

MADRAS FERTILIZERS LIMITED
(A GOVT. OF INDIA UNDERTAKING)
MANALI, CHENNAI 600 068
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**NOTICE INVITING TENDER FOR
PROCUREMENT OF COOLING WATER CHEMICALS (11ITEMS)& COOLING WATER
TREATMENT PROGRAM
(TENDER CUM AUCTION)**

E - TENDER No.EPRO/MM/CWC/140518/010 Dt.03.05.2018

SUMMARY

Online bids are invited from Manufacturers for supply of **Cooling Water Chemicals & Cooling Water Treatment Program**. Bidders, who are interested to submit bids, may visit MFL website www.madrasfert.nic.in ["Tenders"–"e-tenders"] or Central Public Procurement web <http://eprocure.gov.in/eprocure/app>. Instructions for applying e-Tendering are given in Annexure 1.

For any clarification, please communicate to the following:

E-procurement cell: epro@madrasfert.co.in/epro1@madrasfert.co.in

Phone: 044-25945318 / 25945314 / 25941261 Mr.A.M.Sridhar.

User Contact detail:purchase9@madrasfert.co.in,dgmprodn@madrasfert.co.in

Description / Qty	Cooling water chemicals (11 items) and Treatment Program (Refer Annexure 4)
Nature of Bidding	Two Stage Bidding : 1 st Part : Techno-Commercial Bid, 2 nd Part: Price Bid
Commencement of viewing and downloading tender document from e-Tender Website	03.05.2018
Due date & Time of submission	14.05.2018 ;09.00 hrs.
Technical Bid Opening Date& Time	14.05.2018 ; 10.00 hrs.
Price Bid Opening Date	Techno-Commercially qualified tenderers only will be intimated
Bid Submission (To be Uploaded on or before the due date and time)	Three Separate on-line covers (folders) (1) EMD (2) Techno-Commercial Bid (Annexure 4 &5) (3) Price Bid (Annexure-6) To be uploaded on or before the last date & time meant for uploading of bids.
Procedure for opening of On-line Bid	Bids will be opened in Seriatim, i.e. EMD, Techno-Commercial Bid and Price Bid.
Bid Validity	120 days from the date of opening of Techno-Commercial Bid.

EMD Amount: Rs.40,400/- (Rupees Forty Thousand and Four Hundred Only). EMD payment can be made in the form of DD/BG/ RTGS. (Ref. Annexure-7 - EMD terms & conditions, Annexure-13 - EMD BG Format and Annexure-14 – RTGS Format).

Original EMD DD/BG in MFL's approved format (Annexure-13) valid for 135 days from the date of tender opening date or thru' RTGS per details furnished in Annexure-14 should be furnished in a separate sealed cover superscribed as **EMD for Tender No EPRO/MM/CWC/140518/010 Dt.03.05.2018** and the same to be sent within 3 working days from the due date of submission of bids to: **DGM-Materials Management, Madras Fertilizers Ltd., Manali, Chennai-600 068.**

Bidders with NSIC/MSME/ DGS&D valid certificates seeking exemption from payment of EMD should upload such valid certificate along with their bid before the closing date and time of tender. If such valid certificates are not uploaded along with their bid before the closing date and time of tender, their bids will not be considered.

Security Deposit (SD)	5% of the Contract Value in the event of placement of award of Contract.
Performance Guarantee (PBG)	5% of the Contract Value in the event of placement of award of Contract.
Mode of Payment for EMD, SD and PBG	By DD/RTGS in favour of Madras Fertilizers Ltd., payable at Chennai or by Bank Guarantee (Annexure 13,15& 17).
EMD BG Validity	Up to 165 Days from the date of decrypting of techno-commercial bids.
Payment Term	30 days Credit Payment basis from the date of receipt of material, subject to acceptance thru' RTGS
Contract period	Refer Annexure 5 & 9
Evaluation Basis	Refer Annexure-9 Sl.No.7 of NIT
Scope of Work	Refer Annexure 2 of NIT
Reverse Auction /Negotiation	Refer Annexure-9 Sl.No.23 of NIT
LD Clause	Refer Annexure-9 Sl.No.22 of NIT

**DGM –MATERIALS MANAGEMENT
MADRAS FERTILIZERS LTD.,
MANALI, CHENNAI 600 068**

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INSTRUCTIONS TO TENDERERS FOR APPLYING E-TENDER

- 1.1 **Instructions to the Tenderers / Bidders for the e-submission of the bids online through the e-tender site of M/s National Informatics Center (NIC).**
- 1.1.1 Bidders should do the registration in the tender site <https://eprocure.gov.in/eprocure/app> using the option available (on-line bidder enrolment). Then the Digital Signature registration has to be done with the e-token, after logging into the site. The e-token may be obtained from one of the authorized Certifying Authorities such as nCode / eMudhra / safe script.
- 1.1.2 Bidder then need to login to the site through their user ID / password chosen during registration.
- 1.1.3 The e-token that is registered should be used by the bidder only and should ensure safety of the same.
- 1.1.4 The Bidders can update well in advance, the documents such as certificates, purchase order details etc., and these can be selected as per tender requirements and then send along with bid documents during bid submission.
- 1.1.5 After downloading / getting the tender schedules, the Bidder should go through them carefully and then submit the documents as asked, otherwise, the bid will be rejected.
- 1.1.6 If there are any clarifications, this may be obtained online through the tender site, or through the contact details. Bidders should take into account the Corrigendum published before submitting the bids online.
- 1.1.7 Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender schedule and they should be in .pdf / .xls / .jpeg / .rar formats only.
- 1.1.8 Bidder should submit the EMD as specified in the tender. The original should be posted / couriered / given in person to the Tender Inviting Authority, on any working day after e-publication of NIT and upto 3 working days after the last date of submission of bids. Scanned copy of the instrument should be uploaded as part of the offer along with Techno-Commercial bid.
- 1.1.9 It is construed that the bidder has read all the terms and conditions before submitting their offer including General Terms and Conditions (GTC) and Special Terms and Conditions (STC). GTC and STC can be accessed thru' Company's website.

- 1.1.10 The bidder has to submit the tender document online well in advance before the prescribed time to avoid any delay or problem during the submission process.
- 1.1.11 After the bid submission, (the bid token number) given by the e-tendering system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender.
- 1.1.12 The details of the Earnest Money Deposit document should be submitted physically to the Dept., and the scanned copy should be furnished at the time of bid submission online. They should be same otherwise the Tender will be summarily rejected.
- 1.1.13 The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders.
- 1.1.14 The tendering system will give a successful bid up-dation message after unloading all the bid documents submitted and then a bid summary will be shown with the bid number, date and time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed using the e-token of the bidder and then submitted.
- 1.1.15 The bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening date.
- 1.1.16 Bidder should log into the site well in advance for bid submission so that he submits the bid in time, ie., on or before the bid submission end time. If there is any delay, due to other issues, bidder only is responsible.
- 1.1.17 Each document to be uploaded through online for the tenders should be less than 8 MB. However, if the file size is less than 8 MB, the transaction uploading time will be very fast. The total size of the documents in all the covers put together, should be less than or equal to 8 MB.
- 1.1.18 The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected.
- 1.1.19 The time settings fixed in the server side and displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time during bid submission.
- 1.1.20 All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not be viewable by unauthorized persons during bid submission and not be viewable by any one

until the time of bid opening. Overall, the submitted tender documents become readable only after the tender opening by the authorized individual.

- 1.1.21 The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.
- 1.1.22 The bidders are requested to submit the bids through online e-tendering system to the TIA well before the bid submission end date & time (as per Server system clock).
- 1.1.23 The bidder should log out of the tendering system using the normal log out option available at the top right hand corner and not by selecting (X) exit option in the browser.
- 1.1.24 Bidders should ensure that prices should not be indicated anywhere in the un-priced part. The prices should be indicated only in the price bid and nowhere else.
- 1.1.25 Bidders to note that if prices are indicated in their un-priced Techno-Commercial part their offer will be rejected and NO further evaluation or communication will be entertained in this regard.
- 1.1.26 Bidders to note that the very act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read all sections of the pages of the bid document including General Conditions of Contract without any exception and have understood the entire document and are clear about the requirements of the tender requirements.

SCOPE OF WORK

Cooling Water Treatments (CWT) Package for MFL, Manali, and Chennai

Introduction:

Madras Fertilizers Limited has a single cooling tower with 12 cells to cater re-circulating water requirement for various process units. Cooling water is used in process coolers, surface condensers, and compressors intercoolers. Design cooling water inlet and outlet temperature of process coolers and condensers is 33 °C and 45 °C respectively.

The makeup water used in Cooling Towers is a blend of Raw water from CMWSSB, Tertiary Treated sewage water, RO permeate and treated water from CW B/D plant. This water is directly added in CW pump suction sump thru separate lines.

The blended makeup water quality is given in Table-1 and is used as make up water for CT. The quality mentioned in the Table is an indicative and actual quality may vary depending on weather, inflow quality of sewage and process conditions and also depending on the availability of water at source. The CWT program should be capable of handling all kind of make-up water used and should be capable of adjusting to quality fluctuation of make –up water.

Presently non-chromate liquid product based chemical treatment is carried out for cooling water systems to control corrosion, scaling, fouling and microbiological growth.

MFL invites the bids for supply of Non-Chromate Orthophosphate + Organo Phosphonate liquid product based cooling water treatment package having Orthophosphate, Organo phosphate and Pyro phosphate, Zinc, copper inhibitor as corrosion inhibitors along with polymeric dispersant (PASA & TER) for deposit & fouling control, Bio dispersant and necessary microbiological control package , compatible with the existing treatment program for change over. **This bid is invited for Non- Chromate liquid product based Cooling Water Treatment package for the period of Three months.**

General Description of the MFL Cooling WaterSystems:

MFL consists of a single cooling tower with 12 cells of which 9 cells are of concrete and 3 cells are of wooden construction. The technical operational details of all cooling towers are given below:

CW System volume	=	6500 m3
CW recirculation rate	=	18860 m3/hr
Cooling Tower Evaporation Loss	=	405 m3/hr
Blow down	=	135 m3/hr
Normal cycles of concentration	=	4

Usually water in coolers and condensers flows through tube side in process units except in few cases where water can be in shell side.

Cooling water system at all the cooling towers is a pressurized system. Supply header pressure is around 4.0 Kg / cm2 (g). Cooling water Velocity is though higher than minimum requirement of 1.0 m/sec, but there are dead ends as well, in supply and return sub-header at some locations. Also, there are some low velocity (< 0.3 M/sec) coolers / condensers as well as OH condensers.

Cooling Water Treatment (CWT) program to be provided by the vendor should be suitable for all cooling water systems including for low velocity coolers/ condensers as well as OH condensers/coolers without formation of deposits / under-deposit pitting & fouling. CWT program should be suitable for all kind of blended make up water quality as specified in Table-1. Material of construction of supply and return header pipe, ranging from 2” to 66” NB or more is carbon steel without any internal lining on coolingwaterside.

Make up Water Quality forCWS:

The Cooling Water Make up consists of:

- ◆ Raw Water (metro)
- ◆ Tertiary Treated Water
- ◆ RO Permeate
- ◆ CWBD Permeate

The average and indicative make up water quality is given in Table-1. CWT program shall be suitable for all kind of combination of Make-up water blending/mixing or alone as make-up.

Table 1: The blend of Make-up water Quality to CT:

ITEM DESCRIPTION	UNITS	AVERAGE VALUE (Max)
PH	-	7.0-7.5
Cond.	Mic.mho / cm	1300
M-Alk as CaCO3	PPM	25
TH as CaCO3	PPM	100
CaH as CaCO3	PPM	70
Chloride as CaCO3	PPM	370
Na as CaCO3	PPM	425
K as CaCO3	PPM	10
SiO2 as Silica	PPM	15
SO4	PPM	50
NO3 (N)	PPM	20
TURBIDITY	NTU	5
OIL	PPM	<10

Table 2: THE AVERAGE (TYPICAL) CIRCULATING COOLING WATER ANALYSIS IS GIVEN BELOW:

ITEM DESCRIPTION	UNITS	AVERAGE VALUE (Max)
PH	-	7.2-7.5
Cond.	Mic.mho / cm	6000
M-Alk as CaCO3	PPM	45
TH as CaCO3	PPM	500
CaH as CaCO3	PPM	300
Chloride as CaCO3	PPM	1500
Na as CaCO3	PPM	1700
K as CaCO3	PPM	88
NH3	PPM	150
SiO2 as Silica	PPM	30
SO4	PPM	600
NO3 (N)	PPM	60
TURBIDITY	NTU	<30
TOTAL IRON	PPM	<2
DISSOLVED IRON	PPM	<1
OIL	PPM	<10

All the analytical values mentioned above are only tentative so as to understand the cooling water system by the vendor. The vendor should specify the range (lower and upper limit) of circulating water characteristics such as PH, Conductivity, Calcium hardness, Total hardness, Chloride, Silica, M-Alkalinity, Turbidity, Total Iron, Dissolved Iron, Sodium, Sulphates, Nitrate, Nitrogen, Ammonia etc. The vendor is expected to operate the system towards the upper limit of Re-circulating water characteristics to conserve water and chemicals.

Vendor shall clearly list out all control limits and parameters including level of Total Phosphate, Unfiltered Ortho Phosphate, Filtered Ortho Phosphate, Pyro Phosphate, Delta Phosphate And Free Residual Chlorine to be maintained in Circulating Cooling Water for satisfactory performance of their recommended treatment and the smooth operation of the cooling water system.

Material of Construction (for CWsystem):

- i) Piping& Valves : CarbonSteel, SS
- ii) Coolers /Condensers / Tubes : CS, Admiralty Brass, Cu & SS
- iii) TubeSheets : CS/SS
- iv) Shell &ChannelBox : CarbonSteel
- v) Cooling Tower internals : PVC, Wood, CS

Dosing facilities available at MFL:

Sulphuric acid dosing and chlorine injection facilities are available at site and supply of Sulphuric acid and chlorine will be in the scope of MFL.

- a) Sulfuric Acid dosing shall be carried out by gravity for maintaining pH level in re-circulating water systems.
- b) Chlorination in order to maintain free residual chlorine (FRC) level in recirculation CW Systems. Chlorination is done on continuous as well as shock basis in CWsystems.

However, dosing level of Sulphuric acid and Chlorine can be adjusted as per the requirement of CWT program.

Bromine (Oxidizing Biocide to be supplied by the vendor) shall also be dosed along with chlorination in re-circulating cooling water. The bromine dosing shall be injected in chlorinated water line going to CT pump sump. This will be responsibility of vendor to maintain specified THB and SRB in re-circulating cooling water system.

Quality checks by MFL:

MFL in its own laboratory conducts different quality checks for Makeup and circulating water. The results of MFL quality control laboratory is the final and shall be accepted by the vendor.

Current Cooling Water Treatment (CWT) Program under operation for CW System

Corrosion Formulation	Based on Ortho phosphate (O-PO4) +HEDP
Copper inhibitor	Toly Tri Azole (TTA)
Polymeric Dispersant	Low molecular weight polymeric dispersant based on PASA
Bio dispersant	Chlorine penetration/ biocide penetration
Oxidizing Biocides	Chlorine , Chlorine dioxide (ClO2) , Bromine
Non-Oxidizing Biocides	QUAT , Carbamate Blend, Isothiazoline
pH control	By alkalination and H2SO4 addition (pH 7.2-7.5)
Present COC	4.0

Prior to the offer, vendor’s representative shall visit MFL and review the system condition in detail. The vendor is encouraged to examine the cooling water system, inspect coolers/ condensers and be fully acquainted with the system prior to submission of the bid. Vendor should examine the site & Location for Installation of new In situ generators with existing Chlorinators as well as for installation of all monitoring instruments & equipments.

Detailed Scope ofwork

Scope of Cooling water treatment (CWT) package shall include butnotlimitedtodesignandsupplyofthenon-chromateliiquidproductbased treatment with Ortho phosphate (stabilized phosphate) + Zinc + Pyro PO4 as corrosion inhibitors (combination of Anodic + Cathodic Inhibitors) along with organo phosphonate (HEDP+PBTC) for scale deposits

control and polymeric dispersants for fouling/deposit control, copper inhibitor and necessary microbiological program with suitable bio-dispersant, dosing equipments and monitoring systems for controlling corrosion, scaling and fouling & bio fouling as per details given below. The detailed scope of work is defined below as well as given in relevant clauses in this bid document.

CWT program shall take care of following generally encountered in cooling water systems:

- Corrosion & Pitting inCWS
- Fouling, scaling & deposition incondensers/coolers
- Bio fouling in coolers/condensers & distributionlines
- Microbiological control due to formation of SRB, Iron bacterial/ tubercles &pitting and
- Contingency plans

Detailed CWT Program required:

CWT program shall be as follows:

- Corrosion Formulation based on combination of Anodic & Cathodic Inhibitors (O-PO₄+Zn+HEDP+PBTC) +Pyro PO₄ to control Corrosion, Scaling & under deposit – pitting
- Copper Inhibitor to Control Corrosion of Admiraltybrass/Copper
- Bio dispersant for effective Chlorine penetration/ biocidepenetration
- Polymeric dispersants to controlscaling/fouling/deposits
- Chlorination supplemented by Chlorine dioxide (ClO₂)/Bromine to control Microbiological growth (THB, SRB, Ironbacteria)
- Non-oxidising Biocides (QUAT/MBT/Isothiazoline) as shock dose to control Microbiological growth (THB, SRB, Iron bacteria)

Following levels of inhibitors/ chemicals shall be maintained.

SI No.	Parameters	Value
1	pH	7.2-7.5
2	Total phosphate (Filtered) as PO ₄	15-18 mg/l (continuous)
3	Orthophosphate as PO ₄	7-8mg/l (continuous)
4	Organo-phosphonate (HEDP+PBTC) as PO ₄ – blending ratio 2:1 as PO ₄	5-6mg/l (continuous)
5	Pyrophosphate as PO ₄	3-4mg/l (continuous)
6	Zinc as Zn	1-1.5 mg/l (continuous)
7	Delta phosphate as PO ₄ precipitated OPO ₄	<3.0
8	Copper inhibitor(100%)	2.0 mg/l (continuous)
9	Polymeric Dispersant-PASA (40%)	5mg/l (continuous)
10	Polymeric Dispersant – TER (40%)	15mg/l (Continuous)
11	Bio-dispersant (100%)	10 mg/l (continuous)
12	Free Residual Chlorine	0.2-0.4 mg/l (Continuous)

CW CHEMICALS DOSING LEVELS REQUIRED FROM THE VENDOR

SI No.	Parameters	Value	Basis
1	Corrosion Formulation as product	50 ppm	Blow Down
2	Pyrophosphate formulation	20 ppm	Blow Down

3	Copper Corrosion Inhibitor as Product (20%)	10 ppm	Blow Down
4	Polymeric Dispersant-PASA as product (40%)	5 ppm	Blow Down
5	Polymeric Dispersant – TER as product (40%)	15 ppm	Blow Down
6	Bio-dispersant as product (100%)	10 ppm	Blow Down
7	Sodium Bromide product as 40%-shock dosed for 2 hrs per day	1.1 ppm	CW Circulation
8	Chlorine Dioxide 100% Shock Dose - 5 Hours per day	1.25 ppm	CW Circulation
9	QUAT as product 40% shock dose/month	30 ppm	System volume
10	MBT as product 10% shock dose/month	30 ppm	System volume
11	ISOTHIAZOLINE as product 1.50% shock dose/month	30 ppm	System volume
	No. of Non-Oxidizing Biocide Shock doses	3 doss/month	System volume

HEDP : Hydroxy Ethylenedi-phosphonic acid
PBTC : Phosphono butane TriCarboxylic acid
TTA : Tolytriazole
QUAT : Quaternary Ammonium Compounds
MBT : MethyleneBis-Thiocyanate

All formulations supplied by Vendor shall contain max. Recommended levels of inhibitors/dosing levels specified above.

Corrosion Formulations for Corrosion & Scale control inCWS:

* Corrosion Formulation shall be based on Orthophosphate(O-PO₄+Zinc+ Organo-phosphonates (HEDP+PBTC).Corrosion Formulation (O-PO₄+HEDP +PBTC+Zn) shall be based on Pure Soluble Orthophosphate & should not contain any other forms of inorganic phosphate. Corrosion formulation shall not reverse; neither degrades/ precipitates & shall be stable. Corrosion formulation shall be filtered & delta phosphate (i.e. precipitated phosphate) shall be nil. The Corrosion Formulation shall be stabilized phosphate with PASA stabilizer as well as any other stabilizer& should be stable at wide range of CW pH (6.5-8.5) in CT systems.

* Blending Ratio of HEDP: PBTC shall be 2:1 as PO₄ in corrosion formulation.

* Pyrophosphate formulation

Pyrophosphate formulation shall be based on as active (100%) containing Tetra Potassium Pyrophosphate (TPPP) having 55% PO₄ confirming to IS code. The impurities & insoluble shall as per IS code.

All corrosion formulations shall be supplied by Vendor on Liquid product based only. The powdered based formulations will not be acceptable. The concentrated corrosion formulations products shall not be used & are not acceptable. The Corrosion formulations products as per specified total active ingredients in products as specified by MFL shall be used for CWS.

* **Copper Inhibitor Formulation:**

Copper Inhibitor shall be based on Azole compound. Tolytriazole (TTA) based Copper Inhibitor shall be used for all CTs. Copper Inhibitor (TTA) formulation shall be in stable

soluble form in solution & should not precipitate till the application in CWS & exclusive of floating/settled inhibitor chemicals.

* **Polymeric dispersants dosing for scaling/fouling/deposits control inCWS:**

The polymeric dispersant required shall be suitable & based on Alkaline CW pH of 7-8 & shall function effectively in Ortho- phosphate based program (O-PO₄+Zn+ Organo-phosphonate) for control of Corrosion, Scaling & Fouling in CWS. The polymeric dispersant should inhibit/disperse / stabilize / prevent scaling with CaCO₃, CaSO₄, Ca₃(PO₄)₂ , Ca phosphonate, Mg Silicate, Zinc Hydroxide, Zinc phosphate , Iron phosphate , Iron oxide &all other suspended / precipitated foulants in CWS. Polyacrylate (Poly Acrylic Acid (PA)) & Polymaleic Acid (PMA) polymers are alone not suitable because they are based ononly weak Carboxylic acid & do not contain Strong Sulphonic Acid and are only CaCO₃ Scale deposits inhibitors/dispersants. Hence Polyacrylate (Poly Acrylic Acid) & Polymaleic Acid (PMA) polymers shall not be considered for CWT program ¬ acceptable.

The polymeric dispersants based on PASA and TER polymers shall be used for CWT program and shall inhibit and disperse CaCO₃, CaSO₄, Ca₃(PO₄)₂, Ca Phosphonate, Mg Silicate, Zinc Hydroxide, Zinc phosphate, Iron Phosphate, Iron oxide and all other suspended / precipitated foulants in Alkaline pH (7-8). The polymeric dispersants shall be of a low molecular weight (<5000) organicpolymer.

Polymeric dispersant based on PASA: Polyacrylate (Poly Acrylic Acid) Sulphonic Acid copolymer (PASA) consisting of two functional groups of one weak Carboxylic acid and another strong Sulphonic acid. Polymeric dispersant –Type-I should contain 40% Active ingredient content(PASA).

Polymeric dispersant based on TER (Type-II): TER polymer consisting of three functional groups of one weak Carboxylic acid, another strong sulphonic acid and third Non-ionic group shall be used. Polymeric dispersant –Type-II should contain 40% Active ingredient content(TER)

* **MicrobiologicalControl:**

For Microbiological Induced Corrosion Control (MIC) & biological growth Control following Oxidizing& Non- Oxidizing Biocides shall be added in CWS: Oxidizing Biocides:

- ❖ Chlorine(Cl₂)
- ❖ Bromine (NaBr)
- ❖ Chlorine dioxide(ClO₂)

Non-Oxidizing Biocides:

- Quaternary Ammonium Compounds (QUAT)
- Methylene Bis-Thiocynate (MBT) and
- Isothiazolines

a) ChlorinationwillbedoneoncontinuousbasistomaintainFRCof0.2-0.4 ppm in CWS.

b) Sodium Bromide (40 % NaBr) formulationProduct

Bromine release compound (Chlorine Activator) as oxidizing biocide @ 1.1 mg/l (minimum) based on Bromine release compound (Oxidizing biocide, min40 % NaBr in liquid form) shall be dosed in the CW system on shock basis/as required basis for 2 hr / day. The dosage rate shall be based on Re- circulating cooling water flow rate w.r.t. Both Chlorine and Bromine release compound shall be dosed in the sump of CT pump. Bromine shall be injected into chlorinated water line for 100% conversion & effective microbiological control.

c) Sodium Chlorite (25 % NaClO₂) formulation Product for ClO₂ generation

The Sodium Chlorite (25 % NaClO₂) formulation Product in liquid form used for generation of ClO₂ from In-situ generation shall be pure product free from all impurities. It shall contain minimum 25% NaClO₂ active ingredient content.

Chlorine dioxide (ClO₂) at dosing rate of 1.25 ppm on 100% basis shall be dosed in the system on shock / as required basis, for 5 hrs in a day.

In addition to Chlorine / Bromine/ClO₂ as Oxidizing biocides, following non- oxidizing biocides shall also be dosed by the vendor so as to achieve the guarantee. These biocides shall be very effective against aerobic bacteria, anaerobic bacteria including sessile bacteria, Iron bacteria as well as Sulphate reducing bacteria (SRB) and compatible with each other & with Oxidizing biocides. Non Oxidizing Biocides should also be compatible with all treatment chemicals / formulations / inhibitors and should not form any complex with heavy metals including with Zinc.

- ❖ Quaternary Ammonium compounds (QUAT) formulation containing minimum 40% active ingredients @ 30 mg/l based on system volume once in a month.
- ❖ Methylene Bis-Thiocyanate (MBT) formulation containing minimum 10% active ingredients @ 30 mg/l based on system volume once in a month.
- ❖ Isothiazoline formulation containing 1.5% active ingredients @ 30 mg/l based on system volume once in a month.
- ❖ There will be 3 doses / month (once in 10 days) in order of frequency (QUAT + Isothiazoline +MBT).

d) Bio-dispersant:

Bio dispersant shall be dosed @ 10 mg/l (100% basis) on continuous basis based on blow down for Chlorination/biocide penetration to kill binder microorganisms.

- Vendor shall submit Test Certificates along with chemicals of each batch stating that all the chemicals are biodegradable and environment friendly and none of the chemicals are under the list of banned chemicals & other parameters. Material Safety Data Sheet (MSDS) for all chemicals to be used for chemical treatment shall be provided by vendor. Without Proper Test Certificates, Formulations/Products/Chemicals shall not be accepted & liable for rejection.

- All the chemicals such as all corrosion formulations, polymeric dispersants, bio-dispersant, biocides, Sodium chlorite, and sodium bromide shall be tested by MFL for the contents/parameters declared in the test certificates including stability, precipitation / degradation. **Testing procedures for all the formulations / products/chemicals used in CW systems shall be given by Vendor. It is mandatory for vendor to submit Test procedures for all the formulations/products/chemicals during submission of bid. Without Test procedures Bid will not be accepted.**

- ❖ Materials required for three months use shall always be stocked at site but not applicable at the end of contract period.

- ❖ Determining the quantity and frequency of dosage of chemicals for 4 cycles of concentration.

- ❖ **Supply of following items per ASTM standards on loan basis:**

Corrosion racks, Fouling Monitors, Deposit Monitors, Metering Pumps, Dosing Tanks and Test Heat Exchangers

- ❖ Erection & Commissioning of dosing equipment such as Dosing Tanks, Metering Pump etc.,
- ❖ Erection & commissioning of corrosion measuring equipments like Corrosion Coupon Racks, Fouling Monitors, Deposit Monitors, Test Heat Exchangers, etc.,
- ❖ Supply of untreated MS (C1010) MS, admiralty Brass (Cu 71%, Zn 29%), SS coupons (SS304) required **for a period of 3 months** as one lot along with **Metallurgical Certificate of**

Composition of material of coupons. The vendor shall give right to MFL to randomly select any number of coupons and do complete Metallurgical Analysis to confirm the specification of the coupon supplied.

Vendor shall indicate in the offer if Pre-treatment, Pre-cleaning and Passivation of the system is required. If required, chemicals required for Pre-treatment, Pre-cleaning & Passivation are to be indicated separately.

The contaminants expected in the cooling water are

- A) Oil / Hydrocarbon**
- B) Ammonia, Hydrogen Sulphide (H₂S), Sulphur from Process**
- C) Ammonia & Sulphur Dioxide in atmosphere**
- D) High chloride content (above 1500 ppm)**

Oil and hydro carbon ingress in cooling water circuit is not an uncommon occurrence for fertilizer industrial process cooling water system. Whenever such occurrence is encountered, the leaky condenser / cooler are singled out through systematic approach and are isolated from main stream for necessary rectification job. This process of identification and final isolation, however, may take 1-2 days in most of the cases. Hydrocarbon level during this period may go up and the CWT Program offered by Vendor should take care of Oil load in CWS as specified in this bid document to prevent /reduce coolers leaks.

Under normal operating condition of the Plant oil / Hydrocarbon level will be 0-40 PPM and Ammonia in circulating parts will be 0-150 PPM.

Contamination level of Ammonia between 200-250 PPM and Oil / Hydrocarbon level of 40-50 PPM would be a moderate contingency situation. The Treatment Program should be capable of tackling contingencies arising out of such contamination.

MFL shall be responsible for supply and dosing of Chlorine to the system at an average rate of 30 KG/HR in addition shock chlorination (6 times a day). However, vendor shall be responsible to supply sufficient quantity of Biocides, Bio dispersants & other chemicals so as to maintain the recommended FRC level of 0.2 – 0.4 PPM consistently (at least 7 out of 9 readings every day).

The Microbiological Analysis of the Circulating Cooling Water and Make-up water shall be carried out by MFL before and after Biocide addition once in 10 days and as and when the system demands.

Chloride levels in the circulating water normally will be less than 1500 ppm and whenever it exceeds the limit of 1500 ppm, Sodium Molybdate addition to be carried out and molybdate level to be maintained about 3-5 ppm in circulating water.

Under conditions of system upset due to ingress of contaminants (as per chemical analysis reports both by MFL and vendor), vendor has to bring back the system to normal with their Contingency Program immediately.

In this respect vendor has to indicate minimum quantity of contingency formulations to be stocked at site.

The vendor may please note that:

1. A penalty up to 10% of the total contract value during the service period will be deducted over and above the other penalties on guarantees for non-performance of technical service such as not taking care of problems like Foaminess in CT, non-submission of reports in time and not coming for discussions / meetings etc. The decision of MFL on the above is final in this regard.
2. Pitting Corrosion Meter to be provided by the vendor on returnable basis.
3. 3 nos. (Three) on line corrosion meter (Corrator) has to be provided on returnable basis and to be fixed in places as desired by MFL.

4. MFL will provide chlorine at an average rate of 30 Kgs / hour in addition to the shock dosage of 6 times a day (each 15 minutes) any chlorine demand over and above the same, would be charged from the vendor. However, for pH corrections Caustic and H₂SO₄ would be provided on free of cost basis.
5. Dispersant should be PASA & TER Polymer based and the analysis procedure of residual dispersant level in CW should be provided by the vendor.
6. All the chemicals supplied by the vendor (except Bio-Dispersant) should be non-foaming.
7. The vendor should also quote the level of COD, Organic and Hexane extractable if any present in all the chemicals for MFL's reference.
8. Dispersant, Corrosion Inhibitor, Biocides shall be accepted after the laboratory test at MFL. The test procedure for Analysis of Active ingredients for each chemical to be provided by the vendor along with the reagents required for lab testing.
9. One number "Test Heat" exchanger has to be provided by the vendor on returnable basis.

Preparation of Cooling Water Treatment System:

The existing cooling water treatment package shall be handed over to the vendor '**as is where is**' basis. Vendor shall provide CWT scheme along with suitable dosing & monitoring systems including in-situ generation of Chlorine-dioxide required for this purpose on returnable basis. To ensure precise addition of chemicals on continuous basis, the dosing system shall comprise of all the parts / equipment / pipeline / valves to ensure the dosing of different chemicals from dosing tank right up to that CT basin/ channel/ sump and any other equipment required to achieve the dosing on continuous & uniform basis. Vendor shall be responsible for maintaining the dosing systems and replacement of spares as and when required. Vendor shall keep necessary spares dosing and monitoring systems and spares parts at site so that chemicals dosing systems and monitoring systems can be kept in service uninterrupted.

The vendor shall submit detailed procedure for the changeover Program from the present system to the vendor's proposed system along with technical bid.

The successful vendor shall prepare the schematic arrangement for all the online monitoring instruments/equipments including chemicals injection locations (at specified locations for continuous sampling and monitoring) etc. and submit to MFL for review and approval.

New proposed CWT Program will be similar to past/current CWT program hence New CWT program provided by Vendor can be changeover without any pre- cleaning / passivation requirement. The new CWT program will only be allowed to start after complete installation of all dosing facilities & monitoring instruments/equipments.

Technical services by Vendor for operation & monitoring of CWT:

Vendor shall provide services in areas pertaining to Start-up, Program Monitoring, Optimization, Testing, Trouble Shooting and Training. This should be a continuous service during the use of the vendor's Treatment Program.

1. From the date of taking over the contract, the vendor will depute their experienced engineer throughout the contract period at MFL during general Shift hours and as required by MFL to supervise and monitor smooth operation of equipments / plants on free of charge basis.
2. Your engineer will submit periodical progress report to MFL as per mutual agreement / requirement.
3. Inspection of water handling equipment such as Heat Exchanger, Cooling Towers etc., will be carried out by the vendor regularly to determine the healthiness of CW system. Pressure drop

and Temperature rise across CW Exchangers for critical exchangers shall be monitored by the vendor and report to be submitted by the vendor on monthly basis.

4. Vendor shall also depute technical expert once in a month for performance review of the Cooling Water System. Based on such meeting the vendor shall submit written report in quadruplicate to MFL.
5. Vendor shall also Depute Technical Expert for inspection of Heat Exchangers / Coolers during planned shutdown and as and when required depending upon the requirement of the system. A photographic album of such inspection will be made by vendor and submitted to MFL for each shutdown. A report on the same should also be prepared by the vendor and submitted to MFL within 7 days from the date of completion of photographs / shutdown.
6. The vendor shall supply and maintain consumption software for Data Logging, Performance Evaluation etc., at no additional cost.

The parameters to be considered for assessing Cycles of Concentration of the system shall be **Chloride**.

The vendor has to supply samples of Corrosion Inhibitors and Dispersant along with the offer for checking the residuals (such as TPO₄, UFOPO₄, FOPO₄ and Delta PO₄ etc.) by dissolving the required quantity of Corrosion Inhibitors/Dispersants (as per the recommended PPM dosage) in Raw Water at our laboratory.

Vendor's representative shall be available at site all time during the treatment period to ensure all recommended parameters of Circulating Cooling Water. The representative should be a qualified engineer capable of individually trouble shooting the problems arising in CW system then and there itself.

When the Cooling Water System is stabilized and operating parameters are within the specified limits there shall be no revision on the dosage level of chemicals for regular treatment.

In the event of an increase in the chemicals dosage (supplied by vendor) beyond the specified limits, vendor has to bear the cost of excess consumption of chemicals. The excess consumption, if any shall be reviewed on a quarterly basis.

Instruments and reagents for field checking of temperatures, pH, FRC; Turbidity etc. will be under vendor's scope. Any special reagents required for lab analysis such as reagents for Residual Dispersants and Residual Azole Analysis in Cooling Water etc. will be under vendor's scope.

All the chemicals supplied should be in liquid form only. For each continuous dosing chemical 2 dosing pumps (1 operating +1 standby) along with related piping (on returnable basis) will be under vendor's scope.

The dosing pumps for chemical dosing & system monitoring devices mentioned above are to be made available at MFL site at least 3 days prior to the startup of New Treatment Program. During the course of treatment, all efforts shall be made by MFL jointly with vendor to optimize chemical consumption and to enhance Cycles of Concentration without affecting performance.

The Treatment Program shall be stabilized and performance established within 30 days of commencement of treatment. If the vendor requires Pre-treatment, Pre-cleaning and Passivation of the system, performance shall be established within 30 days of commencement of regular treatment. First coupon shall be put in line within one week after commencement of regular treatment. Bio-fouling Monitor, Deposit Monitor etc., shall also be put in line within 30 days of commencement of regular treatment.

Vendor's site representative shall be conversant with analytical methods, Microbiological Tests and ready to advise MFL for immediate corrective action in case of system upset conditions due to ingress of contaminants such as Ammonia, Oil / Hydro carbon etc., in circulating water.

Vendor has to provide 5 copies of the procedural treatment program before implementation of the program.

If MFL desires, vendor shall be ready to provide training to MFL personnel on chemical & Microbiological Analysis as well as implementation and operation of Cooling Water Treatment Program.

The offer shall be for three months duration and will be effective from date of commencement of treatment.

The treatment program shall be reviewed jointly by the vendor & MFL every month immediately after the removal of corrosion coupons from the system.

PERFORMANCE EVALUATION & GUARANTEES

The performance evaluation of the program would be from the following angles:

- A) Corrosion Rate Measurement for MS, SS, & AB coupons
- B) Microbiological Control –
- C) Scale & Deposit Control
- D) Fouling Control
- E) Open Inspection of Heat Exchangers

The vendor shall guarantee that the Corrosion Rate and Microbiological level shall not exceed:

M S (C1010)	-	≤ 3 MPY
A B	-	≤ 1 MPY
SS 304	-	≤ 0.02 MPY
S R B	-	≤ 100 ORG / 100 ML
T H B	-	≤ 1 LAKH COL. / ML

The evaluation of corrosion coupon shall be done every 30 days by MFL in accordance with the procedure laid down in ASTM D 2688 – 92 and THB & SRB measurements once in 10 days.

The Scaling and Fouling tendencies shall be assessed for the critical exchangers by way of estimating Fouling Factors and by visual inspection of the Fouling and Deposit monitors installed in the system. The Treatment Program should avoid heat transfer limitations arising out of fouling for a reasonable period of time i.e. between scheduled turn-around.

If possible, MFL will periodically open the process Heat Exchangers and assess the condition of Heat Exchangers with respect to Corrosion and Scaling / Bio-Fouling.

PERFORMANCE GUARANTEE

Performance Guarantee shall be for 5% of the supply value in the form of DD / furnishing BG.

The performance guarantee amount will be deducted from their first bill or a BG from any nationalized bank to be submitted. The validity of the BG should be for a period beyond 60 days of the contract period.

Performance guarantee should also cover moderate contingency situation.

The performance guarantee would cease to apply in the event of process contamination beyond the limits of 50 PPM for Oil / Hydrocarbon and 250 PPM for Ammonia and also when the moderate contingency situation prevails beyond 10 continuous days.

If the corrosion rate of any one of the three metallurgies exceeds by 50% of guaranteed value, or part thereof, a penalty of a minimum 20% of the price of chemicals and services for the corresponding treatment period will be levied. No pro-rata penalty is applicable.

For every additional 50% increase of the corrosion rates of any of the three metallurgy of the guaranteed value or part thereof another 20% of the cost as above will be levied. If

performance parameters are not met, MFL shall be at liberty to take suitable action including termination of the contract with a notice of 4 weeks.

PENALTY FOR NON-PERFORMANCE WITH RESPECT TO MICROBIOLOGICAL CONTROL:

If the **SRB & THB** values exceed the guaranteed limit even in moderate contingency situation, then the biocide charge shall not be payable. Also the cost of additional biocide requirement to bring the same within guaranteed value shall be to the vendor's account. Analysis of SRB&THB shall be continued till the normalcy is restored.

INFORMATION REQUIRED ALONG WITH OFFER:

Vendor shall provide Product Data Sheet, MSDS for each formulation indicating active ingredients and chemical characteristics.

Vendor shall indicate the functions of each formulation separately like Corrosion Inhibition, Scale / Deposit Inhibition, Dispersion, Chlorine Activation, Biocide etc.,

Vendor shall indicate the dosage levels of each formulation and estimated quantity required for one month.

Shelf life, packing details and safe handling methods etc., of all formulations shall be provided.

Vendor shall provide certificate from a government approved agency regarding the environmental friendliness of their formulations.

Vendor shall provide list of customers for whom they have treated similar water in the immediate past. Also the list of ammonia & urea plant cooling towers treated in the immediate past shall be provided.

Vendor shall provide list and frequency of analysis of parameters of Circulating Cooling Water and Make up waters.

EXCESS CHEMICALS:

In the matter of consumption of quantity of chemicals in excess of the recommended level (chemicals supplied by the vendor), the vendor has to bear the cost of the materials required in excess for ensuring the quality of cooling water.

GENERAL:

The chemicals shall be packed in 200 Lit HDPE containers. The packing shall be in different coloured containers or with coloured strips marked with brand name for different chemicals. Vendor shall take back the entire stock of chemicals at site in the event of termination of contract or at the end of contract period at actual cost.

Vendor shall provide test certificate of quality of the formulation with every consignment, stating that all the chemicals are biodegradable and environment friendly and should meet the specification of IS 2490-1974.

MFL reserves the right to reject the supplied MS, AB&SS coupons if they are not conforming to specified ASTM standards. In such case, it is the responsibility of vendor to supply specified standard coupons immediately. However, MFL reserves the right to purchase corrosion coupons of ASTM standards from any standard suppliers and use the same for performance guarantee evaluation. The cost for the corrosion coupons shall be deducted from the bill of vendor.

MFL reserves the right to put any number of corrosion racks in any place, which MFL decides, suitable. Vendor should accept to provide the number of racks and coupons as required by MFL.

The vendor is responsible for the safety of the persons engaged for monitoring the cooling water treatment program and should provide the safety gadgets such as safety Shoes, Helmet, Rubber / PVC gloves, Apron etc.

The vendor should have proper labour license, insurance, ESI, PF etc for the persons engaged in operation of Cooling Water Treatment Program. The vendor may have to provide copy of the above to MFL on monthly basis.

Scope of MFL:

MFL will supply only chlorine & Sulphuric acid for use in treatment at free of cost. Storage & dosing system for these chemicals shall be made available to the vendor free of cost for the proposed cooling water treatment.

Testing of all make up water and CW at MFL QC lab

Testing of corrosion coupons

Microbial counts analysis (THB, SRB etc.)

Utilities like power, air, steam and water required for testing and dosing equipments

PRE-QUALIFICATION CRITERIA – TECHNICAL

- 1 The bidder must be a manufacturer of eco –friendly Cooling Water treatment chemicals to be used in cooling water treatment program, having ISO certification for EMS and QMS. The vendor has to submit documentary evidence for the same.
- 2 The bidder should have minimum two consecutive years of experience in non-chromate based industrial cooling water treatment with cooling water circulation rate of 10000 m³/hr or above and cooling water system hold up volume of 5000 m³ or above in any one of the fertilizer plants (with Ammonia plant) during the last ten years (2007-2017). The bidder should submit Experience cum performance certificate from their clients as proof.
- 3 The bidder should have experience in any two fertilizer plants during the last ten years and should submit experience certificate from their clients.
- 4 The bidder should have experience in cooling water treatment program with Tertiary treated sewage water as direct make up or through RO plant to cooling tower.
- 5 The bidder shall furnish details of their R&D facility available with them including details of modern gadgets and tools for online flow measurement and monitoring of the system performance, corrosion rates etc., at site during normal running of the program. The vendor can have either a full fledged R&D or technical collaboration with a reputed institution / laboratory / international renowned company/organization providing cooling water treatment package for trouble shooting of problem associated with cooling water treatment. Required document shall be furnished.
- 6 The bidder should not be put in holiday list or black listed in any of the industry-Self declaration by the vendor.
- 7 The bidder should not have been terminated in any of the industry-Self declaration by the vendor.

PRE-QUALIFICATION CRITERIA - COMMERCIAL

1. Financial Soundness – Solvency Certificate to be submitted for Rs.25 Lakhs issued by reputed scheduled bank other than Gramin and Cooperative Bank

Signed copy for the proof of the above documents such as vendor registration certificates, PO copies, experience certificate are to be uploaded as attachment with the on-linesubmission of bids. Tenders not accompanying documentary proof will be rejected.

Documentary proof that the participant tenderer is a manufacturer of the chemicals and a certificate that the said manufacturer is manufacturing eco-friendly chemicals are to be uploaded along with online bids.

SPECIFICATION, QUANTITY & TECHNICAL BID FORMAT
SUPPLY OF COOLING WATER CHEMICALS& COOLING WATER TREATMENT
PROGRAM

SI No.	Parameters	Article Code	3 months Qty in
1	Polymeric Dispersant-PASA as product (40%)	23-1-10206	1500
2	Copper Corrosion Inhibitor as Product (20%)	23-1-10211	3000
3	Sodium Chlorite-NaCl ₂ O for Chlorine Dioxide 100% Shock Dose - 5 Hours per day	23-1-10216	3750
4	Sodium Bromide product as 40%-shock dosed for 2 hrs per day	23-1-10221	3850
5	Corrosion Formulation as product	23-1-10226	15000
6	Bio-dispersant as product (100%)	23-1-10231	3000
7	ISOTHIAZOLINE as product 1.50% shock dose/month	23-1-10236	600
8	QUAT as product 40% shock dose/month	23-1-10246	600
9	Pyrophosphate formulation	23-1-10250	6000
10	Polymeric Dispersant – TER as product (40%)	23-1-10255	4500
11	MBT as product 10% shock dose/month	23-1-10260	600

ALSO REFER ANNEXURE 2 FOR PROGRAM/TECHNICAL DETAILSAND FOR PENALTY /ACCEPTANCE /REJECTION

Signed copy of the specification details & duly filled Techno-Commercial bid to be uploaded as attachment with the on-line submission bids.

COMMERCIAL BID FORMAT

1	Name of the Tenderer	
2	Address	<u>E-mail</u> <u>Mobile:</u> <u>Land Line:</u>
3	Payment Term: 30 days Credit Payment only from the date of receipt of material, subject to acceptance thru RTGS / NEFT transfer.	Accepted
4	Contract Period: (Refer Annexure 9) Three Months from the date of LOI/PO.	Accepted
5	Delivery Term: (Ref Annexure 9) Entire ordered quantity is to be supplied within 7 days from the date of LOI / PO.	Accepted
6	Delivery Place (Refer Annexure 9) MFL Stores, Manali, Chennai- 600 068.	Accepted
7	Unloading at MFL (Refer Annexure 9) Tenderer must make arrangements for unloading the material at MFLStores.	Accepted
8	Offer Validity: 120 days from the date of opening of Tender	Accepted
9	Security Deposit (Refer Annexure 8 and Annexure 15) 5% in the event of placement of order	Accepted
10	Acceptance to give 5% Performance Guarantee in the event of placement of order	Accepted
11	Acceptance to Scope of Work and all other terms & conditions as mentioned in Annexure-2	Accepted
12	LD clause (Refer Annexure-9)	Accepted
13	Received Quantity (Refer Annexure-9) Weight as recorded in MFL weighbridge or the weight declared in vendor's DC/Invoice whichever is less is final and is applicable for payment.	Accepted
14	All other terms & conditions in Annexure – 9, 10, 11	Accepted
15	Production of Mfr's& Material Test Certificate	Accepted

Signature of the authorized person :

Name of the authorized person :

Designation of the authorized person :

ANNEXURE 6**PRICE BID FORMAT****SUPPLY OF COOLING WATER CHEMICALS & COOLING WATER TREATMENT PROGRAM**TENDER No. **EPRO/MM/CWC/140518/010 Dt.03.05.2018**

Bidder's Ref No..... dt.....

Sl. No.	Name of the Chemical	Article Code	Three months Qty in (Kgs) (a)	Basic Rate in Rs/Kg (b)	GST		Landed Rate Rs/Kg (e)	Landed Value of each item (Rs.) (f)
					% (c)	Amt. (d)		
							(b+d)	(a X e)
1	Polymeric Dispersant-PASA as product (40%)	23-1-10206	1500					DO NOT QUOTE PRICE IN THIS FORMAT
2	Copper Corrosion Inhibitor as Product (20%)	23-1-10211	3000					
3	Sodium Chlorite-NaCl2O for Chlorine Dioxide 100% Shock Dose - 5 Hours per day	23-1-10216	3750					
4	Sodium Bromide product as 40%-shock dosed for 2 hrs per day	23-1-10221	3850					
5	Corrosion Formulation as product	23-1-10226	15000					
6	Bio-dispersant as product (100%)	23-1-10231	3000					
7	ISOTHIAZOLINE as product 1.50% shock dose/month	23-1-10236	600					
8	QUAT as product 40% shock dose/month	23-1-10246	600					
9	Pyrophosphate formulation	23-1-10250	6000					
10	Polymeric Dispersant - TER as product (40%)	23-1-10255	4500					
11	MBT as product 10% shock dose/month	23-1-10260	600					
12	Total Landed Cost (1f+2f+3f+4f+5f+6f+7f+8f+9f+10f+11f)							

EARNEST MONEY DEPOSIT (EMD) TERMS & CONDITIONS

1. The tenderer shall submit the Earnest Money Deposit of **Rs.40,400/- (Rupees Forty Thousand and Four Hundred Only)**. by way of Demand Draft drawn in favour of “Madras Fertilizers Limited” payable at Chennai or Bank Guarantee (BG) in the MFL’s approved format (**Annexure - 13**) valid for 165 Days from Tender Opening Date or **thru RTGS** per details furnished in (**Annexure - 14**).
2. In the case of EMD thru BG, Independent confirmation for having issued the BG by the concerned banker should be sent directly to DGM-Materials Management, Madras Fertilizers Limited, Manali, Chennai 600 068.
3. NSIC / DGS&D / MSMEs registered bidders seeking EMD exemption should enclose valid Certificate of such Registration. They should upload the relevant Certificate copy before the closing date and time of tender.
4. EMD shall not carry any interest.
5. EMD shall be returned / refunded to the Tenderers only after finalization of Tender.
6. Offers without EMD or valid Certificates for exemption of EMD, will not be considered.
7. EMD shall be forfeited if the tenderer withdraws from the offer or modifies the terms and conditions of offer, without prejudice to MFL’s rights to initiate other legal action, for losses, if any suffered by MFL, even after forfeiture of EMD.
8. Unreturned EMD in respect of earlier tenders, if any, cannot be adjusted against this tender.
9. Tenderers who are submitting EMD payment in the form of **DD or BG / RTGS** should upload the scanned copy of the same on or before the Closing Date and Time of the Tender. The original EMD DD / BG should be directly sent to **DGM–Materials Management, Madras Fertilizers Ltd., Manali, Chennai 600 068** with clear superscription on the cover as **“EMD For E-Tender No EPRO/MM/CWC/140518/010 Dt.03.05.2018”** on or before the date **16.05.2018**

SECURITY DEPOSIT (SD) TERMS & CONDITIONS

1. Successful tenderer irrespective of holding NSIC / DGS&D / MSME Certificates shall have to make Security Deposit (SD) to the tune of 5% of Contract value within 21 days from the date of LOI / Purchase Order, by Demand Draft / RTGS or BG in MFL's approved format (**Annexure - 15**) with a validity of 60 Days beyond the date of completion of the Purchase Order / Delivery period.
2. In the case of SD thru BG, Independent confirmation for having issued the BG by the concerned banker should be sent directly to DGM-Materials Management, Madras Fertilizers Limited, Manali, Chennai 600 068.
3. Unreturned SD in respect of earlier tenders, if any, cannot be adjusted against this tender.
4. The SD shall be refunded within a reasonable time after the date of completion of the supply period subject to the contractor carrying out all the obligations/operations as required per tender.
5. Failure to pay SD shall be treated as failure to discharge the duties under the contract and shall result in cancellation of the offer of contract besides forfeiture of EMD.
6. MFL reserves the right to appropriate any part or the whole of the amount of SD without prejudice to other claims against the contractor for losses suffered by MFL due to failure on the part of the contractor or due to termination of the contract or contractor becoming disqualified because of liquidation / insolvency or change of composition. The decision of MFL in respect of such losses, damages, expenses; or costs shall be final and binding on the contractor and shall not be called into question
7. In the event of the SD being insufficient or if the SD has been wholly forfeited, the balance of the total sum recoverable as the case may shall be deducted from any sum then due or which any time thereafter may become due to contractor under this or any other contract with MFL. Should that sum also be not sufficient to cover the full amount recoverable, the contractor shall pay to MFL on demand the balance amount due. Whenever the SD falls short of specified amount the contractor shall submit either by DD/RTGS or by BG in approved format (Annexure 15) so that the total amount of security deposit shall not at any time be less than the specified amount.
8. SD shall be liable for forfeiture without prejudice to any other claims in the event of breach of contract/failures by the contractor, if any.
9. SD shall not carry any interest.

SPECIAL TERMS & CONDITIONS

1. CONSTITUTION OF THE TENDERER

After submission of offer by any tenderer and if any contract is awarded to such tenderer based on such offer, from the date of offer and until compliance with all the contractual obligations the tenderer/contractor shall, inform by Registered Post to DGM-Materials Management, Madras Fertilizers Limited, Manali, Chennai 600068, within 24 hours, any change in the composition of the tenderer/contractor and/or any re-constitution of the tenderer/contractor and/or any happenings like death / resignation of any Partner / Director / Member etc., in the tenderer/contractor organization. On receipt of such information, MFL reserves the right either to consider the offer or reject the same and/or continue or terminate the contract, if any awarded to the tenderer.

The tenderer/contractor shall produce self-attested copy of Power of Attorney granted in favour of the Signatory of the Tender and the Partnership Deed.

In the event of any dispute, Legal or other proceedings, by any party or parties concerning the constitution and/or composition and/or change in the tenderer/contractor's organization, MFL reserves the right to initiate necessary action as it deems fit, including termination of the contract, withholding payments due to the tenderer/contractor etc..

The contract, if any, awarded to the tenderer/contractor shall be on the basis of 'Principal-to-Principal Contract' and the tenderer/contractor shall be deemed to be in an independent tenderer/contractor engaged for the performance of service / work / job in the manner and to the extent provided in these presents.

2. VOLUME

The quantity indicated in the tender is only tentative and the same is subject to revision. MFL reserves the right to increase or decrease the quantity during contract period.

3. PRICE & TERMS OF DELIVERY

Price quoted must be firm during the Tenure of the Contract. Please quote your lowest rate for delivery of **Cooling Water Chemicals** at MFL Stores premises at Manali, Chennai including unloading by road transport. As the offer is "Door Delivery at MFL Stores", the risk in transit shall be yours.

4. INSPECTION & TESTING

Purchaser shall have the right to inspect and test goods at any time and to reject unacceptable goods.

Notwithstanding purchaser's acceptance or right of inspection and or any other terms and conditions provided in the purchase order, supplier warrants that **Cooling Water Chemicals** is complied with the MFL Specification. The Purchase Order is issued in reliance on the aforementioned warranty of the supplier.

5. **REJECTION**

All supplies should conform to specification as stipulated in **Annexure 4**. Tenderer should ensure the quality before dispatching the consignment. If the material received is not conforming to our specification, shall be liable for summary rejection. Tenderer must make necessary arrangements for removing the rejected material immediately and arrange to replace the same with fresh supply conforming to specification on receipt of intimation from MFL at their risk and cost.

In case material is not meeting our specification entire lot will be rejected and supplier shall arrange to take back the material within 10 days from the date of information and beyond which MFL is not responsible for the material loss if any.

6. **CONTRACT PERIOD**

Contract Period shall remain in force for a period of three months from the date of LOI / PO.

7. **EVALUATION BASIS**

The price bids of tenderers qualified in the techno-commercial bid alone will be considered for price evaluation and arrival of cost and selection will be on Techno-Commercially qualified "R1 basis" if Reverse Auction is conducted. Techno-commercially qualified "L1 basis" if Reverse Auction is not conducted. (Please also refer Sl.No.23)

8. **UNLOADING**

Tenderer must make arrangements for unloading the material at MFL Stores, per instruction of MFL Stores Supervisor / Manager, concerned.

9. **DELIVERY SCHEDULE:**

Entire ordered quantity is to be supplied within 7 days from the date of LOI / PO.

10. WEIGHMENT

Weighment will be done at MFL weighbridge. Weight as recorded in MFL weighbridge or the weight declared in vendor's DC/Invoice whichever is less is final and is applicable for payment.

11. MFL SAFETY RULES & REGULATIONS

Tenderer should comply with environmental instructions while delivering their material at MFL.

Smoking inside the factory premises is very dangerous and is strictly prohibited.

12. TERMS OF PAYMENT

Payment will be made on **30 days Credit Payment** only from the date of receipt of material, subject to acceptance thru' RTGS. **Tenderer to quote only for credit payment offering a credit period of 30 days. Payment becomes due only from the 31st day from the date of supply, subject to acceptance of the material. Tenderer/Contractor shall not be entitled for any interest on delayed payment, where the delay is reasonable and/or due to force majeure situation.**

Offers with payment term such as "payment thru Proforma Invoice" or "payment against documents thru bank" or "payment thru letter of credit" etc., will be summarily rejected.

Invoices to be forwarded to AGM – CA, Madras Fertilizers Limited, Manali, Chennai 600 068. Bills submitted should be duly supported by proof of delivery.

Invoices should be clearly marked with MFL Purchase Order No. and date and the tenderer's DC No. and Date.

Payment will be made only thru RTGS, after reckoning the credit period from the date of receipt of bills at MFL for the accepted material.

RTGS Form (**Annexure 16**) to be filled in, signed & sent along with the offer by the Tenderer to avoid any delay in processing payment.

13. SUBLETTING & TRANSFER

Tenderer shall be solely responsible for rendering any or all the services. He shall not sublet / transfer / assign the contract or any part thereof to others. All their dealing with third parties shall be without reference to MFL.

14. CANCELLATION OF ORDER

Failure to comply with specification, terms & conditions or to perform or deliver as promised shall entitle the Purchaser to cancel all or any part of this order. In the

event of such cancellation, the Purchaser shall not be required to make any payment on such cancelled items. Nothing herein shall limit the Purchaser's right in the event of the failure to perform by the Seller.

15. SUMMARY TERMINATION

MFL reserves the right to terminate the supply contract due to any failure/breach on the part of the tenderer in discharging the services under the contract, or in the event of vendor becoming insolvent or going into liquidation. The decision of Madras Fertilizers Limited about the breach/failure on the part of the tenderer shall be final and binding on the tenderer.

MFL shall also have, without prejudice to any other rights and remedies, the right in the event of breach/failure by the tenderer of any of the terms and conditions of the Supply, or due to the tenderer's inability to perform as agreed for any reason whatsoever, to terminate the supply contract forthwith and get the supplies at the risk and cost of the tenderer and recover the losses, damages, expenses or costs that may be suffered or incurred by MFL. The decision of Madras Fertilizers Limited about the losses, breach/failure on the part of the tenderer shall be final and binding on the tenderer and shall not be called into question.

16. LAWS GOVERNING THE CONTRACT

Contract will be governed by Laws of India for the time being in force and as amended from time to time and the Courts within whose jurisdiction the Registered Office of the Company is situated alone will have jurisdiction.

17. DEFINITION

The term "Tender" shall mean & include the online bids and other attachments uploaded while submitting the bids online.

"Tenderer" shall mean and include those bidders submitting their offers and/or successful bidders entering into agreement with MFL, their Heirs, Representatives, Executives, Administrators, Successors and their permitted assignees, as the case may be.

"Services" shall mean and include all items of work duties / responsibilities of the Tenderer and / or any other item of work not specified but consistent with general terms of the contract and entrusted by MFL.

18. FORCE MAJEURE

The terms and conditions of the orders shall be subject to force majeure. Neither seller nor MFL shall be considered in default of its obligation under this contract,

if such performance is prevented or delayed because of war, hostilities, revolution, civil commotion, sabotage, strikes, lock outs, fires, floods, explosions, epidemics, accidents, freight embargoes on export or import to India, Acts of God, Acts of Government, should one or both parties be prevented from fulfilling their actual obligations by the state of force majeure lasting continuously for a period of 3 months the two parties should consult each other regarding future implementation of the contract.

Tenderer shall promptly notify the Purchaser in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the Purchaser in writing the Seller shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

19. ARBITRATION

Any or all disputes arising out of the contract / agreement shall be settled by mutual discussions and in the event of failure to do so, such dispute (s) shall be referred to a sole arbitrator, who will be appointed by mutual consent for settlement of such dispute (s) and whose decision shall be final and binding. In the event of failure to appoint such a sole arbitrator, with mutual consent, then the sole arbitrator will be appointed through the high court of judicature at Madras. Subject as aforesaid, the arbitration and conciliation act 1996 shall apply to the arbitration proceedings under this clause and such arbitration shall be in English and take place in the city of Chennai, Tamil Nadu.

20. COMPLIANCE WITH STATUTORY PROVISIONS

In the event of any accident causing injury or death of any workmen engaged by the tenderer while executing such supply and/or service contracts, all obligations/responsibilities shall rest with the tenderer and MFL shall have no obligation whatsoever in that respect and MFL shall not be liable for any action by third parties.

For any damage to MFL property, due to negligence by the tenderer or workmen engaged by tenderer, the tenderer shall make good the loss suffered by MFL, on account of such damage to MFL's property due to such negligence.

21. VARIATION

MFL will not be bound by any general or printed provisions of tenderer's offer. Only MFL's NIT Format is acceptable.

22. LIQUIDATED DAMAGES (LD Clause)

In the event of placement of order on the successful tenderer, delivery of the items within 7 days from the date of LOI/Purchase order is very important. If the items

are not delivered within 7 days, MFL reserves the right either to reject the material or to receive the material subject to imposition of penalty at the rate of 0.5% of the invoice value for every week of delay or part thereof from the specified date of delivery subject to a maximum of 5% of the purchase order value. Purchase order value includes basic order value + applicable statutory levies, and freight & insurance if applicable. **LD clause is applicable for the part of the quantity, which is delivered late.**

23. **REVERSE AUCTION AND / OR NEGOTIATION**

Reverse auction: Applicable where there is more than one techno-commercially qualified bid.

Negotiation: Applicable in the following circumstances:

1. Where there is only one techno-commercially qualified bid
2. Where there are more than 1 techno-commercially qualified bid and where reverse auction is conducted but no competitive bids in reverse auction.

Notwithstanding anything mentioned above, MFL reserves the right to go in for Reverse Auction process and/or negotiation, if required or may finalize the tender without Reverse Auction and/or negotiation. However, the decision, if any to conduct Reverse Auction will be conveyed to short-listed bidders. If Reverse Auction is conducted, the same will be intimated in advance to the techno-commercially shortlisted tenderers to enable them to indicate their acceptance for participation in the Reverse Auction.

24. **DECLARATION IN HOLIDAY LIST/ BLACKLISTED / ARBITRATION PROCEEDINGS.**

Where the bidder is placed in holiday list / Blacklisted by MFL or by any other Govt. PSUs, even if such bidder participated in the bidding process, their offer will not be considered for evaluation.

Where there is pending arbitration proceedings initiated by MFL against any contractor/ supplier is / are pending disposal, the offer of such contractor / supplier will not be considered for evaluation.

25. **H1 ELIMINATION:**

- MFL requires minimum of 5 bidders for H1 Elimination.
- After opening the price bids, the H1 bidder/bidders will be eliminated, only if the minimum number of eligible bidders for Reverse Auction are 5.

Example Conditions:

CONDITION -1:

No. of bidders – 6

H1 bidders – 3 (Highest quoted bidders with same rates)

(Eligible bidders for Reverse Auction if H1 elimination carried out would be 3)

Hence no H1 elimination would be carried out and all the 6 parties would be allowed to participate in the Reverse Auction.

CONDITION -2:

No. of bidders – 10

H1 bidders – 4 (Highest quoted bidders with same rates)

(Eligible bidders for Reverse Auction if H1 elimination carried out would be 6)

Hence all the H1 bidders (4 bidders) would be eliminated and the remaining 6 bidders would be allowed to participate in the Reverse Auction.

26.The bidders will be educated by our service provider before conducting Reverse Auction.



GENERAL TERMS & CONDITIONS

1. Conditional offers will not be considered.
2. Rate quoted should be valid for a period of 90 days from the date of opening of Bids. Other commercial terms should be kept firm till the completion of the contract / execution of the purchase order, except statutory levies. Revision, if any, in the statutory levies will be applicable, subject to adherence to other commercial terms like “delivery period”, etc.
3. In the event of placing the order, the tenderer should strictly adhere to the delivery date and should accept to deliver the ordered items on or before the delivery date as mentioned in the purchase order or as advised by MFL
4. Any unsolicited letter / fax / e-mail on price / other terms revision will not be entertained and such tenderers are liable to be disqualified from tender.
5. Any offer received against this tender from sister / associate concern and/or offers received after the due date will be summarily rejected
6. Canvassing in any form is strictly prohibited and the tenderers who resort to canvassing in any form shall be disqualified.
7. MFL will not be bound by any general/printed provisions of Tenderer’s offer.
8. Tenderer should clearly indicate the GST % & HSN code, wherever applicable. In case of any change in the GST, the same will be applicable from the effective date of implementation.
9. MFL shall have the right to inspect and test goods at any time and to reject unacceptable goods. The tenderer shall arrange collection of the rejected materials from MFL at his cost.
10. Notwithstanding purchaser’s acceptance or right to inspection and / or any other terms and conditions provided in the purchase order, tenderer warrants that all goods supplied hereunder are free from any defects in design materials and workmanship and that they fully comply with the specifications. Purchase order will be issued in reliance on the aforementioned warranty of the tenderer.
11. Demurrage, other expenses incurred owing to the tenderers not complying with the purchaser’s instruction will be to the tenderer’s account.

12. The enquiry shall not be assigned to anybody by the tenderer without obtaining the prior written consent of MFL.
13. Tenderer warrants that the goods described herein, and sale or use of them will not infringe any patent and tenderer covenants that he will defend at his own cost and expense every act which may be brought against the purchaser or against those selling or using the purchaser's products for any alleged infringement of any patent by reason of the sale or use of such articles and tenderer agrees to pay all costs, damages, liens and profits recoverable in any such action.
14. Eligible NSIC registered Micro Small & Medium Enterprises (MSME's) participating in this tender and quoting price within L1 + 15% may be considered at the sole discretion of MFL. Such bidders may be allowed to supply up to 20% of the Purchase Order value, where it is feasible to place order on more than one bidder by splitting the quantity, provided such bidder is prepared to bring down the price equal to or less than the L1 price quoted by the Non-MSME.
15. MFL reserves the right to accept or reject any or all the tenders or any part thereof without assigning any reason whatsoever.
16. Tenderers are advised to acquaint themselves with the jobs involved. The tenderer in the event of awarding the contract / PO, is required to supply the materials per specification to MFL Stores at Manali, using their own or hired vehicle. The operation to be followed is:
 - Weighing the vehicle at MFL Weigh Bridge while coming in and going out of MFL premises;
 - Unloading **Cooling Water Chemicals** with their own men at the place assigned by the authorized MFL Personnel; and
 - Maintaining trip sheet, Material- In Pass and other documents with signature of authorized MFL personnel for receipt of material.
 - The vehicle in which material is transported should have emission control certificate, RC Book, fitness certificate and valid license for the driver who is driving the vehicle.
 - It is the responsibility of the vendor to transport the goods at their own risk and MFL will not be responsible for any damages or whatsoever.



TENDERER UNDERTAKING

THE TENDERER HEREIN

- Agrees, accepts and abides by all the terms, conditions and covenants of the tender having read and understood the tender documents in full including the specification, scope of work, instructions, forms, annexures, terms & conditions etc.
- Confirms and acknowledges that the bids placed by the tenderer are true, accurate & with the best knowledge of the tenderer
- Confirms that awarding of the contract/purchase order based on the bids of the tenderer is the sole discretion of MFL
- Undertakes to honour the bid(s), which is legally binding on, if the contract/purchase order is awarded to the tenderer.
- Accepts EMD, SD, PBG& Liquidated Damages clauses and agrees to invocation of the respective clause(s) in case of non-fulfillment of commitment.
- Declares that M/s National Informatics Centre provided the training to participate in e-tender.
- Agrees to accept any changes, if any, to the tender that may be made subsequently after releasing the tender, but before the last date meant for submission of bids, with respect to specification, last date for bid submission and/or any other clauses/terms of the tender.
- Agrees to update any changes made in the tenders & subsequent corrigendum from the e-Tendering portal of M/s National Informatics Centre.
- The tenderer shall furnish a declaration that the tenderer has not been put on Holiday list / Delisted / black-listed or that there is no pending litigation or any action including arbitration proceedings against the tenderer by other companies, especially, by MFL and any other public sector undertakings. In case of prevalence of any such litigation or action including arbitration proceedings, tenderer shall furnish full details of such litigation (Refer clause 24 of Annexure 9).

Signature of the authorized person :

Name of the authorized person :

Designation of the authorized person :

Company's Seal :

INFORMATION ABOUT TENDERER

Sl. No.	Information Required	To be Filled in by Tenderer
1	Name of the Tenderer	
2	Address of Registered Office and Branches	
3	Address and Phone Number, Fax Number, Email ID etc.	
4	Composition of Tender (here state whether it is Hindu Joint Family Business, Proprietorship concern or Registered Partnership or a Limited Company)	
5	Name of the Kartha in case of Hindu joint family business, or the name of the proprietor in the case of proprietorship or the name of the partners in the case partnership firm or the name of the Managing Director in the case of limited companies should be furnished.	
6	In case of change in composition and change of the partner or proprietor, the same should be intimated to MFL in writing, well in advance with required documents. In such case of changes, MFL reserves the right to terminate or to continue the contract	
7	Nature of normal business of the tenderer	
8	GST Registration No.	
9	Details of Turnover	
10	Copy of PAN Card and last 3 years IT Return with acknowledgment order to be attached	
11	Last Three years statement of Accounts with Balance Sheet.	

Note: Copies of documents are required to be attached for Sl.No. 7 to 11.

FORMAT FOR BANK GUARANTEE FOR FURNISHING EMD

Whereas (herein after called the ‘tenderer’) has submitted their offer datedfor the supply of (hereinafter called the “tender”) against the purchaser’s tender enquiry No..... KNOW ALL MEN by these presents that WE ofhaving our registered office at are bound unto Madras Fertilizers Limited (hereinafter called the “Purchaser”) in the sum of Rupees for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this day of 20.....

THE CONDITIONS OF THIS OBLIGATION ARE:

- 1 If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- 2 If the tenderer having been notified of the acceptance of his tender by the Purchaser during a period of its validity:-
 - a) If the tenderer fails to furnish the Performance Security for the due performance of the contract.
 - b) Fails or refuses to accept /execute the contract.

WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

.....
(Signature of the authorized officer of the Bank)

.....
.....
Name and designation of the officer

.....
Seal, name & address of the Bank and address of the Branch.




MADRAS FERTILIZERS LIMITED
MANALI, CHENNAI - 600 068

MANDATE FOR ELECTRONIC FUND TRANSFER THROUGH RTGS / NEFT

1.	Party Name	MADRAS FERTILIZERS LTD
2.	Party's complete address and Phone no.	MANALI CHENNAI 600 068
3.	Bank Name	STATE BANK OF INDIA
4.	Bank Branch Name and Address with Phone.No.	COMMERCIAL BRANCH NSC BOSE ROAD CHENNAI 600 001
5.	IFS (RTGS / NEFT) Code	SBIIN0007347
6.	Name of the beneficiary	MADRAS FERTILIZERS LTD.
6.	Bank Account No.	10242276424
7.	Account Type CC A/c (Saving / Current) (SA/CA)	CC ACCOUNT
8.	Email ID	ins@madrasfert.co.in
9.	PAN Number	AAACM5198E
10.	Contact Person	PRIYA RANJAN PANDA
11.	Contact Person mobile No.	9884172251

CERTIFICATE

We MFL, having our branch at SBI-CB have verified and certify that the information provided in SL Nos. 1 to 7 are correct per our records.



Signature of the authorized
Official from the Bank with seal

Encls: Cancelled / copy of cheque leaf

V. CHANDRAMOULI
CHIEF MANAGER,
CORPORATE ACCOUNTS & TAXATION,
MADRAS FERTILIZERS LIMITED,
MANALI, CHENNAI-600 068.

PRIYA RANJAN PANDA
DEPUTY GENERAL MANAGER-FINANCE
MADRAS FERTILIZERS LIMITED
MANALI, CHENNAI-600 068.



भारतीय स्टेट बैंक
State Bank Of India

073477 COMMERCIAL BRANCH CHENNAI
BOMBAY MUTUAL BUILDING
232 NSC BOSE ROAD CHENNAI 600001
IFS Code: SBIN007347

काल 3 मासों के लिए वैध / VALID FOR 3 MONTHS ONLY
D D M M Y Y Y Y

को या उनके आदेश पर OR ORDER

PAY

रुपये RUPEES

अदा करें ₹

चक्र. सं. /
A/c No. 10242276424

VALID FOR Rs. 50,00 Lacs & UNDER

FOR MADRAS FERTILISERS LTD



Prefix :
0523600002

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

AUTHORISED SIGNATORIES
Please sign above

183179 600002014 000205 30

BANK GUARANTEE FOR FURNISHING SECURITY DEPOSIT

In consideration of the Madras Fertilizers Limited, Manali, Chennai 600 068 (Hereinafter called "the Company") having agreed to exempt _____(hereinafter called "the said Contractor (s)") from the demand under the terms and conditions of an agreement dated _____, Purchase Order No. _____ dated _____ made between Madras Fertilizers Limited and _____ for supply of _____ (hereinafter called "the said agreement") of a Security Deposit for the due fulfillment by the said contractor(s) of the terms and conditions contained in the said agreement, on production of Bank Guarantee for Rs. _____ (Rupees _____). We

_____ (Hereinafter referred as "Bank") at the request of _____ do hereby undertake to pay to the company an amount not exceeding Rs. _____ (Rupees _____) against any loss or damage caused to or suffered or would be caused to or suffered by the Company by reason of any breach by the contractor(s) of any of the terms and conditions contained in the said agreement.

We ___(bank)_____ do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the company by reason of any breach by the said contractor(s) of any of the terms or conditions contained in the said agreement or by reason of the contractor(s) failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due any payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees _____).

We undertake to pay to the company any money demanded notwithstanding any dispute raised by the contractor(s) / tenderer(s) in any suit or proceeding pending before any court or tribunal relating thereto liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under any contractor(s)/tenderer(s) shall have no claim against us for making such demand.

We _____(Bank)_____ further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that is shall contained to be enforceable till all the dues of the company under or by virtue of the said agreement have been fully paid. And its claim satisfied or discharge or till the company certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before __(date)_____. We shall be discharged from all liability under this guarantee thereafter. We _____(bank)_____ further agree with the company that the company shall have the full cut liberty without our consent and without affecting in any manner or obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to ;postpone for any time or from time to time any of the powers exercisable by the company against the said contractor(s) and forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor(s) or for any forbearance or omission on the part of the company or any indulgence by the company to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision have effect or so relieving us.

This guarantee will not be discharged due to the change in the constitution of the bank or the contractor(s)/tenderer(s).

We, _____(bank)_____, lastly undertake not to revoke this guarantee during its currency.

Notwithstanding anything contained this bank guarantees our liability under this guarantee is restricted to Rs._____ (Rupees _____). Our guarantee shall remain in force until _____ and unless a demand or claim under this guarantee is received by us in writing on or before _____, all your rights under the said guarantee shall be forfeited and we shall be deemed relieved and discharged from all liabilities there under.

The beneficiary is bound to seek confirmation from the Regional Office whose address is mentioned below in respect of the geniuses and authenticity of the Bank Guarantee.

(Signature of the authorized officer of the Bank) -----

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch.

**MADRAS FERTILIZERS LIMITED
BANK DETAILS & AUTHORISATION FOR RTGS/NEFT PAYMENT**

REQUIRED DETAILS	TO BE FURNISHED BY THE VENDOR		
VENDOR NAME			
ADDRESS			
TELEPHONE NO.		FAX No.	
EMAIL ID			
CONTACT PERSONS'S NAME		Designation :	
MOBILE NO.			
EMAIL ID			
COMPANY'S PAN NO.			
IMPORT EXPORT CODE			
BANK ACCOUNT NO.			
VENDOR'S BANK NAME			
BANK ADDRESS / PHONE NO.			
VENDOR'S BANK CODE (MICR) NO.		GRPT CODE	
VENDOR'S BANK ACCOUNT NO.		NEFT CODE	
		RTGS CODE	
BANK SWIFT CODE (For foreign vendors)			
	Type of Account	Saving Acct / Current Acct. (Strike out which is not applicable)	
ARE YOU A	Manufacturer YES / NO	Dealer YES / NO	Agent YES / NO
CATEGORY OF THE FIRM	A. Micro	B. Small	C. Medium
REGISTERED WITH NUMBERS	GST	SSI	OTHERS

We hereby authorize Madras fertilizers Limited to make all the payments due to us with respect to above referred Enquiry through RTGS/NEFT Transfer

Place:

Signature of Authorized Signatory:

Date:

Name:

Seal:

Designation:

(To be filled by MFL in case of ordering)

MFL Purchase Order No.	
------------------------	--

RTGS-Real Time Gross Settlement Code
IFSC- Indian Financial System Code

NEFT-National Electronic Funds Transfer

BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY

WHEREAS
(name and address of the supplier) (hereinafter called “the supplier”) has undertaken, in pursuance of contract no..... dated to supply (description of goods and services) (herein after called “the contract”). AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract; AND WHEREAS we have agreed to give the supplier such a bank guarantee; NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein. We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand. We further agree that no change or addition to or other modification of the terms of the contract to be performed thereunder or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification. This guarantee shall be valid until the day of, 20.....

(Signature of the authorized officer of the Bank)

.....

Name and designation of the officer

.....

.....

Seal, name & address of the Bank and address of the Branch

REQUEST FOR QUOTATION – RFQ

Auction Rule Document (ARD) Reference Number	MFL/RA/2017-18/ <<srl.no>>
Process	Online Reverse Auction
Website	https://eauction.gov.in/eAuction/app (or) https://eprocure.gov.in/eprocure/app
Date & Time of Auction	<<date and time>>
Requirement of Item	<<name of the tender with tender number>>

Dear Supplier,

MFL is conducting Reverse Auction for above mentioned Tender. Unlike our past sourcing initiatives, bids for this opportunity will follow through online reverse auction. In this way, a fully transparent, fair market is created, where prospective vendors can evaluate the competition and are provided with opportunity to react as per the competitive live market/ bids & hence can able to modify your bids within the 'pre-intimated' fixed time frame.

We will also take the responsibility to publish the document,for conducting online Reverse auction and the bidding process, train all invited suppliers on how to bid online and conduct the online competitive bidding event and collect post bid cost breakdowns if any. This process shall be managed by M/s National Informatics Centre (hence known as NIC).

The goal of this initiative is to ensure that MFL is receiving the best market prices in the most transparent way and is aligned with right quality suppliers. MFL will keep all information received from suppliers as confidential.

Thanking you for your co-operation and best wishes.

<<Tender Inviting Authority>>

BUSINESS RULES FOR REVERSE AUCTION

1.0 APPLICABILITY

- 1.1 Reverse Auctions are carried out under the framework of rules that are called BusinessRules.
- 1.2 All vendors participating in Reverse Auction shall understand/accept and give an undertaking for compliance with the same to MFL in the prescribed format Annexure I.

2.0 ELIGIBILITY

- 2.1 Only vendors who are technically qualified alone will be eligible for participation in the reverse auction process.

3.0 COMPLIANCE/CONFIRMATION FROM VENDORS

- 3.1 The vendors participating in Reverse Auction shall submit the following duly signed by the same Competent Authority who signs the offer documents in response to the Tender:
 - 3.1.1 Acceptance of Business Rules for Reverse Auction and undertaking as per format in Annexure I.

4.0 TRAINING

- 4.1 MFL will facilitate training for participation in Reverse Auction on its own.

5.0 TOTAL COST OF OWNERSHIP(TCO)

- 5.1 TCO refers to the aggregate amounts payable by MFL for transfer of ownership.

6.0 DATE/TIME FOR TRAINING

- 6.1 The Venue, Date, Time etc. for training in Reverse Auction shall be advised at the appropriate time.
- 6.2 MFL shall endeavor to fix such Date/Time at mutual convenience to the vendor/s, and MFL.
- 6.3 No request for postponement/fixing of Training Date/Time shall be entertained which in the sole view and discretion of MFL might result in any avoidable delay to either the Reverse Auction or the whole process of selection of vendor.

7.0 DATE/TIME OF REVERSE AUCTION

- 7.1 The Date and Time of commencement of Reverse Auction as also Duration of 'Reverse Auction Time' shall be communicated at least 1 working Day prior to such auction Date.

7.2 Any force majeure or other condition leading to postponement of auction shall entitle MFL to postponement of auction even after communication, but, MFL shall be obliged to communicate to all participating vendors the 'postponement' prior to commencement of such 'ReverseAuction'.

8.0 CONDUCT OF REVERSEAUCTION

8.1 The Reverse Auction shall be conducted on a specific web portal meant for this purpose (<https://eauction.gov.in/eAuction/app>).

8.2 The Reverse Auction may be conducted by MFL itself using the NIC facility.

9.0 TRAINING ANDAUCTION

9.0.1 MFL is responsible for conduct of adequate training to all technically qualified bidders representing the reverse auction and bidding process.

9.0.2 Each bidder shall participate in the training at his / their own on prior appointment with MFL but before the date and time mentioned for the auction.

9.0.3 Bidders are requested to enroll themselves into the e-auction portal (<https://eauction.gov.in/eAuction/app>) and register their profile and digital key.

9.0.4 The credentials so created shall be used to logging into the e-Auction site for participation.

9.0.5 Any Queries regarding the enrollment, bidders are advised to contact MFL – e-Procurement Cell (044-25945318 / 25941261) before the date and time mentioned for the auction.

9.0.6 All the bids made from the log-in ID will be considered as the bids made by the bidder.

9.0.7 Any bid once made through registered log-in ID / password by the vendor / bidder cannot be cancelled. The bidder, in other words, is bound to sell the "Offering" as per the Tender at the bid price of TCO.

9.0.8 Every successive bid by the bidder / vendor being decrement bidding shall replace the earlier bid automatically and the final bid as per the time and log-in ID shall prevail over the earlier bids.

9.0.9 MFL shall conduct the reverse auction as per the Standard English reverse auction, that is, no two bids can have identical price from two different vendors. In other words, there shall never be a "Tie" in bids.

9.0.10 Bidding in the Last 5th minute shall be avoided.

10.0 TRANSPARENCY INBIDS

10.1 All bidders will be able to view during the auction time the current lowest price in portal. Bidder shall be able to view not only the lowest bid but also the last bid made by him at any point of time during the auctiontime.

11.0 MASKING OFNAMES

11.1 Names of bidders/ vendors shall be anonymously masked in the Reverse Auction process and vendors will be given suitable dummynames.

11.2 After completion of Reverse Auction, the service provider / auctioneer shall submit a report to MFL with all details of bid and the original names of the bidders as also the L1 bidder with his / their original names.

12.0 STARTPRICE

12.1 MFL shall determine the start price on its own at appropriate time during or at the conclusion of technical evaluation.

13.0 DECREMENTAL BIDVALUE

13.1 The vendors shall be able to bid only at a specified decrement value and not at any other fractions. The Bid decrement value shall be fixed by MFL during the start of the Reverse Auction.

13.2 The bid decrement value shall be rounded off to the nearest thousands ofrupees.

14.0 COPY OF BUSINESSRULES

14.1 MFL shall up-load copy of the Business rules/ PCF/POST BID DOCUMENT in the auction portal. Only MFL technically qualified bidders for the mentioned tender alone can participate in the auction process.

15.0 REVERSE AUCTIONPROCESS

15.1 In order to reduce the time involved in the procurement process, MFL shall be entitled to complete the entire procurement process through a single Reverse Auction.

15.2 MFL shall however, be entitled to cancel the procurement of Reverse Auction process, if in its view procurement or reverse auction process cannot be conducted in a fair manner and / or in the interest of the MFL.

15.3 The successful vendor shall be obliged to provide a Bill of Material at the last bid price at the close of auction using the specified formats provided (Annexure II & III).

16.0 CHANGES IN BUSINESSRULES

- 16.1 Any change in Business Rules as may become emergent and based on the experience gained shall be made only by MFL.
- 16.2 Any / all changes made in Business Rules shall be uploaded inthe Websiteimmediately.
- 16.3 If any reverse auction process has commenced and a change is made in Business Rules, it shall be informed immediately to each vendor/ bidder and his concurrence to / acceptance of the change shall be obtained in writing by MFL.

17.0 DON'TS APPLICABLE TO THEBIDDER/VENDOR

- 17.1 No vendor shall involve himself / itself or any of his / its representatives in any price manipulation directly or indirectly with other bidders. If any such practice comes to the notice, MFL shall disqualify the vendor / bidders concerned from the reverse auctionprocess.
- 17.2 Bidder shall not disclose details of his bids or any other details concerning Reverse Auction process of MFL to any other third party without specific permission in writing from MFL.
- 17.3 Neither MFL nor M/s NIC can be held responsible for consequential damages such as no power supply, system problem, inability to use the system, loss of electronic information, power interruptions, UPS failure, etc. (MFL shall, however, entertain any such issues of interruptions, problems with open mind and fair degree of transparency in the process before deciding to stop or extend the auction.)

18.0 ERRORS ANDOMISSIONS

- 18.1 On any issue or area of material concern respecting Reverse Auction not specifically dealt with in these Business Rules, the decision of MFL shall be final and binding on allconcerned.

PROCESS COMPLIANCE FORM

(The bidders are required to print this on their company's letter head, sign & stamp before up-loading)

MFL-BRD Ref No: MFL/RA/2017-18/<<srl>>
<<date>>

Date:

Madras Fertilizers Limited
(A Govt. of India undertaking)
Manali, Chennai – 600068

Dear Sir,

**Reverse Auction for <<Description of Item/ service>>
E – TENDER No: <<Tender Number>>**

We are interested in participating in the e-Auction Process for above mentioned subject and as stated in the MFL business Rule Document (MFL-BRD). We have received and fully understood the ARD for e-auction.

We confirm:

1. I/We agree that I/we have been provided training by MFL in order to participate in Online Auctions. I/We agree to update ourselves regarding any changes made to the MFL-BRD/MFL-BRD from the website of the NIC /MFL and bid accordingly.
2. I/We agree that I/we shall change the password on receipt by me/us and keep it confidential. I/We agree that NIC/MFL shall not be held responsible in any way for any losses that may be suffered by me /us as a result of disclosure of the password to any other person by me.
3. NIC/MFL will not be held responsible for any breakdown of power, internet/ bandwidth Connectivity, server, either at Bidder's end or at NIC directly or indirectly in the process of online bidding. NIC is not responsible for if any disputes or disagreements occur in between buyers & seller (vice versa).
4. Our online bids will pertain to the products / services as required by the MFL, as per the auction lots (markets).
5. We are aware of and understand the "Start Bid Price"/"Min Decrement"/ extension or bidding systems.
6. We are aware that Buyer (MFL) can accept or reject any of our bids without assigning any reasons whatsoever.

We hereby, confirm that we have understood the lot & market break up, Bidding price calculation and the process of e-Auction Event. We also confirm that we have made arrangements and would be able to place our bid on the specified date & time on our own.

We confirm, if allotted, we will honor our online bid(s), which is legally binding on us.

Name:

Signature:
Seal

Company Stamp &

Designation:

POST BID DOCUMENT**MFL-BRD Ref No: MFL/RA/2017-18/ <<srlno>>**

Date: <<date>>

To

Madras Fertilizers Limited
(A Govt. of India undertaking)
Manali, Chennai - 600068

**Sub: Final price quoted during online reverse auction conducted on <<date>>and
price break up-of**

<<Description of Goods/ Services>>

E – TENDER No:<<Tender Number>

**(This sheet should be printed on the Letter head of the bidder duly stamped and signed by
the authorized signatories for should be sent to the service provider within 24 hrs. from
the completion of auction.)**

Dear Sir,

We confirm that we have quoted as final cost of _____ (Price quoted on Total Landed cost Per NIT) as our final landed price during the Reverse Auction conducted today & Please find below the breakup for the same.

POST BID BREAK UP

Bidder(s) who win are hereby advised to give detailed breakup of the final prices in the price bid format provided in the EXCEL sheet and should reach MFL within 24 hours of the completion of Auction.

Price bid should be printed in separate A4 sheet, duly stamped and signed by the authorized signatory of the company.