency shall update the said insurance

policy from time to time on par with contract labour employed by RINL/VSP through contractor.

29. Insurance: The Agency shall maintain and shall require his Sub-Contractors to maintain in full force and effect, from Insurance Companies in India acceptable to Representative of RINL/VSP/Engineer, from the time of execution of his Agreement:

- a) All such insurances as are required by law for the purpose of the Contract at the cost of Contractor.
- b) All such insurances required in respect of equipment purchased out of advance received from Employer at the cost of Contractor.
- c) Any additional insurance required specifically by the Employer/Engineer at the cost of Employer.

Agency shall ensure that the insurer shall furnish to the Representative of RINL/VSP/Engineer and Employer with evidence of such insurance copy of the issued policy and any amendments thereto and prompt notification of any cancellation or termination thereof. Should Contractor default in paying any premium when due, Representative of RINL/VSP/Engineer or Employer, without prejudice to other remedies set forth in this Agreement shall be at liberty to pay such premium and recover the same from the Contractor.

Any such insurance requirements are hereby established as the minimum policies and coverage which Contractor must secure and keep in force. Contractor shall at all times be free to obtain additional or increased coverage at Contractor's sole expense.

The provisions contained within this Article are not intended and do not impair or in any manner limit the liabilities or obligation assumed by Contractor as may be set forth more fully elsewhere in this Agreement.

30. Damages to persons & property : The contractor shall (except if and so far as the Contract otherwise provides) indemnify and keep indemnified the employer against all losses and claims for injuries or damages to any person or property whatsoever (including surface or other damages to land or trees or crops being on the site suffered by tenants or occupiers) which may arise out of or in consequence of the construction and maintenance of the works and against all claims, demands, proceedings damages, costs, charges and expenses whatsoever in respect thereof or in relation to, provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify the employer against any compensation of damages for or with :

- a) The permanent use or occupation or land by the works or any part thereof (save in respect of damages to crops as aforesaid)

- b) The right of the Employer to construct the works or any part thereof on over, under, in or through any land.
  - c) Interference whether temporary or permanent resulting in any right or-light, air way or other assessment or quasi assessment which is the unavoidable result of the construction of the works in accordance with the contract.
  - d) Injuries or damages to person or property resulting from any act or neglect done or committed during the currency of the contract by the Employer, his agents, servants-other contractors (not being employed by the contractor) or for in respect of any claim demands, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto.
31. Third party Insurance: Before commencing the execution of the works the Contractor (but without limiting his obligations and responsibilities) shall insure against any damage, loss or injury which may occur to any property (including that of the Employer) or to any Person (including any employee of the Employer) by or arising out of the execution of the works or temporary works or in the carrying out of the contract otherwise than due to the matters referred to in the Provision of Clause 30 hereof.
32. Minimum amount of third party Insurance: Such insurance shall be effected with an insurer and in terms, approved by the Employer and for an amount not less the amount of ₹.50,000/- (Rupees fifty thousand only) and the Contractor shall whenever required, produce to the Representative of RINL/VSP/Engineer the valid policy or policies of insurance and the receipts for payment of the current premium. The Agency shall update the said insurance policy as per the instructions of the employer from time to time.
33. Accident or injury to Workmen: The employer shall not be liable for or in respect of any damages or compensation payable at Law in respect of or in consequence of any accident or injury to any workman or other person in the employment of the Contractor any sub-contractor save and except an accident or injury resulting from any act or default of the Employer, his agents or servants and the Contractor shall indemnify and keep indemnified the employer against all such damages and compensation (save and except as aforesaid) and against all claims, demands, proceedings, costs, charges and expenses whatsoever in respect or in relation thereto.
34. Compliance with Statute, Regulations etc: The Agency shall conform in all respects with the provision of any such Statute, Ordinance, or Law as aforesaid and the rules, regulations or bye-laws of any local or other duly constituted authority which may be applicable to the works or to any Temporary Works and with such rules and regulations of public bodies as aforesaid and shall keep the employer indemnified against all penalties and liability of every kind for breach of any such statute, Ordinance, law, Rule, Regulation or Bye-Law.

35. Supply of Plant Materials and Labour: Except where otherwise specified by the contractor shall at his own expense supply and provide all the constructional plant materials both for temporary and for permanent works. Labour (including the supervision thereof) transport to or from site and in and about the works and other things of every kind required for the construction, completion and maintenance of the works.
36. Age limit of Labour: The age limit for employment of labour shall be in strict accordance with the existing Labour Rules & Regulations.
37. Observance by subcontractors: The contractor/agency shall also be responsible for the observance of the aforesaid provisions by sub-contractors employed by him in the execution of the contract, if any. Such sub-contractors shall be authorised by the employer.
38. The contractor/agency shall follow the provisions of Factories Act, 1948 and all rules made there under from time to time as applicable and shall indemnify the employer against all claims of compensations under the provisions of the act in respect of workmen employed by the contractor in carrying out the work against all costs, expenses and penalties that may be incurred by the employer in connection therewith.

**39. SAFETY :**

- a) The contractor/agency and his workers must strictly take all safety precautions and shall supply to his workers dependable safety appliances like hand gloves, safety boots, safety belt, safety helmets, duster cloth, dust mask/nostril filter etc.
- b) The contractor/agency shall take adequate safety precaution to prevent accidents at site. The contractor shall also ensure that his employees observe the statutory safety rules and regulations and also those laid down by the employer from time to time and promptly submit report of accident and state the measures taken by him to prevent their recurrence and also keep the employer indemnified of all claims arising out of such accidents.
- c) No Workmen shall be engaged on the work without proper safety induction and without using required Personal Protection Equipment. Use of safety helmet and shoe is must excepting in painting works where shoe will not be used.
- d) All the safety appliances required for safe working as decided by Safety Engineering Department/Contract operating department of RINL/VSP shall be provided by the contractor to his workmen.
- e) Clearance to start the job will be obtained by the contractor in form 'A&B' before start of work. The forms may be obtained from the dept. concerned.
- f) Works at height cannot be started without clearance from Zonal Safety Officer. The workers engaged for work at height shall possess height pass from Safety Engineering Department. The names of workmen

working at height or in hazardous areas will be written on the body of form "B".

- g) Contravention of any safety regulation of VSP in vogue from time to time will result into work stoppage, levying penalties and ultimately in contract termination.

40. **LABOUR DEPLOYMENT :**

- A) The contractor/agency shall deploy his labour as per requirement and as instructed by the Representative of RINL/VSP/Engineer. It may be necessary to carryout the work round the clock based on requirement and shutdown provided. The contractor's rate shall cover such eventualities.
- B) Only trained, experienced, safety inducted workers acceptable to the Representative of RINL/VSP/Engineer shall be engaged on this work, work shall be executed as per specifications to the satisfaction of the Representative of RINL/VSP/Engineer.

- 41. The contractor/agency, his supervisors and workmen shall observe entry and exit timings strictly.
- 42. After completion of work activity, the site has to be cleared of all debris, construction material and the like.
- 43. The successful tenderer shall start the work immediately after obtaining gate passes and safety induction training and clearance from the Representative of RINL/VSP/Employer.

\* \* \*

**NOTE: Wherever the contractor execute works in a state other than Andhra Pradesh, the concerned Department shall register with the concerned Labour Department of appropriate Government in that particular state (presently Asst. Labour Commissioner (Central), Government of India, Ministry of Labour) as a principal employer in order to issue Form of Certificate by Principal Employer (Form-V) to enable the contractor to obtain licence under the Contract Labour (Regulation & Abolition) Act, 1970 and the Contract Labour (Regulation & Abolition) Central Rules 1971 and comply with all the provisions of various statutes governing the service conditions of the contract labour in that concerned State or the contractors' particulars shall be amended at registered office, Visakhapatnam by the concerned department with labour department of appropriate Government (presently with Asst Labour Commissioner (Central), Ministry of Labour, Government of India, Visakhapatnam) through Central Contract Labour Cell. The terms and conditions may be modified accordingly after obtaining the approval of competent authority.**

\* \* \*

**Annexure-1**

**PART-A PH-9 Gr-III(SMS-GCP) RECIRCULATION SYSTEM**

Chemical Quantities sheet for 365 days + 15 days passivation

NAME OF THE AGENCY:

CHEMICAL TREATMENT PROGRAMME  
PERIOD =

365 days + 15 days passivation

**Pump House-9 Gr-III (SMS-GCP)**

Water Recirculation rate = Avg 1582 cu.m/hr .

Converter flow rate = 430 cu.m/hr/converter.

Number of heats per day (for 3 converters) = Avg 75

Heats

Blow time = 16

min

**PART-B PH-16 Gr-II RECIRCULATION SYSTEM**

Chemical Quantities sheet for 365 days + 15 days passivation

CHEMICAL TREATMENT PROGRAMME  
PERIOD =

365 days + 15 days passivation

Water flow rate for continuous dosed chemicals at Secondary spray circuit= 600 cu.m/hr.

Hold up water volume at secondary water storage tank for slug dose chemicals = 105 cu.m .

TP-4 Hold up volume = 7000 cu.m .

Water flow Rate through TP-4 = 2150 cu.m /hr.

WATER SUPPLY TEMP. = 34 deg. C

WATER RETURN TEMP. = 40 deg. C

**I) CHEMICAL QUANTITIES SHEET OF PUMP HOUSE-9 Gr-III (SMS-GCP) WATER SYSTEM**

**TABLE- A : PH-9 side Continuous dosing chemicals: (i) Antiscalents , (ii) Scale Dispersants, (iii) Poly electrolyte.**

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Circulation rate (m <sup>3</sup> /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 365 days (kgs)
			(a)	(b)	$C = a * b * 24 / 1000$	$d = c * 365$
			1582			
			1582			
			1582			

<b>TABLE-B: Converter side continuous dosing CHEMICALS (i) Wetting agents.</b>						
1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Circulation rate (m <sup>3</sup> /hr/converter)	Chemical Dosage concentration (ppm)	Chemical Dosage rate kgs/day	Chemical Qty for 365 days
			(a)	(b)	$C = (a \times 75 \times 16 \times b) / (60000)$	$(d = c \times 365)$
			430			
			430			
			430			
			430			

<b>TABLE- C : PH-9 side Continuous dosing Passivation chemicals: (i) Antiscalents , (ii) Scale Dispersants, (iii) Poly electrolyte (for initial 15 days in addition to the regular chemical dosing for 365 days)</b>						
1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Circulation rate (m <sup>3</sup> /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/day	Chemical Qty for 15 days (kgs)
			(a)	(b)	$C = (a * b * 24 / 1000)$	$d = c * 15$
			1582			
			1582			
			1582			
			1582			

<b>TABLE-D: Converter side PASSIVATION CHEMICALS: (i) Wetting agents (for initial 15 days in addition to the regular chemical dosing for 365 days)</b>						
1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Circulation rate (m <sup>3</sup> /hr/converter)	Chemical Dosage concentration (ppm)	Chemical Qty/Dose	Chemical Qty for 15 days
			(a)	(b)	$C = (a \times 75 \times 16 \times b) / (60000)$	$(d = c \times 15)$
			430			
			430			
			430			
			430			

**TABLE- E : Continuous dosing chemicals at Quencher pumps Recirculation system : (i) Antiscalents , (ii) Scale Dispersants (iii) Wetting agent.**

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Water circulation rate at quencher pumps for all 3 converters (m <sup>3</sup> /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 365 days (kgs)
			(a)	(b)	$C = (a * b * 24) / 1000$	$d = c * 365$
			1290			
			1290			
			1290			

**TABLE- F : Continuous Passivation chemicals at Quencher pumps Recirculation system (i) Antiscalents , (ii) Scale Dispersants, (iii) Wetting agents (for initial 15 days in addition to the regular chemical dosing for 365 days)**

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Water circulation rate at quencher pumps for all 3 converters (m <sup>3</sup> /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 15 days (kgs)
			(a)	(b)	$C = (a * b * 24) / 1000$	$d = c * 15$
			1290			
			1290			
			1290			

**III) CHEMICAL QUANTITIES SHEET OF PUMP HOUSE-16 Gr-II WATER SYSTEM**

**TABLE- G : Continuous dosing chemicals: (i) MS Corrosion inhibitor , (ii) Antiscalents , (iii) Scale Dispersants, (iv) Oxidising Biocides, (v) Bio dispersants, (vi) Filter back wash aid.**

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Water flow rate (m <sup>3</sup> /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 365 days (kgs)
			(a)	(b)	$C = a * b * 24 / 1000$	$d = c * 365$
			600			
			600			
			600			

**TABLE-H: SLUG DOSED CHEMICALS (i) Non Oxidising Biocides, (ii) Filter back wash aid, (iii)Oxidising Biocides .**

1	2	3	4	5	6	7	8	9
S No	CHEMICAL	PURPOSE	Hold up water volume (m <sup>3</sup> )	Chemical Dosage concentration (ppm)	Chemical Qty/Dose	Dosage frequency (once in no of days )	No of doses for 365 days	Chemical Qty for 365 days
			(a)	(b)	$C=(a \times b/1000)$	(d)	$(e=365/d)$	$(f=cXe)$
			105					
			105					
			105					

**TABLE- I: Continuous dosing Passivation chemicals: (i) MS Corrosion inhibitors , (ii) Antiscalents , (iii) Scale Dispersants, (iv) Oxidising Biocides, (v) Bio dispersants (for initial 15 days in addition to the regular chemical dosing for 365 days)**

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Water flow rate (m <sup>3</sup> /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 15 days (kgs)
			(a)	(b)	$C = (a * b * 24 /1000)$	$d = c * 15$
			600			
			600			
			600			

**TABLE-J: SLUG DOSED PASSIVATION CHEMICALS (for initial 15 days in addition to the regular chemical dosing for 365 days)**

1	2	3	4	5	6	7	8	9
S No	CHEMICAL	PURPOSE	Hold up volume (m <sup>3</sup> )	Chemical Dosage concentration (ppm)	Chemical Qty/Dose	* Dosage frequency (once in no of days )	No of doses for 15 days	Chemical Qty for 15 days
			(a)	(b)	$C=(a \times b/1000)$	(d)	$(e=15/d)$	$(f=cXe)$
			105					
			105					
			105					
			105					

**TABLE- K : Continuous dosing chemicals at TP-4: (i) Flocculent , (ii) Oxidising Biocides, (iii) Bio dispersants (iv) Oil dispersants, (v) Oil demulsifier.**

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	TP-4 water Flow rate (m <sup>3</sup> /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 365 days (kgs)
			(a)	(b)	$C = a * b * 24 / 1000$	$d = c * 365$
			2150			
			2150			

**TABLE- L : Continuous dosing Passivation chemicals at TP-4: (i) Flocculent, (ii) Oxidising Biocides, (iii) Bio dispersants (iv) Oil dispersants, (v) Oil demulsifier.**

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	TP-4 water Flow rate (m <sup>3</sup> /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 15 days (kgs)
			(a)	(b)	$C = a * b * 24 / 1000$	$d = c * 15$
			2150			
			2150			

**OTHERS :** PLEASE FILL THE RELEVANT TABLE AS PER THE REQUIREMENT

TABLE-M : Final quantities of the chemicals for the treatment programme

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S N o	C H E M I C A L	Qty indic ated in Colu mn 7 of table A	Qty indic ated in Colu mn 7 of table B	Qty indic ated in Colu mn 7 of table C	Qty indic ated in Colu mn 7 of table D	Qty indic ated in Colu mn 7 of table E	Qty indica ted in Colu mn 7 of table F	Qty indica ted in Colu mn 7 of table G	Qty indic ated in Colu mn 9 of table H	Qty indic ated in Colu mn 7 of table I	Qty indic ated in Colu mn 9 of table J	Qty indic ated in Colu mn 7 of table K	Qty indica ted in Colu mn 7 of table L	Final Qty of Chemica l (Kgs)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(M=a+b +c+d+e +f+g+h +i+j+k+l )

<b>OTHERS :</b> PLEASE FILL THE RELEVANT TABLE AS PER THE REQUIREMENT
---

**WE AGREE TO THE FOLLOWING TERMS & CONDITIONS CONDITIONS FOR CHEMICAL TREATMENT PROGRAMME.**

1. Guarantees, Penalties, General and other clauses of technical specification.
2. All the fields of the above tables are filled. Irrelevant fields are indicated as "NA"
3. All final quantities are rounded off to the next higher integer.
4. All the chemical calculations regarding quantities, dosage rate, dosage frequency, No. of days of treatment etc furnished by us are thoroughly checked and found to be in order.
5. Chemicals required for system cleaning/ precleaning are included in the Passivation chemicals
6. The final quantities stated at **column 15 of Table-M** are binding. No change in final quantities mentioned will be allowed for the purpose of evaluation of tender.
8. In the event of order placement by VSP for the final quantities mentioned at TABLE-M, any short fall in the final quantities (arising out of errors in the calculations in all the above tables) will be supplied additionally with out any financial implication to VSP for ensuring the proper treatment.
9. In case the quoted final quantity of any chemical is more than the required quantity dosing shall be done as per the dosage rate specified in the respective table and payment will be made at actuals.

AUTHORISED SIGNATORY

## Annexure –2

The chemicals are to be supplied against full or part of the following SAP Material code numbers based on the Agency's treatment programme:

### **PUMP HOUSE-9 Gr-III&PH-16 Gr-II (SMS ZONE)**

SAP Mat CODE:

Material Description:

1) 3032696	Antiscalent-1
2) 3032691	Polyelectrolyte
3) 3032689	Wetting Agent
4) 3032688	M.S corrosion Inhibitor-1
5) 3032687	M.S corrosion Inhibitor-2
6) 3032695	oxidizing biocide
7) 3032693	Bio dispersant
8) 3032694	Non oxidizing biocide
9) 3032690	Filter backwash aid
10) 3032692	Oil dispersant-1

**ANNEXURE – 3**

**Make up Water Analysis Report**

Month	Value	pH	Conductivity	Turbidity	P-Alk	M-Alk	Ca-H	Mg-H	Chlorides	Sulphates
Oct-22	Min	7.6	278	3.8	0	96	50	32	18	4.6
	Max	8.4	292	23.8	4	116	68	56	23	14.8
	Avg	7.9	283	8.9	0	108	58	42	21	8.1
Nov-22	Min	7.2	280	3.5	0	78	50	38	20	3.0
	Max	8.9	320	10.1	10	128	68	54	26	32.4
	Avg	8.0	291	7.2	1	115	57	45	22	11.8
Dec-22	Min	7.6	274	3.2	0	114	50	36	19	5.1
	Max	8.3	306	11.6	0	130	60	54	22	12.9
	Avg	7.8	291	6.9	0	121	55	46	21	9.5
Jan-23	Min	7.7	290	4.4	0	66	52	32	20	6.2
	Max	8.2	301	18.1	0	130	76	50	22	11.3
	Avg	7.9	294	7.6	0	118	58	44	21	7.8
Feb-23	Min	7.6	294	4.9	0	100	56	40	20	6.4
	Max	7.9	308	11.5	0	130	64	50	26	30.1
	Avg	7.8	298	7.2	0	122	60	45	22	9.8
Mar-23	Min	7.8	273	3.9	0	106	54	38	19	4.8
	Max	8.1	306	10.0	0	136	72	50	25	9.7
	Avg	7.9	297	6.3	0	121	60	45	23	7.7
Apr-23	Min	7.7	292	3.6	0	98	52	40	20	6.3
	Max	8.1	301	9.2	0	140	64	52	24	9.2
	Avg	7.9	295	5.9	0	120	58	45	22	8.1
May-23	Min	7.6	287	3.4	0	94	52	36	19	5.0
	Max	8.0	297	13.2	0	130	66	54	25	12.2
	Avg	7.8	292	5.6	0	119	60	43	22	8.9
Jun-23	Min	7.8	274	4.2	0	96	54	38	18	5.7
	Max	8.3	305	10.4	8	130	62	52	23	10.2
	Avg	8.0	292	6.7	1	122	59	44	21	7.8
Jul-23	Min	7.7	289	7.6	0	98	54	40	19	4.2
	Max	8.3	313	22.8	8	124	64	50	24	18.0
	Avg	8.1	301	15.2	1	117	60	43	21	9.2
Aug-23	Min	7.8	288	5.7	0	100	52	38	20	4.0
	Max	8.3	307	20.7	6	132	64	48	23	16.8
	Avg	8.0	297	12.0	0	117	60	42	22	10.1
Sep-23	Min	7.7	287	5.8	0	100	50	36	18	7.6
	Max	8.2	308	26.5	0	126	64	52	24	13.8
	Avg	8.0	296	14.0	0	114	58	42	22	11.4



**PROTOCOL FOR START/MID / END OF CONVERTER CAMPAIGN REGARDING CHEMICAL TREATMENT OF GCP CLEANING WATER IN SMS-1 ANNEXURE-5**

1	CONVERTER No.	CAMPAIGN NO.	SARTTING DATE OF CAMPAIGN	END DATE OF CAMPAIGN	CONVERTER LIFE AT END OF CAMPAIGN	
2	<b>Readings at beginning/end of Campaign</b>					
	Gas flow (NCUM/hr)	ID Fan Vibration(mm/sec)	ID Fan speed (RPM)	Water flow of Primary Quencher nozzles(NCUM/hr)		
3	<b>Mid Campaign repairs</b>					
	<b>MCR No.:</b>	<b>Date:</b>	<b>Converter life:</b>	<b>MCR duration:</b>		
	<b>Readings at beginning Mid Campaign repairs.</b>					
	Gas flow (NCUM/hr)	ID Fan Vibration	ID Fan speed (RPM)	Water flow of Primary Quencher nozzles(NCUM/hr)		
	<b>Readings after Mid Campaign repairs.</b>					
	Gas flow (NCUM/hr)	ID Fan Vibration	ID Fan speed (RPM)	Water flow of Primary Quencher nozzles(NCUM/hr)		
	<b>Reasons &amp; Jobs Details of MCR</b>					
	<b>Cleaning of Scrubber:</b>					
		Activity and its status			Reasons	
		Primary ventury cleaning done/ not done				
		Gas channels cleaning done/not done				
		Upper basin cleaning done or not done				
		Secondary ventury cleaning done/not done				
<b>ID Fan balncing:</b>						
	ID Fan intermediate balncing done or not done:					
	Balancing done with cleaning or without cleaning:					
	Reasons for Reduction in ID Fans speed below 1250 RPM					
	Mid term Balamcing due to chemical treatment/water quality(If done before 1200 Heats cycle):Yes/No					
	Mid campaign Balancing Number in the 1200 heats cycle:(1 <sup>st</sup> &2 <sup>nd</sup> ....etc)					
	Heats at above mid campaign:					
<b>Quencher pumps and nozzles cleaning:</b>						
	Quencher pump impeller cleaning done/ not done					
	Primary quencher nozzles cleaning done /not done					

4	<b>Remarks:</b>
5	Signature of the Agency <span style="float: right;">Signature of GCP Representative</span>

Annexure-6  
**Chemical Test Certificate Format**

Date:

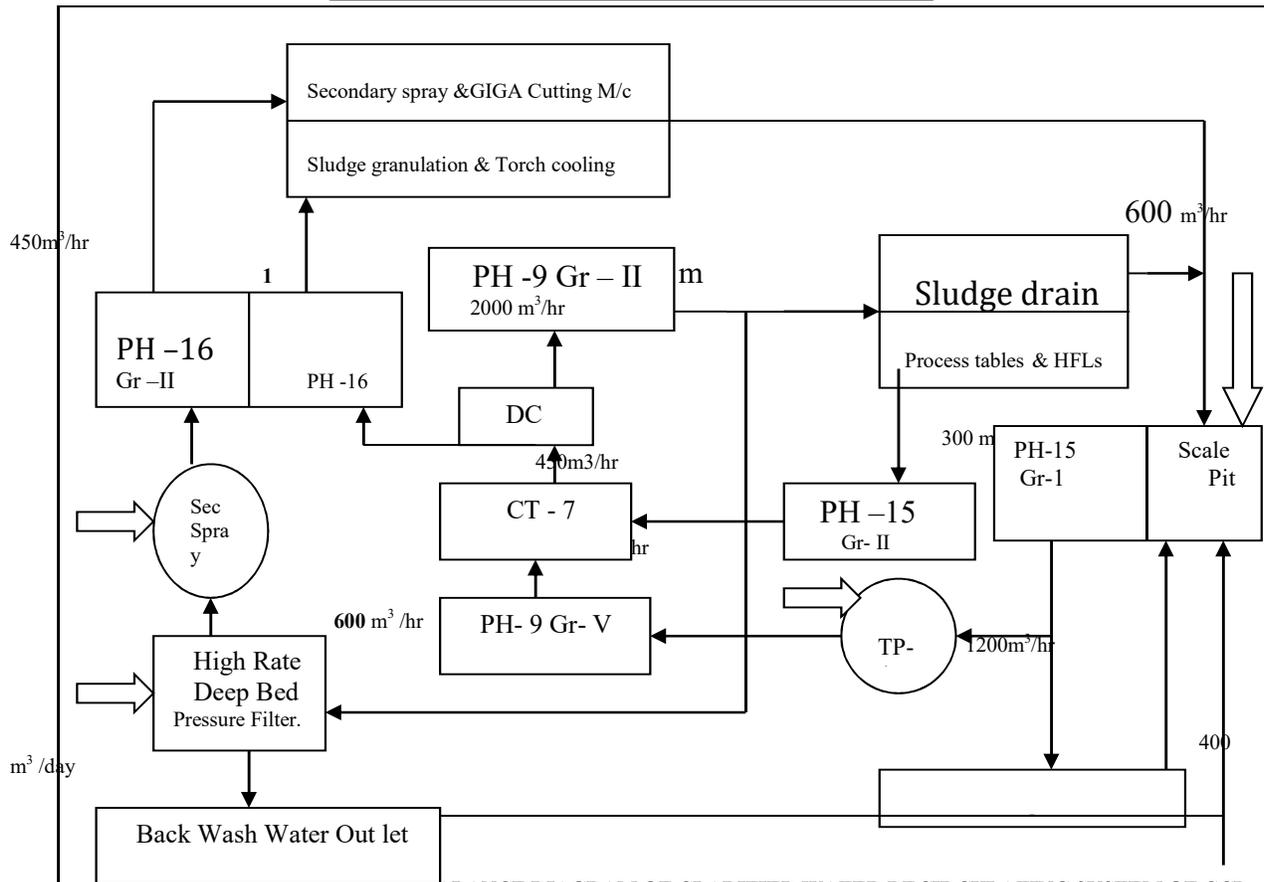
Name of the system:

PO No & Date:

Sl. No.	Parameter	Details/Value
1	Name of the chemical/Product	
2	Party Name	
3	Quantity Supplied	
4	Batch Number	
5	Mfg. date	
6	Exp. date	
7	Physical form(Solid/Liquid)	
8	Challan/Invoice No. & Date	
9	pH Value	
10	Solubility	
11	Specific gravity	
12	Name of Active ingredient	

Signature of Quality control in-charge  
Seal:

## Annexure-7 FLOW AND WATER BALANCING DIAGRAM



**FLOW & WATER BALANCE DIAGRAM OF CLARIFIED WATER RECIRCULATING SYSTEM OF CCD  
Part-B**

DC : Distribution chamber .

CT-7: Cooling tower -7.

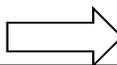
TP-4: Treatment Plant -4.

2 Thickeners /1125 M<sup>3</sup> /hr each

PH-9 Pump House -9 / Gr -II ----4 Pumps / 2000M<sup>3</sup> /hr each.  
Gr -V ---- 4 Pumps / 800 M<sup>3</sup> /hr each.

PH-15 Pump House-15 / Gr -I ----5 Pumps /1100 M<sup>3</sup> /hr each.  
Gr- II -- 4 Pumps / 900 M<sup>3</sup> / hr each.

PH- 16 Pump House -16 / Gr-II ----5 pumps ( Sludge granulation ) 150 M<sup>3</sup> /hr each  
3 pumps (Secondary spray ) / 320 M<sup>3</sup> /hr each .



SUGGESTED CHEMICAL DOSING POINTS