

RASHTRIYA ISPAT NIGAM LIMITED  
VISAKHAPATNAM STEEL PLANT  
VISAKHAPATNAM-530 031

MATERIALS MANAGEMENT DEPARTMENT  
(PURCHASE WING)  
BLOCK-A, III FLOOR, ADMINISTRATIVE BUILDING  
VISAKHAPATNAM STEEL PLANT  
VISAKHAPATNAM-530 031 (A.P) INDIA

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### **OPEN TENDER NOTIFICATION**

**Invitation to Tender (I T T) No.Pur. 7.13.710/WMD/0057 DT. 06/09/2017**

**FOR CHEMICAL TREATMENT OF RECIRCULATION WATER SYSTEMS OF PH-16 GR-II OF VSP.**

Last date & time for receipt of Tenders is: **11/10/2017 by 10.30 HRS (IST)**

Tender Details can be downloaded from our Website:  
[www.vizagsteel.com](http://www.vizagsteel.com)<MM><MM>TENDERS><TENDERS>.

**Note: The bidder should refer to VSP's website regularly for any corrigendum/addendum.**

**- EXECUTIVE DIRECTOR (MM)**

**RASHTRIYA ISPAT NIGAM LIMITED**  
**VISAKHAPATNAM STEEL PLANT**  
**VISAKHAPATNAM**

Invitation to Tender (I TT) No.Pur. **7.13.710/WMD/0057 DT. 06/09/2017** FOR  
**CHEMICAL TREATMENT OF RECIRCULATION WATER SYSTEMS OF PH-16 GR-**  
**II OF VSP.**

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Note: Link for formats for free downloading the following from VSP website

- 1) **DETAILED TERMS AND CONDITIONS OF INVITATION TO SUPPLY**
- 2) G C C 3) INTEGRITY PACT

Link:[www.vizagsteel.com](http://www.vizagsteel.com), Click on “Tenders”, Click on “Materials Management Tenders” and Click on “Detailed terms and conditions of Invitation to Tender (ITT)”

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**RASHTRIYA ISPAT NIGAM LIMITED  
VISAKHAPATNAM STEEL PLANT  
VISAKHAPATNAM - 530 031, INDIA**

Tel: +91 891 2518309 Ext. 163  
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**OPEN TENDER NOTICE FOR CHEMICAL TREATMENT OF RECIRCULATION  
WATER SYSTEMS OF PH-16 GR-II OF VSP.**

|   |
|---|
| <b>INVITATION TO TENDER (ITT ) NO Pur. 7.13.710/WMD/0057 DT. 06/09/2017</b> |
|---|

**NOTICE INVITING TENDERS** CHEMICAL TREATMENT OF RECIRCULATION WATER SYSTEMS OF GAS CLEANING PLANT DIRECT COOLING WATER SYSTEM, INDUSTRIAL (INDIRECT) COOLING WATER SYSTEM AND SOFT WATER COOLING SYSTEM OF BF-1 OF VSP

1.0 Rashtriya Ispat Nigam Limited (RINL), Visakhapatnam Steel Plant (VSP), Hereinafter referred to as PURCHASER, hereby invites tenders FOR CHEMICAL TREATMENT OF RECIRCULATION WATER SYSTEMS OF PH-16 GR-II OF VSP.conforming to Technical specifications at **Annexure -III** of tender documents.

2.0 **QUANTITY:** To be specified by the tenderer

2.1 **NO OF SOURCES:** One

2.2 **INTEGRITY PACT:**To be submitted along with the techno –commercial bid duly signed on all pages.The details of Nodal Officer and Independent External Monitors (IEMs) for Integrity pact for RINL are available are as follows:

| <u>Nodal officer :</u>   | <u>IEM</u>  |
|--|---|
| Shri A Bhattacharya<br>GM (MM-Purchase)<br>Rashtriya Ispat Nigam Limited,<br>Visakhapatnam Steel Plant,<br>Administration Building – 3 <sup>rd</sup> Floor<br>Visakhapatnam – 530031<br>Phone No : 0891-2518534<br>Fax No : 0891-2518753<br>E-mail: <a href="mailto:agnimitra@vizagsteel.com">agnimitra@vizagsteel.com</a> | <b>Shri Venugopal K Nair, IPS (Retd.)</b><br>Address:<br>P-1 Chakola Water Ford, Pandit Karuppan Road,<br>Near Sacred Heart College, THEVARA, COCHIN – 682 013.<br><b>Contact numbers :</b> +91-484-2664223<br>09447500010 (Mobile)<br><b>E-mail :</b> <a href="mailto:vgknair@gmail.com">vgknair@gmail.com</a>   |
|  | <b>Shri Siva Prasad Rao</b><br>Address:<br>Flat No. 4 H, South Park Apartment,<br>Opp. HDFC Bank, Nallagandla By pass Road,<br>Nallagandla, Serilingampally, Hyderabad – 500 019<br>Mobile No : +91 9908511188<br>Email Id : <a href="mailto:sivaprasadrao1950@gmail.com">sivaprasadrao1950@gmail.com</a><br><a href="mailto:spr50@rediffmail.com">spr50@rediffmail.com</a> |

3.0**DELIVERY:** The successful Tenderer shall supply material within threeweeks' time from the date of LOI without fail for a period of 730 DAYS PLUS 15 DAYS OF PASSIVATION andcontinue supplies at the offered monthly scheduled quantity basis till completion of treatment period.

4.0 Tenderers should submit their tenders in accordance with the instructions given in the detailed terms of this Invitation to Tender and the formats, which are available for free downloading on our website :[www.vizagsteel.com](http://www.vizagsteel.com). Click on “Tenders”, Click on “MM” and Click on “Detailed terms and conditions of Invitation to Tender (ITT)” and G C C .

4.1 Tenderers shall submit their offers in two parts:

**Part-A : Techno-Commercial Bid and**

**Part-B: Price Bid**

Please **submit both the above bids in** separate sealed envelopes super scribing clearly on the envelopes whether it contains Part A: Techno- Commercial Bid or Part B : Price Bid.

**Both these covers are to be placed in a third sealed outer cover super-scribing the ITT No. with date and due date.**

**PART-A** Techno-commercial Bid should contain a) Technical Specification duly signed on all pages. b) Commercial format (Annex-II of Detailed terms and conditions of Invitation to Tender (ITT) c) Integrity pact d) EMD if applicable e) Blanked price bid f) Credentials, if required, as per Cl. No.1.0 of Annexure-1

**Part-B** Price bid should contain no caveat conditions.

5.0 **Reverse-e-auction** : RINL/VSP will go in for Reverse-e-auction for this treatment on one lot basis. Hence tenderers are requested to indicate **their user ID** for participation in reverse-e-auction as per Clause No.17.0 of “Detailed terms & Conditions of ITT” available in our website [www.vizagsteel.com](http://www.vizagsteel.com). Tenderers shall ensure compliance Clause No. 2.1(g & h) and 17.0 of “Detailed Terms and Conditions of Invitation to Supply Tender” and ensure submission of all relevant documents complete in all respects.

5.1 Tenders are required to keep their offers valid for a minimum 90 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.

6.1 Tenders will be accepted up to **10.30 Hrs. (IST) on the date of tender opening**. Techno-Commercial part of the Tender (Part-A) 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 price bid opening shall be intimated separately to technically and commercially acceptable tenderers. Price Bids (Part-B) of those Tenderers who have been Techno-Commercially accepted shall be opened in the presence of the Tenderers or Authorized Representatives of the Tenderers who may choose to be present.

6.2 **TENDER DOCUMENTS**: Tenderers who are interested to participate in the tender can download the tender documents from our website **Website: WWW.VIZAGSTEEL.COM<MM><MM 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.**

6.3 All the tenders shall be evaluated on the basis of LANDED Net of ITC (LNIP)/ VAT cost.

6.4 **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.

**6.5 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 RECIRCULATION WATER SYSTEMS OF PH-16 GR-II OF VSP and instructions to tenderers (Annexure-I).**

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

**----- General Manager (MM)**

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|---|
| ANNEXURE-I TO TENDER NO.Pur. 7.13.710/WMD/0057 DT. 06/09/2017 |
|---|

### **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 superscribing “**CREDENTIALS**” and the **ITT 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 Excise, Sales Tax (CST, VAT), 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)

Party should have experience in treating Continuous Casting Spray Cooling Water System of Steel Melting Shop or any of the gas cleaning system of SMS/BF or metal conditioning water system of Rolling mills in any Integrated Steel Plant (minimum 2 million tons per year) at least for one year without any interruption in the last 7 years. The party should have undertaken both supply of chemicals and their application. Party should produce order copies and satisfactory performance certificates.

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

Tenderers who may be the Manufacturers or the Suppliers of the system as at Annexure.III 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 Part - A: Techno-commercial bid. The formats are available in Detailed Terms and Conditions of Invitation to Supply Tender ( See VSP website.)

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 fill up the check list as at **Annexure – II** 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 taxes, duties, levies, Insurance and freight considered are to be indicated separately. **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. **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, as per the Commercial Format (Annex-II of Detailed Terms and Conditions)

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 this 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 (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:

- a) Tax Invoice in duplicate for quantity consumed during the month.
- b) Copy of GARN for the quantity consumed.
- c) 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..

**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 (one hundred & twenty days)** from the date of opening of tenders.

**6.0 BID MONEY : (VITAL)**

**6.1** The tender shall be considered only if BID MONEY in Indian Rupees by means of either a Demand Draft or Cheque (both subject to realization) drawn on any Scheduled Bank and payable to Rashtriya Ispat Nigam Ltd. at Visakhapatnam or in Electronic mode **for an amount**



**Rs.1,75,000(Rupees One lac seventy five thousand only) submitted along with or prior to Opening of Part-A: Techno-commercial Bid.**

**NOTE :** The following are exempted from submission of EMD/BID MONEY

- 1) Central/State Public Sector Enterprises of India**
- 2) Vendors registered with VSP for the tendered items.**
- 3) SSI Units/Micro and Small scale enterprises (MSEs) registered with NSIC/District Industries Centre of the State Government concerned for the items(s)/item category of tendered items(s) for which the tenderer is registered with the respective authority.

**SSIs/MSEs and units registered with RINL need to submit notarized copies of the relevant valid registration certificates for claiming exemption of EMD.**

6.2 The BID Money should be valid for 180 (One hundred and eighty) days from the date of tender opening. **Tenders received without the Bid MONEY of requisite value will be summarily rejected. BID MONEY , if paid in cash, shall not accrue interest.**

6.3 The BID MONEY must be submitted along with or prior to Opening of Techno-Commercial Bid (Part-A). **Tenders received without the BID MONEY of requisite value shall not be considered by RINL.**

6.4 The BID MONEY shall be forfeited:

- a) if a Tenderer withdraws or modifies his BID during the period of BID validity specified by the Tenderer, or
- b) in case of a successful Tenderer fails to furnish Performance Guarantee Bond in accordance with clause 15.0 of Annexure – I of the Tender documents.

## **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) Price firmness (d) Liquidated damages, (e) Weighment (f) Risk Purchase (g) Submission of BID BOND/BID MONEY,(h) Consent for opening Performance Guarantee Bond (i) Inspection (j) Penalty and total rejection (k) Arbitration and Jurisdiction and (l) Default (m) offers received by cable, e-mail, telex, fax or Telegram (s) late / delayed offers.

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

- 8.1 The detailed offer together with its enclosures should be submitted in two parts:

Part-A – Techno-Commercial Bid

Part-B – Price Bid.

in two separate sealed envelopes.

Part-A should contain all details on technical specifications, other information/ data/ documents/ confirmations/ deviations, if any. A price format as in the Part-B after **blanking the prices** is also to be placed in the Part-A. However, no indication of price in any form, shall be given in Part-A. Confirmation with regard to information/ data/ documents to be furnished by tenderers above are also to be enclosed in Part-A.

**Part-B:** Price Bid should be submitted separately. (Price bid format is available at Detailed Terms and Conditions of Invitation to Supply Tender which is available at our website. In case, the tenderer is a dealer or trader who is participating on behalf of a manufacturer, the tenderer shall furnish assessable value for each item they have quoted along with Excise Tariff Nos.

- 8.2 Each page of the offer should be numbered consecutively, referring to the total number of pages comprising the entire offer, at the top right-hand corner of each page.

- 8.3 Each page of the offer should be signed by the authorizing officer(s) of the Tenderer.

The Part-A & Part-B of the offer together with its enclosures in separate sealed envelopes, should be placed in an envelope which should bear, in Block capital letters, superscription **“ITT No: Pur. 7.13.710/WMD/0057 DT. 06/09/2017** and should also bear superscription:

Part-A: Techno-Commercial Bid or

Part-B: Price Bid.

The two envelopes should then be sealed separately. The name and address of the tenderer should be mentioned on each of this envelope.

- 8.4 The envelopes referred to in para 8.3 above should be placed in another envelope which should be addressed to the **GM (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 **“OFFER IN RESPONSE TO TENDER NO.Pur. 7.13.710/WMD/0057 DT. 06/09/2017**. This envelope should also be sealed. The name and address of the Tenderer should be mentioned on this envelope as well.

- 8.5 Tenders will be accepted upto **10.30 Hrs (IST), on tender opening**. The Techno-Commercial bid of the tenders shall be opened immediately thereafter in the presence of the tenderers or authorized representative of the tenderers, who may choose to be present. The date and time of opening of price bid shall be intimated separately to technically and commercially accepted tenderers. Price Bids (Part-B) of those Tenderers who have been Techno-Commercially accepted shall only be opened in the presence of the tenderers or Authorized representatives of the Tenderers who may choose to be present.

- 8.6 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.

- 8.7 The price quotations should be given in the Part – B : Price bid 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.

**8.8 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.

**12.0 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.

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

**14.0** 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)

**15.0** PERFORMANCE BANK GUARANTEE (VITAL): The successful tender shall submit performance bank guarantee for an amount equal to 10% of total landed value of chemicals Supplied and application charges in the prescribed format as per Annexure. 4.

**16.0 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.

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## Annexure-II

### ANNEXURE-II TO TENDER NO Pur. 7.13.710/WMD/0057 DT. 06/09/2017 CHECK LIST TO BE FILLED UP AND SENT ALONG WITH THE TECHNO COMMERCIAL OFFER

| SL. NO. | TENDER TERMS   | AS REQUIRED BY VSP  | TO BE CONFIRMED BY PARTY ACCEPTED / NOT ACCEPTED | DEVIATIONS IF ANY |
|---------|--|---|--|-------------------|
| 1       | Name and address of the Tenderer                       |   |  |                   |
| 2       | Quantity offered                                       | To be confirmed as per Para 2.0 of OPEN Tender notice                       |  |                   |
| 3       | Technical specifications                               | To be confirmed as per Annex-III of tender document                         |  |                   |
| 4       | Delivery schedule                                      | To be confirmed as per para 3.0 of OPEN Tender notice                       |  |                   |
| 5       | Payment terms  | To be confirmed as per Cl.4.0 of Annx-1 of ITT                              |  |                   |
| 6       | BID MONEY  | To be confirmed as per Cl. 6.0 of Annx-I of ITT                             |  |                   |
| 7       | Price Basis  | To be confirmed as per Cl.3.1.1 of Annx-I of ITT                            |  |                   |
| 8       | Price firmness   | To be confirmed as per Cl. 3.1.3 of Annx-I of ITT                           |  |                   |
| 9       | Insurance  | To Tenderer's a/c   |  |                   |
| 10      | Weighment  | To be confirmed as per Cl.No.10.0 of Annexure –I                            |  |                   |
| 11      | Validity of offer                                      | To be confirmed as per Cl.5.0 of Annx-I of ITT                              |  |                   |
| 12      | Test certificate                                       | To be confirmed as per Cl.9.0 of Annex-I of ITT                             |  |                   |
| 13      | Liquidated damages                                     | To be confirmed as per Cl. 11.0 of Annx-I of ITT                            |  |                   |
| 14      | Default  | To be confirmed as per Cl.12.0 of Annx-I of ITT                             |  |                   |
| 15      | Other General conditions of contract for supply (GC C) | To be confirmed as uploaded & available in VSP's Website:www.vizagsteel.com |  |                   |

**PART– A****CHEMICAL TREATMENT OF RECIRCULATION WATER SYSTEMS  
IN CCD, SMS ZONE (PH-16: GR-II SECONDARY SPRAY)****1. 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.

**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.

**2. DETAILS OF EXISTING COOLING WATER SYSTEM:****2.1. 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                   |

### 2.2. 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.

### 2.3. 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   | : 112- 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 |

#### 2.4. 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      | 36ppm          | 16ppm           |
| P-Alkalinity   | 8ppm           | 8ppm            |
| M-Alkalinity   | 120ppm         | 120 ppm         |
| 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            |

#### 2.5. Filtration:

100 % water after passing through HRDB Filters is used.

#### 2.6. 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.

#### 2.7. 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/l           |
| 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.

## 2.8. **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 De-emulsifier
- Filter Backwash Aid
- Flocculent

## 3. **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, micro-biological 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%).

### 3.1. **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 |

#### 4. REQUIREMENTS OF PROPOSED COOLING WATER TREATMENT PROGRAMME:

##### 4.1. General requirements of cooling water treatment package

4.1.1. VSP requires Party to provide cooling water treatment package for chemical supply, dosage, control and monitoring of cooling towers 3 & 5 with the following chemicals.

1. Effective corrosion inhibitors to protect MS from corrosion.
2. Effective antiscalant 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.

4.1.2. 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.

- 4.1.3. 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
- 4.1.4. 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.
- 4.1.5. 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.
- 4.1.6. 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.
- 4.1.7. 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.
- 4.1.8. 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.
- 4.1.9. 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.
- 4.1.10. The formulation offered shall be compatible with chemicals used in treatment plant viz. polyelectrolyte & alum.
- 4.1.11. Party shall submit product profile/description of each chemical including the active ingredient in the offer and in the test certificate submitted at the time of delivery of chemicals should be in line with the above point 4.1.7.
- 4.1.12. Treatment shall be effective in the specified range of pH and temperature.
- 4.1.13. Supplier should ensure that there should not be any corrosion in the fittings at injection point because of low  $P^H$  of chemicals. Otherwise it will be viewed adversely.
- 4.1.14. 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.
- 4.1.15. Party has to give the details of daily monitoring criteria for the active ingredient of their each quoted chemical. Failing which the offer will not be considered.
- 4.1.16. Tenderer has to quote the minimum residual level of active ingredient of their chemical like phosphate, nitrate, zinc, organic compounds etc. on daily basis to be measured at the end of one cycle in the recirculation water system. Testing methods / procedures for the active ingredient in the treated water must be submitted by tenderer. If the minimum concentration levels of active ingredient are not maintained in re circulation water on any day payment of that particular chemical for that day shall be made as per clause 7.9 Analysis is to be done by the party daily & Party has to provide all analysis kits along with the consumables for the purpose. VSP QATD

laboratory will periodically check the system as and when required by the pump house in-charge. In case of any dispute, the report of VSP QATD lab will be taken as final & binding.

4.2. **Scaling and Corrosion:**

4.2.1. 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.

4.2.2. The formulation shall be effective for all operating parameters as mentioned at para 2.0.

4.3. **Biological Growth:**

4.3.1. 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.

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

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

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

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

4.3.6. If required dosing of NaOCl, ClO<sub>2</sub> or gas chlorine 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.

4.3.7. On site generation is allowed for Cl<sub>2</sub> and ClO<sub>2</sub>.

4.3.8. In case of dosing gas chlorine necessary arrangement of tonners/100kg cylinders, dosing infrastructure and emergency handling equipments shall be in the scope of party. As far as possible Party has to maintain minimum number of containers which are legally allowable at the site.

4.3.9. 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.

**5. JOB SCOPE OF TREATMENT PACAKGE**

5.1. Treatment package consists of two parts-

1. Supply & Performance of chemicals.

2. Application of chemicals.

5.2. 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 SINGLE L1 PARTY SHALL BE

DECIDED BASED ON THE SUM OF THE PART-A & PART-B CHEMICALS SUPPLY AND APPLICATION PARTS.

- 5.3. PERFORMANCE CERTIFICATE (PC) INDICATING THE RECOMMENDED QUANTITY WILL BE ISSUED ON MONTHLY BASIS WHICH IS BASED ON THE PERFORMANCE EVALUATION AND PENALTY AS APPLICABLE. RECOMMENDED QUANTITY ONLY WILL BE CONSIDERED FOR PAYMENT OF SUPPLY AS WELL AS APPLICATION.
- 5.4. THE APPLICATION PART IS TO BE READ WITH **PART-B** (APPLICATION CONTRACT).
- 5.5. **Supply of Chemicals**
  - 5.5.1. 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.
  - 5.5.2. **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.**
  - 5.5.3. Supply of chemicals (except Cl<sub>2</sub>, Gas chlorine and Sulphuric Acid) is to be regulated in such a way that one-month stock is always available at site.
  - 5.5.4. 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.
  - 5.5.5. 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.

- 5.5.6. 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.
- 5.6. **MONITORING OF CHEMICALS:**
  - 5.6.1. Party should have its own laboratory facility with the following provisions for daily monitoring.
    - A. Spectro-Photometer (HACK or any other equivalent) for determination of turbidity, suspended solids, phosphates, iron, chlorides, sulphides, oil & Grease, active ingredient of supplied chemical etc.
    - B. Standard titration equipments with standard reagents.
    - C. Digital PH meter & conductivity measurement devices.
    - D. Instruments and apparatus required for carrying out routine & non- routine chemical and biological analyses.
    - E. All consumables/reagents including necessary apparatus.

F. Selective Ion Electrode to detect cations and anions.

**Note-1:** The above laboratory is for SMS-PH-16 Gr-II system (PART-A). 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.

5.6.2. The above monitoring facilities would have to be arranged by the party on returnable basis during the entire period of treatment without charging additional cost to VSP. Laboratory space and utilities will be provided by WMD.

5.6.3. Party shall provide operating manual for their chemical treatment package. It should also contain chemical analysis procedure for positive identification of the chemicals as supplied and also in Recirculation water.

**Monitoring services:**

5.6.4. Cooling water treatment program should be carefully chosen and implemented to achieve uninterrupted operation, at a low cost. 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.

5.6.5. The Party should monitor corrosion and fouling tendency. Perform Routine analyses and carry out regular (daily) visual inspection for monitoring health of system.

5.6.6. Regular once/day analysis of CW, Residual active ingredient in treated water is required.

5.6.7. Regular once/day monitoring of CW inlet/outlet temp to Cooling towers, make up rate.

5.6.8. Party will have to regularly monitor and report as a part of monitoring, fouling tendency.

**Additional monitoring services**

5.6.9. Party shall inspect & collect scale/deposit samples, analyze samples within 48 hrs of inspection at its own laboratory, take photograph and submit the report within 72 hrs of inspection.

**Abnormality detection and Response**

5.6.10. Clear instructions shall be available for handling power failure and all other emergencies.

**Daily reports:**

5.6.11. Party's representative will generate daily electronic reports of the previous day which will include

A. Chemicals consumption.

B. Concentration of treatment chemicals and other inorganic chemicals (Residual Active ingredient) in all CW systems.

C. CW chemical analyses.

D. Daily report should include abnormality like undesirable odor, color, turbidity, raise in make up rate, action taken and results achieved etc.

5.6.12. One hard copy of report will be submitted to pump house in charge, and soft copy of the report will be sent to WMD HOD, GM (WMD) and consumer dept by E-mail for close monitoring.

5.6.13. On monthly basis actual consumption of the chemicals deviations if any with reasons and explanations will be reported. Actions taken for any abnormal / emergency situations will be reported in brief. Report will be given to WMD HOD, pump house in charge and consumer dept.

5.7. **Performance Monitoring Tools Required:**

- 5.7.1. For monitoring the Performance, the party should provide and maintain the following monitoring tools throughout the period of treatment program.
- A. Test corrosion coupon rack, of a 1"pipe dia., for measuring corrosion rates in the system. The coupons shall be provided by VSP and the coupons will be inspected every month for measuring the corrosion rates as per IS: 8188-1999 procedures.
  - B. Test deposition coupon racks for measuring the deposition rate in the system. This will be used for quantitative evaluation of the treatment performance. The coupon with deposition shall be weighed. The difference of final weight of the coupon and the initial weight of the coupon shall give the weight of the deposit. The coupons shall be provided by VSP and will be inspected every month for measuring the deposition rates.
  - C. Party shall provide bio-fouling monitor as per NACE standard. The pressure drop ( $\Delta P$ ) across the bio-fouling monitor should be maintained at less than 5 inches of water column.
  - D. Electronic metering pumps for dosing the each formulation with measuring facilities. No manual / Gravity dosing is allowed.
  - E. Temperature measuring instruments preferably non-contact type.
- 5.7.2. 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. Utilities like power, water shall be provided by VSP at free of cost.
- 5.7.3. Test coupons shall be arranged by VSP. These will be installed in coupon racks every month in each system. Analysis report of coupons shall be taken for performance evaluation purpose.
- 5.7.4. Performance parameters shall be monitored on regular basis as per IS: 8188-1999 and monthly performance reports containing the test results of the month shall be the basis for performance evaluation and payment.
- 5.7.5. 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.

5.8. **Party's Scope:**

Party's scope of work, supply and services shall be as described below.

- 1. Design of suitable cooling water treatment programme to meet the system requirement and technical specifications.
- 2. Supply of chemicals for passivation, normal operation and their dosing.
- 3. To provide monitoring tools like 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.
- 4. Supervision by Party's supervisor/ application engineer.
- 5. Daily CW analysis and Reporting to concerned authorities.
- 6. Deploying sufficient number of work men.
- 7. Establishing Party's lab facility for cooling water analysis.
- 8. Fulfilling the Statutory requirements.

5.9. **VSP's Scope:**

VSP's scope and responsibilities shall include the following

- 1. Providing laboratory space for the party to establish its lab.

2. All Utilities like Power, water for the party's metering pumps and lab will be provided.
3. VSP shall provide corrosion/deposit test coupons.
4. Testing of corrosion/deposit coupons & microbiological analysis will be done by VSP.

5.10. **Payment terms:**

Performance certificate(PC) as mentioned at clause 5.3 shall be issued on receipt of all relevant documents like PC application, Daily reports by party, GARNS from the stores, Test certificates from QATD lab. Payment will be released within 30 days from the date of release of performance certificate by WMD. 100% payment will be done on recommended quantity (recommended quantity will be arrived after deduction of applicable penalty) for supply and performance purpose.

**6. GUARANTEE:**

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

- 6.1. **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 5.00 mpy**

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

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

- 6.4. **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.

- 6.5. **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.

- 6.6. **Residual availability:** Presence of minimum residual of active ingredient of each quoted chemicals as per offer given by party.

**7. 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.



- 7.1. **Corrosion rate for MS:** Measured on monthly basis Average of two / One MS coupons shall be rounded off to first four decimal points and 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 10% 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 20% of the quantity of corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

Above 7.0 mpy and up to 8.0 mpy - Deduction of 50% of the quantity of corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

Above 8.0 mpy- No Payment for the quantity of chemicals viz corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

- 7.2. **Suspended solids:**

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

Above 20ppm and up to 30ppm-Deduction of 25% 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.

- 7.3. **Oil & Grease:**

For less than 10ppm-No penalty.

Above 10ppm and up to 15ppm -Deduction of 25% 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.

- 7.4. **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 0.0051 grams/coupon/day and below 0.0060- deduction of 5% of the Quantity of corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

For deposition rate above 0.0061 grams/coupon/day and below 0.0070- deduction of 10% of the Quantity of corrosion inhibitors, iron dispersants, Antiscalents and relevant chemicals dosed during the period.

For deposition rate above 0.0071 grams/coupon/day and below 0.0080- deduction of 20% 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.

- 7.5. It may please be noted that even if one of the above parameter viz. Corrosion rate for MS or deposition rate as detailed in 7.1 & 7.4 goes above the limits specified, penalty is applicable to all the chemicals consumed for corrosion inhibition, iron dispersant and Antiscalent purpose.

7.6. **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 10% 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 25% 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.

Penalty is applicable even if one of the parameters deviates from the norm. TVC & SRB count shall be measured once in a fortnight for performance evaluation.

For the analysis of TVC & SRB sample is to be collected once in fortnight at the location specified in the clause 6.5.

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

7.7. **Penalty on residual availability of active ingredient in recirculation water:**

If it is lower than the Lower Limit (LL) of concentration of each chemical quoted by party penalty will be levied as given below.

Residual achieving lower limit (LL) in ppm – No penalty

Residual achieving <100-85% of LL in ppm : Deduction of 10% of the Quantity of chemical consumed during the period for the system.

Residual achieving <85-70% of LL in ppm : Deduction of 20% of the Quantity of chemical consumed during the period for the system.

Residual achieving <70-55% of LL in ppm : Deduction of 50% of the Quantity of chemical consumed during the period for the system.

No Payment for Residual achieving <55% of LL in ppm.

- 7.8. **Stock Out penalty:** In case of 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. Also as per A/T clause LD will be charged in case of delay in supply of materials. Penalty will be imposed in confirmation with clause No 7.9. VSP's decision is final in this regard.
- 7.9. **Note:** While imposing the penalty, all penalties applicable are summed up. For any day the highest penalty applicable on any chemical due to different clauses is limited to 100%. .
- 7.10. If the corrosion rate of MS is maintained in 100% penalty range for 3 times either consecutively or intermittently during the treatment period, from 4th time onwards penalty will be imposed on all chemicals. For corrosion rates of below 100% penalty this clause is not applicable.
- 7.11. If the TVC or SRB is maintained in 100% penalty range continuously or intermittently during the treatment period for 6 times, from 7th time onwards penalty will be imposed on all chemicals. For TVC or SRB below 100% penalty range this clause is not applicable.
- 7.12. In case simultaneous imposition of penalties levied under the clause 7.0.0 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 %.
- 7.13. 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.

## **8. GENERAL:**

- 8.1. 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.
- 8.2. **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. To this end, 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 along with the final payment which require CLC Clearance etc. and same will be released within 30 days.**
- 8.3. **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 along with active ingredient, concentration and percentage.
  - C. Dosing rates, monthly consumption as well as yearly consumption of chemicals for each cooling tower this shall include the quantity of sulphuric acid (if required).

- D. The treatment program for each cooling tower should be separately indicated for (1) precleaning and passivation, (2) Normal treatment,
- E. Party has to give complete procedure and time required for precleaning and passivation.
- 8.4. **The treatment program will be for a minimum period of Two Years (730 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 730 days.**
- 8.5. **Party shall quote all the quantities in kilograms (kgs) only**
- 8.6. **Prices quoted by the party should be exclusive of packing charge as the carboys are returnable.**
- 8.7. **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.**
- 8.8. **Offers without the relevant details and confirmations as asked for in the tender may call for rejection.**
- 8.9. **THE PARTY MUST FILL THE ANNEXURE-I PROPERLY AND SUBMIT ALONG WITH THE TECHNICAL BIDS.**
- 8.10. **Party shall confirm and implement the following for better Environment management and for safe handling of the chemicals:**
- i) 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.*
- ii) Chemicals containers shall be stacked neatly in the designated area at site, with separate stacking of empty and full containers.*
- iii) Safety instructions for handling the chemicals/Fire hazards etc. shall be displayed clearly in the chemical handling area.*
- iv) 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.*
- v) In case of inflammable/explosive chemicals, fire extinguishers to be used and not to be used shall be clearly mentioned in the displayed instructions.*
- vi) In case of dosing Gas Chlorination necessary statutory requirements have to be arranged by the party itself.*
- vi) While taking back empty carboys, party must ensure that carboy's lids, cups, seals etc. are fully cleared and taken back.*
- vii) Precautions shall be taken to avoid spillage of chemicals.*
- viii) Party shall ensure to maintain "EMERGENCY PREPAREDNESS & WASTE DISPOSAL PROCEDURES for the chemicals like sulphuric acid etc. as per the existing EMS procedures of VSP in consultation with concerned Incharge of the zone.*

**PART-A PH-16 Gr-II RECIRCULATION SYSTEM**  
Chemical Quantities sheet for 730 days + 15 days passivation

NAME OF THE AGENCY:

CHEMICAL TREATMENT PROGRAMME

PERIOD =

730 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

**CHEMICAL QUANTITIES SHEET FOR 730 DAYS****TABLE- A : 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                               | 8  | 9                         |
|------|----------|---------|--------------------------------------|--------------------------------------|------------------------------|---------------------------------|--|---------------------------|
| 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 730 days (kgs) | Name of Active ingredient in the chemical (AI) | Lower limit of AI in RCCW |
|      |          |         | (a)                                  | (b)                                  | $C = a * b * 24 / 1000$      | $d = c * 730$                   |  |                           |
|      |          |         | 600                                  |                                      |                              |                                 |  |                           |
|      |          |         | 600                                  |                                      |                              |                                 |  |                           |
|      |          |         | 600                                  |                                      |                              |                                 |  |                           |

**TABLE-B: 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 730 days | Chemical Qty for 730 days |
|      |          |         | (a)                                    | (b)                                 | $C = (a * b / 1000)$ | (d)                                    | $(e = 730 / d)$          | $(f = c * e)$             |
|      |          |         | 105                                    |                                     |                      |  |                          |                           |
|      |          |         | 105                                    |                                     |                      |  |                          |                           |
|      |          |         | 105                                    |                                     |                      |  |                          |                           |
|      |          |         | 105                                    |                                     |                      |  |                          |                           |

**TABLE- C : 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 730 days)**

| 1    | 2        | 3       | 4                                    | 5                                    | 6                            | 7                              | 8   | 9                         |
|------|----------|---------|--------------------------------------|--------------------------------------|------------------------------|--------------------------------|---|---------------------------|
| 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) | Name of Active ingredient in the chemical | Lower limit of AI in RCCW |

|  |  |  |     |     |                           |              |      |  |
|--|--|--|-----|-----|---------------------------|--------------|------|--|
|  |  |  |     |     |                           |              | (AI) |  |
|  |  |  | (a) | (b) | $C = (a * b * 24 / 1000)$ | $d = c * 15$ |      |  |
|  |  |  | 600 |     |                           |              |      |  |
|  |  |  | 600 |     |                           |              |      |  |
|  |  |  | 600 |     |                           |              |      |  |

**TABLE-D: SLUG DOSED PASSIVATION CHEMICALS (for initial 15 days in addition to the regular chemical dosing for 730 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)                                 | $C = (a * b / 1000)$ | (d)                                      | (e=15/d)                | (f=cXe)                  |
|      |          |         | 105                              |                                     |                      |  |                         |                          |
|      |          |         | 105                              |                                     |                      |  |                         |                          |
|      |          |         | 105                              |                                     |                      |  |                         |                          |
|      |          |         | 105                              |                                     |                      |  |                         |                          |

**TABLE- E : 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                               | 8  | 9                         |
|------|----------|---------|---|--------------------------------------|-------------------------------|---------------------------------|--|---------------------------|
| 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 730 days (kgs) | Name of Active ingredient in the chemical (AI) | Lower limit of AI in RCCW |
|      |          |         | (a)                                       | (b)                                  | $C = a * b * 24 / 1000$       | $d = c * 730$                   |  |                           |
|      |          |         | 2150                                      |                                      |                               |                                 |  |                           |
|      |          |         | 2150                                      |                                      |                               |                                 |  |                           |
|      |          |         | 2150                                      |                                      |                               |                                 |  |                           |

**TABLE- F : 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                               | 8  | 9                         |
|------|----------|---------|---|--------------------------------------|-------------------------------|---------------------------------|--|---------------------------|
| 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 730 days (kgs) | Name of Active ingredient in the chemical (AI) | Lower limit of AI in RCCW |
|      |          |         | (a)                                       | (b)                                  | $C = a * b * 24 / 1000$       | $d = c * 15$                    |  |                           |
|      |          |         | 2150                                      |                                      |                               |                                 |  |                           |
|      |          |         | 2150                                      |                                      |                               |                                 |  |                           |
|      |          |         | 2150                                      |                                      |                               |                                 |  |                           |

**TABLE-G : Final quantities of the chemicals for the treatment programme**

| 1 | 2        | 3   | 4                | 5             | 6                            | 7   | 8   | 9                     |
|---|----------|-----|------------------|---------------|------------------------------|-----|-----|-----------------------|
| S | CHEMICAL | Qty | Qty indicated in | Qty indicated | Qty indicated in Column 9 of | Qty | Qty | Final Qty of Chemical |

| No |  | indicated in<br>Column 7 of<br>table A | Column 9 of<br>table B | in Column 7<br>of table C | table D | indicated<br>in Column<br>7 of table<br>E | indicated<br>in Column<br>7 of table<br>F | (Kgs)            |
|----|--|--|------------------------|---------------------------|---------|---|---|------------------|
|    |  | (a)                                    | (b)                    | (c)                       | (d)     | (e)                                       | (f)                                       | (f =a+b+c+d+e+f) |
|    |  |  |                        |                           |         |   |   |                  |
|    |  |  |                        |                           |         |   |   |                  |
|    |  |  |                        |                           |         |   |   |                  |
|    |  |  |                        |                           |         |   |   |                  |
|    |  |  |                        |                           |         |   |   |                  |

**OTHERS :** 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 i.e. in Table C D & F
6. Regarding exigency chemicals, slug dosed chemicals are not required. The only continuously dosed chemicals i.e. corrosion inhibitors, antiscalants, biocides etc., are to be considered in Table- C.
7. The final quantities stated at **column 8 of Table-G** 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-G, 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**

### **CHEMICAL TREATMENT OF RECIRCULATION WATER IN CCCD PUMP HOUSE-16 GR-II**

The chemicals are to be supplied against full or part of the following catalog numbers based on the party's treatment programme:

Mat NO:

Description:

- |             |                                      |
|-------------|--------------------------------------|
| 1) 3002736  | M.S corrosion Inhibitor              |
| 2) 3002737  | Antiscalent Scale Dispersant         |
| 3) 3002738  | oxidizing biocide                    |
| 4) 3002739  | oxidizing biocide-Supplementary      |
| 5) 3002740  | Non oxidizing biocide                |
| 6) 3002741  | Non-Oxidizing biocide- Supplementary |
| 7) 3002742  | Biodispersant                        |
| 8) 3002743  | Oil dispersant                       |
| 9) 3002744  | Oil DE-Emulsifier                    |
| 10) 3002745 | Filter backwash aid                  |
| 11) 3002746 | Filter backwash aid -Supplementary   |
| 12) 3002747 | Flocculent                           |
| 13) 3027017 | M.S Corrosion Inhibitor              |



## MAKEUP WATER ANALYSIS REPORT

| Month  | Value | PH  | Cond<br>( $\mu$ sin/cm) | Turb<br>(NTU) | Alkalinity<br>(ppm) |     | Chlorides<br>(ppm) | Sulphates<br>(ppm) | Hardness (ppm) |    |       |
|--------|-------|-----|-------------------------|---------------|---------------------|-----|--------------------|--------------------|----------------|----|-------|
|        |       |     |                         |               | P                   | T   |                    |                    | Ca             | Mg | Total |
| Jan-16 | MIN   | 7.4 | 360                     | 9.7           | 0.0                 | 135 | 25                 | 21.6               | 58             | 34 | 104   |
|        | MAX   | 7.8 | 396                     | 19.5          | 0.0                 | 168 | 32                 | 41.2               | 98             | 72 | 148   |
|        | AVG   | 7.7 | 383                     | 13.7          | 0.0                 | 147 | 29                 | 30.2               | 78             | 54 | 132   |
| Feb-16 | MIN   | 7.4 | 352                     | 5.9           | 0.0                 | 122 | 27                 | 23.4               | 61             | 34 | 110   |
|        | MAX   | 7.8 | 399                     | 17.4          | 0.0                 | 148 | 34                 | 42.0               | 92             | 68 | 146   |
|        | AVG   | 7.6 | 379                     | 10.4          | 0.0                 | 133 | 30                 | 34.1               | 75             | 52 | 128   |
| Mar-16 | MIN   | 7.4 | 320                     | 7.0           | 0.0                 | 106 | 22                 | 18.0               | 60             | 40 | 110   |
|        | MAX   | 8.2 | 359                     | 15.5          | 0.0                 | 132 | 31                 | 39.2               | 84             | 80 | 144   |
|        | AVG   | 7.7 | 337                     | 9.3           | 0.0                 | 120 | 27                 | 29.6               | 68             | 53 | 121   |
| Apr-16 | MIN   | 7.5 | 138                     | 6.2           | 0.0                 | 104 | 28                 | 13.4               | 58             | 40 | 104   |
|        | MAX   | 8.1 | 355                     | 33.3          | 0.0                 | 140 | 35                 | 37.0               | 76             | 64 | 134   |
|        | AVG   | 7.9 | 330                     | 13.0          | 0.0                 | 128 | 32                 | 26.3               | 67             | 49 | 117   |
| May-16 | MIN   | 7.4 | 148                     | 4.0           | 0.0                 | 100 | 23                 | 24.2               | 52             | 36 | 92    |
|        | MAX   | 8.3 | 367                     | 29.2          | 0.0                 | 146 | 35                 | 56.2               | 80             | 68 | 144   |
|        | AVG   | 8.0 | 326                     | 12.8          | 0.0                 | 123 | 30                 | 31.4               | 68             | 47 | 115   |
| Jun-16 | MIN   | 7.4 | 275                     | 5.3           | 0.0                 | 90  | 21                 | 19.2               | 54             | 34 | 94    |
|        | MAX   | 8.1 | 331                     | 27.6          | 0.0                 | 122 | 27                 | 33.0               | 70             | 54 | 118   |
|        | AVG   | 7.8 | 293                     | 10.9          | 0.0                 | 106 | 24                 | 23.9               | 61             | 42 | 103   |
| Jul-16 | MIN   | 7.2 | 269                     | 5.7           | 0.0                 | 86  | 23                 | 11.4               | 55             | 32 | 92    |
|        | MAX   | 8.0 | 303                     | 38.4          | 0.0                 | 128 | 29                 | 26.8               | 70             | 62 | 124   |
|        | AVG   | 7.6 | 283                     | 12.0          | 0.0                 | 105 | 26                 | 19.0               | 62             | 43 | 105   |
| Aug-16 | MIN   | 7.2 | 204                     | 7.3           | 6.0                 | 70  | 22                 | 11.4               | 54             | 32 | 90    |
|        | MAX   | 8.1 | 306                     | 26.0          | 6.0                 | 118 | 30                 | 21.2               | 72             | 60 | 124   |
|        | AVG   | 7.6 | 266                     | 12.9          | 6.0                 | 96  | 25                 | 16.2               | 61             | 46 | 107   |
| Sep-16 | MIN   | 7.2 | 204                     | 5.5           | 6.0                 | 80  | 22                 | 14.2               | 56             | 34 | 96    |
|        | MAX   | 7.9 | 293                     | 22.6          | 6.0                 | 108 | 30                 | 22.0               | 72             | 58 | 126   |
|        | AVG   | 7.5 | 263                     | 8.7           | 6.0                 | 92  | 25                 | 18.6               | 63             | 44 | 106   |
| Oct-16 | MIN   | 7.2 | 256                     | 4.1           | 0.0                 | 82  | 24                 | 9.0                | 60             | 30 | 94    |
|        | MAX   | 7.7 | 344                     | 10.6          | 0.0                 | 128 | 38                 | 30.2               | 74             | 52 | 120   |
|        | AVG   | 7.4 | 288                     | 6.6           | 0.0                 | 106 | 29                 | 22.7               | 65             | 43 | 108   |
| Nov-16 | MIN   | 7.1 | 287                     | 4.6           | 0.0                 | 100 | 24                 | 11.5               | 68             | 30 | 110   |
|        | MAX   | 8.2 | 349                     | 16.3          | 0.0                 | 140 | 38                 | 31.0               | 90             | 76 | 156   |
|        | AVG   | 7.8 | 322                     | 8.3           | 0.0                 | 125 | 30                 | 24.6               | 76             | 48 | 124   |
| Dec-16 | MIN   | 7.9 | 292                     | 3.8           | 0.0                 | 122 | 23                 | 13.2               | 68             | 40 | 108   |
|        | MAX   | 8.3 | 338                     | 12.9          | 0.0                 | 146 | 31                 | 24.8               | 82             | 62 | 144   |
|        | AVG   | 8.2 | 314                     | 7.3           | 0.0                 | 136 | 27                 | 18.8               | 75             | 51 | 125   |
| Jan-17 | MIN   | 8.0 | 282                     | 4             | 0.0                 | 118 | 23                 | 11                 | 60             | 40 | 108   |
|        | MAX   | 8.3 | 319                     | 10            | 0.0                 | 142 | 30                 | 19                 | 76             | 60 | 130   |
|        | AVG   | 8.2 | 297                     | 7             | 0.0                 | 128 | 26                 | 16                 | 68             | 48 | 116   |
| Feb-17 | MIN   | 7.9 | 244                     | 5             | 0.0                 | 98  | 21                 | 8                  | 58             | 40 | 102   |
|        | MAX   | 8.3 | 295                     | 17            | 0.0                 | 146 | 27                 | 26                 | 90             | 60 | 144   |
|        | AVG   | 8.1 | 279                     | 7             | 0.0                 | 126 | 23                 | 18                 | 68             | 51 | 119   |
| Mar-17 | MIN   | 8.0 | 254                     | 6             | 3.0                 | 78  | 20                 | 16                 | 62             | 38 | 104   |
|        | MAX   | 8.4 | 285                     | 25            | 3.0                 | 140 | 23                 | 34                 | 86             | 58 | 138   |
|        | AVG   | 8.2 | 270                     | 13            | 3.0                 | 121 | 22                 | 24                 | 70             | 48 | 119   |
| Apr-17 | MIN   | 8.0 | 270                     | 5             | 0.5                 | 118 | 20                 | 11                 | 58             | 34 | 92    |
|        | MAX   | 8.5 | 297                     | 17            | 6.0                 | 136 | 24                 | 31                 | 78             | 62 | 134   |
|        | AVG   | 8.2 | 283                     | 9             | 3.3                 | 129 | 22                 | 20                 | 69             | 45 | 114   |

**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. Service tax is payable extra. It is mandatory for the parties to quote application charge separately for each chemical & the various taxes and duties are also to be mentioned.

**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, B & C – the performance will be based on meeting the guarantee parameters and deduction of penalty if any calculated during performance evaluation for the period.

As submission of 10 % of Bank Guarantee against both supply & application of chemicals is already envisaged – no other components like Security Deposit, deposition towards labour component for Final settlement etc will be deducted from the regular bills. Total Bank Guarantee will be released after CLC clearance and along with the final payment within 15 days.

Application charge along with appl. GST etc will be released within 15 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 :**

DGM (T) / WMD of SMS Zone pump house in charge 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 CONDITIONDS (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 DGM(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 ex-gratia 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)<br>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.

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 prorata 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   | An amount equivalent to actual payable towards ad-hoc  |

|                       |   |
|-----------------------|---|
| of ₹.300/- per month. | <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. 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.

11. In case of revision of RINL/VSP approved wage rate, consequent to the revision in the minimum wages (either in Basic Wage or Living Allowances) as notified by the appropriate government (presently Regional Labour Commissioner (Central), Hyderabad, Government of India, Ministry of Labour), escalation amount to the contract shall be payable as per the following formula:

$$V = L \times W \times (X - X_0) / X_0$$

Where :

V = Escalation payable

L = Labour content as percentage of the work is 100 %

W = Gross value of work done on the basis of contract rates for the period for which variation is applicable

X = Revised weighted average of RINL / VSP approved wage rates of Unskilled Worker, Semi-skilled Worker and Skilled Worker based on the Minimum Wages as notified by the Regional Labour Commissioner (Central), Hyderabad, for the period under consideration for the contract on the basis of actual man days present by different categories of contract labour during the billing period.

X<sub>0</sub> = Weighted average of existing RINL / VSP approved wage rates of Unskilled Worker, Semi-skilled Worker and Skilled Worker considered in the Estimate which is indicated in the Quote Sheet - Form 'G' / BOQ of the Tender Document on the basis of actual man-days present by different categories of contract labour during the billing period.

Computation of X and X<sub>0</sub> :

$$X = (a \cdot \text{USR} + b \cdot \text{SSR} + c \cdot \text{SKR}) / (a + b + c)$$

$$X_0 = (a \cdot \text{USR}_0 + b \cdot \text{SSR}_0 + c \cdot \text{SKR}_0) / (a + b + c)$$

Where

a = man-days present by USW during the billing period

b = man-days present by SSW during the billing period

c = man-days present by SKW during the billing period

USR = Revised RINL / VSP approved wage rate for USW at the time of billing

SSR = Revised RINL / VSP approved wage rate for SSW at the time of billing

SKR = Revised RINL / VSP approved wage rate for SKW at the time of billing

USR<sub>0</sub> = RINL/VSP approved wage rate for USW indicated in the Quote Sheet (Form G) / BOQ of Tender Document



SSRo = RINL/VSP approved wage rate for SSW indicated in the Quote Sheet (Form G) / BOQ of Tender Document

SKRo = RINL/VSP approved wage rate for SKW indicated in the Quote Sheet (Form G) / BOQ of Tender Document

Note: The revised RINL/VSP approved estimated Wage Rates of USW, SSW and SKW effective from 01.04.2017 are ₹.753.35 ps., ₹.848.45 ps., ₹.988.65 ps. Respectively.

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 30<sup>th</sup> 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 Labour per every WORKING DAY (in Rupees) |              |            | To be released when   |
|--|---------------------------|--|--------------|------------|---|
|  |                           | UN-SKILLED   | SEMI-SKILLED | SKILLED    |   |
| 01   | Notice pay                | ₹<br>38.44   | ₹<br>43.42   | ₹<br>50.88 | 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. <b>(to be paid with pre-final bill)</b>  |
| 02   | Retrenchment compensation | 19.22  | 21.71        | 25.44      |   |
| 03   | Leave with wages          | 23.66  | 26.72        | 31.31      |   |
| <b>Sub-total</b>                                     |                           | 81.32  | 91.85        | 107.63     |   |
| 04   | Bonus                     | 38.43  | 43.40        | 50.86      | 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. <b>(to be paid with RA bill / pre-final bill as and when paid by the Contractor)</b> |
| <b>Grand total (To be paid to the Labourer)</b>      |                           | 119.75   | 135.25       | 158.49     |   |
| <b>10% toward profit and overheads of Contractor</b> |                           | 11.98  | 13.53        | 15.85      |   |
| <b>Total recovery amount</b>                         |                           | 131.73   | 148.78       | 174.34     |   |

#### **NOTE**

- i The above recovery rates are effective from \* 01.04.2017. 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.

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 15<sup>th</sup> 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 21<sup>st</sup> 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 of 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.IV

Price Bid Format:

| ITT No. 7.13.710/WMD/0057 DT. 06/09/2017   |                  |                                     |                          |                        |                     |                             |                                     |                     |                             |                     |
|--|------------------|-------------------------------------|--------------------------|------------------------|---------------------|-----------------------------|-------------------------------------|---------------------|-----------------------------|---------------------|
|  |                  |                                     |                          |                        |                     |                             |                                     |                     |                             |                     |
| 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        |                                     |                          |                        |                     |                             |                                     |                     |                             |                     |
|  |                  |                                     |                          |                        |                     |                             |                                     |                     |                             |                     |
| <p><b>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.</b></p> |                  |                                     |                          |                        |                     |                             |                                     |                     |                             |                     |
|  |                  |                                     |                          |                        |                     |                             |                                     |                     |                             |                     |
| <p>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</p>  |                  |                                     |                          |                        |                     |                             |                                     |                     |                             |                     |
| <p>Station :</p> <p>Date :</p> <div style="text-align: right; margin-top: 50px;">             SIGNATURE OF THE TENDERER / THEIR<br/>             AUTHORISED REPRESENTATIVE WITH<br/>             SEAL           </div>   |                  |                                     |                          |                        |                     |                             |                                     |                     |                             |                     |

**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  
Rashtriya Ispat Nigam Limited,  
Visakhapatnam Steel Plant,  
Administrative Building,  
Visakhapatnam-530031

Bank Guarantee No Dt

**LETTER OF GUARANTEE**

WHERE AS M/s\_\_\_\_\_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.\_\_\_\_\_Dated\_\_\_\_\_(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\_\_\_\_\_)against any loss or damage that may be caused to or suffered by the PURCHASER, byreason 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 saidAGREEMENT and that it shall continue to be enforceable for (a) 120 days after thedate of L/R of the last consignment of the MATERIALS under the said AGREEMENTor (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 ifany 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 \_\_\_\_\_ 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