

HINDUSTAN ORGANIC CHEMICALS LTD (A Government of India Enterprise) AMBALAMUGAL, COCHIN – 682302 Phone: (0484) 2720911, FAX No. (0484) 2720893 LIMITED E- TENDER NOTICE

HOCL Invites e Bids under the two bid system for the following item.

Sl. No.	Description of item and Tender No.
1	Supply of chemicals for cooling water treatment and boiler water
	treatment for a period of 2 years.
	HOCL tender ref : MAT/PUR/32516/19

Tender documents may be downloaded from www.hoclkochi.com or orwww.eprocure.gov.in

Approved vendors may please get registered with NIC e-procurement portal (URL: https://eprocure.gov.in/eprocure/app) to participate in the tender. Tenders submitted other than through online procedure specified will not be accepted. Please visit the above sites regularly for any addendum/ corrigendum/extension before submitting the offers.

EMD Amount : Rs.12000/-

Thanking you, Yours Faithfully,

For Hindustan Organic Chemicals Limited (GSTIN: 32AAACH2663P1ZG)

K R USHARANI CHIEF GENERAL MANAGER MATERIALS M/s.

Dear Sir,

Hindustan Organic Chemicals Ltd. is a Govt. of India Undertaking manufacturing Phenol, Acetone & Hydrogen Peroxide at its plant at Kochi, Kerala, India. HOCL invites e tenders for finalizing the contract for the supply of chemicals and monitoring of cooling water treatment and boiler water treatment for a period of 2 years in two bid system. Detailed specification and scope of work is given in the tender documents. HOCL has entered into an agreement with M/s NIC for e-procurement through their portal www.eprocure.gov.in. You may please get registered as a vendor with MSTC for participating in thistender.

TenderdocumentsareuploadedinHOCLwebsite<u>www.hoclindia.com</u>and www.eprocure.gov.in

The details of the tender are as shown in INDEX enclosed

You may submit your online offer on two bid system before the due date and time specified.

EMD: Rs.12000/-

Due Date & time for bid submission: 29.08.2019 at 2.00 PM Tender Opening Start Time & Date: 30.08.2019 at 2.00 PM

Thanking you,

Yours faithfully, For Hindustan Organic Chemicals Ltd.

USHARANI.K.R CHIEF GENERAL MANAGER (MATERIALS)

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PART A - COOLING WATER TREATMENT

ANNEXURE -I

SCOPE OF WORK

The work involves the detailed study of the cooling water system of our No.1 cooling tower and the supply of various water treatment chemicals for the pre-cleaning, passivationandregulartreatmentofthecoolingwaterofNo.1coolingtowerinourplant atAmbalamugal.PresentlyweareusingthewatertreatmentchemicalssuppliedbyM/s. Anco India Chemicals (P) Ltd. Please note that in case of a changeover of thechemicalstoanewone,we'llnotbeabletostopthecoolingtowerandtherequired water treatment has to be done in continuation to the existing ones. The programme shall be based on corrosion inhibitors, scaling inhibitors, fouling Inhibitors, with minimum 2 broad spectrum non oxidizing biocide, chlorine, bio-dispersants and other mineral dispersants. In no cases, the stoppage of system/cooling tower is possible. The programme including flushing, passivation etc shall be implemented on line i.e. without varying the load of the coolingtower, heat exchangersetc.

The circulation of the No1 Cooling Tower is around 5100 M^3 /hr and the holdup capacity is (sump) + (Piping) is 3750 M^3 and side stream filter having capacity of 50 M^3 . Average consumption of makeup water is 55 M^3 /Hr. The design bleed off (Blow down + Drift loss) is $22M^3$ /Hr.

The specification detail of Cooling Tower is given in Annexure IV and make up water analysis is given in Annexure V. The vendors are free to verify these values using their facilities at their cost.

The parameters to be controlled in the system have to be specifically mentioned in the offer and should be adhered during the treatment programme. The dosage of the chemicals offered / recommended should be strictly adhered, to maintain the required parameters. At any cost, there should not be any deviation in the consumption of chemicals recommended for the treatment to maintain the specified parameters; especially the consumption should not go high with respect to recommended dosage. The chemicals actually consumed in excess of the quantity specified in your offer shall be borne by the party.

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Corrosion Coupon

- (a) Corrosion evaluation shall be done every month. The corrosion on MS Coupon shall not exceed 3MPY.
- (b) The corrosion coupons should be free from inorganic & biological fouling, deposit corrosion & pitting corrosion.
- (c) The installation & evaluation of corrosion coupon shall be in accordance with ASTM D-2688-1992.

Microbiological Analysis

- A. TVC to be less than $1 \times 10^5 / \text{MI}$
- B. SRB to be less than 60 Col/100ml
- C. Iron Bacteria to be less than 5 org/100ml

Servicepersonnelhavetobepostedatsitetostabilizethetreatmentprogrammeandto monitor it daily. Service Personnel shall visit our site on daily basis as a part of monitoring the treatment programme and for recommendation of dosage. Weekly report has to be submitted to the Engineer-in-charge by the Service Personnel. In addition a Monthly report has to be submitted to the Engineer-in-charge. The reports aretobesubmittedasperspecialinstruction(Annexure–III)&Checklist..

Technical Assistance shall be offered till such time the ordered quantity of chemicals is fully used (consumed) or 2 years whichever is more.

Interested vendors can visit our site on any working days to collect any further required details / samples of water before submitting the bids.

PART A - COOLING WATER TREATMENT

ANNEXURE - II

DETAILS THAT ARE TO BE INDICATED IN PART I – TECHNICAL BID

- A. System details and Wateranalysis
- B. Chemical TreatmentProgramme
- C. Chemical Consumption on PPM basis, daily, monthly & yearly consumption of each chemical for evaluation purpose.
- D. ControlParameters.
- E. Technical Services offered shall be as per our (ANNEXURE I & ANNEXURE III Clause6).
- F. Qualifying Requirements
- G. Compliance to attached special instructions(ANNEXURE-III)
- H. MSDS, specification and functions & shelf life of eachproduct

I. Priced Bid Format PART C (ANNEXUREV)

PART A - COOLING WATER TREATMENT

ANNEXURE - III

Special Instructions

Following details shall be clearly mentioned in the Technical Bid.

- 1. The procedure for change over from the present treatment system to your system without stoppage of coolingtowers.
- 2. The type of chemicals indented to be used for the following and its dosage to be given in TechnicalBid.
 - CorrosionInhibitor
 - Dispersant
 - Antiscalant
 - Biodispersent
 - Non-oxidising biocides (2 Nos.)minimum out of which one should be 45% glutaraldehyde + Chemicals for generating ClO₂(oxidizing biocide)
 - Chemicals/biocides required in the absence of Chlorination
- 3. Copy of MSDS of all chemicals offered. All the chemicals shall be biodegradable and non hazardous. The function of each chemical, specification, shell life and safe handling procedure to be given in MSDS of each product/chemical.
- 4. Caustic soda and chlorinefor ClO₂dosing(apart from to 2 non oxidising biocides) required for the treatment will be supplied by HOCL at free of cost. Vendor shall specify the dosagesof caustic soda and chlorine very clearly in the technical bid which shall be a parameter for evaluation of the offer. The cost of the above chemical consumed in excess of the specified dosages shall be to the vendor'saccount.
- 5. Contingency plan has to detailed in the technical bid for the following Hydrocarbon ingress into system Chlorination failure pH fluctuation Lube Oil/grease ingress into system High iron content High turbidity of Make up water

- 6. Services to be provided by the vendor till such time the ordered quantity of chemicals are fully used or 2 years whichever is more. Charges for the services to be included in the prices of chemicals. No additional charges will be given by HOCL.
 - a. Yourservicerepresentativeshallbeavailableondailybasistomonitortheprogramme (for corrective, preventive actions & routineanalysis).
 - b. Your expert technical personnel shall be made available within 24 hrs, as and when required.
 - c. You shall supply and maintain all the monitoring equipments, dosing equipmentsand kits/aidsformonitoring,dosing,controllingandreportingthetreatmentprogramme. The details of such items to monitor corrosion, fouling monitor, deposit monitor, microbiological analysis and complete laboratory test kits including all testing reagents and all glass wares for daily monitoring of all control parameters of make upandcirculatingcoolingwateretc.shallbedetailedinyourtechnicalbid.
 - d. All control parameters of circulating and make up water to beanalysed by you at site on daily basis to control the parameters and to optimise the chemical consumption and for trouble shooting. The procedure/ method for analysis of above parameters are to be given tous.
 - e. Microbiological analysis for TVC, SRB & Iron Bacteria to be done by you fortnightly. (First fortnight sample shall be tested using Microbe detection test slides at HOCL and second fortnight sample shall be done through outsideapproved laboratories)

f. Reports to besubmitted

- Daily monitoring shall include, monitoring of all the control parameters of circulating cooling water and make up water and control measures / corrective actions to be adopted and quantity of chemicals to beadded.
- Weekly reports shall contain the average of control parameters, chemical stock position (stock at site & at Stores), deviation if any, corrective/preventive actions made, suggestion ifany.
- Monthly reports shall contain trends of all control parameters, measurement of COC (cycles of concentration), corrosion study calculation/details, microbiological study, actual consumption including chlorine & caustic vs. projected consumption, chemical stock, analysis, deviation, corrective/preventive actions and improvements including identification and arresting the system leakages to maintain/improve the cycle of concentration, cause analysis of deviations in any of the parameters & reporting of key performanceindicators.
- g. A training on general water treatment and subjects specific to this programme shall be arranged.

PART A - COOLING WATER TREATMENT

ANNEXURE - IV SPECIFICATIONOFTHECOOLINGTOWERNO.1

Circulationrate 5100M³/Hr

Hold up volume (sump)+(Piping) 3750M³

Hot watertemp.(Design) 42 degreeC

Cold watertemp.(Design) 32 degreeC

Delta T degreeC(design) 10 degreeC

SystemMetallurgy SS/CarbonSteel

Evaporationloss 33 M3/Hr(approx)

Cyclesofconcentration 1.7 to 2.2

Design Blow down +DriftLoss

(Total BleedOff)

22 M³/Hr

Average Make upwaterquantity 55M³/Hr

- Side stream filterprovided
- Chlorination facilityprovided

PART A - COOLING WATER TREATMENT

ANNEXURE - V

SOURCE OF COOLING WATER MAKE UP

I. (PTP WATER)

PH : 6.8 –7.2

M-alkalinity : 15.5 ppm

Hardness : 12ppm

Chloride : 10ppm

Iron : 0.2 ppm

TDS : 37ppm

III. PARAMETER TO BE MAINTAINED BY THE VENDOR				
1. Cooling Water - PO_4^{3} 10 - 12 6. Cooling water - P^H 6.5 - 7.2				

(Other Control Parameter is to be given by the vendor based on their study of the system and feed waterdetails)

II. ANOTHER SOURCE OF COOLING WATER MAKE UP (POND WATER)-(Sparingly used)

	Min.	Max.
PH	4.0	7.5
TDS	91 PPM	192 PPM
* Fe	0.13 PPM	4.0 PPM
Chloride	75 PPM	105 PPM
Hardness	28 PPM	62 PPM
Turbidity	1.2 NTU	8.1 NTU

^{*} During some period **Fe** content is found to be on higher side (upto 4 PPM). Accordingly dosage may be recommended as a contingency plan.

This may please quote separately . However same will not be considered for comparison purpose

CHECK LIST FOR COOLING WATER TREATMENT ANNEXURE VI

QUALIFYING REQUIREMENTS TO BE SUBMITTED ALONG WITH TECHNICAL BID

Page 1 of7

SI. No.	Description	Submitted by Vender	Deviation if Any
Relevant documents / purchase order copies to be provided for all Qualifying require ments listed below:			
1.	Start up experience in a large chemical / petrochemical plant of cooling towers of minimum similar capacity. A minimum of two references are required		
2.	Experience in treating low hardness and low alkalinity water.		
3.	Vendor should have full-fledged manufacturing and R&D set up on India and service support facility at Kochi and carryout servicing directly by the company.		
4.	There should be at least one order for cooling water treatment with a minimum value of Rs. 7.5 Lakhs, in the last three financial years.		
5.	Annual turnover details for the supply of water treatment chemicals for the last threefinancial years		
6.	ISO certified company (preferred)		
7.	Concurrent commitments of the vendor		
9.	Technical data sheet, write up and material safety and data sheet of the offered chemicals.		

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DETAILS THAT ARE TO BE INCLUDED IN THE IN TECHNICAL BID

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SI.	Description	Offer from Vender	Deviation if Any
No.			
1.	System details and water analysis after		
	the vendor's study.		
2.	Chemical treatment programme details		
3.	Chemical consumption, daily, monthly		
	and yearly. The recommended dosage		
	in PPM to be given separately foreach		
	chemical Including calculation details.		
4.	The procedure for change over from		
	the present treatment system to new		
	system without stoppage ofcooling		
	tower.		
5.	Exact quantity of extra chemicals		
	required for smooth change over tothe		
	new system		
6.	The treatment shall have the following		
	1. CorrosionInhibitor		
	2. Bio-Dispersant		
	3. Mineral-Dispersant		
	4. Antiscalant&Antifoulant		
	5. Non-oxidising biocides (2 Nos.) min-		
	imum out of which one should be		
	45%glutaraldehyde		
	6. Chemicals required for generation		
	of ClO₂ generation		
	7. Chemicals/biocides required inthe		
	absence of ClO₂ dosing.		

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Signature	of vendor:
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DETAILS THAT ARE TO BE INCLUDED IN THE IN TECHNICAL BID

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			<u>Page 3 of /</u>
Sl. No.	Description	Offer from Vender	Deviation if Any
7.	All Cooling water Control Parameters shall be specified. The parameters to		
	be controlled in the system have to be		
	specifically mentioned in the offer and		
	should be adhered duringthe		
	treatment programme.		
8.	Contingency plan has to be detailed in the technical bid for the following		
	a) Hydrocarbon ingress into system		
	b) Chlorination failure		
	c) <mark>p</mark> H fluctuation		
	d) Lube Oil/grease ingress into system		
	e) High iron content		
	f) High turbidity of Make upwater.		
	g) High Chloride inMake up water.		
9.	Vendor shall specify the dosages of caustic soda and chlorine very clearly. Caustic soda and Chlorine required for the treatment will be supplied by HOCL free of cost.		
10.	The cost of Caustic soda and Chlorine consumed in excess of the specified dosages shall be to the vendor's account.		

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Sl. No.	Description	Agreement by Vender	Deviation if Any
1.	All services and technical assistance shall be Provided by the Vendor till such time the ordered quantity of chemicals is fully used or 2 years whichever is more.		
2.	a) Service personnel have shall be posted at site to stabilize thetreatment programme		
	 b) Your service representative shall visit the cooling tower on daily basis to mon- itor the programme (for corrective, preventive actions & routine analysis) andrecommendation dosage. 		
3.	Your expert technical personnel from head quarters shall be made available within 24 hrs. as and when required.		
4.	You shall supply and maintain all dosing equipments (minimum 3 dosing pumps) and aids for dosing, controlling the treatment programme.		
5.	You shall supply and maintain all the monitoring equipments and kits / aids for daily monitoring, controlling and reporting the treatment programme and for monitoring of all control parameters ofmakeupand-circulatingcoolingwater. The items shall include		
	Corrosion monitor Fouling monitor		
	 3. Deposit monitor 4. ClO₂ generator using chlorinated water. (Party shall visit site to ascertain the existing chlorination system for compatibility with your ClO₂ generation.) 5. Chemical analysis Kits including all reagents and Microbe detection testslides 		
	6. All Glass Ware		

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Signature of vendor:

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Sl. No.	Description	Agreement by Vender	Deviation if Any
6.	All control parameters including ORPof circulating and make up water shall be analysed by the vendor at site on daily basis to control the parameters and to optimise the chemical consumption and		
7.	fortroubleshooting. The procedure / method for analysis of above parameter shall be given.		
8.	a) Microbiological analysis shall be done fortnightly. Microbiological analysis for TVC, SRB & Iron Bacteria shall be done fortnightly. (First fortnight sample shall be tested using Microbe detection test slides at HOCL and second fortnight sample shall be done through outside approved laboratories) b) Corrosion evaluation shall be done		
9.	monthly. Daily monitoring shall include, monitoring of all the control parameters of circulating cooling water and make upwaterandcontrolmeasurestobe adopted and quantity of chemicals to be added.		
10.	There shall be no deviation in the consumption of chemicals recommended for the treatment to maintain the specified parameters; especially the consumption should not go high with respect to recommended dosage. The chemicals actually consumed in excess of the quantity specified in your offer shall be borneby the vendor.		
11.	Training (class room lecture) ongeneral water treatment and subjects specific to this programme is to be arranged at site.		

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SI. No. Description Agreement by Vender All the parameters to be controlled in the system should be adhered during the treatment programme. The dosage of the chemicals offered / recommended should be strictly adhered, tomaintain the required parameters. Following Reports shall be submitted a) Weekly reports shall contain the average, maximum, minimum of all control parameters, consumption of chemicals, stockposition(stockatsite & at Stores), deviation if any, corrective / preventive actionsmade, suggestion if any. b) Monthly reports shall contain trends of all control parameters (Tabular form and graphical), measurement of COC (cycles of concentration), corrosion evaluation, ORPstudy, calculation / details, microbiological study (Results of TVC, SRB & Iron Bacteria), actual consumption vs. projected consumption, chemical stock, analysis, deviation, corrective / preventive actions andimprovements including identification and arresting the system leakages to				<u>Page 6 017</u>
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Sl. No.	Description	Agreement by Vender	Deviation if Any
14.	Guarantee		
	a) The corrosion on MS Coupon shall not exceed 3MPY.		
	 The corrosion coupons shall befree from inorganic & biological fouling, de- posit corrosion & pittingcorrosion. 		
	c) The installation & evaluation of corrosion coupon shall be in accordance with ASTM D-2688-1992.		
	d) TVC to be less than 1 x10 ⁵ / MI		
	e) SRB to be less than 60 Col / 100 ml		
	f) Iron Bacteria to be less than 5 org/ 100 ml		
	g) All the control parameters will be main- tained within limits with the recom- mended dosages of respective		
	chemicals.		

PARAMETER TO BE MAINTAINED BY THE VENDOR

1. Circulating Water $-P^H$ 6.8 - 7.2 Circulating Water $-PO_4^{3-}$ 10.0 - 12.0 (Other Control Parameters are to be given by the vendor based on their study of the system and Make Up waterdetails)

Page 7 of 7

Signature of vendor:

ANNEXURE VII (1 of2)

CHEMICAL REQUIREMENTS FOR COOLING WATER TREATMENT ANDTHE DOSAGEOFCHEMICALSTOBESUBMITTEDALONGWITHTECHNICALBID

SI. No.	Description	Name of Chemical	Recom- mended Dosage(PP M)	Daily Requirement / Basis of Addition (Calculation to be as specified below)
	Regular Chemicals		,	(Daily Requirement in kG)
	a) Corrosion			
	Inhibitor			
	b) Bio-Dispersant			
	c) Mineral- Disper-			
	sant			
	d) Antiscalant			
	e) Antifoulant			
	f) Non-oxidising			
	biocide - 1			
	g) Non-oxidising bio-			
	cide – 2 (shall be			
	glutaraldehyde			
	h) Chemical required			
	for generating ClO ₂			
	using chlorinated			
	water			
	Contingency Chemica	ls		(Basis of Addition)
	(a) Hydrocarbon in-			
	gress			
	(b) Chlorination fail-			
	ure			
	(c) pH fluctuation			
	(d) Lube Oil / grease			
	ingress			
	(e)High iron			
	content			
	(f) High Turbidity in			
	Make up			
	(g) High Chloride in			
	Make up			

THE BASIS OF CALCULATION SHALL BE BASED ONLY ON TOTAL BLEED-OFF: 22 M³/HR. AND HOLD UP VOLUME OF 3750 M³.

Signature of vendor:

QUANTITY OF CHEMICALS TO BE SUBMITTED ALONG WITH TECHNICAL BID

SI.	Description	Nameof	Recommended	Daily	Monthly	Yearly
No.		Chemical	Dosage(PPM)	consumption	consumption	consumption
	Regular Chemicals					
	a) Corrosion Inhi-					
	bitor					
	b) Bio-					
	Dispersant					
	c) Mineral-					
	Dispersant					
	d) Antiscalant					
	e) Antifoulant					
	f) Non-oxidising					
	biocide - 1					
	g) Non-oxidising					
	biocide – 2 shall					
	be glutaralde- hyde 45%					
	h) Chemical re-					
	quired for generat-					
	ing ClO ₂ using					
	chlorinated water					
	i)Caustic Soda	(Will be				
	supplied by HOC	CL)				
			Reqd. Flow	No. of Hrs		
	j) Chlorine (Will be	supplied	(Kg/Hr)	Reqd.		
	by HOCL) -Chlor	inated				
	water for usein(CIO ₂ gene-				
	rator					

(Vendor shall specify the dosages of caustic soda and chlorine (for use $inClO_2$ generator) which shall also be a parameter for evaluation of the offer.)

Signature of vendor:			

PART B - BOILER WATER TREATMENT CHEMICALS

ANNEXURE -I

SCOPE OF THE WORK

The work involves detailed study of the boiler water system and supply of conventional boiler water treatment chemicals and treatment of Boiler water in our plant at Ambalamugal. Presently we are using the water treatment chemicals supplied by M/s. Anco India Chemicals (P) Ltd.. Please note that in case of a changeover of the chemicals to a new one, we'll not be able to stop the Boiler and the required water treatment has to be done in continuation to the existing ones. The details of our Boiler is given in ANNEXURE IV enclosedherewith.

The vendor shall specify the parameters to be controlled in the Boiler system.

- a) In the event of placing order, the vendor shall ensure adherence to these parameters during the contract period. The dosage of the chemicals offered/ recommended shall be strictly adhered to. The chemicals supplied shall be accompanied with test certificates. The containers of chemicals to be properly identified with item description, quantity, date of manufacture, date of expiry, Batch numberetc.
- b) Any higher requirements of chemicals to maintain the boiler water parameters in control as compared to the originally recommended dosage of the chemicals shall be to the vendorsaccount.
- c) A performance bank guarantee has to be furnished for maintaining the Boiler water parameters in control using the recommended dosage of the chemicals. (Refer clause no: 8 of GENERAL TERMS & CONDITIONS in Annexure.)
- d) Service personnel as required are to be posted by the vendor in site to stabilize the boiler water treatment programme and to monitor it daily and maintain theparameters.
- e) Regular analysis of boiler feed water, boiler water, DM water and Condensate will be done by HOCL. (The standard water parameters analyzed by HOCL are given in Annexure V).
- f) Reports have to be submitted to the Engineer in charge indicating the treatment parameters, chemical stock position at site, deviations if any and corrective / preventive action to be taken (See AnnexureII).
- g) The details that are to be indicated in Technical Bid are given in a consolidated format as Annexure II & III. These formats have to be filled up and signed by the vendor and enclosed along with the TechnicalBid.
- h) The chemical requirements are to be given by the vendor in the format given inANNEXURE VII. This is to be enclosed in the TechnicalBid.

Interested vendors can visit our site on any working day to collect any further details required prior to submitting the bids.

PART B - BOILER WATER TREATMENT CHEMICALS

ANNEXURE II

DETAILS THAT ARE TO BE INDICATED IN PART I – TECHNICAL BID

- a. System details and water analysis after yourstudy.
- b. Chemical treatmentprogramme.
- c. Chemical Consumption / recommended dosage perday.
- d. Boiler water ControlParameters
- e. Technical services offered. (Such as training, optimization of dosage, expertise in monitoring and control.)
- f. Qualifying Requirements as listedbelow
- g. Technical data sheet and Material safety data sheet of offeredchemicals.
- h. Chemical supplied to be accompanies with Test Certificate & all containers of chemicals to be properly identified with item description, quantity, date of manufacture, date of expiry, batch No. etc.
- i. A training on general water treatment to be arranged byyou.
- j. Monthly monitoring of reports to be submitted to Engineer-in-charge
- k. Weekly monitoring of system to be done byyou.
- I. Priced Bid Format PARTC (ANNEXUREV)

PART B - BOILER WATER TREATMENT CHEMICAL-SANNEXURE - III

G. <u>SpecialInstructions</u>

Following details shall be clearly mentioned in the Technical Bid.

- 1. The procedure for change over from the present treatment system to your system without stoppage of BOILERS.
- 2. The type of chemicals indented to be used for the following and its dosage to be given in TechnicalBid.
 - Antiscalant, Corrosion inhibitor & sludgeConditioner
 - OxygenScavenger
 - Condensate lineprotection
 - Feed Water PHBooster (volatile)
- 3. Copy of MSDS of all chemicals offered. All the chemicals shall be biodegradable and non hazardous. The function of each chemical, specification, shell life and safe handling procedure to be given in MSDS of each product/chemical.
- 4. Services to be provided by the vendor till such time the ordered quantity of chemicals are fully used or 2 years whichever is more. Charges for the services to be included in the prices of chemicals. No additional charges will be given by HOCL.
 - a. Your service representative shall be available on daily basis to monitor the programme (forcorrective, preventive actions & routine analysis).
 - b. Your expert technical personnel shall be made available within 24 hrs, as and when required.
 - c. The details of complete laboratory test kits including all testing reagents and all glass wares for daily monitoring of all control parameters of Feed Water, Boiler WaterandCondensateWateretc.shallbedetailedinyourtechnicalbid.Colloidal Silica in feed water shall be analysed twice in a month.
 - d. All control parameters of circulating and make up water to be analysed by you at site on daily basis to control the parameters and to optimise the chemical consumption and for trouble shooting. The procedure/ method for analysis of above parameters are to be given tous.

e. Reports to besubmitted

- Daily monitoring shall include, monitoring of all the control parameters of boiler water and condensate. Control measures to be adopted and quantity of chemicals to beadded.
- Weekly reports shall contain the average of control parameters, chemical stock position (stock at site & at Stores), deviation if any, corrective/preventive actions made, suggestion ifany.
- Monthly reports shall contain trends of all control parameters, measurement of COC (cycles of concentration), calculation / details, actual consumption vs. projected consumption, chemical stock, analysis, deviation, corrective / preventive actions and improvements including cause analysis of deviations in any of the parameters & reporting of key performance indicators.
- f. A training on general water treatment and subjects specific to this programme shall bearranged.

PART B - BOILER WATER TREATMENT CHEMICALS

ANNEXURE IV

SPECIFICATION OF BOILERS

No.ofBoilers : 3 Boilers (2 main Boilers of which one is standby +

1 Package Boiler

Type : BI drum, natural circulation, oilfired,

Water TubeBoilers

Capacity : 24.25T/Hr

Pressure : 20Kg/cm²

SteamQuality : Drysaturated

Makeup : De-mineralized water and condensate.

PART B - BOILER WATER TREATMENT

<u>Annexure – V</u>

I. STANDARD BOILER WATER PARAMETERS ANALYSED BYHOCL

Boiler Drum Water	Boiler Feed Water	DM Water	Condensate
P ^H	P ^H	P ^H (5 -6.8)	P ^H
Conductivity (Mhos)	Conductivity (Mhos)	Conductivity (0.7 - 1.57) (Mhos)	Conductivity (Mhos)
Total Phosphate as PO ₄ PPM	-	-	-
Iron as Fe PPM	Iron as Fe PPM	Iron (0.02) PPM	Iron as Fe PPM
Silica as SiO₂ PPM	Silica as SiO ₂ PPM	Silica (0.21) as SiO _{2PPM}	-
Hydrazine N₂H₄ PPM	Hydrazine as N₂H₄ PPM	-	-
P Alkalinity as CaCo ₃ PPM	-	-	-
M Alkalinity as CaCo3 PPM	-	-	-
TDS PPM	-		
TH as CaCO₃ PPM	TH as CaCO ₃ PPM	-	-

- * Regular analysis of boiler feed water, boiler water, DM water and condensate will also be done by HOCL. (As given above) in addition to youranalysis.
- * Condensate utilisation 40% (only in case of MainBoilers)
- * Average Steam generator 13MT/hr
- * Average Feed Water Consumption 15MT/hr

II.	PARAMETER TO BI	MAINTAINED BY THE	/ENDOR		
1. Feed Water - P ^H -	Feed Water - P ^H - 8.5 - 9.5 5. Condensate - P ^H				
2. Boiler Drum Water - P ^H	10.0 - 11.0				
3. Boiler Drum Water - PO ₄	25.0 - 40.0	(Other Control Parameter is to be give based on their study of the system and			
4. Boiler Drum Water - Hydra- zine	0.1 - 1.0	tails)			

CHECK LIST FOR BOILER WATER TREATMENT ANNEXURE VI

QUALIFYING REQUIREMENTS TO BE SUBMITTED ALONG WITH TECHNICAL BID

Page 1 of7

			<u>Page 1 017</u>
Sl. No.	Description	Submitted by Vender	Deviation if Any
Relevan	t documents / purchase order copies	to be provided for all Qua	alifying requirements
listed be	elow:		
1.	Start up experience in a large chemi-		
	cal / petrochemical plant of BOILERS		
	of minimum similar capacity. A min-		
	imum oftwo		
	references are required		
2.	Vendor should have full fledged		
	manufacturing and R&D set up on		
	India and service support facility at		
	Kochi and carryout servicing directly		
	by the company.		
3.	There should be at least one order		
	for Boiler water treatment with a		
	minimum value of Rs. 2 Lakhs, inthe		
	last three financial years.		
4.	Annual turnover details for the		
	supply of water treatment chemi-		
	cals for the last threefinancial		
	years		
5.	ISO certified company (preferred)		
6.	Concurrent commitments of the		
	vendor		
7.	Technical data sheet, write up and		
	material safety and data sheet of		
	the offered chemicals.		

Page 1 of7

Signature of vendor:

DETAILS THAT ARE TO BE INCLUDED IN THE IN TECHNICAL BID

Page 2 of7

Sl. No.	Description	Offer from Vender	Deviation if Any
1.	System details and water analysis after		
	the vendor's study and control		
	parameters to bespecified.		
2.	Chemical treatment programme details		
3.	Chemical consumption, daily, monthly		
	and yearly. The recommended dosage		
	in PPM to be given separately foreach		
	chemical Including calculation details.		
4.	The procedure for change over from the		
	present treatment system to new		
	system.		
5.	The containers of chemicals to be prop-		
	erly identified with item description,		
	quantity, date of manufacture, date of		
	expiry, batchNo.		
	etc.		

Page 2 of7

Signature of vendor:

DETAILS THAT ARE TO BE INCLUDED IN THE IN TECHNICAL BID

Page 3 of7

		. u.g.c c c
6.	All Control Parameters of FEED WATER, BOILER WATER and CONDENSATE shall be speci-	
	·	
	fied. The parameters to be controlled in the	
	system have to be specifically mentionedin-	
	theofferandshouldbe	
	adhered during the treatment pro-	
	gramme.Colloidal Silica in feed water shall be	
	analysed twice in a month.	
7.	Higher requirements of chemicals to	
	maintain the control parameters shall be to	
	the vendor's account	
8.	Performance bank guarantee for maintain-	
	ing the Boiler water control parameters using	
	the recommended dosage ofthechemical-	
	shastobefurnishedbythe	
	vendor.	
9.	The treatment shall have the following	
٥.	Antiscalant, Corrosion inhibitor &	
	·	
	sludge Conditioner	
	2. OxygenScavenger	
	3. Condensate lineprotection	
	4. Feed Water PHBooster (Volatile)	

Page 3 of7

Signature of vendor:

Page 4 of7

			<u> Page 4 of 7</u>
Sl. No.	Description	Agreement by Vender	Deviation if Any
1.	All services and technical assistance shall be Provided by the Vendor till such time the ordered quantity of chemicals is fully used/consumed or 2 years whichever is more.		
2.	c) Service personnel have shall be posted at site to stabilize thetreatment programme		
	d) Your service representative shall visit the boilers on daily basis to monitor the programme (for corrective, preventive actions & routineanalysis) and recommendation dosage.		
3.	Your expert technical personnel from head quarters shall be madeavailable within 24 hrs. as and when required.		
4.	You shall supply all the kits / aids for daily monitoring, controlling and reporting the treatment programme and for monitoringofallcontrolparametersof make up and circulating cooling water.		
6.	All control parameters of Feed Water, Boiler Water and Condensate water shall be analysed by the vendor at site on daily basis to control the parameters and to optimise the chemical consumption and for troubleshooting.		

Page 4 of7

Signature of vendor:

Page 5 of 7

			<u>Page 5 017</u>
Sl. No.	Description	Agreement by Vender	Deviation if Any
7.	The procedure / method for analysis of		
	above parameter shall be given.		
8.	Daily monitoring shall include, monitor-		
	ing of all the control parameters of Feed		
	Water, Boiler Water and Condensate wa-		
	ter and the necessary control measures		
	to be adoptedand		
	quantity of chemicals to be added.		
9.	There shall be no deviation in the con-		
	sumption of chemicals		
	recommended for the treatment to		
	maintain the specified parameters; espe-		
	cially the consumption shouldnot go high		
	with respect to recommended dosage.		
	The chemicals actually consumed in		
	excess of the quantity specifiedinyourof-		
	fershallbeborneby		
	the vendor.		
10.	Training (class room lecture) on general		
	water treatment and subjects specific to		
	this programme is to be arranged at		
	site.		

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Signature of vendor:

Page 6 of 7

Sl. No.	Description	Agreement by Vender	Deviation if Any
11.	All the parameters to be controlled in the system should be adhered during the treatment programme. The dosage of the chemicals offered / recommended should be strictly adhered,tomaintaintherequired parameters.	venuer	
12.	Following Reports shall be submitted c) Weekly reports shall contain the average, maximum, minimum of all control parameters, consumption of chemicals, stock position (stock at site & at Stores), deviation if any, corrective / preventive actionsmade, suggestion if any. d) Monthly reports shall contain trends of all control parameters (Tabular form and graphical), including but not limited to measurement of COC (cycles of concentration), Calcium		
	and Magnesium hardness, Silica, Colloidal Silica in feed water (fortnightly), corrosion evaluation, study, calculation / details, actual consumption vs. projected consumption, chemical stock, analysis, deviation, corrective / preventive actions and improvements including identification & reportingof key performance indicators.		

Signatureofvendor:	Page 6 of7
signatureorvenuor.	rage 0 017

Page 7 of 7

THE FOLLOWING PARAMETERS SHALL BE MAINTAINED						
1. Feed Water - PH - 8.5 - 9.5 5. Condensate - PH 8.0 - 9.0						
2. Boiler Drum Water - PH	10.0 - 11.0					
3. Boiler Drum Water - PO4	25.0 - 40.0	vendor based on their	ter shall be given by the study of the system and			
4. Boiler Drum Water - Hydrazine	0.1 - 1.0	feed water details)				

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Signature of vendor:		
Date:		

ANNEXURE VII

QUANTITY OF CHEMICALS TO BE SUBMITTED ALONG WITH TECHNICAL BID

	QUANTITIO	I CHLIVIICALS I	O DE JODIV		OING WITTI	TECHNICAL D	<u>10</u>
	Chemical Requirement Boiler Water Treatment						
SL.NO	Purpose	Basis of Calculation	Product Name	Dosage	Qty/day	Qty/Month	Qty/year
1	Antiscalant, Corrosion inhibitor & sludge Conditioner	Feed water Consumption 15 Mt/hr.					
2	Oxygen Sca- venger	Feed water Consumption 15 Mt/hr.					
3	Condensate line protec- tion	Steam generation 13 Mt/hr					
4	Feed Water PH Boost- er(Volatile)	Feed water Consumption 15 Mt/hr.					
1. Antiscalant& Corrosion inhibitor sludge conditioner (To be Calculated based on feed water consumption)							
2.Oxyge	2.OxygenScavenger (To be Calculated based on feed waterconsumption)						
3. Condensatelineprotects (To be Calculated based on steamgeneration)							
4. Feed	Water P ^H boos	ster (Volatile). (T	o be Calcula	ated based	d of Feed w	ater Consumpt	tion)

Signature of vendor:

PART C ANNEXURE-I

GENERAL INSTRUCTIONS TO BIDDERS FOR E BID SUBMISSION

Please submit your e-bids under the two bid system conforming to the specifications and the terms and conditions attached as per instructions given below:-

- 1. HOCL has entered into an Agreement with NIC for e procurement through their portal www.eprocure.gov.in. Quotations shall be submitted online on or before the due date and time of closing the tender. The Techno commercial bid containing the Technical specification of the Products and Proof of satisfactorily meeting the Qualifying requirements and all commercial terms should be uploaded as per instructions given in Annexure I A. EMD should be submitted by bank transfer as per details given in clause no 3 Annexure IV .EMD may also be submitted by way of Bank Guarantee from any scheduled banks. The Price bid should be submitted in price bid format (BOQ)given.
- 2. Techno commercial bid shall be opened electronically on specified date and time given in NIT. Bidders can witness the electronic opening of bid .The date and time of opening of the price bids will be intimated to the Technically qualified bidders after evaluation of the Technical bids via emailal erts through the valid email confirmed.
- 3. The bid shall contain as integral part of the same the following compliance statement: "We have read, understood and accepted the terms and conditions of purchase and related documents forming part of this enquiry and agree to supply the goods in compliance with thesame."
- 4. The bids shall be neatly typed in English language with pages consecutively numbered and shall be signed on all pages by authorized persons. Bids shall be free from over writing and all corrections shall be duly attested by the bidder.
- 5. Bidders should carefully study the documents of this enquiry. All terms and conditions set out there in the enquiry shall be binding on the bidders unless conflicting with any terms and conditions expressly stated by HOCL while accepting any bid, in the event of suchacceptance.
- 6. HOCL reserves the right, without assigning any reason whatsoever, to accept or reject any or all bids in part or in full or cancel this enquiry.
- 7. HOCL reserves the right to extend without giving any reason(s) the closing date/time of theenquiry.
- 8. Bids shall be valid for a minimum of 90 days from the due date for receipt and opening of thebids.

9.Purcha	se Preference to Cen	tral Public Sector	Enterprises of	Govt Of Ir	ndia and I	MSMEs
shall be	as per Govt. of India	policyinvogue.				

ANNEXURE IA

Instructions for Online Bid Submission

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

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

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 7) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

ELIGIBILITY CRITERIA FOR PARTICIPATING IN THE BID

- 1. Start up experience in a large chemical/petrochemical plant including pre-cleaning, passivation etc. A minimum two references are required each for both cooling water treatment and boiler watertreatment.
- 2. Experience in treating low hardness and low alkalinity water (cooling water treatment). Vendor should have full-fledged manufacturing and R & D set up.
- 3. Vendor must also have service support facility at Cochin to carry out servicing directly by the Company.
- 4. Vendor must have executed orders of value of 34 lakhs for cooling water treatment works and 12 lakhs for boiler water treatment work in the last threeyears.
- 5. Vendor must have executed at least one single order of value of 8 lakhs for cooling water treatment work and 4 lakh for boiler treatment work in the last three years.
- 6. Vendor shall submit a solvency certificate of a scheduled bank worth minimum 6 lakhs.
- 7. Concurrent commitments of the vendor
- Relevant documents/purchase order copies are to be submitted to substantiate the
 above qualifying requirements. Please note that technical evaluation shall be done on
 the basis of criteria fixed by HOC and HOC reserves the right to accept or reject any or
 all bids without assigning any reasons whatsoever. Vendor should sign and upload the
 required documents given in PART A and PARTB
- Vendors who are already registered with HOCL for the supply of water treatment are not required to furnish credentials against point no4,5&6

ANNEXURE-III

GENERAL CONDITIONS OF TENDER MAT/PUR/32516/19 dated 23.08.2019 due on 29.08.2019

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- 1. <u>VALIDITY OF OFFER</u>: Offer shall be valid for a minimum period of 90 days from the last date of submission stipulated for the tender. The bidder shall not be entitled during the contract period, to revise the rate or withdraw from the contract or vary any of the tender conditions without the consent of HOCL inwriting.
- 2. <u>SUBMISSIONOFBIDS</u>: Bids shall be uploaded as per the instructions given in Annexure I& IA.
- 3. <u>EARNEST MONEY DEPOSIT</u> (EMD): A refundable EMD of Rs.12000/- to be submitted along with the technical bid. EMD may be submitted in the form of Bank transfer through our banker M/s State Bank Of India, Ambalamedu Branch, A/c No:10342163665;IFS Code:SBIN0001108. Details of bank transfer should be indicated in your technical offer. EMD may also be submitted by way of Bank Guarantee from any scheduled banks .EMD of the successful tender may be adjusted against the security Deposit payable. EMD of unsuccessful bidder will be returned after finalization of the tender. EMD of a tenderer shall be forfeited if he withdraws or amends his tender or impairs or derogates from the tender in any respect within the validity period of thetender.
 - PSUs and Vendors registered with MSME need not submit EMD, but have to submit valid documentary proof like NSIC/UAM certificate etc along with the Techno-commercial bid.
- 4. <u>Security Deposit</u>: Successful bidder will have to pay a Security deposit of 5% of the order value towards satisfactory performance of the contract. SD has to be submitted by way of Bank Guarantee from a Scheduled bank within 21 days of placement of Order. SD will be forfeited in the event of any breach of contract by the supplier. SD will be refunded to the contractor within 60 days of completion of contract. PSU s are exempted from payment of Security Deposit. Also MSME Vendors registered with NSIC are exempted from SD up-to the monetary limit mentioned in the certificate. This guarantee should be valid for 6 months beyond the expiry of the contract period and should be submitted within 15 days of placing the purchase order.
- 5. <u>RIGHTTOREJECTABID</u>:HOCLreservestherighttorejectanybidduetoreasonssuch as a) Vendor not following above bidding procedures (b) Vendor not being technically acceptable to HOCL (c) Not enclosing EMD with the techno commercial bid or EMD paid being lesser than the stipulated amount (d) Vendor not agreeing with the general conditions of the tender. (e) Not enclosing any partic-
- ular documents asked for (f) Any other valid reason

 6. <u>PRICE</u>: The price quoted shall be for delivery at our factory at Ambalamugal, Ernakulam District, Kerala state. The price shall be quoted in detail as per statement given in Appexure V. The price quoted by the
- state. The price shall be quoted in detail as per statement given in Annexure V.The price quoted by the vendor shall remain firm during the period of contract.

 7. BOQ :Bidders are requested to note that they should necessarily submit their financial bids in the format
- provided and no other format is acceptable .If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders.Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder).No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
- 8. <u>PAYMENT TERMS</u>: Payment shall be released by HOCL within 30 days of receipt and acceptance of the material at HOCLsite.

- 9. <u>INSURANCE</u>: HOCL shall arrange the transit insurance for the materials. However, thevendor shall promptly inform HOCL regarding despatches for arranging insurance. The transporter engaged should have necessary public liability insurancecoverage.
- 10. <u>OPENING OF BIDS</u>: Techno commercial bids will be opened electronically at 2.00 pm on 30.08.2019. HOCL, after evaluation of the techno commercial bids, will subsequently inform all those technically acceptable vendors regarding the date and time of opening of the price bids.
- 11. <u>DISPUTES</u>:: In the event of a contract being executed, all cases of disputes between seller and buyer shall be settled through arbitration as per Indian arbitration and Conciliation act 1996 or any amendments from time to time. The decision of the arbitration shall be final and binding on both theparties.
- 12. <u>PURCHASE/PRICEPREFERANCE</u>:Purchase/PricePreferenceoranyotherconcessions applicable for SSI Units /PSUs will be as per latest Government Of India Directives. For availing this benefit, the bidder should make their claim in the Technical Bids itself and enclose necessary documentary evidence to prove their eligibility.
- 13. <u>PERIOD OFCONTRACT</u>The contract for supply of chemicals shall be for a period of 2 years. No guarantee can be given about the exact quantity of chemicals that will be lifted from you. The chemical treatment programme will have to be started as soon as the tender isfinalised and the supply of chemicals will have to be effected as soon as the letter of intent is placed. The vendorshallcarrysufficientinventoryof-chemicalsatCochintomeetthedemandsintime. Though the contract is for a period of 2 years. The work order will be initially awarded for a period of 1 year. The performance will be reviewed after one year and if found satisfactory the contract will be renewed for next year.
- 14. <u>DELIVERY:</u> The delivery schedule shall be given by HOCL and you shall be responsible for arranging supplies asperthes chedule. In case the supplier fails to deliver the consignment within the period prescribed, HOCL shall be entitled to recover from supplier's pending bills against the order or from any other-bills apenalty of ½% of the price of the goods in arrears perweek at discretion of the HOC subject to maximum of 5%. Technical Assistance shall be offered till such time the ordered quantity of chemicals is fully used (consumed) or 2 years which ever is more.
 - At present the treatment programme is indented for a period of 2 years. Since we want to start the chemical treatment programme immediately on finalization of tender, the supply of chemical should be effected immediately on placement of the Letter of Intent and hence the chemicals should be available ex-stock preferably at Cochin. Therefore, the tenderer should indicate their best firm delivery time in the offer. Also, the prices should be firm for the above said period. Vendor has to take utmost care that there is no stock out situation. Stock out situation will be viewed very seriously.
- 15. <u>TERMINATION OFORDER:</u> The order is subject to termination if the chemicals fail in giving the desired performance parameters agreed upon or if you fail to supply items as per delivery schedule agreed. In such case the performance guarantee will be invoked and HOCL shall make alternate arrangements to carry out the work at the risk and cost of failedsupplier.

TECHNICAL BID FORMAT

(Techno commercial Bid should contain the following details which must be uploaded in the NIC website in pdf format)

- 1. Commercial Terms as per format given in tender term (ANNEXURE-VI PART C)
- 2.Required EMD bank transfer details.
- 3. Detailed Technical specification of the Chemical offered as per PART A and PARTB
- 4. Proof of satisfactorily meeting all the Eligibility criteria Conditions given in Annexure-II
- 5. Signed copy of the terms and conditions of the enquiry as given in Annexure-III
- 6. Un priced price bid format

COOLING WATER & BOILER WATER TREATMENT ANNEXURE – V PRICE BID FORMAT- AGAINST TENDER NO.MAT/PUR/32516/19

a) Quantity (total quantity required for 12 months : to be mentioned in respective coloumn inBOQ) b)Basic Cost of chemical per Kg (for Caustic & Chlorine only quantity to be specified in BOQ) : b) P & F Charges (%) :

(SUPPLY RATE TO BE INCLUSIVE OF SERVICE CHARGES ALSO)

The quantity recommended by technical department will be considered for price evaluation which will be done manually. Contingency chemical's rate to be mentioned in the respective column in BOQ . However the same will not be considered for financial evaluation.

-Annexure VI

Commercial Terms Format

(Please fill up the details mentioned below in your letter head and upload alongwith your bid)
Name and Address of Organization :
Phone & Fax No :
GSTIN:
e-mail id for correspondence :
Contact Person Name and Mobile No:
MSME registration status of bidder: Registered/Non Registered.
EMD Transfer Details :
(If you are an MSME vendor, Pl. upload documentary evidence for same. If proof is not uploaded alongwith bid the same may not be considered)
Payment Term offered.
Terms of delivery offered :
Validity of offer :
Tayor Applicable
Taxes Applicable :
Signature and Stamp