

# र्हिंदुस्तानऑर्गेनिककेमिकल्सलिमिटेड HINDUSTAN ORGANIC CHEMICALS LTD (भारतसरकारकाउद्यम A Government of India Enterprise) अंबलमुगल,कोची AMBALAMUGAL, COCHIN – 682 302 दूरभाष Phone: (0484) 2720911

## MAT/PUR/33305/24

25.06.2024

## Dear Sirs, SUB:- WATER TREATMENT CHEMICALS REF:- TENDER NO.MAT/PUR/33305/24 DT. 25.06.2024

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-tender 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 <u>www.eprocure.gov.in</u>. Approved vendors may please get registered as a vendor with NIC for participating in this tender.

Tender documents are uploaded in HOCL website www.hoclindia.com and www.eprocure.gov.in.

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

# TENDER CLOSING DATE: 09.07.2024 at 02.00 PM TENDER OPENING DATE: 10.07.2023 at 02.30 PM

Thanking you,

Yours faithfully, For Hindustan Organic Chemicals Ltd.

बी बालचन्द्रन B. BALACHANDRAN महा प्रबन्धक (सामग्री) General Manager (Materials) हिंदुस्तान ऑर्गेनिक केमिकल्स लिमिटेड HINDUSTAN ORGANIC CHEMICALS LIMITED (भारत सरकार का उद्यम A Govt.of India Enterprise) अंबलमुगल, कोची, केरल Ambalamugal, Kochi, Kerala-682302 Tel:0484-2727346.

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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, passivation and regular treatment of the cooling water of No.1 cooling tower in our plant at Ambalamugal. Presently we are using the water treatment chemicals supplied by M/s. Chembond Water Technologies Ltd. Please note that in case of a changeover of the chemicals to a new one, we'll not be able to stop the cooling tower and the required 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 cooling tower, heat exchangers etc.

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 270  $M^3$ . Average consumption of makeup water is 55  $M^3$ /Hr. The design bleed off (Blow down + Drift loss) is 22 $M^3$ /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.

#### 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 <mark>1 x10<sup>5</sup>/MI</mark>
- B. SRB to be less than 60 Col/100ml
- C. Iron Bacteria to be less than 5 org/100ml

Service personnel have to be posted at site to stabilize the treatment programme and to 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. Service Personal shall visit our site during shut-down for evaluating the performance of the treatment.

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 are to be submitted as per special instruction (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.

Vendor are advised to visit the plant site and submit their proposal only after extensive plant survey, ascertaining quality of makeup water, circulating water, equipment metallurgy etc.

Service personal shall visit our site during shutdown for evaluating the performance of treatment.

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## PART A - COOLING WATER TREATMENT

#### ANNEXURE - II

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

- A. System details and Water analysis
- B. Chemical Treatment Programme
- C. Chemical Consumption on PPM basis, daily, monthly & yearly consumption of each chemical for evaluation purpose.
- D. Control Parameters.
- 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 each product
- I. Priced Bid Format PART C (ANNEXUREV)

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## 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 cooling towers.
- 2. The type of chemicals indented to be used for the following and its dosage to be given in Technical Bid.
  - Corrosion Inhibitor
  - Dispersant
  - Antiscalant
  - Bio dispersent
  - Non-oxidizing biocides (2 Nos.)minimum out of which one should be 45% glutaraldehyde + Chemicals for generating ClO<sub>2</sub>(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 chlorine for ClO<sub>2</sub>dosing (apart from to 2 non oxidizing biocides) required for the treatment will be supplied by HOCL at free of cost. Vendor shall specify the dosages of 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's account.
- 5. Contingency plan has to detailed in the technical bid for the following
  - a) Hydrocarbon ingress into system
  - b) Chlorination failure
  - c) pH fluctuation
  - d) Lube Oil/grease ingress into system
  - e) High iron content
  - f) High turbidity of Makeup water
  - g) High Chloride of Makeup 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. Your service representative shall be available on daily basis to monitor the programme (for corrective, preventive actions & routine analysis). The vendor should ensure the skill of service representative in condition base analysis and resolve the unexpected incidents in the operating systems.
- 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 equipments and kits/aids for monitoring, dosing, controlling and reporting the treatment programme. 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 makeup and circulating cooling water etc. shall be detailed in your technical bid. Ensure the periodical service and evaluation of fouling monitor, deposit monitor and other test kits.
- d. All control parameters of circulating and make up water to be analyzed by you at site on daily basis to control the parameters and to optimize the chemical consumption and for trouble shooting. The procedure/ method for analysis of above parameters are to be given to us.
- 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 outside approved laboratories)
- f. Vendors shall monitor the cooling water flow rates using Ultra Sonic Flow measurement for all the 46 heat exchangers as Annexure III A.
- g. Reports to be submitted
  - 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 be added.
  - 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 if any.
  - Monthly reports shall contain trends of all control parameters, measurement of COC (cycles of concentration), corrosion study calculation/details, microbiological study, performance of deposit monitor & Bio fouling monitor, 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 performance indicators and all exchanger flow rate measurements.
- h. Training on general water treatment and subjects specific to this programme shall be arranged.

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# <u>ANNEXURE – III A</u>

1	WSN TREATMENT COOLER	WSN TREATMENT COOLER	03.E.001
			06.E.001
2		OXIDISER FEED COOLER	
3	EXTRACTOR FEED COOLER		07.E.001
4	C-001 OVERHEAD CONDENSER	C3-C4 COLUMN-OVERHEAD CONDENSER	101-E-002
5	C 002 OVERHEAD CONDENSER	C3-C3 COLUMN-OVERHEAD CONDENSER	101-E-004
6	C3-C4 STREAM COOLER-A	C3-C4 STREAM COOLER-A	101-Е- 006А
7	HEAD CONDENSOR	HEAD CONDENSOR	28.E.003
8	COOLING TRAP	COOLING TRAP	28.E.006
9	DEPROPANISER OVERHEAD CONDENSER	DEPROPANISER OVERHEAD CONDENSER	E-2004
10	L.P.G PRODUCT COOLER	L.P.G PRODUCT COOLER	E-2005
11	DRAG BENZENE COOLER	DRAG BENZENE COOLER	E-2007
12	RECYCLE COLUMN TRIM CONDENSER	RECYCLE COLUMN TRIM CONDENSER	E-2009
13	CUMENE COLUMN BOTTOM COOLER	CUMENE COLUMN BOTTOM COOLER	E-2011
14	CUMENE COLUMN PRODUCT TRIM COOL-	CUMENE COLUMN PRODUCT TRIM COOL-	E-2013A
15	CUMENE COLUMN PRODUCT TRIM COOL-	CUMENE COLUMN PRODUCT TRIM COOL-	E-2013B
16	COMPRESSOR AFTER COOLER	COMPRESSOR AFTER COOLER	E-2501
17	OXIDISER VENT GAS CODENSOR	OXIDISER VENT GAS CODENSOR	E-2506A
18	OXIDISER VENT GAS CODENSOR	OXIDISER VENT GAS CODENSOR	E-2506B
19	EVAPORATOR PRE-FLASH CONDENSER	EVAPORATOR PRE-FLASH CONDENSER	E-3002
20	EVAPORATOR FLASH CONDENSER	EVAPORATOR FLASH CONDENSER	E-3003A
21	EVAPORATOR FLASH CONDENSER	EVAPORATOR FLASH CONDENSER	E-3003B
22	EVAPORATOR FLASH CONDENSER	EVAPORATOR FLASH CONDENSER	E-3003C
23	EVAPORATOR OVERHEAD CONDENSER	EVAPORATOR OVERHEAD CONDENSER	E-3004A
24	EVAPORATOR OVERHEAD CONDENSER	EVAPORATOR OVERHEAD CONDENSER	E-3004B
25	EVAPORATOR BOTTOM COOLER	EVAPORATOR BOTTOM COOLER	E-3005
26	CONDENSER VENT CONDENSER	CONDENSER VENT CONDENSER	E-3006
20	CLEAVAGE REACTOR COOLER	CLEAVAGE REACTOR COOLER	E-3501A
28	CLEAVAGE REACTOR COOLER		E-3501B
20	DIRECT NEUTRALISATION FEED COOLER	DIRECT NEUTRALISATION FEED COOLER	E-4001A
30	DIRECT NEUTRALISATION FEED COOLER	DIRECT NEUTRALISATION FEED COOLER	E-4001B
30	DIRECT NEUTRALISATION PRODUCT	DIRECT NEUTRALISATION PRODUCT	
31	COOLER	COOLER	E-4002A
32	DIRECT NEUTRALISATION PRODUCT	DIRECT NEUTRALISATION PRODUCT	E-4002B
33	C.A.C OVERHEAD CONDENSER	C.A.C OVERHEAD CONDENSER	E-4502
34	FAC BOTTOM COOLER	FAC BOTTOM COOLER	E-4505A
35	FAC BOTTOM COOLER	FAC BOTTOM COOLER	E-4505B
36	ACETONE PRODUCT COOLER	ACETONE PRODUCT COOLER	E-4506
	F.A.C OVERHEAD CONDENSER	F.A.C OVERHEAD CONDENSER	E-4507A

38	F.A.C OVERHEAD CONDENSER	F.A.C OVERHEAD CONDENSER	E-4507B
39	TAR COLUMN OVER HEAD CONDENSOR	TAR COLUMN OVER HEAD CONDENSOR	E-4510
40	A M S COLUMN OVERHEAD CONDENSOR	A M S COLUMN OVERHEAD CONDENSOR	E-4512
	PHENOL COLUMN OVERHEAD CONDEN-	PHENOL COLUMN OVERHEAD CONDEN-	
41	SER	SER	E-4517
42	HYDROGENATION PRODUCT CONDENSER	HYDROGENATION PRODUCT CONDENSER	E-5003
43	RETURN COLUMN CONDENSER	RETURN COLUMN CONDENSER	E-5502
44	STRIPPER COLUMN CONDENSER	STRIPPER COLUMN CONDENSER	E-5504
45	HOT OIL PUMP OUT COOLER	HOT OIL PUMP OUT COOLER	E-6001
46	AMMONIA CONDENSOR	AMMONIA CONDENSOR	W-2502

Monthly reports shall contain the above exchanger flow rates measurement reports.

## PART A - COOLING WATER TREATMENT

## ANNEXURE - IV - SPECIFICATION OF THE COOLING TOWER NO.1

Circulation rate	5100M <sup>3</sup> /Hr
Hold up volume (sump)+(Piping)	3750M <sup>3</sup>
Hot water temp.(Design)	42 degree C
Cold water temp.(Design)	32 degree C
Delta T degree C(design)	10 degree C
System Metallurgy	SS/Carbon Steel
Evaporation loss	33 M3/Hr (approx)
Cycles of concentration	1.7 to 2.2
Design Blow down +Drift Loss (Total Bleed Off)	22 M³/Hr
Average Make up water quantity	55M³/Hr

- Side stream filter provided
- Chlorination facility provided

## PART A - COOLING WATER TREATMENT

#### <u>ANNEXURE – V</u>

#### SOURCE OF COOLING WATER MAKE UP

# I. <u>(PTP WATER)</u>

РН	: 6.5 – 7.5
M-alkalinity	: 15.5 ppm
Hardness	: 17ppm
Chloride	: 10ppm
Iron	: 0.2 ppm
TDS	: 67ppm

III. PARAMETER TO BE MAINTAINED BY THE VENDOR				
1. Cooling Water - PO4 <sup>3-</sup> 8 - 12         2. Cooling water - P <sup>H</sup> 6.5 - 7.2				
(Other Control Parameter is to be given by the vendor based on their study of the system and feed water details)				

# II. ANOTHER SOURCE OF COOLING WATER MAKE UP (POND WATER)-(50% of Total make-up quantity)

	<u>Min.</u>	<u>Max.</u>
PH	4.0	7.5
TDS	730 PPM	925 PPM
* Fe	0.13 PPM	4.0 PPM
Chloride	75 PPM	105 PPM
Hardness	28 PPM	100 PPM
Turbidity	1.2 NTU	8.1 NTU
Conductivity	936µmhos/cm	1250µmhos/cm
COD	8 PPM	30PPM

Sulphate	200 PPM	650 PPM
Nitrate	1PPM	5PPM

\* During some period **Fe** content is found to be on higher side (up to 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.	Description	Submitted by Vendor	Deviation if Any
No.			
Relevar	nt documents / purchase order copies to	o be provided for all Qu	alifying requirements
listed b	elow:		
1.	Start up experience in a large chemi-		
	cal / 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 In-		
	dia and service support facility at Ko-		
	chi and carryout servicing directly		
	by the company.		
4.	There should be at least one order for		
	cooling water treatment with a min-		
	imum 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 three financial years		
6.	ISO certified company (preferred)		
7.	Concurrent commitments of the ven-		
	dor		
9.	Technical data sheet, write up and		
	material safety and data sheet of		
	the offered chemicals.		
10	Vendors shall have experience in sup-		
	plying cooling water treatment chemi-		
	cals and effectively treat-		
	ing/Monitoring of treatment program		
	for cooling towers that operates with		
	low hardness and low alkalinity		
	Makeup/circulation water systems of		

not less than 5000 M3/Hr or more for	
not less than two years of operation in	
the last five years. Vendors shall sub-	
mit successful experience/Completion	
/Performance certificate along with	
documentary evidence for work order	
as a proof of carrying out the treat-	
ment program.	

Vendors having their own manufacturing facilities with all obligatory certifications like ISO 9001,14001, and OHSAS 45001 for the integrated Quality management System shall be preferred.

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Signature of vendor:

# DETAILS THAT ARE TO BE INCLUDED IN THE IN TECHNICAL BID

	DETAILS THAT ARE TO BE INCLUD		Page 2 of7
SI. No	Description	Offer from Vender	Deviation if Any
1.	System details and water analysis after the ven- dor's study.		
2.	Chemical treatment programme details		
3.	Chemical consumption, daily, monthly and yearly. The recommended dosage in PPM to be given separately for each chemical Including calculation details.		
4.	The procedure for change over from the present treatment system to new system without stop-page of cooling tower.		
5.	Exact quantity of extra chemicals required for smooth change over to the new system		
6.	<ol> <li>The treatment shall have the following</li> <li>Corrosion Inhibitor</li> <li>Bio-Dispersant</li> <li>Mineral-Dispersant</li> <li>Anti-scalant &amp;Antifoulant</li> <li>Non-oxidizing biocides (2 Nos.) minimum out of which one should be 45%glutaraldehyde</li> <li>Chemicals required for generation of ClO<sub>2</sub> generation</li> <li>Chemicals/biocides required in the absence of ClO<sub>2</sub> dosing.</li> </ol>		

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Signature of vendor:

## DETAILS THAT ARE TO BE INCLUDED IN THE IN TECHNICAL BID

	DETAILS THAT ARE TO BE INCLUI		Page 3 of7
SI. 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 during the Treatment programme.		
8.	<ul> <li>Contingency plan has to be detailed in the technical bid for the following <ul> <li>a) Hydrocarbon ingress into system</li> <li>b) Chlorination failure</li> <li>c) pH fluctuation</li> <li>d) Lube Oil/grease ingress into system</li> <li>e) High iron content</li> <li>f) High turbidity of Makeup water.</li> </ul> </li> </ul>		
9.	<ul> <li>g) High Chloride in Makeup water.</li> <li>Vendor shall specify the dosages of caustic soda and chlorine very clearly. Caustic soda and Chlo- rine required for the treatment will be supplied by HOCL free of cost.</li> </ul>		
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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Signature of vendor:

			<u>Page 4 of7</u>
SI.	Description	Agreement	Deviation if Any
No.		by Vender	
1.	All services and technical assistance shall be Provided by		
	the Vendor till such time the ordered quantity of chemi-		
	cals is fully used or 2 years whichever is more.		
2.	a) Service personnel have shall be posted at site to stabi-		
	lize the treatment programme		
	b) Your service representative shall visit the cooling tower		
	on daily basis to monitor the programme (for correc-		
	tive, preventive actions & routine analysis) and rec-		
	ommendation 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 (min-		
	imum 3 dosing pumps) and aids for dosing, controlling		
	the treatment programme.		
5.	You shall supply and maintain all the monitoring equip-		
	ments and kits / aids for daily monitoring, controlling and		
	reporting the treatment programme and for monitoring		
	of all control parameters of makeup and circulating cool-		
	ing water.		
	The items shall include		
	1. Corrosion monitor		
	2. Fouling monitor		
	3. Deposit monitor		
	4. CIO <sub>2</sub> generator using chlorinated water.(Party shall visit		
	site to ascertain the existing chlorination system for com-		
	patibility with your ClO <sub>2</sub> generation.)		
	5. Chemical analysis Kits including all		
	reagents and Microbe detection test slides		
	6. All Glass Ware		

Signature of vendor:

			<u>Page 5 of7</u>
SI. No.	Description	Agreement by Vender	Deviation if Any
6.	All control parameters including ORP of circulating and make up water shall be analyzed by the vendor at site on daily basis to control the parameters and to optimize the chemical consumption and for troubleshooting.		
7.	The procedure / method for analysis of above parameter shall be given.		
8.	<ul> <li>a) Microbiological analysis shall be done fortnightly. Mi- crobiological analysis for TVC, SRB &amp; 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)</li> </ul>		
	b) Corrosion evaluation shall be done monthly.		
9.	Daily monitoring shall include, monitoring of all the con- trol parameters of circulating cooling water and make up water and control measures to be adopted and quan- tity of chemicals to be added.		
10.	There shall be no deviation in the consumption of chemi- cals 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 vendor.		
11.	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 of7
SI.	Description	Agreement	Deviation if Any
No.		by	
		Vender	
12.	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 strict-		
	ly adhered, to maintain the required parameters.		
13.	Following Reports shall be submitted		
	a) 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 actions		
	made, suggestion if any.		
	b) Monthly reports shall contain trends of all control		
	parameters (Tabular form and graphical), measure-		
	ment of COC (cycles of concentration), corrosion		
	evaluation, ORP study, calculation / details, mi-		
	crobiological study (Results of TVC, SRB & Iron Bac-		
	teria), actual consumption vs. projected consump-		
	tion, chemical stock, analysis, deviation, corrective /		
	preventive actions and improvements including		
	identification and arresting the system leakages to		
	maintain/improve the cycle of concentration & key		
	performance indicators and all exchanger flow rate		
	measurements.		

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Signature of vendor:

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SI.	Description	Agreement	Deviation if Any
No.		by	
		Vender	
14.	Guarantee		
	a) The corrosion on MS Coupon shall not exceed 3MPY.		
	b) The corrosion coupons shall 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.		
	d) TVC to be less than 1 x10 <sup>5</sup> / 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 maintained within lim-		
	its with the recommended dosages of respective chem-		
	icals.		

PARAMETER TO BE MAINTAINED BY THE VENDOR								
1. Circulating Water - P <sup>H</sup> -	1. Circulating Water - $P^{H}$ - 6.8 - 7.2 Circulating Water - $PO_4^{3-}$ 8.0 - 12.0							
(Other Control Parameters	(Other Control Parameters are to be given by the vendor based on their study of the system							
and Make Up water details)								

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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- Dispersant			
	d) Antiscalant			
	e) Antifoulant			
	f) Non-oxidising biocide - 1			
	g) Non-oxidising biocide – 2 (shall be glutaraldehyde 45%)			
	<ul> <li>h) Chemical required for gen- erating ClO<sub>2</sub> using chlorinat- ed water</li> </ul>			
	Contingency Chemicals		-	(Basis of Addition)
	(a) Hydrocarbon ingress			
	(b) Chlorination failure			
	(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 M $^3$ /HR. AND HOLD UP VOLUME OF 3750 M $^3$ .

Signature of vendor:

# ANNEXURE VII ( 2 of 2)

SI.	Description	Name of	Recommended	Daily	Monthly	Yearly
No.		Chemical	Dosage(PPM)	consumption	consumption	consumption
	Regular Chemicals					
	a) Corrosion Inhib-					
	itor					
	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 <sub>2</sub> using chlorinated water					
	i)Caustic Soda	(Will be				
	supplied by HOC	•				
	j) Chlorine (Will be		Reqd. Flow	No. of Hrs		
	by HOCL) –Chlor	• •	(Kg/Hr)	Reqd.		
	water for usein(		(\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Nequ.		
	erator	CIO2 Bell-				
	erator					

#### QUANTITY OF CHEMICALS TO BE SUBMITTED ALONG WITH TECHNICAL BID

(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. Chembond Water Technologies 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 are given in ANNEXURE IV enclosed herewith.

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 & instruments supplied shall be accompanied with test and calibration certificates. The containers of chemicals to be properly identified with item description, quantity, date of manufacture, date of expiry, Batch number etc. The quantity of chemicals required for wet preservation shall be considered separately.
- 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 vendors account.
- 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 the parameters.
- 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 Annexurell).
- 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 Technical Bid.
- h) The chemical requirements are to be given by the vendor in the format given in ANNEXURE VII. This is to be enclosed in the Technical Bid.

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 your study.
- b. Chemical treatment programme.
- c. Chemical Consumption / recommended dosage per day.
- d. Boiler water Control Parameters
- e. Technical services offered. (Such as training, optimization of dosage, expertise in monitoring and control.)
- f. Qualifying Requirements as listed below
- g. Technical data sheet and Material safety data sheet of all offered chemicals.
- 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. Training on general water treatment to be arranged by you.
- j. Monthly monitoring of reports to be submitted to Engineer-in-charge
- k. Weekly monitoring of system to be done by you.
- I. Priced Bid Format PARTC (ANNEXUREV)

\*\*\*\*\*

# PART B - BOILER WATER TREATMENT CHEMICAL 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 BOILERS.
- 2. The type of chemicals indented to be used for the following and its dosage to be given in Technical Bid.
  - Antiscalant, Corrosion inhibitor & sludge Conditioner
  - Oxygen Scavenger
  - Condensate line protection
  - Feed Water PH Booster (volatile)
- 3. Copy of MSDS of all chemicals offered. All the chemicals shall be bio degradable 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 (for corrective, 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 analyzed twice in a month.
  - d. All control parameters of circulating and make up water to be analyzed by you at site on daily basis to control the parameters and to optimize the chemical consumption and for trouble shooting. The procedure/ method for analysis of above parameters are to be given to us.
  - e. Reports to be submitted
    - 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 be added.
    - 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 if any.

- 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. Training on general water treatment and subjects specific to this programme shall be arranged.

\*\*\*\*\*\*\*

# PART B - BOILER WATER TREATMENT CHEMICALS

## ANNEXURE IV

#### **SPECIFICATION OF BOILERS**

No .of Boilers	: 3 Boilers (2 main Boilers of which one is standby + 1 Package Boiler
Туре	: BI drum, natural circulation, oil fired, Water Tube Boilers
Capacity	: 24.25T/Hr
Pressure	: 20Kg/cm <sup>2</sup>
Steam Quality	: Dry saturated
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 <sup>H</sup>	P <sup>H</sup>	Р <sup>н</sup> (5 -6.8)	P <sup>H</sup>
Conductivity (Mhos)	Conductivity (Mhos)	Conductivity (0.7 - 1.57) (Mhos)	Conductivity (Mhos)
Total Phosphate as PO <sub>4</sub> PPM	-	-	-
Iron as Fe PPM	Iron as Fe PPM	Iron (0.02) PPM	Iron as Fe PPM
Silica as SiO <sub>2</sub> PPM	Silica as SiO <sub>2</sub> PPM	Silica (0.21) as SiO <sub>2PPM</sub>	-
Hydrazine $N_2H_4$ PPM	Hydrazine as N <sub>2</sub> H <sub>4</sub> PPM	-	-
P Alkalinity as CaCo <sub>3</sub> PPM	-	-	-
M Alkalinity as CaCo3 PPM	-	-	-
TDS PPM	-		
TH as CaCO <sub>3</sub> PPM	TH as CaCO₃ 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 BE MAINTAINED BY THE VENDOR					
1. Feed Water - P <sup>H</sup> -	8.5 - 9.5	5. Condensate - P <sup>H</sup>	8.0 - 9.0		
2. Boiler Drum Water - P <sup>H</sup>	10.0 - 11.0	(Others Construct Demonst	aton in the last sizes have the same		
3. Boiler Drum Water - PO <sub>4</sub>	25.0 - 40.0	Other Control Parameter is to be given by the vertex dor based on their study of the system and feed wa			
4. Boiler Drum Water - Hydra- zine	0.1 - 1.0	details)			

# CHECK LIST FOR BOILER WATER TREATMENT ANNEXURE VI

# QUALIFYING REQUIREMENTS TO BE SUBMITTED ALONG WITH TECHNICAL BID

			<u>Page 1 of7</u>
SI. No.	Description	Submitted by Vender	Deviation if Any
Relevar listed b	nt documents / purchase order copies elow:	to be provided for all Qua	alifying requirements
1.	Start up experience in a large chemi- cal / petrochemical plant of BOILERS of minimum similar capacity. A min- imum of two references are required		
2.	Vendor should have fully 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, in the last three financial years.		
4.	Annual turnover details for the sup- ply of water treatment chemicals for the last three financial 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.		

<u>Page 1 of7</u>

# DETAILS THAT ARE TO BE INCLUDED IN THE IN TECHNICAL BID

## Page 2 of7

SI. No.	Description	Offer from Vender	Deviation if Any
1.	System details and water analysis after the vendor's study and control		
	parameters to be specified.		
2.	Chemical treatment programme details		
3.	Chemical consumption, daily, monthly and yearly. The recommended dosage in PPM to be given separately for each 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 properly identified with item description, quantity, date of manufacture, date of expiry, batch No. etc.		

<u>Page 2 of7</u>

# DETAILS THAT ARE TO BE INCLUDED IN THE IN TECHNICAL BID

#### Page 3 of7

<ul> <li>All Control Parameters of FEED WATER, BOIL- ER WATER and CONDENSATE shall be speci- fied. The parameters to be controlled in the system have to be specifically mentioned in the offer and should be adhered during the treatment programme. Colloidal Silica in feed water shall be analyzed twice in a month.</li> <li>Higher requirements of chemicals to maintain the control parameters shall be to the vendor's account</li> <li>Performance bank guarantee for maintaining the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.</li> <li>The treatment shall have the following</li> <li>Antiscalant, Corrosion inhibitor &amp; sludge Conditioner</li> <li>Oxygen Scavenger</li> <li>Condensate line protection</li> <li>Feed Water PH Booster (Volatile)</li> </ul>		
fied. The parameters to be controlled in the system have to be specifically mentioned in the offer and should be adhered during the treatment programme. Colloidal Silica in feed water shall be analyzed twice in a month.Image: Colloidal Silica in feed water shall be analyzed twice in a month.7.Higher requirements of chemicals to maintain the control parameters shall be to the vendor's accountImage: Colloidal Silica source8.Performance bank guarantee for maintaining the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.Image: Colloidal Silica source9.The treatment shall have the following 1. Antiscalant, Corrosion inhibitor & sludge Conditioner 2. Oxygen Scavenger 3. Condensate line protectionImage: Colloidal Silica source	6.	All Control Parameters of FEED WATER, BOIL-
system have to be specifically mentioned in the offer and should be adhered during the treatment programme. Colloidal Silica in feed water shall be analyzed twice in a month.7.Higher requirements of chemicals to maintain the control parameters shall be to the vendor's account8.Performance bank guarantee for maintaining the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.9.The treatment shall have the following 1. Antiscalant, Corrosion inhibitor & sludge Conditioner 2. Oxygen Scavenger 3. Condensate line protection		ER WATER and CONDENSATE shall be speci-
the offer and should be adhered during the treatment programme. Colloidal Silica in feed water shall be analyzed twice in a month.7.Higher requirements of chemicals to maintain the control parameters shall be to the vendor's account8.Performance bank guarantee for maintaining the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.9.The treatment shall have the following 1. Antiscalant, Corrosion inhibitor & sludge Conditioner 2. Oxygen Scavenger 3. Condensate line protection		fied. The parameters to be controlled in the
treatment programme. Colloidal Silica in feed water shall be analyzed twice in a month.7.Higher requirements of chemicals to maintain the control parameters shall be to the vendor's account8.Performance bank guarantee for maintaining the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.9.The treatment shall have the following 1. Antiscalant, Corrosion inhibitor & sludge Conditioner 2. Oxygen Scavenger 3. Condensate line protection		system have to be specifically mentioned in
water shall be analyzed twice in a month.Image: Constant of the state o		the offer and should be adhered during the
<ul> <li>7. Higher requirements of chemicals to maintain the control parameters shall be to the vendor's account</li> <li>8. Performance bank guarantee for maintaining the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.</li> <li>9. The treatment shall have the following <ol> <li>Antiscalant, Corrosion inhibitor &amp; sludge Conditioner</li> <li>Oxygen Scavenger</li> <li>Condensate line protection</li> </ol> </li> </ul>		treatment programme. Colloidal Silica in feed
<ul> <li>maintain the control parameters shall be to the vendor's account</li> <li>8. Performance bank guarantee for maintaining the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.</li> <li>9. The treatment shall have the following <ol> <li>Antiscalant, Corrosion inhibitor &amp; sludge Conditioner</li> <li>Oxygen Scavenger</li> <li>Condensate line protection</li> </ol> </li> </ul>		water shall be analyzed twice in a month.
the vendor's accountendor's account8.Performance bank guarantee for maintaining the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.endor9.The treatment shall have the following 1. Antiscalant, Corrosion inhibitor & sludge Conditioner 2. Oxygen Scavenger 3. Condensate line protectionendor	7.	Higher requirements of chemicals to
<ul> <li>8. Performance bank guarantee for maintaining the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.</li> <li>9. The treatment shall have the following <ol> <li>Antiscalant, Corrosion inhibitor &amp; sludge Conditioner</li> <li>Oxygen Scavenger</li> <li>Condensate line protection</li> </ol> </li> </ul>		maintain the control parameters shall be to
the Boiler water control parameters using the recommended dosage of the chemicals has to be furnished by the vendor.9.The treatment shall have the following 1. Antiscalant, Corrosion inhibitor & sludge Conditioner 2. Oxygen Scavenger 3. Condensate line protection		the vendor's account
<ul> <li>recommended dosage of the chemicals has to be furnished by the vendor.</li> <li>9. The treatment shall have the following <ol> <li>Antiscalant, Corrosion inhibitor &amp; sludge Conditioner</li> <li>Oxygen Scavenger</li> <li>Condensate line protection</li> </ol> </li> </ul>	8.	Performance bank guarantee for maintaining
be furnished by the vendor.9.The treatment shall have the following 1. Antiscalant, Corrosion inhibitor & sludge Conditioner 2. Oxygen Scavenger 3. Condensate line protection		the Boiler water control parameters using the
9.       The treatment shall have the following         1.       Antiscalant, Corrosion inhibitor & sludge Conditioner         2.       Oxygen Scavenger         3.       Condensate line protection		recommended dosage of the chemicals has to
<ol> <li>Antiscalant, Corrosion inhibitor &amp; sludge Conditioner</li> <li>Oxygen Scavenger</li> <li>Condensate line protection</li> </ol>		be furnished by the vendor.
sludge Conditioner 2. Oxygen Scavenger 3. Condensate line protection	9.	The treatment shall have the following
<ol> <li>Oxygen Scavenger</li> <li>Condensate line protection</li> </ol>		1. Antiscalant, Corrosion inhibitor &
3. Condensate line protection		sludge Conditioner
		2. Oxygen Scavenger
4. Feed Water PH Booster (Volatile)		3. Condensate line protection
		4. Feed Water PH Booster (Volatile)

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#### Page 4 of7

SI. No.	Description	Agreement by	Deviation if Any
		Vender	
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 the treatment		
	programme		
	d) Your service representative shall visit the		
	boilers on daily basis to monitor the		
	programme (for corrective, preventive		
	actions & routine analysis) and recom-		
	mendation dosage.		
3.	Your expert technical personnel from head		
	quarters shall be made available 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 monitoring		
	of all control parameters of feed water,		
	Boiler water and condensate water		
6.	All control parameters of Feed Water,		
	Boiler Water and Condensate water shall		
	be analyzed by the vendor at site on daily		
	basis to control the parameters and to op-		
	timize the chemical consumption and for		
	troubleshooting.		

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#### <u>Page 5 of7</u>

SI. No.	Description	Agreement by	Deviation if Any
		Vender	
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 adopted and 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 should not go		
	high with respect to recommended dos-		
	age. The chemicals actually consumed in		
	excess of the quantity specified in your		
	offer shall be borne by the vendor.		
10.	Training (class room lecture) on general		
	water treatment and subjects specific to		
	this programme is to be arranged at site.		
			Page 5 of
			Page 5

#### Page 6 of7

SI. 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, to maintain the required parameters.		
12.	Following Reports shall be submitted		
	c) Weekly reports shall contain the av- erage, maximum, minimum of all control parameters, consumption of chemicals, stock position (stock at site & at Stores), deviation if any, corrective / preventive actions made, 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 (cy- cles of concentration), Calcium and Magnesium hardness, Silica, Colloidal Silica in feed water (fortnightly), actu- al consumption vs. projected consumption, chemical stock, analy- sis, deviation, corrective / preventive actions and improvements including identification & reporting of key per- formance indicators.		

Signature of vendor:

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## <u>Page 7 of7</u>

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	(Other Control Parameter shall be given by th vendor based on their study of the system an feed water details)			
4. Boiler Drum Water - Hydrazine	0.1 - 1.0				

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Signature of vendor:

## ANNEXURE VII

# QUANTITY OF CHEMICALS TO BE SUBMITTED ALONG WITH TECHNICAL BID

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 Scavenger	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 wa- ter consumption)							
2.OxygenScavenger (To be Calculated based on feed water consumption)							
3. Cond	3. Condensate line protects (To be Calculated based on steam generation)						
4. Feed	4. Feed Water P <sup>H</sup> booster (Volatile). (To be Calculated based of Feed water Consumption)						

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 portalwww.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.
- 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 evaluationoftheTechnicalbidsviaemailalertsthroughthevalidemailconfirmed.
- 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 the same."
- 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 such acceptance.
- 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 the enquiry.
- 8. Bids shall be valid for a minimum of 90 days from the due date for receipt and opening of the bids.
- 9. Purchase Preference to Central Public Sector Enterprises of Govt Of India and MSMEs shall be as per Govt. of India policy in vogue.

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# ANNEXURE- I A 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.

#### Contact Person (National Informatics Centre)

Mr.Midhun Babu Sr. Systems Analyst - HOCL Mobile No. 8921387812, 8547196394

### **HOCL Work Co-ordinator**

- 1. Mr. Mangesh V Shahsane GM (Mechanical / Utility) Mobile No.9969186592/ 0484 – 2727440
- 2. Mr. Jishnu M K Sr.Mechanical Engineer Mobile No.9947278381/ 0484 – 2727390

## **ANNEXURE II**

## **ELIGIBILITY CRITERIA FOR PARTICIPATING IN THE BID**

- 1. Offers from from M/s Chembond Water Technologies Ltd, M/s Ion Exchange, M/s Thermax & M/s Nalco Water India Ltd will only be considered.
- Only manufacturers or their authorized dealers having sound financial capability and who can supply the chemicals as per the scope enclosed should submit the offers. Vendors who have been blacklisted in the past by any PSU shall not submit the bids.
- 3. Vendor should have sufficient technical and commercial capability to supply the materials as per HOCL requirements'.
- 4. 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 water treatment.
- 5. Experience in treating low hardness and low alkalinity water (cooling water treatment). Vendor should have full-fledged manufacturing and R & D set up.
- 6. Vendor must also have service support facility at Cochin to carry out servicing directly by the Company.
- 7. Vendor must have executed orders of value of 1.14 Crores for the similar water treatment supply contracts for cooling towers and boiler in the last three years.
- 8. Vendor must have executed at least one single order of value of 28.58 lakhs for the similar water treatment supply contracts for cooling towers and boiler in the last three years.
- 9. Vendor should submit balance sheet (Profit & Loss) for last three financial years.
- 10. Vendor should upload the satisfactory performance certificate/ Purchase Order copies from renowned customer.
- 11. Documentary evidence for all the above parameters is to be furnished by the bidder along with the Technical bid. However, the existing registered vendors of HOCL (for the said item) who were enlisted after ascertaining the above parameters may be exempted from furnishing the details against point no. 3,4,5 and 6.
- 12. MSME vendors as well as starts ups are eligible for relaxation on condition of prior turn over and prior experience subject to meeting of quality and technical specifications.
- 13. Any bidder from a country which shares a land border with India will be eligible to bid, only if the bidder is registered with the Department for promotion of Industry and Internal Trade (DPIIT). Such bidders should submit the valid copy of registration certificate along with tender.

- 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.
- 8. Technical offers submitted by existing suppliers will be evaluated considering the past Performance of the chemicals supplied by them to HOCL.

## ANNEXURE-III

## **GENERAL CONDITIONS OF TENDER MAT/PUR/33094/23**

## Page 1 of 2

- <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 in writing.
- 2. <u>SUBMISSION OF BIDS</u>: Bids shall be uploaded as per the instructions given in Annexure I & IA.
- 3. <u>EARNEST MONEY DEPOSIT</u> (EMD): Bid shall be accompanied with a refundable EMD of Rs.28,580/-along with the technical bid. EMD may be submitted in the form of NEFT / RTGS to Hindustan Organic Chemicals Ltd., through our banker M/s.State bank of India, Branch : CBD BELAPUR, A/c. No. 00000037881840330, IFSC: SBIN0013551. EMD may also be submitted by way of Bank Guarantee from any Nationalized/ Scheduled bank. Details of bank transfer should be indicated in your offer. EMD of the successful tender may be adjusted against the PBG payable. 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 the tender.

HOCL Vendors who have already supplied the material to HOCL, PSUs and Vendors registered with MSE need not submit EMD. MSE vendors have to submit valid NSIC registration/UAM/exemption certificate along with the Techno-commercial bid. Under MSE category, only manufacturers for goods are eligible for exemption from EMD. Traders are excluded from the purview of this

- 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. PSUs 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>RIGHT TO REJECT A BID</u>:HOCL reserves the right to reject any bid due to reasons such as

a) Vendor not following above bidding procedures (b) Vendor not being technically acceptable to HOCL (c) Not enclosing BID Security Declaration with the techno commercial bid (d) Vendor not agreeing with the general conditions of the tender. (e) Not enclosing any particular documents asked for (f) Any other valid reason including point No.8 as mentioned in Annexure III

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 Annexure V. The price quoted by the vendor shall remain firm during the period of contract.

- 7. <u>BOQ</u> :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 colored (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 HOCL site.
- 9. <u>INSURANCE</u>: HOCL shall arrange the transit insurance for the materials.. However, the vendor shall promptly inform HOCL regarding dispatches for arranging insurance. The transporter engaged should have necessary public liability insurance coverage.
- <u>OPENING OF BIDS</u>: Techno commercial bids will be opened electronically at 2.00 pm on 10.08.2023. 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. ARBITRATION OF DISPUTES: All disputes, differences, questions and claims arising out of, under or touching upon this Tender /Agreement/ Purchase Order/ Work Order shall be settled amicably between the parties through mutual discussion and failing that, such disputes, difference, questions or claims shall be referred for resolution through arbitration to the India International Arbitration Centre or a Sole Arbitrator to be appointed by the Chairman-cum-Managing Director of HOCL and the award of Arbitration shall be final and binding on the parties. The seat of the Arbitration shall be at Kochi, Kerala, India and the proceedings of the arbitration shall be held at Kochi, Kerala, India in accordance with the India International Arbitration Centre Act 2019 / Indian Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof for the time being in force. When the contract is with foreign vendor, the vendor has the option to choose arbitration in accordance with the provisions of The India International Arbitration Centre Act 2019 / The Indian Arbitration and Conciliation Act, 1996 / UNCITRAL (United Nations Commission on International Trade Law Arbitration) Arbitration Rules."
- **12.** <u>JURISDICTION</u>:- All questions, disputes or differences arising under or in connection with this contract shall be subject to the exclusive jurisdiction of the courts in Ernakulam, Kerala, India only.
- 13. <u>PURCHASE/PRICE PREFERANCE</u>: Purchase/Price Preference or any other concessions 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.
- 14. <u>PERIOD OF CONTRACT</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 is finalized and the supply of chemicals

will have to be effected as soon as the letter of intent is placed. The vendor shall carry sufficient inventory of chemicals at Cochin to meet the demands in time. 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.

Note: The contract can be extended further up to a period of 1 year if the performance found to be satisfactory at the same rates, terms and conditions on a mutually agreeable basis.

15. <u>DELIVERY:</u> The delivery schedule shall be given by HOCL and you shall be responsible for arranging supplies as per the schedule. In case the supplier fails to deliver the consignment within the period prescribed, HOCL shall been titled to recover from supplier's pending bills against the order or from any other bills a penalty of ½% of the price of the goods in arrears per week 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 whichever 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 affected 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.

- 16. <u>TERMINATION OF ORDER</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 failed supplier.
- **17.** <u>INTEGRITY PACT</u>: Bidder is required to sign the Integrity Pact with HOCL as per format & terms and conditions enclosed with tender in Annexure-VII. This document is essential and binding. In case a bidder does not sign & submit the Integrity Pact along with bid documents, his bid shall be liable for rejection.

## 18. RESTRICTION ON PROCUREMENT FROM BIDDER WHO SHARES THE LAND BORDER WITH INDIA

Any bidder from a country which shares a land border with India will be eligible to bid, only if the bidder is registered with the Department for promotion of Industry and Internal Trade (DPIIT). (PI. refer office Memorandum no. 6/18/2019-PPD dated 23rd July 2020 )Such bidders should submit the valid copy of registration certificate along with tender. However the said requirement of registration will not be applicable to bidders from those country to which Govt. of India has extended lines of credit or in which Govt. of India is engaged in development of projects. Bidders may appraise themselves of the updated lists of such countries available in the website of Ministry of External Affairs.

All Bidders shall furnish compliance certificate with respect to above clause as per the format in Annexure VI along with the bid.

#### \*\*\*\*\*

## **ANNEXURE IV**

## **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 BID Security Declaration.
- 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/33094/23

a) Quantity (total quantity required for 12 months	:	
to be mentioned in respective column in BOQ)		
b) Basic Cost of chemical per Kg		
(For Caustic & Chlorine only quantity to be specified in BOQ)	:	
c) P & F Charges (%)	:	
d) Freight (%)	:	
e) GST (%)	:	

## (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 A

# **Commercial Terms Format**

(Please fill up the details mentioned below in your letter head and upload along with 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.

BID Security Declaration: Submitted/Not Submitted

(If you are an MSME vendor, PI. upload documentary evidence for same. If proof is not uploaded along with bid the same may not be considered)

Payment Term offered.

Terms of delivery offered:

Validity of offer:

Taxes Applicable:

Signature and Stamp

## ANNEXURE VI - B

## (KINDLY FILL THIS SHEET AND SUBMIT IN TECHNICAL BID)

г

Sr. No.	Commercial Clauses	Bidder Confirmation (Please put V in front of your confirmation)
1	Whether bidder (a proprietary concern, Partnership Firm, Company) is currently on holiday list/black list/de-listed or has been put on holiday/blacklisted/de-listed at any PSU/govt. Organization. If so, give details.	<ul> <li>Yes, We are on holiday</li> <li>List/Black List/De-List</li> <li>No</li> </ul>
<b>2</b> i	Whether the party is registered under Micro/Small/Medium Enterprises act 2006 (Please furnish the proof)	<ul> <li>Micro Medium</li> <li>Small No</li> </ul>
2-ii	Status of MSE Bidder	<ul> <li>Manufacturer</li> <li>Services</li> <li>Not Applicable</li> </ul>
2-iii	Whether MSE bidder is offering product manufactured by him/her	<ul><li>Yes</li><li>No</li></ul>
3i	All MSE bidders shall register / declare their UAM Number on CPP Portal and copy of this registration / declaration shall be attached with the offer; failing which such bidders will not be able to enjoy benefits as per PP Policy for MSME order, 2012. <u>SSI/MSME/NSIC/UAM /DIC registration certificate</u>	<ul> <li>Mention UAM Number</li> <li></li></ul>
3-ii	Submitted valid document against clause no 3i	<ul><li>Submitted</li><li>Not Applicable</li></ul>
4i	Whether the proprietor of "MSME" enterprise is from SC/ST category (Please attach caste certificate issued by competent authority)	<ul><li>Yes</li><li>No</li></ul>
<b>4</b> ii	Whether the proprietor of "MSME" enterprise is woman (i.e. Woman proprietorship, or holding minimum 51% shares in case of Partner- ship/Private Limited Companies)	<ul><li>Yes</li><li>No</li></ul>
4iil	Submitted certificate against clause no 4ii	<ul><li>Submitted</li><li>Not Applicable</li></ul>
5	AGREED TO ALL TERMS AND CONDITIONS OF ENQUIRY: It is hereby stated that the quotation/offer submitted is in full compliance with the documents issued against the enquiry and also further confirmed that there is no deviation from all the terms and conditions as per the enquiry.Non-acceptance or deviation to HOCL's standard terms and conditions mentioned in enquiry documents may lead to rejection of offer, no correspondence shall be done for clarifications	<ul> <li>Agreed</li> <li>Not Agreed</li> </ul>
DATE	SIGN AND STAMP OF BIDDER	

#### **COMMERCIAL TERM FORMAT-C**

(For Purchase Order/ Work Order with estimated value more than FIVE Lakhs)

#### ANNEXURE TO BE SUBMITTED ALONG WITH THE BID AGAINST TENDER NO\_

#### (KINDLY FILL AND SUBMIT ALONG WITH COMMERCIAL/TECHNICAL BID)

NAME OF BIDDER: .....

_					
Sr.No.	COMMERCIAL CLAUSES	BIDDER CONFIRMATION (PLEASE PUT $v$			
1	Please mention whether you are a Class-I/Class II Local suppli- er.(Please see the definition given below)	Class I Class II			
2	Specify the percentage (%) of local content.	%			
3	Details of location at which the local value addition is made.				
4	Mention whether the product offered is manufactured in India under a license from a foreign manufacturer who hold intellectual property rights and there is a technology collaboration agreement / Transfer of technology agreement	Yes / No			

### SELF DECLARATION OF LOCAL CONTENT

We hereby declare that the percentage (%) of local content specified against mentioned against Sr.No.2 is \_\_\_\_\_%. We also understand that submitting False self-declarations and auditors will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a Bidder or its successors can be debarred for up to Two Years as per the Rule 151 (iii) of the General. Financial Rules along with such other actions as may be permissible under Law.

Definitions

Local Content: - The amount of value added in India(Total value of item procured minus the value of imported content in the item(including all customs duties) as a proportion of total value, in percentage.

Class I Local Supplier: - Supplier or service provider whose goods, services or works offered for procurement has local content equal to or more than 50%.

Class II Local Supplier: - Supplier or service provider whose goods, services or works offered for procurement has local content more than 20% but less than 50 %.

Purchase Preference: -Will be as per the applicable Government order.

DATE

SIGNATURE AND STAMP

<u>अनुबंध</u> ANNEXURE VI C

## **BID SECURITY DECLARATION**

ANNEXURE TO BE SUBMITTED ALONG WITH THE BID AGAINST TENDER NO\_\_\_\_\_

I/We.....hereby declare that:

- **1.** I will not revoke the tender within the stipulated period/validity period OR increase the quoted rates.
- **2.** I will commence the work on receipt of Purchase Order.
- **3.** I will not withdraw or amend the tender or impair or derogate from the tender in any respect within the period of validity of the tender.
- **4.** I will furnish the required performance security within the specified period.

## NAME AND ADDRESS OF THE BIDDER

PLACE: DATE:

## SIGNATURE AND STAMP OF THE BIDDER

### REF : TENDER/RFQ No.: MAT/PUR/33305/24

## <u>COMPLIANCE TO CLAUSE W.R.T MANADATORY REGISTRATION OF VENDORS FROM COUN-</u> <u>TRIES SHARING LAND BORDER WITH INDIA, WITH DPIIT</u>

Date:

## TO WHOMSOEVER IT MAY CONCERNS

"I have read The clause titled restrictions on procurement from a bidder of a country which shares a land border with India.

I certify that M/s.....(Name Bidder) is not from such a country

Or.

I hereby certify that M/s. .....(name of Bidder) is from a country which shares land border with India and fulfills all requirements in this regard and is eligible to be considered. Enclosed herewith Valid Registration Certificate

Or I hereby certify that M/s..... (Name of Bidder) is from such a country which shares land border with India , however the said requirement of registration will not be applicable to bidders as Govt. of India has extended lines of credit or in which Govt. of India is engaged in development of projects. Enclosed herewith documentary evidence in this regards

We confirm that if it is established that we have provided any false information in pursuance to above clause, while competing for this contract then our Bid shall be rejected.

We further confirms that, if it is established that we have not complied with terms of aforesaid clause, during execution of contract, this would be a sufficient ground for immediate termination of the contract as per tender provision and shall be dealt accordingly

Name of the Bidder

Stamp & Signature of the Bidder

### **ANNEXURE VII**

#### **INTEGRITY PACT FORMAT**

#### INTEGRITY PACT

#### Between

Hindustan Organic Chemicals Ltd(HOCL), a company formed and registered under the Companies Act,1956 and having its registered office at Ambalamugal PO, Ernakulam Dist.,Kerala-682302 hereinafter referred to as "The Principal",

#### And

...... herein after referred to as "The Bidder/Contractor"

#### Preamble

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

#### Section 1- Commitments of the Principal

- 1. The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
- a) No employee of the Principal, personally or through family members will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b) The Principal will, during the tender process treat all bidders(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c) The Principal will exclude from the process all known prejudiced / interested persons.
- 2. If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code/Prevention of Corruption Act, or if there be a substantive

suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

## Section 2 - Commitments of the Bidder(s)/ Contractor(s)

- 1. The Bidder(s)/ Contractor(s) commit themselves to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- a) The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- b) A Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
- c) The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or passon to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d) The Bidder(s) /contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the bidder(s)/contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. All the payments made to the India agent/representative have to be in Indian Rupeesonly.
- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2. The Bidder(s) / Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

### Section 3- Disqualification from tender process and exclusion from future contracts

If the Bidder(s) / Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above or in any other from such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidders/ Contractor(s) from the tender process or to terminate the contract, if already signed, for such reasons.

### **Section 4- Compensation for Damages**

- 1. If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- 2. If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor the liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

### Section 5- Previous transgression

- 1. The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in India conforming to the anti- corruption approach including Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 2. If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process and appropriate action can be taken including termination of the contract, if already awarded, for such reason.

## Section-6- Equal treatment of all Bidders / Contractors / Subcontractors

- 1. The Bidder(s) / Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- 2. The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractor.
- 3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate itsprovisions.

## Section-7- Criminal charges against violating Bidder(s)/ Contractor(s) /Subcontractor (s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

### Section 8 - Independent External Monitor / Monitors

1. The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

- The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. It will be obligatory for him to treat the information and documents of the Bidder(s) / Contractor(s) as confidential. He reports to the Chairman and Managing Director, HOCL.
- 3. The Bidder(s) / Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Sub contractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) / Subcontractors(s) with confidentiality.
- 4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meeting.
- 5. As soon as the Monitor notices, or believes to notice, a violation of this agreement he will so inform the management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 6. The Monitor will submit a written report to the Chairman and Managing Director, HOCL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and should the occasion arise, submit proposals for correcting problematic situations.
- 7. Monitor shall be entitled to compensation on the same terms as being extended to / provided to Independent Directors on HOCL Board.
- 8. If the Monitor has reported to the Chairman & Managing Director, HOCL, a substantiated suspicion of an offence under relevant IPC/PC Act, and the Chairman & Managing Director, HOCL has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central VigilanceCommissioner.
- 9. The word 'Monitor' would include both singular and plural.

## 10. Independent External Monitor Details:

Name: Arun Kumar Gupta
 Mob No.:9833880764
 Address: E-68B, Nandanvan CHS.
 Sector 17, Nerul,
 Navi Mumbai, Maharashtra, Pin-400706

### E-mail ID: guptaarun55@rediffmail.com

### **Section 9 - Pact Duration**

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other bidder(s) 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Pact as specified above, unless it is discharged/determined by the Chairman and Managing Director of HOCL.

### Section 10 - Other provisions

- 1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Ambalamugal PO, Ernakulam Dist.,Kerala-682302.
- 2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 3. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 4. Should one or several provisions of the agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 5. The Bidder / Contractor signing this "Integrity Pact" shall not approach the courts while representing the matters to IEMs and he/she shall wait their decisions in the matter.

For & On behalf of the Principal (Office Seal)	For & On behalf of Bidder/Contractor(Office Seal)
Place:	
Date:	
Witness 1	Witness 2:
(Name & Address)	(Name & Address)



# हिंदुस्तानऑर्गेनिककेमिकल्सलिमिटेडHINDUSTAN ORGANIC CHEMICALS LTD (भारतसरकारकाउद्यमA Government of India Enterprise) अंबलमुगल,कोचीAMBALAMUGAL, COCHIN – 682 302 दूरभाषPhone: (0484) 2720911

## **SPECIAL LIMITED E- TENDER NOTICE**

HOCL invites Special Limited e Bids under Two bid system for the supply of following item

Sl.No.	Description of item and Tender No.
1	WATER TREATMENT CHEMICALS
	HOCL tender ref : MAT/PUR/33305/24

Tender documents may be downloaded from <u>www.hoclindia.com</u> or <u>www.eprocure.gov.in</u>

Approved vendors may please get registered with NIC e-procurement portal (URL: <u>https://eprocure.gov.in/eprocure/app</u>) 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.

Thanking you,

Yours faithfully, For Hindustan Organic Chemicals Ltd.

बी बालचन्द्रन B. BALACHANDRAN महा प्रबन्धक (सामग्री) General Manager (Materials) हिंदुस्तान ऑर्गेनिक केमिकल्स लिमिटेड HINDUSTAN ORGANIC CHEMICALS LIMITED (भारत सरकार का उद्यम A Govt.of India Enterprise) अंबलमुगल, कोची, केरल Ambalamugal, Kochi, Kerala-682302 Tel:0484-2727346.