

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.7.13.705/WMD/0020 DT. 01/03/2017

FOR CHEMICAL TREATMENT OF RECIRCULATION WATER SYSTEM FOR PH.9 Gr-III (SMS-GCP)

Last date & time for receipt of Tenders is: **31/03/2017 by 10.30 HRS (IST)**

Tender Details can be downloaded from our Website:

www.vizagsteel.com<MM><MMTENDERS><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.7.13.705/WMD/0020 DT. 01/03/2017 FOR
CHEMICAL TREATMENT OF RECIRCULATION WATER SYSTEM FOR PH. 9 Gr-III (SMS-GCP)

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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, Click on “Tenders”, Click on “Materials Management Tenders” and
Click on “Detailed terms and conditions of Invitation to Tender (ITT)”

**RASHTRIYA ISPAT NIGAM LIMITED
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**OPEN TENDER NOTICE FOR CHEMICAL TREATMENT OF RECIRCULATION WATER
SYSTEM FOR PH. 9 Gr-III (SMS-GCP)**

INVITATION TO TENDER (ITT) NO Pur.7.13.705/WMD/0020 DT. 01/03/2017

**NOTICE INVITING TENDERS CHEMICAL TREATMENT OF RECIRCULATION WATER
SYSTEM FOR PH. 9 Gr-III (SMS-GCP) 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 SYSTEM FOR PH. 9 Gr-III (SMS-GCP) 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 as follows:

<u>NODAL OFFICER</u>	<u>IEM</u>	
Shri A. Bhattacharya	Sri VenuGopal K Nair, IPS(Retd)	Sri Siv Prasad Rao
General Manager (MM)	P-1, Chakola Water Ford	Flat No. 4 H, South Park Apartment,
Rashtriya Ispat Nigam Limited	PanditKaruppan Road	Opp. HDFC Bank, Nallagandla By pass Road
Visakhapatnam – 530031	Near Sacred Heart College	Nallagandla, Serilingampally
Phone No : 0891-2519503	Thevara, Cochin – 682 013,	Hyderabad – 500 019
Fax No : 0891-2518753/756	Ph. No.: +91 9447500010	Ph. No.: +91 9908511188
Email: agnimitra@vizagsteel.com	Email: vgknair@gmail.com	Email: sivaprasad Rao1950@gmail.com

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

4.0 Tenderers should submit their tenders 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, 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. 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: 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 CENVAT (LNCP)/ 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 is a part of this tender.

----- General Manager (MM)

ANNEXURE-I TO TENDER NO.Pur.7.13.705/WMD/0020 DT. 01/03/2017
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SPECIAL INSTRUCTIONS TO TENDERERS

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

If a tenderer who responds to this tender is not presently enlisted with RINL / VSP, he is requested to furnish copies of the following documents separately in a sealed envelope super scribing “**CREDENTIALS**” and the **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) Self-certified Financial worth and audited financial statements for the last three (3) years.

v) Self-certified Purchase Orders / contracts copies for the same or similar tendered item/s.

vi) Self-certified ISO certificate, if any

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 shall be liable for rejection in case of non-submission or incomplete submission of the above documents except (vi) of above or 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 treated any one of the gas cleaning plant recirculation water systems (Blast furnace or Steel Melt Shop Gas Cleaning Plant re-circulation water systems) in any integrated steel plant (minimum 2 million tons per year) at least for one year without any interruption in the last 5 years. The party should have undertaken both supply of chemicals and their application. Party should produce order copies and satisfactory performance certificates. PQC criteria is applicable to the parties already registered with VSP also.

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

Tenderers who may be the Manufacturers or the Suppliers of the system 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 Stores basis inclusive of applicable taxes, duties, levies, Insurance and Freight. However, the rate of taxes, duties, levies, Insurance, freight, application charges & service tax, if any, 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 VALUE ADDED TAX (VAT): Tenderers from the State of Andhra Pradesh should be registered under VAT and shall confirm submission of VAT invoice to enable RINL/VSP to avail the input tax credit. Also, the tenderers from A.P shall indicate the TIN (Tax Identification Number) under VAT. For the purpose of evaluation of tenders/bids floated by RINL/VSP for the financial year 2016-17, the rate of ITC that would be available to RINL/VSP shall be as under :

- i) Item with 5% VAT qualifies for Input Tax Credit @ 1.74%
- ii) Item with 14.5% VAT qualifies for Input Tax Credit @ 11.23%

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:

a) Payment for supply of Chemicals

100% payment 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 Service Tax @ 15% (or as applicable) , shall be released within 15 days based on Satisfactory Performance Certificate to be issued by User 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 60th 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 twenty hundred and twenty days 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: 7.13.705/WMD/0020 DT. 01/03/2017** 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 para8.3 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.7.13.705/WMD/0020 DT. 01/03/2017**. 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.

10.0WEIGHMENT:

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

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.

16.0EXCISE ASSESSABLE VALUE:

If it comes to the notice of RINL/VSP at any point of time that Excise Assessable Value of any item supplied by the successful tender against the Purchase Order placed against this ITT is less than the value indicated in the price bid, payment shall be released taking such lower Excise Assessable Value into consideration & no claims whatsoever on this account shall be entertained.

17 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.

Annexure-II

ANNEXURE-II TO TENDER NO Pur.7.13.705/WMD/0020 DT. 01/03/2017 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		

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

1.0.0 The System:

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

In the Steel Melt shop, there are 3 numbers of LD Converters with a volume of 150 m³ capable of producing 150 MT of liquid steel. Each converter releases fumes rich in carbon monoxide laden with a significant amount of dust. Of the process gas arising in the converter, 90% are CO and 10% CO₂ (approximately), which is removed by the connected gas exhaust system directly at the converter mouth and admitted to the gas cooling system above the converter lip ring. The hot gases collected above the converter mouth are cooled in water cooled cooling stack from 1600 °C down to 900 °C. Cooling stack is connected to a scrubbing tower. In scrubbing tower, the dust laden gas is cleaned in two stage scrubbing system. The first stage separates the coarser particle by means of water spraying in venturi throat and also reduces the gas temperature. The second stage cleans the finer particles by the SMS SIEMAG Baumco venturi and water spraying system which is called the “heart” of cleaning system. The second stage outlet gas is passing through a whirl vane separator which knocks out the water particle entrapped with dust.

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

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

First Stage (Primary Venturi):

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

Nozzles at the scrubbing tower first stage

Direct cooling water spray nozzle

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

Saturation nozzle (discharge of quencher pump)

Number	6
Water flow rate	6 x 71.2 m ³ /hr

Channel cleaning nozzles

Number	3X2
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Water flow rate 6 x 69 m³/h
Pressure 1.5 bar

Second Stage Venturi

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

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

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

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

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

Nozzles upstream of venturi throat

Number 4
Water flow rate 4 x 28.625 m³/h
Pressure 2.5 bar

Total water flow through these 4 nozzles and perpendicular injection at venturi throat is more than 430 m³/hr.

Lower level bottle

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

Hydraulic seal pot

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

Number 1
Overflow Water flow rate 4 x 28.625 m³/h
Capacity (effective) 3.7 m³
Overflow line size DN 400

Quencher pump unit

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

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

After the converter gases passed through the cooling stack, they are directed with a temperature of approx. 1,000°C into the gas cleaning plant for cleaning the gas from the dust particles. The converter gases are heavily laden with dust particles (~120 g/sm³) from the converter process, mainly with iron oxide but as well as other particles from slag, flux charges (lime and others). The range of particle sizes runs from approx. 0.1 micron up to some mille meters. The gas cleaning system is designed as a two-stage high efficiency SMS Siemag Baumco Scrubbing Tower following the cooling stack discharge.

1st stage (quencher stage):

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

Depending on the actual gas temperature part of the scrubbing water evaporates while passing with the converter gas through the saturator throat. After the quencher, the saturated gas temperature cools down to approx. 75°C during the blowing time (based on designed blowing data). In this first cleaning stage a big portion (around 90%) of the entrained dust particles are separated by the water, mainly the coarse grain particles. The **saturator throat** is equipped with a **damper** which is manually adjustable.

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

2nd stage (venturi stage):

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

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

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

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

During the blowing phase:

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

During non blowing phase:

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

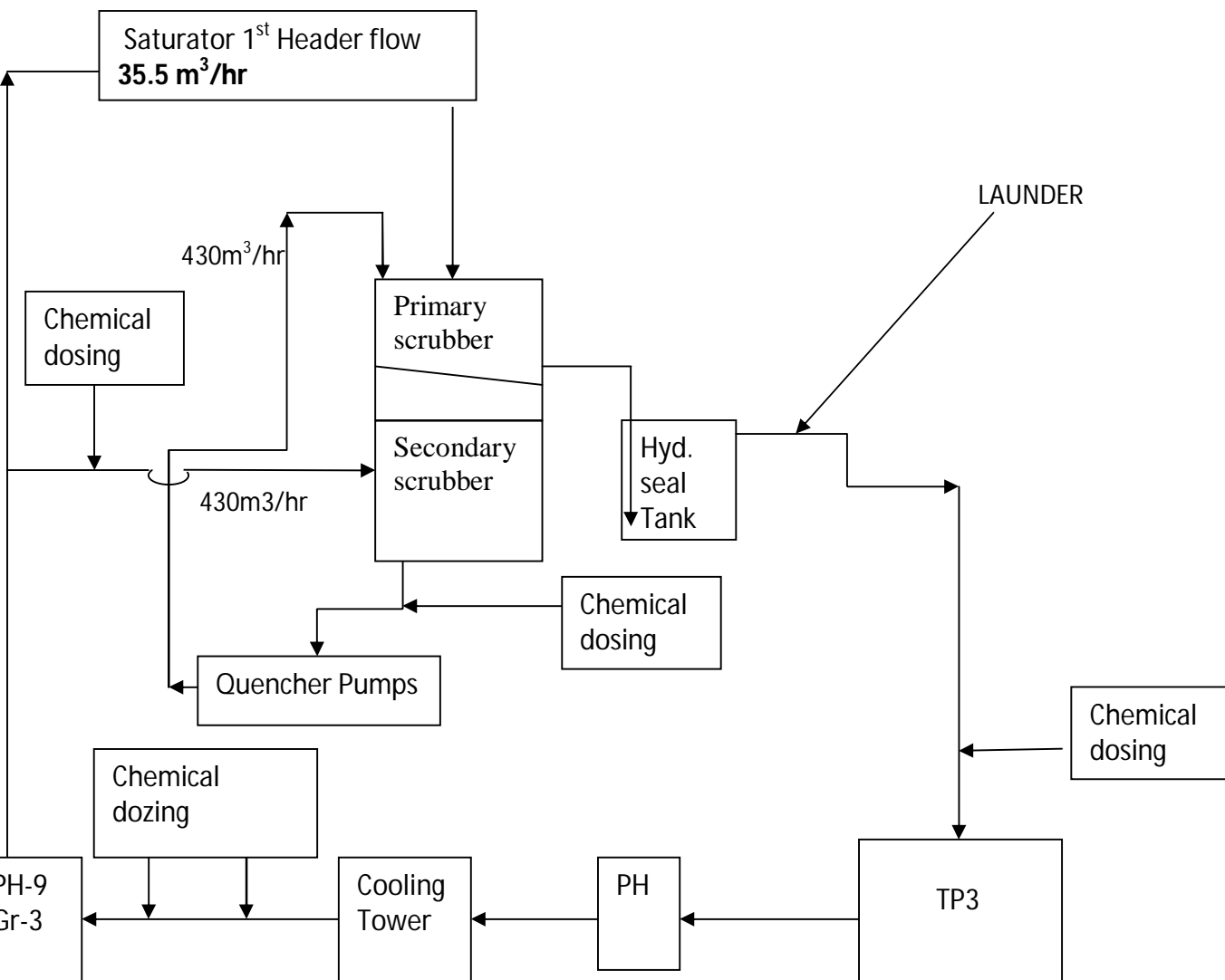
The fan capacity is controlled during the blowing and non-blowing period by operating the fan at its maximum and reduced speeds as given below.

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

Metal charge balance into the converter generally has Hot metal charge (135t -145 t), Scrap charge (8t --12 t), Lime (5t -- 10t), Iron ore (3t-- 5t), Cal dolo (3t---5t) and Raw dolo (0.5t--1t). However there can be wide variation in the range and components as per process requirement. Blow time is 18 min with an oxygen injection at rate of 460m³/min to 520m³/min.

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

SMS GCP clarified water flow diagram



2.0.0 SYSTEM PARAMETERS:

The clarified water circuit which is fed from pump house (PH-9) Group III pumps (5 nos each capacity 600 m³/hr at 90 MWC) supply water to the following consumers:

2.1.1 SMS area:

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

2.1.2 ID Fan House area:

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

2.1.3 Electrostatic Precipitator Area:

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

2.2.0 General characteristics of gas cleaning section.

2.2.1 GAS temperature & flow rates:

Inlet gas temp. 950⁰ - 1050 ⁰C.

Inlet gas flow 125000 Nm³/hr.

Water injection flow rate:

-- At pre-scrubbing saturator: Clarified water 35.5 m³/hr

-- At Primary venture quencher Nozzles: Recirculation water from venturi: 430 m³/hr

-- At venturi scrubber: Clarified water of 430 m³/hr flow is to be taken for the calculation of chemical consumption.

2.2.2 Converter side:

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

NOTE:

1.Total flow rate per converter is (35+50+430+50) = 565 m³/hr. Average flow for two converter operation is 1130 cum/hr (with 2 pumps in service at PH-9) and for three converter operation it is 1695 m³/hr (with 3 pumps in service at PH-0 9). However, for chemical consumption at PH-9, an average of 2.8 converter operation to be considered for which flow rate will be 565 x 2.8 =1582 m³/hr.The dosage rate and yearly quantities will be arrived at based on this flow rate. For the chemical quantity at secondary venturi, an average of 75 heats per day and 16 minutes blow time to be considered. Actual consumption at site will be based on the number of converters in operation and heats made.

2. Supply water temperature is normally up to 38⁰C to 40⁰C and may go to 45⁰C at times

3. 70-80 cub. Meter per hour water goes to Electrostatic precipitator (3 working + 1 stand by) of EMD. First water gets filled up in the pond and then slowly enters in every pipe and flows downwards all along the wall of the pipes cleansing the particles stuck on the inner circumference of the pipe. Operation voltage on the electrode is maintained at 30 – 25 KV. Gas enters electrostatic precipitator with a dust content appx. 100 mg / NM³ of Gas. Outlet gas from electrostatic precipitator should contain max. 10 mg / NM³ of Gas. During the shift each ESP is flushed twice for 5 minutes with a flow of 120 cub. meter of water at 6 kg/sq.cm.

The return contaminated water from the above consumers is taken through open launder to Treatment Plant TP-3 where the water is clarified in thickeners and clarified water having TSS less than 20 ppm is taken to Group VI sump in PH9 from where it is pumped to cooling tower CT-9 and cooled clarified water is recirculated. The losses in the system are made up by adding make up water of following quality given at 2.2.1. In case of any system corrections during the course of treatment acid will be provided at free of cost. If required, even soda ash may also be dosed in the treatment plant or in a suitable place in the system to reduce hardness. Soda ash will be provided by VSP. After acid dosing, proportionately water has to be drained from the system as per requirement.

2.2.1 Quality of Make up Water:

pH		: 7.8 - 8.5
conductivity	mho/cm	: 300 - 400
calcium Hardness (as CaCo3)	mg/l	: 40 - 60
Magnesium Hardness (as CaCo3)	mg/l	: 40 - 60
Total Hardness (as CaCo3)	mg/l	: 80 - 120
P. Alkalinity	mg/l	: 0 - 10
M. Alkalinity	mg/l	: 100 - 150
Turbidity	NTU	: 5 - 20
Total Dissolved solids	mg/l	: 180 - 250
Sulphates as SO4	mg/l	: 10 - 30
Chlorides as Cl2	mg/l	: 20 - 30
Sodium as Na	mg/l	: 40 - 60
Iron as Fe	mg/l	: 0.1 - 0.3
Total suspended solids	mg/l	: 10 (max)
Silica as SiO2	mg/l	: 18 - 30
TVC Count	colonies/ml	: less than 30000
Oil & Grease	mg/l	: less than 10

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

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

		TP-3 INLET	TP-3 OUTLET
pH		: 11.5 -12.5	10.5 -12
conductivity	mho/cm	: 1420-5500	1110-2500
calcium Hardness (as CaCo3)	mg/l	: 20-640	20-450
Magnesium Hardness (as CaCo3)	mg/l	: 15-20	12-40
Total Hardness (as CaCo3)	mg/l	: 35-660	32-490
P. Alkalinity	mg/l	: 150-940	100-350
M. Alkalinity	mg/l	: 40-170	30-140
Turbidity	NTU	: -----	10-20
Chlorides as Cl2	mg/l	: 270-480	270-480
Total suspended solids	mg/l	: 6000	<20

2.2.2 Composition of LD gas:

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

Dust content at flare stack : 50 mg/Nm m³ (Max)
Dust content at ESP outlet (Gas recovery plant): 10 mg/Nm m³

2.2.3 Chemical Composition of incoming solids to Treatment Plant:

Appearance	: Black.
Action on Acid	: Brisk effervescence
Loss on ignition	: Nil.
Acid insoluble	: 1.7 – 2.5%
Iron (Feo)	: 43.3 - 60%
Calcium (Cao)	: 30 - 40.0%
Magnessium (Mgo)	: 2.5 - 4%
Silica (Sio2)	: 10.5 - 12%
Phosphates	: 1.5 - 3%
Manganese (Mno)	: 1.3 - 2%
Titanium Tio 2	: 0.26 – 0.5%

2.2.4 Granulometry of incoming Solids to Treatment Plant:

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

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

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

pH	:	8.6-12.5	7.2 -11.6
conductivity mho/cm	:	1060-5500	660-2200
calcium Hardness (as CaCo3) mg/l	:	60-1150	40-350
Magnesium Hardness (as CaCo3) mg/l	:	05-110	05-60
Total Hardness (as CaCo3) mg/l	:	65-1260	45-410
P. Alkalinity mg/l	:	20-650	0-40
M. Alkalinity mg/l	:	50-350	50-375
Chlorides as Cl2 mg/l	:	250-320	250-320
Total suspended solids mg/l	:	5524-21296	5964-11050

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

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

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

3.3.0 Deposition at gas channel areas.

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

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

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

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

3.8.0 High TSS in TP - 3 outlet water.

3.9.0 Scaling, deposition in water is difficult to bring under control.

3.10.0 Heavy deposition inside Electrostatic precipitator supply pipes causing reduction in voltage below 25 KV. Deposition in the pipes reduces the flushing water flow and temperature drastically. Increased deposition on ID fan blades causes abnormal increase in the frequency of Fan Balancing of booster.

3.11.0 Nozzles of 1st header water flow comes below 35.5 m³/hr and Quencher Nozzles water flow comes below 430 m³/hr during a campaign of 1200 heats.

3.12.0 Gas flow rate comes below (during non-blow time) 1,25,000 m³/hr during a campaign of 1200 heats.

4.0.0 TREATMENT SPECIFICATION:

The system is under continuous treatment. The system is to be treated to overcome the problems mentioned in the clause no 3.0.0. VSP is committed and expected to go for 4500 and above heats in a campaign without experiencing the problems as depicted at point 3.0.0.

4.1.0 Specification for Chemicals:

4.1.1 The formulation offered by the party shall be best suited to take care of scaling, deposition in the system and to take care problems mentioned at clause 3.0.0 in SMS gas cleaning water recirculation system including pump house, treatment plant-3, Electrostatic precipitator and LD gas cleaning system. The formulation shall be selected to take care of the Iron ore & lime fines charged into the converter along with flux.

4.1.2 The formulation shall be supplied in carbuoys (returnable)/ tankers, whichever the case may be, properly sealed and labeled.

4.1.3 The formulation shall be effective at the following operating parameters of the system pH 9 to 13, water temp 80 - 90 deg.C, total Hardness : 900-1300 ppm, and other parameters as depicted in 2.3.2 during blow at Hydraulic seal and Quencher pumps and also mentioned in pt. 2.2.1 for TP-3 outlet.

4.1.4. Vendor shall recommend chemical in Kgs., the quantity of formulation to be dosed daily in to the system. Any extra dosage required to achieve 100% scale inhibition efficiency during treatment program shall be exclusively to vendors account and No payment will be made to this effect.

- a) Constant flow rate of water and gas should be maintained through out the campaign and for this inflow to GCP on the first day is to be recorded jointly by WMD, Converter (SMS) operation and the party. This recorded inflow to GCP must be maintained through out the treatment period during the campaign.

- b) There should not be any deposit/chokage in pump internals, valves, pipes and at the nozzles of kinpactor and quencher.
- c) A test piece of 1 meter length and 100 mm dia to be installed to the supply line of gas holder consumers area. This will be inspected at a regular interval for the effectiveness of the treatment program. Efforts are to be made to see that heavy deposition does not occur in system and thereby in the test piece.
- d) Blow down from pump house 9 Group III system will be provided incase Calcium levels exceeds more than 100 ppm/ Chloride of 300ppm.
- e) Party has to submit daily reports to Engineer incharge as per Annexures A, B,C,D and samples are to be collected at Converter during blow weekly once and submit analysis reports to Engineer incharge as per Annexure E as enclosed in Excel sheet "Report Annexures".
- f) Dispersant and wetting agent may be added if required at ID fan of SMS GCP and Electrostatic precipitator to avoid any deposition by precipitation.

4.1.5. The agency should depute one technical expert in the site during the treatment program to inspect effectiveness of the programme and should be in a position to take instant decisions for increasing or decreasing the doses as required keeping the annual dosage quantity or quantity mentioned in the total contract period constant to maintain 100% effectiveness of treatment programme. This is to be informed to the pump house incharge and GCP Shift Incharge immediately or the next day. He has to supervise the daily chemical dosing and monitoring system through out the year.

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

4.1.7 The system has heavy deposits through out the circuit. The vendor should offer suitable chemical like Iron dispersant, wetting agent etc. which shall be completely miscible with water to avoid deposition.

4.1.8. Chemical formulation should be able to take care Metal charge balance in the converter during charging and its wide variations and should work effectively even for simultaneous charging of Lime up to 10 T and Cal Dolo up to 5T.

4.1.9. The formulation offered shall be compatible with polyelectrolyte used for coagulation and clarification in treatment plant-3.

4.1.10. The formulation shall be stable at very high temperature of the LD gas with which it is coming in contact while scrubbing.

4.1.11. 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.

4.1.12 The tenderer shall submit the most effective dosage rate for the formulation offered by them.

4.1.13 The list of chemicals is mentioned at Annexure-II. The list is only indicative. Chemicals list covers all the possible chemicals appropriate to the system by their generic nature. Parties are free to offer their choice of chemicals combination which need necessarily not cover the entire list. However, it is expected that number of chemicals do not exceed the number given in the list.

4.1.14 No shutdown is possible in the system. Passivation / precleaning, if required to be done, is the responsibility of the party and is to be carried out on line without affecting the process or the equipment of the system.

4.1.15. Chemicals shall be stored in the designated place and housekeeping at the storage area is party's responsibility. MSDS and relevant safety precautions shall be displayed by the party prominently at the storage area.

4.1.16. Party shall submit product profile/description of each chemical in the offer and the test certificate submitted at the time of delivery of chemicals and should be in line with the above.

4.1.17. Party shall consider local dosage of necessary chemicals in water lines at Secondary venturi and Quencher (Re circulation) system for all converters to avoid frequent chokage problems. In absence of local recirculation the same chemical quantity has to be dosed at a suitable location as desired by site incharge.

5.0.0 GUARANTEE:

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

5.1.0 TSS at TP-3 outlet will be maintained at less than 20 ppm.

5.2.0 Maximum allowable ID fan vibration for blowing operation to take place will be less than 4.5 mm/sec. ID fan vibration will be less than 4.5 mm/sec through out the campaign period without any forced mid-campaign fan balancing except planned mid-campaign fan balancing and without any reduction in the fan speed. Campaign period is normally 180 days with an approximate converter life of 4500 heats.

5.3.0 Gas path from 1st header to ID fan should be deposit free and abrupt gas flow reduction is considered as the result of deposition in the gas path. However, consideration will be given in such cases where ID fan speed reduction etc takes place due to operational problems.

5.4.0 For monitoring of the above, the party will provide and maintain the following monitoring equipments at site throughout the period of treatment programme.

- a) Electronic dosing pumps (with one standby) including polyelectrolyte dosing pumps (with one standby) to all 3 streams at TP-3.
- b) pH, Conductivity, Spectrophotometer along with TSS analytical kit with required lab chemicals for measurement of all parameter at site. Parameters to be checked are ph, conductivity, p Alkalinity, M Alkalinity, calcium hardness, Total hardness, iron, TSS, Chlorides on daily basis at the outlet of the treatment plant.
- c) Weekly once any one converter, recirculation water sample analysis to be carried out at Hydraulic seal tank outlet and quencher recirculation (in case of local recirculation is in operation) for all the parameters mentioned in point "b" of 5.4.0 during blow time.
- d). The party shall provide the above facilities during the entire period of treatment without any commercial implications to VSP. Party may take back the above monitoring tools after the completion of treatment. However the existing dosing equipment such as Alum/polyelectrolyte dosing pumps and stirrers are allowed to use by the party. Power for operation of dosing equipment shall be provided by VSP free of cost.
- e) Water flow for 1st header should be maintained at 35.5 m³/hr, Quencher water flow should be 430 m³/hr till 1200 heats made during fresh campaign or after mid campaign.
- f) Gas flow rate at the start of converter operation (during non-blow time) is approximately 1,25,000 m³/hr at the start of the campaign. Initial gas flow has to be recorded in the protocol at the beginning of campaign. Same exercise has to be done during mid campaign as well. Initial recorded Gas flow rate should be maintained till 1200 heats made during fresh campaign or after mid campaign.
- g) Chemical analysis of incoming and outgoing water of the system is to be carried out once in a day and report to be submitted to Engineer I/c as per annexure-D.

6.0.0 PENALTY:

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

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

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

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

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

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

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

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

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

6.2.0 ID fan vibrations:

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

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

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

If the ID fan RPM is kept intentionally in the range 1150 to 1200 to continue blowing in order to keep the ID fan vibration below 4.5 mm/sec: Deduction of 30% of the quantity of all chemicals except polyelectrolyte consumed (at converter side and at PH-9) as penalty for the day.

If the ID fan RPM is kept intentionally below 1150 to continue blowing in order to keep the ID fan vibration below 4.5 mm/sec: No payment for the quantity of all chemicals except polyelectrolyte consumed (at converter side and at PH-9) as penalty for the day.

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

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

Clause no: 6.2.2 is further clarified as follows:-

I.D.fan balancing shall be taken up for every 1200 heats, which becomes cycle for campaign performance evaluation. All other clauses of 6.2.0 remaining same, it is further clarified that if mid campaign balancing is warranted below 1200 heats, penalty shall be imposed as per clause 6.2.3 for next 1200 heats. During the period of 2nd and 3rd mid campaign balancing, penalties shall be imposed as per 6.2.3 (ii), (iii) up to next 1200 heats.

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

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

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

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

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

6.2.4 As VSP intends to achieve above 4500 heats per campaign, ID fan balancing shall be taken up for every 1200 heats or during available opportunity. However, If intermediate balancing is done at less than or equal to 4.5 mm/sec ID fan vibration levels, and to read with clause 6.2.2 & 5.3.0; it will be taken as the operational requirement for the above and party shall not be penalized on that account.

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

6.3.0 Gas flow rate at the start of converter operation (during non-blow time) is approximately 1,25,000 m³/hr at the start of the campaign. This has to be recorded in the protocol at the beginning of campaign. Same exercise has to be done during mid campaign as well. Significant reduction in gas flow is considered as the result of deposition in gas path i.e. deposition from I header to ID fan and penalty is imposed as the details given below:

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

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

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

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

6.3.2 Water flow for primary quencher Nozzles should not come down below 250 m³/hr before 1200 heats made during fresh campaign or after mid campaign. Here one campaign cycle means total life of a converter from lining to lining. 4500 heats will be made in one campaign cycle.

(i) For Water flow below 250 m³/hr and up to 225 m³/hr - 50% payment for all chemicals except polyelectrolyte consumed in the remaining period of the campaign of 1200 heats cycle.

(ii) For Water flow below 225 m³/hr and up to 200 m³/hr - 25% payment for all chemicals except polyelectrolyte consumed in the remaining period of campaign.

(iii) For Water flow below 200 m³/hr - no payment will be made for all chemicals except polyelectrolyte consumed thereafter till the campaign end period.

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

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

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

7.0.0 GENERAL:

7.1.1 Party shall visit the site, study the system in totality, properly understand and analyze the problems encountered in the system before submitting any offer for the treatment. This is very essential to avoid any confusion and any dispute in future. Party may submit a survey report along with the technical bids.

7.1.2 Party shall analyze all problems affecting the performance parameters and offer a cost effective programme best suited for the system.

7.1.3 Party may collect samples of water for their study at their R & D Centre.

7.1.4 Improvements in the system desired for the system performance guarantees etc will be jointly discussed and decided before order is finalized.

7.2.0 Party shall deliver the materials through VSP stores and unload at WMD site. It is mandatory to weigh the consignment at VSP Weigh Bridge inside the plant before entering VSP stores. Material shall be supplied in standard containers of standard weights with tare weight mentioned on each container.

7.3.0 Supply of chemicals is to be regulated in such a way that a minimum quantity of one month stock shall be available at site at any given point of time.

7.4.0 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 the A/T value.

7.5.0 Extra supply and extra consumption of chemicals in addition to the chemicals and quantity of chemicals mentioned in A/T 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.

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

7.7.0 PARTIES SHALL SUBMIT THE TECHNICAL AND PRICE BIDS SEPERATELY. THE PRICE BID SHOULD CLEARLY INDICATE THE PRICE OF CHEMICALS AND THE APPLICATION PART OF EACH CHEMICAL SEPERATELY. HOWEVER THE L1 PARTY SHALL BE DECIDED ON THE SUM OF THE BOTH CHEMICALS AND APPLICATION PARTS. THE PERFORMANCE EVALUATION AND PENALTY SHALL BE APPLICABLE FOR BOTH SUPPLY AS WELL AS APPLICATION. THAT IS THE PENALTY SHALL BE DEDUCTED FROM THE PRICE OF APPLICABLE CHEMICALS (WETTING AGENT,SCALE DISPERSANT ETC.) AND IT'S APPLICATION VALUE COMPONENT FOR THAT EVALAUATION PERIOD. THE APPLICATION PART IS TO BE READ WITH PART-B.

7.8.0 Quantity mentioned in the tender is only indicative. Ordering quantity will be on the requirement of chemicals for two years (730 days of treatment plus 15 days of passivation) based on the dosage rate specified by the party. However due to variations in the blow time there may be variations in quantities of the chemicals used at quencher and secondary venturi. In case the quantities are left out, party may take back the same with VSP's gate pass. The treatment period can be extended further for another 180 days with mutual agreement after successful completion of initial 730 days treatment plus 15 days passivation.

7.9.0 Party is totally responsible for chemical dosing and maintenance of the connected systems through out the treatment period. Party shall post a technically qualified person at site for regular monitoring of the system and to take up any upset conditions.

7.10.0 The supplier shall supply the material in returnable HDPE carboys / tankers, which shall be taken back by the supplier at his cost. The packing & forwarding charges if any are to be included in the basic price.

7.11.0 Party shall quote all the quantities in kilograms (kgs) only.

7.12.0 Offers without all the relevant details, confirmations as asked for in the tender may call for rejection.

7.13.0 Sunday's and VSP closed holidays are not working days hence sample collection and analysis need not be conducted on those days.

7.13.0 Party must fill in the annexure-I and submit along with the technical bids.

7.14.0 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) While taking back empty carboys, party must ensure that carboy's lids, cups, seals etc. are fully cleared and taken back.

PART-A PH-9 Gr-III (SMS-GCP) RECIRCULATION SYSTEM

Chemical Quantities sheet for 730 days + 15 days passivation

NAME OF THE AGENCY:

CHEMICAL TREATMENT PROGRAMME PERIOD = 730 days + 15 days passivation

Pump House-9 Gr-III (SMS-GCP)

Water Recirculation rate = Avg 1582 cu.m/hr.

Converter flow rate = 430 cu.m/hr/converter.

Number of heats per day (for 3 converters) = Avg 75

Heats

Blow time = 16

min

J) CHEMICAL QUANTITIES SHEET OF PUMP HOUSE-9 Gr-III (SMS-GCP) WATER SYSTEM**TABLE- A : PH-9 side Continuous dosing chemicals: (i) Antiscalents , (ii) Scale Dispersants, (iii) Poly electrolyte.**

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Circulation rate (m ³ /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 730 days (kgs)
			(a)	(b)	$C = a * b * 24 / 1000$	$d = c * 730$
			1582			
			1582			
			1582			

TABLE-B: Converter side continuous dosing CHEMICALS (i) Wetting agents.

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Circulation rate (m ³ /hr/converter)	Chemical Dosage concentration (ppm)	Chemical Dosage rate kgs/ day	Chemical Qty for 730 days
			(a)	(b)	$C = (a * 75 * 16 * b) / (60000)$	$(d = c * 730)$
			430			
			430			
			430			
			430			

TABLE- C : PH-9 side Continuous dosing Passivation chemicals: (i) Antiscalents , (ii) Scale Dispersants, (iii) Poly electrolyte (for initial 15 days in addition to the regular chemical dosing for 730 days)

1	2	3	4	5	6	7
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S No	CHEMICAL	PURPOSE	Circulation rate (m ³ /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 15 days (kgs)
			(a)	(b)	$C = (a * b * 24 / 1000)$	$d = c * 15$
			1582			
			1582			
			1582			

TABLE-D: Converter side PASSIVATION CHEMICALS: (i) Wetting agents (for initial 15 days in addition to the regular chemical dosing for 730 days)

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Circulation rate (m ³ /hr/converter)	Chemical Dosage concentration (ppm)	Chemical Qty/Dose	Chemical Qty for 15 days
			(a)	(b)	$C = (a * 75 * 16 * b) / (60000)$	$(d = c * 15)$
			430			
			430			
			430			
			430			

TABLE- E : Continuous dosing chemicals at Quencher pumps Recirculation system : (i) Antiscalents , (ii) Scale Dispersants (iii) Wetting agent.

1	2	3	4	5	6	7
S No	CHEMICAL	PURPOSE	Water circulation rate at quencher pumps for all 3 converters (m ³ /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/ day	Chemical Qty for 730 days (kgs)
			(a)	(b)	$C = (a * b * 24) / 1000$	$d = c * 730$
			1290			
			1290			
			1290			

TABLE- F : Continuous Passivation chemicals at Quencher pumps Recirculation system (i) Antiscalents , (ii) Scale Dispersants, (iii) Wetting agents (for initial 15 days in addition to the regular chemical dosing for 730 days)

1	2	3	4	5	6	7
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S No	CHEMICAL	PURPOSE	Water circulation rate at quencher pumps for all 3 converters (m ³ /hr)	Chemical Dosage concentration in ppm	Chemical Dosage rate kgs/day	Chemical Qty for 15 days (kgs)
			(a)	(b)	$C = (a * b * 24 / 1000)$	$d = c * 15$
			1290			
			1290			
			1290			

TABLE-G : Final quantities of the chemicals for the treatment programme								
1	2	3	4	5	6	7	8	9
S No	CHEMICAL	Qty indicated in Column 7 of table A	Qty indicated in Column 7 of table B	Qty indicated in Column 7 of table C	Qty indicated in Column 7 of table D	Qty indicated in Column 7 of table E	Qty indicated in Column 7 of table F	Final Qty of Chemical (Kgs)
		(a)	(b)	(c)	(d)	(e)	(f)	(g = a+b+c+d+e+f)

OTHERS : PLEASE FILL THE RELEVANT TABLE AS PER THE REQUIREMENT

WE AGREE TO THE FOLLOWING TERMS & 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. The final quantities stated at **column 7 of Table-G** are binding. No change in final quantities mentioned will be allowed for the purpose of evaluation of tender.
7. 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 without any financial implication to VSP for ensuring the proper treatment.
8. 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**

PART-A
ANNEXURE - II

PUMP HOUSE – 9 Gr-III GCP (SMS ZONE)

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

- | | |
|------------|-----------------------------|
| 1) 3002687 | Antiscalent |
| 2) 3002688 | Scale dispersant |
| 3) 3002690 | Wetting Agent |
| 4) 3002692 | Polyelectrolyte |
| 5) 3021199 | Wetting Agent supplementary |

Report 1

Month

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Report 2

Converter No: 2

Mont h

[illegible]

Annexure C

Report 3

Converter No: 3

Month

[illegible]

Once in a Day

Annexure D

Date	PH 09 discharge							
	pH	P-Alk	M- Alk	Cond	Ca H	TH	Chlorides	TSS

Annexure E

Weekly once

Date	Blow Time - Converter : 1 or 2 or 3															
	Hydraulic seal tank								Quencher pump out let							
	pH	P-Alk	M-Alk	Cond	Ca H	TH	Chlorides	TSS	pH	P-Alk	M-Alk	Cond	Ca H	TH	Chlorides	TSS
Before blow																
3 rd min																
6 th min																
9 th min																
12 th min																
After blow																

PART-A**Annexure-IV****Check list to be filled up and submitted along with Technical Bid**

S.No	Description	Page no	
		From	To
1	Deviation statement for deviations taken from Technical Specification.		
2	Submission of documents/ Credentials towards meeting PQC.		
3	Product data sheets containing Active Ingredient chemical name and percentage of Active Ingredient present in the product.		
4	Quantity Sheet filled in all aspects.		
5	Duly signed and stamped full set of technical specification.		
6	Details of authorised technical executive for Technical Clarifications like Name , Designation, contact numbers Email ID		

Signature

PART- B

Price Bid Format:

ITT No.7.13.705/WMD/0020 DT. 01/03/2017

Party Name

S.No	Item Description	Qty Accounting Unit(Kg etc.)	Basic Price (in figures)	Basic Price (in words)	P&F Charges	Excise Duty, if applicable	Excise Assessable Value	CST / VAT, if applicable	Freight & Insurance	Application Charges	Service Tax on Appl. Charge
1	Item No.1										
2	Item No.2										
3	Item No.3										
4	Item No.4										
5	Item No.5										
6	Item No.6										

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

Note: Except the above details, any other condition / information if any, given in the format shall not be considered for evaluation.

Station :

Date :

SIGNATURE OF THE TENDERER / THEIR
AUTHORISED REPRESENTATIVE WITH SEAL

PART – C

APPLICATION CONTRACT

I) Scope of Work:

Transportation from VSP stores, loading, unloading, stacking at site, cleaning, formation and dosing of chemicals quoted and supplied by the party. The scope includes monitoring, sampling, testing and submission of test reports.

II) Quantity : To be given by party.

III) Unit Price : To be mentioned by party for each chemicals.

IV) Total Ordering Price: Total Application charges to be mentioned by party. 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, 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 Service Tax 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 incharge is the Engineer Incharge for execution of contract.

VIII) SUPPLIER SCOPE:

- a) The Party representative/Application engineer is responsible for initial commissioning and stabilization of treatment package followed by regular monitoring, performing required analysis and initiate actions based on test results, as well as dosing the chemicals in the system and checking possible leakages in the system & reporting to the concerned In charge. He should be familiar with objectives of chemical treatment.
- b) Party representative /Application engineer should make routine spot checks, preferably once in a day, for Chemical levels, monitor and control growth of micro-organisms, anticipate any difficulties that may be developing, and submit a periodic status report to the concerned Incharge.
- c) Party representative /Application engineer should be equipped with online facilities like e-mail account (for sending daily electronic reports), mobile phone for being in contact with VSP and with their main office for any required technical backup is absolutely essential. It is not acceptable that site staffs depend on monthly or fortnightly spot checks by VSP/WMD/service representatives.
- d) Party has to engage sufficient number of work men for carrying out following jobs
 - A. Loading & Un-loading of Chemicals.
 - B. Stacking & storage of chemicals.
 - C. Preparation of chemicals for dosing.
 - D. Cleaning of cooling towers & Nozzles.
 - E. Water Sample collection.
 - F. Grass cutting of walk way to cooling towers and dosing points.
 - G. Maintaining overall house keeping in chemical storage and handling area.
 - H. Inspection for water leakages.
- e) Any other services required as per the scope of work shall be done by the party without any extra cost to VSP.
- f) **Technical support:** Periodic visit by senior technical representatives, say once in a quarter or as and when required by Pump house incharge, for a joint review of the treatment program. This will help in arriving at the level of efficiency and effectiveness achieved, mid course corrections, when required, and in extreme case, to decide about continuation of the program. This report will be given to respective pump house in-charge, consumer dept in-charge and WMD HOD.
- g) Party is required to fulfill the conditions laid down by Safety Engg Department of VSP for carrying out the job. Before starting the work Safety clearance from Safety Engg Department has to be obtained and certificate is to be submitted. All the work men engaged in the application should possess valid safety certificate issued from Safety Engg Department of VSP.
- h) Supplier has to fulfill the conditions and statutory obligations of contract Labour cell of VSP. The deployment of manpower (skilled and unskilled workers) beyond the norms for working hours is prohibited.
- i) As the application involves manpower for dosing of chemicals, loading, unloading works, cleaning, monitoring etc., party has to take care of fulfilling all the statutory requirements of Govt. of India / Govt of AP/Factories act etc. During the quotation itself, party has to submit the details of PF CODE, ESI CODE, LABOUR LICENCE etc.
- j) **The party shall specify clearly in the cases where application contract will be subletted. In such cases the firm on whom it is to be awarded shall be explicitly specified with address and details of PF code, ESI etc in the techno commercial bid. Else their subsequent request for subletting of application contract will not be entertained.** Any such consent shall not relieve the supplier from any obligation, duty or responsibilities under the contract.
- k) **PARTY HAS TO COMPLY VARIOUS STATUTORY CONDITIONS AND HAS TO FOLLOW THE TERMS AND CONDITIONS (WHICH MAY CHANGE FROM TIME TO TIME) AS GIVEN BELOW.**

Terms and Conditions

'Employer' means Rashtriya Ispat Nigam Limited (RINL), Visakhapatnam Steel Plant / VSP, Administrative building, Visakhapatnam - 530 031 A.P. and includes Employer's Personal representative or successors or assignees.

'Engineer' means an engineer appointed from time to time by the employer and shall include the Chief Engineer of the employer.

Contractor/Agency means person or persons, firms or Company whose tender has been accepted by the employer and who has entered into contract with the employer and includes the contractor's heirs: executors, administrators, legal representatives, personal representatives, successors and permitted assignees.

1. Immediately on receipt of Work Order/LOI, the successful tenderer shall obtain and submit the following documents to the representative of RINL/VSP (in the present case Engineer Incharge 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 exgratia amount within 30 days to the legal heir of the deceased from the date of death takes place. This insurance is in addition to the statutory insurances under the provisions of the Employees State Insurance Act, 1948 / Employees' Compensation Act, 1923, Public Liability Insurance Policy (Third Party insurance) or any other insurance taken by the contractor or any other agency to cover the workmen. The Agency shall update the said insurance policy from time to time as per RINL/VSP rules.
 - e) Copy of the insurance policy for the third party insurance (Public Liability Insurance Policy) for ₹50,000/- (Rupees fifty thousand only). The Agency shall update the said insurance policy from time to time as per RINL/VSP rules.
 - f) Safety clearance from the Safety Engineering Department of RINL/VSP.

Further the following may be ensured.

2. LABOUR LICENCE :

The agency shall obtain necessary License issued by the appropriate Government under the Contract Labour (Regulations and Abolition) Act, 1970 and rules framed there under (including amendments thereof) within the time limit allowed by the appropriate Government (presently the contractor shall obtain licence from Asst. Labour Commissioner (Central), Visakhapatnam, Ministry of Labour, Government of India) and shall obtain and produce copy of such License before commencement of contract. On his failing to do so, the contract shall automatically come to an end immediately on the expiry of such time limit and earnest money / security deposit shall stand forfeited.

3. LABOUR RULES :

In respect of all contract labour directly or indirectly employed on the works, the Agency shall comply with all legislations and rules of State and / or Central Government or other local authority as the case may be including those governing the protection of health, sanitary arrangements, wages, welfare and safety applicable for Labour employed. The Contract Labour (Regulation and Abolition) Act 1970 and rules framed there under by the appropriate Government, The Minimum Wages Act, 1948, Payment of Wages Act, 1936, Employees' Provident Funds and Miscellaneous Provisions Act, 1952, Employees' State Insurance Act, 1948 / Employees' Compensation Act 1923, Payment of Bonus Act, 1965, Payment of Gratuity Act, 1972, Factories Act, 1948, Industrial Disputes Act, 1947, Child Labour (Prohibition and Regulation) Act, 1986 and Maternity Benefit Act, 1961 and Andhra Pradesh Labour Welfare Fund Act, 1987 and other statutes and amendments thereof and other statutory obligations with regards to fair wages, welfare amenities and safety measures, maintenance of registers etc. will be deemed to be the part of the contract. On failure to do so, the contract shall automatically come to an end immediately on the expiry of such limit and earnest money / security deposit shall stand forfeited.

04. As security for fulfillment of the obligations, the agency will be deemed to have authorized the RINL / VSP to set off any claims under various Acts and Rules in force from time to time, against the bills payable to him and also to withhold the payments due to him till such time as the requirements of laws are complied with or to adjust payments to be made to and / or on account of the employees of the agency from the amounts payable to him.

05. The agency shall have to maintain the following registers in the forms, as prescribed under various statutes / Rules framed there under and show such registers to the concerned officer in charge of RINL /VSP or his nominee as and when called for :-

S.NO.	NAME OF THE REGISTER	FORM No. as per C.L (R&A) Central Rules, 1971
1	MUSTER ROLL	XVI
2	REGISTER OF WAGES	XVII
3	REGISTER OF DEDUCTIONS FOR DAMAGE OR LOSS	XX
4	REGISTER OF OVER-TIME	XXIII
5	REGISTER OF FINES	XXI
6	REGISTER OF ADVANCES	XXII
7	WAGE SLIP	XIX
8	REGISTER OF WORKMEN EMPLOYED BY CONTRACTOR	XIII
9	EMPLOYMENT CARD	XIV
10	SERVICE CERTIFICATE	XV

06. The agency shall furnish to RINL / VSP a copy of the half-yearly returns in the Form XXIV prescribed under the Contract Labour (R & A) Act, 1970 and rules framed thereunder by the appropriate Government (presently Asst. Labour Commissioner (Central), Visakhapatnam, Ministry of Labour, Government of India). Further the agency shall furnish the details such as name and address of the contractor, period of contract, nature of work, Work Order number and date, Department/Zone, maximum number of workers employed, Number of days worked and Number of man-days worked for every calendar year to RINL/VSP at the end of the calendar year / on completion of the work.

07. PAYMENT OF MINIMUM WAGES : Wages paid to the workmen by the Agency should not be less than the rates notified by the appropriate Government (presently Regional Labour Commissioner (Central), Ministry of Labour, Government of India) published in the Gazette / as communicated by them to RINL/VSP from time to time with regard to the minimum wages

applicable to the respective category of workmen and ad-hoc amount @ of ₹.11-54 ps. per day per contract worker on actual attendance subject to a maximum of Rs.300/- (Rupees three hundred only) per month. Wages with ad-hoc amount to the workmen should be paid on or before the 7th of the subsequent month after the last day of wage-period. If 7th 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 15th 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 21st 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 :

LAPSE	ACTION BY VSP
1. Payment of wages at rates less than those notified under the minimum wages notification.	An amount equivalent to the differential amount between wages to be paid under Minimum wages notification of the Govt. applicable for the period less actual wages paid shall be recovered from the bills of the contractor as certified by the Representative of RINL/VSP/Engineer.
2. Non-payment of wages.	An amount equivalent to wages payable by the contractor applicable for the relevant period shall be recovered from the bills of the contractor as certified by the Representative of RINL/VSP/Engineer.
3. Non-payment of PF.	Recovery of PF amount and an amount equivalent to maximum penalty and interest livable by Regional Provident Fund Commissioner for the delayed period under the provisions of

	Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and Rules framed thereunder for delayed remittance of Provident Fund contributions (both the employee's and employer's (in this case Contractor's) contributions and administrative charges), shall be recovered from the bills of the contractor as certified by Representative of RINL/VSP/Engineer.
4. Delayed payment of PF	An amount equivalent to maximum penalty and interest livable by Regional Provident Fund Commissioner for the delayed period under the provisions of Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and Rules framed there under for delayed remittance of Provident Fund contributions (both the employee's and employer's (in this case Contractor's) contributions and administrative charges), shall be recovered from the bills of the contractor as certified by Representative of RINL/VSP/Engineer.
5.Non-payment of ESI	Recovery of ESI contributions amount and an amount equivalent to maximum penalty livable by Employees' State Insurance Corporation Authorities for the delayed period under the provisions of Employees' State Insurance Act, 1948 and Rules framed there under for delayed remittance of Employees' State Insurance contributions (both the employee's and employer's (in this case contractor's) contributions), shall be recovered from the bills of the contractor as certified by the Representative of RINL/VSP/Engineer.
6. Delayed payment of ESI	An amount equivalent to maximum penalty and interest livable by Employees' State Insurance Corporation Authorities for the delayed period under the provisions of Employees' State Insurance Act, 1948 and Rules framed thereunder for delayed remittance of Employees' State Insurance contributions (both the employee's and employer's (in this case contractor's) contributions), shall be recovered from the bills of the contractor as certified by the Representative of RINL/VSP/Engineer.
7. Non-payment of ad-hoc amount of ₹.300/- per month.	An amount equivalent to actual payable towards ad-hoc <u>amount</u> to the workmen engaged for relevant period shall be recovered from the bills as certified by the Representative of RINL/VSP/Engineer.

- a) The recovered amount under clauses 1,2,3,4,5,6 and 7 will be refunded along with subsequent Running Account Bill/final bill on certification by as certified by Representative of RINL/VSP/Engineer that the contractor has since complied with the provisions of payment of wages, Provident Fund and Employees' State Insurance contributions etc.
- b) In the case of completed works, the recovered amount under clause No.4 & 6 above will be refunded to the contractor along with final bill of the subject work on submission of no due/no claim certificate from the concerned Zonal Contract Labour Cell of RINL/VSP that the contractor has since made with the payments under the provisions of Employees' Provident Funds and Miscellaneous provisions Act, 1952 and Employees' State Insurance Act, 1948.

10. 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.

X0 = 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 X₀ :

$$X = (a*USR + b*SSR + c*SKR) / (a + b + c)$$

$$X_0 = (a*USR_0 + b*SSR_0 + c*SKR_0) / (a + b + c)$$

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

USR₀ = RINL/VSP approved wage rate for USW indicated in the Quote Sheet (Form G) / BOQ of Tender Document

SSR₀ = RINL/VSP approved wage rate for SSW indicated in the Quote Sheet (Form G) / BOQ of Tender Document

SKR₀ = 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 01.04.2016 are ₹.530.30 ps., ₹.597.55 ps., ₹.697.55 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 30th day from the date of submission of required valid / correct and complete documents in all respects.

The following deductions per workmen deployed category-wise shall be made from the bills / amounts due to the contractor as applicable for the work done and such deducted amounts shall be released as follows :

S.No.	Component	Recovery amount per Labour per every WORKING DAY (in Rupees)			To be released when
		UN- SKILLED	SEMI- SKILLED	SKILLED	
01	Notice pay	₹ 26.77	₹ 30.29	₹ 35.52	After the Contractor makes payment to the workmen in the presence of Engineer I/c and CLC representatives . A certificate to this effect is to be enclosed with pre-final bill. (to be paid with pre-final bill)
02	Retrenchment compensation	13.39	15.15	17.76	
03	Leave with wages	16.48	18.64	21.86	
Sub-total		56.64	64.08	75.14	
04	Bonus	26.76	30.28	35.51	After the Contractor makes payment to the workmen in the presence of Engineer I/c and CLC representatives . A certificate to this effect is to be enclosed with RA bill / pre-final bill. (to be paid with RA bill / pre-final bill as and when paid by the Contractor)

Grand total (To be paid to the Labourer)	83.40	94.36	110.65	
10% toward profit and overheads of Contractor	08.34	09.44	11.07	
Total recovery amount	91.74	103.80	121.72	

NOTE

- i *The above recovery rates are effective from 01.10.2016. 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 15th of the subsequent month of the wage period in their independent Employees' Provident Fund code number or in RINL/VSP Provident Fund sub-code number, if permitted as per the provisions of the Employees' Provident

Funds and Miscellaneous Provisions Act, 1952 and thereafter amended from time to time, failing which payments due to them will be withheld. The contractor should submit the Provident Funds remittance copy of challans containing the work order number along with list of workers with contribution details to the representative of RINL/VSP and Zonal Personnel Executive every month.

22. The contractor should submit returns to Regional Provident Fund Commissioner under the provisions of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and rules framed there under from time to time and copy of the same shall furnish to RINL/VSP representative and Zonal Personnel Executive. The contractor should maintain the records such as attendance, wage registers, contribution registers, etc as per the provisions of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 and rules framed thereunder from time to time.

23. The Agency shall ensure strict compliance with the provisions of the Employee's Provident Funds and Miscellaneous Provisions Act, 1952 and the schemes framed there under from time to time in so far as they are applicable to their establishment and agencies engaged by them. The contractor is also required to indemnify the employer against any loss or claim or penalties or damages whatsoever resulting out of non-compliance on the part of the contractor with the provisions of the aforesaid act and the schemes framed there under from time to time.

24. **Employees' State Insurance Act:** The successful agency should follow the procedure that shall be implemented in order to comply with the provisions of the Employees' State Insurance Act, 1948 and submit a copy of the Employees' State Insurance registration certificate indicating their Employees' State Insurance code number. The contractor should give all the particulars of workmen including Employees' State Insurance number(s) engaged by them before commencement of work and changes during the course of work shall be intimated by the contractor to the representative of RINL/VSP along with insurance code number where necessary.

The contractor should deposit Employees' State Insurance Fund contributions (employee's + employer's (in this case contractor) contributions) on or before 21st of the subsequent month of the wage period in their independent Employees' State Insurance code number or in RINL/VSP ESI sub-code number, if permitted as per the provisions of the Employees' State Insurance Act, 1948 and thereafter amended from time to time, failing which payments due to them will be withheld. The contractor should submit the remittance copy of challans containing the work order number along with list of workers with contribution details to the representative of RINL/VSP and Zonal Personnel Executive every month. The contractor should submit Return of contributions to Employees' State Insurance Corporation authorities under the provisions of the Employees' State Insurance Act, 1948 and rules framed there under from time to time and copy of the same shall furnish to RINL/VSP representative and Zonal Personnel Executive. The contractor should maintain the records such as attendance, wage registers, contribution registers, etc as per the Employees' State Insurance Act, 1948.

25. The Agency shall at all times indemnify the Employer against all claims for compensation under the provisions of the Employees' State Insurance Act, 1948 / Employees' Compensation Act, 1923, as amended from time to time or any other law for the time being in force by or in respect of, any workmen employed by the Contractor in carrying out the contract and against all costs and expenses or penalties incurred by the employer in connection there with and (without prejudice to any other means of recovery) the employer shall be entitled to deduct from any money due or to become due to the Contractor (whether under the contract or any other contract) all moneys paid or payable by the employer by way of Compensation aforesaid or for costs or expenses in connection with claims thereto and the contractor shall abide by the decision of the employer as to the sum payable by the Contractor under the provisions of this clause.

26. **Reporting of accidents to the employer and other local authorities concerned pertains to labour:** The contractor shall be responsible for the safety of all employees and / or workmen employed or engaged by him on and in connection with the work and shall report to the employer and other local statutory authorities concerned, all cases of serious accidents howsoever caused and wherever occurring on the works and shall make adequate arrangements for rendering immediately all possible aid to the victims of the accidents.

27. Where any accident causing disablement or death occurs, the agency shall be liable for such injury or death caused as a result of such accident either within or outside the working place in the course of work. The agency shall be responsible for such contingencies and will make good all claims for compensation claimed by his labour or staff or under Employees' State Insurance Act, 1948 / Employees' Compensation Act, 1923 / Tribunal and other relevant laws of the land as the case may be. He shall also indemnify the RINL/VSP and pay all such sums as may be awarded in respect of claims for compensation arising out of or consequent to any accident to any staff or Labour working under him pursuant to the provisions of the Employees' State Insurance Act, 1948 / Employees' Compensation Act, 1923 or any subsequent modifications or amendments to the Act thereof. All costs incurred by the RINL / VSP in connection with any such claims should be made good by the agency and the RINL / VSP reserves the right to pay in the first instance such amount of compensation as is payable under the said Act or any other Act / rules and recover the amount so paid from the agency's bills, security deposit or other ways.

28. **ADDITIONAL INSURANCE COVERAGE :**

The agency shall take insurance policy for payment of an ex-gratia amount of ₹ 5,00,000/- (Rupees five lakhs only) per head for deaths arising out of accidents on duty to the contract labour engaged by him. As and when death takes place arising out of accidents on duty, the contractor is required to pay the exgratia amount within 30 days to the legal heir of the deceased from the date of death takes place arising out of accidents on duty. This insurance is in addition to the statutory insurances under

Employees State Insurance Act, 1948 / Employees' Compensation Act, 1923, Public Liability Insurance Policy (Third Party insurance) or any other insurance taken by the contractor or any other agency to cover the workmen. The Agency shall update the said insurance policy from time to time on par with contract labour employed by RINL/VSP through contractor.

29. Insurance: The Agency shall maintain and shall require his Sub-Contractors to maintain in full force and effect, from Insurance Companies in India acceptable to Representative of RINL/VSP/Engineer, from the time of execution of his Agreement:

- a) All such insurances as are required by law for the purpose of the Contract at the cost of Contractor.
- b) All such insurances required in respect of equipment purchased out of advance received from Employer at the cost of Contractor.
- c) Any additional insurance required specifically by the Employer/Engineer at the cost of Employer.

Agency shall ensure that the insurer shall furnish to the Representative of RINL/VSP/Engineer and Employer with evidence of such insurance copy of the issued policy and any amendments thereto and prompt notification of any cancellation or termination thereof. Should Contractor default in paying any premium when due, Representative of RINL/VSP/Engineer or Employer, without prejudice to other remedies set forth in this Agreement shall be at liberty to pay such premium and recover the same from the Contractor.

Any such insurance requirements are hereby established as the minimum policies and coverage which Contractor must secure and keep in force. Contractor shall at all times be free to obtain additional or increased coverage at Contractor's sole expense.

The provisions contained within this Article are not intended and do not impair or in any manner limit the liabilities or obligation assumed by Contractor as may be set forth more fully elsewhere in this Agreement.

30. Damages to persons & property : The contractor shall (except if and so far as the Contract otherwise provides) indemnify and keep indemnified the employer against all losses and claims for injuries or damages to any person or property whatsoever (including surface or other damages to land or trees or crops being on the site suffered by tenants or occupiers) which may arise out of or in consequence of the construction and maintenance of the works and against all claims, demands, proceedings damages, costs, charges and expenses whatsoever in respect thereof or in relation to, provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify the employer against any compensation of damages for or with :

- a) The permanent use or occupation 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.

* * *

**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,
3rd floor, purchase dept
Administrative Building,
Visakhapatnam-530031

Bank Guarantee No Dt

LETTER OF GUARANTEE

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

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

3. We, (name of bank & branch) hereby further agree that the guarantee herein contained shall remain in full force and effect during the period that would betaken for satisfactory performance and fulfillment in all respects of the said AGREEMENT and that it shall continue to be enforceable for (a) 120 days after the date of L/R of the last consignment of the MATERIALS under the said AGREEMENT or (b) in the event of any dispute(s) between the PURCHASER and the SELLER, until such period(s) the dispute is settled fully, whichever date is the latest and that if any claim accrues or arises against us,(name of bank & branch)by virtue of this guarantee before the dates referred to at (a) and (b) herein above, the same shall be enforceable against us, (name of bank & branch), notwithstanding the fact that the same is enforced after the dates referred to at (a) or (b) herein above, whichever date is the latest, provided that notice of any such claim has been given by the PURCHASER before the dates referred to at (a) or (b) herein above, as the case may be. Payments under this LETTER OF GUARANTEE shall be made promptly upon our receiving the notice to that effect from the PURCHASER on demand and without protest or demur.

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

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

matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so releasing us from our liability under this Guarantee.

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

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

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

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

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

FOR AND ON BEHALF OF

(name of bank & branch)

Signature:

Name:

DULY CONSTITUTED ATTORNEY
& AUTHORISED
