

भारत सरकार

स्वास्थ्य एवं परिवार कल्याण मंत्रालय
(स्वास्थ्य सेवा महानिदेशालय)
केन्द्रीय औषध मानक नियंत्रण संगठन
केन्द्रीय औषधि परीक्षण प्रयोगशाला



CDSCO

क्षेत्रीय अन्न व औषध प्रशासन भवन, जी.एम.एस.डी कंपाउंड,
बेलासीस रोड, मुंबई सेन्ट्रल, मुंबई ४००००८
दूरभाष : ०२२-२३००२३०९ / ०२२-२३०० २१३८
फैक्स : ०२२-२३०९ ९२४०

ई-मेल : cdtlmumbai@cdsco.nic.in

Government of India

Ministry of Health and Family Welfare
(Directorate General of Health Services)
Central Drugs Standard Control Organisation
Central Drugs Testing Laboratory

Zonal FDA Bhawan, GMSD Compound,
Bellasis Road, Mumbai Central, Mumbai - 400 008.
Tel : 022-2300 2309 / 2300 2138
Fax : 022- 2309 9240

Email : cdtlmumbai@cdsco.nic.in

Accredited By : NABL (ISO/IEC-17025:2005 in Chemical & Biological Testing)

Certified For : IMS (ISO - 9001:2008; ISO - 14001:2004; OHSAS - 18001:2007)

NOTICE INVITING TENDER FOR
ANNUAL MAINTENANCE CONTRACT FOR SWEAGE TREATMENT PLANT
OF CAPACITY OF 25 KLD
BASED ON EXTENDED AERATION TECHNOLOGY.

8(L)/CDTL-MUM/18-19/2328

25-31/7/18

Sealed tenders are invited from reputed interested service providers for **Comprehensive Annual Maintenance Contract for Sewage Treatment Plant at Central Drugs Testing Laboratory (CDTL), Mumbai Central** who have been rendering / undertaking the specified work in the field as per the scope of work shown in Annexure III below :-

Sr. No.	Item Name	Specification
1.	Comprehensive Annual Maintenance Contract for Sewage Treatment Plant	As per Annexure-III

- The tenders should be submitted in sealed covers: -
 - The first sealed cover superscribed as 'Technical Bid' should contain the following items : -
 - The Proforma at **Annexure-II**, duly filled in, along with relevant documents/ information.
 - Acceptance of terms & conditions as per **Annexure - I**.
 - The second sealed envelope superscribed 'Financial Bid' as per **Annexure IV** should contain only rates for **Comprehensive Annual Maintenance Contract for Sewage Treatment Plant**.
 - Earnest money of **Rs. 9,200/- (Rupees Nine Thousand Two Hundred Only)** must be paid in the form of Demand Draft/ Banker's Cheque of any scheduled bank drawn in favour of Director, CDTL, Mumbai payable at Mumbai and should accompany the tender. This money will be forfeited if tender accepted is not honoured by the tenderer. Earnest money of all unsuccessful tenderers will be refunded.
 - Both the sealed covers should be placed in the main sealed envelope superscribed 'Tender for **Comprehensive Annual Maintenance Contract for Sewage Treatment Plant**. Tender should be addressed to **The Director, Central Drugs Testing Laboratory, Zonal FDA Bhawan, GMSD Compound, Bellasis Road, Mumbai Central, Mumbai - 400 008** & should reach this office by 4.30 pm on **20.08.2018**. The tenders will be opened on **21.08.2018** at 3.30 pm in presence of tenderer if any.


Last date for seeking clarifications : 16/08/ 2018

- Quotation received after stipulated time & date will be rejected forthwith.

ok
Shedhu
30/7/18

31-7-18

3. The competent authority in the CDTL – Mumbai reserves the right to amend any of the term & conditions in the tender document or reject any or all application (offers) without giving any notice or assigning any reason thereof. The decision of competent authority in this regard will be final & binding.
4. All the tenderers are requested to read & understand the terms & conditions of the contract as detailed in the Annexure – I before sending their quotations, as no change or violation of the aforesaid terms & conditions are permissible once the quotation is accepted by CDTL – Mumbai.
5. PLANT VISIT: The bidders are required to visit the site to see the actual installation for themselves to assess the quantum of work involved before submitting the tender. Once the tender is submitted, it will be presumed that the bidder has seen and understood the complete work involved for each of the system.
6. The services required is for initial period of one year. The contract may be extended on mutual consent subsequently based on performance or till finalization of the next tender. The contract may be terminated at any stage solely at the option of CDTL, Mumbai with an advance notice of one month without assigning any reason.



(Dr. Raman Mohan Singh)
Director
CDTL-Mumbai

Annexure – I

TERMS AND CONDITIONS OF TENDER.

1. The tenderers are required to submit the earnest money (bid security) of Rs.9200/- (Rupees Nine thousand two hundred only) and tenders received without earnest money will not be considered at all.
2. The tenderers are required to quote their lowest rates for CAMC for STP as mentioned in **Annexure- III** annexed hereto.
3. The rates should be valid for 90 days from the date of opening of tender.
4. Hypothetic or conditional Tender will not be entertained. Tender once submitted shall not be allowed to be withdrawn or altered. If the tender is withdrawn or altered by the concerned party at any time after it is submitted, appropriate action may be taken.
5. PLANT VISIT: The bidders are required to visit the site to see the actual installation for themselves to assess the quantum of work involved before submitting the tender. Once the tender is submitted, it will be presumed that the bidder has seen and understood the complete work involved for each of the system.
6. Only reputed service providers are eligible to participate. While submitting the Tenders, the tendering firm shall have to furnish the proof of PAN No., GST No., etc. as per Annexure – II.
7. The tender received after due date & time or incomplete in any respect shall be summarily rejected.
8. No Advance payment would be made. However, on successful completion of every 3 (three) months , payment will be released within a reasonable period from the date of receipt of the bills along with certified copies of monthly service reports, log sheets, work done as per the scope of work mentioned in the tender/contract duly certified by the Concerned in charge.
9. The shortlisted firm will have to provide the **Warranty** for at least 1 year.
10. The firm which qualifies in the Tender Process would be required to furnish a Performance Security to the tune of 10% of cost of maintenance which should be valid for 14 months from the date of work order. The Performance Security will be retained in CDTL-Mumbai which will be returned to the concerned after service period.
11. Over – writing on the quotations must be avoided. Otherwise the quotations are likely to be rejected. The CDTL – Mumbai reserves the right to accept or reject any tender, in whole or in part thereof without assigning / specifying any reason (s) thereof and the decision of the competent authority in the CDTL – Mumbai shall be final and binding on the contractor firm.
12. Tenders received after the stipulated time and date will not be accepted / considered.
13. Any dispute arising in the matter shall be resolved through an arbitrator to be nominated by the competent authority in CDTL – Mumbai.
14. Performing the obligations spelt out in the tender strictly as per the rules in force/enforced in future by the statutory authorities.
15. The contract shall be subject to Indian Laws & jurisdiction of the court located in Mumbai.

Special Terms and Conditions :

16. LOG-BOOK: for recording of parameters related to Sewage Treatment Plant shall be maintained by the firm/ agency /contractor showing the complete maintenance done on the Plant and it should be made available to the authorities of CDTL on a monthly basis.

17. Contractor shall provide all necessary consumables, chemicals etc. as required for the complete maintenance as per requirements during the AMC period. All spares parts and materials shall be genuine and of same make and type as installed wherever applicable and a minimum quantity of spares and materials for routine maintenance may be kept at site to minimize time of maintenance. The firm / agency / contractor have to keep all equipments well maintained for the Plant so as to give proper output at all times.
18. Tools and equipment required for maintenance for the STP accessories etc. shall be provided by the firm /agency /contractor.
19. Proper care shall be taken to avoid major breakdown at the plant. In the event of any breakdown, the same will be rectified immediately within 24 hours from the date of reporting of the fault. Similarly, if any breakdown takes place due to negligence of firm/ agency/ contractor, the whole component has to be replaced/ rectified to bring it to the original condition immediately.
20. Precaution against any fire hazards or other damages to Plant and equipment shall be arranged by the firm.
21. The firm/ agency/ contractor shall fulfil the requirement of various law enforcing agencies / local authorities, such as Pollution control Board, Directorate of Electricity Safety etc by taking their approvals as and required.
22. The firm/ agency/ contractor will be responsible for the safety of their deputed staff during the performance of their duty at site.
23. In case any of staff is not found up to the mark and not able to do work properly, he will have to be changed as per the instruction of CDTL, Mumbai and immediately replaced by another qualified staff.
24. In case of any problem with the equipment, the firm/agency/contractor shall inform CDTL, Mumbai immediately.
25. The firm/ agency/ contractor shall keep the equipment well maintained, neat and clean and adhere to the maintenance schedule.. Upon placement of work order they will prepare the maintenance schedule and discuss the same with the Institute's designated Official for its implementation. This may be revised from time to time as per the requirement.
26. Any statutory tax as applicable will be deducted from the bill of the contractor.
27. The firm/agency shall maintain data log including running of all mechanical items and chemical dosing schedule.
28. The firm/agency shall operate the filter press as and when required.
29. The firm/Agency shall provide and maintain bacteria culture as and when required.

Annexure – II

(Technical Bid) - PROFORMA

Sr. No.	Particulars	To be filled by the Tenderer
1.	Name of the agency	
2.	Whether brief profile of the agency is enclosed	
3.	Detailed Office Address of the agency with office telephone No. e-mail address, Fax No., Mobile No., & Name / Designation of the Contact Person	
4.	Whether registered with all concerned Govt. Authorities (Register of companies, Commissioner Employees etc.) (Copies of all certificates of Registration should be attached)	
5.	PAN Number (copies to be enclosed)	
6.	TIN Number Registration No. (Copy to be enclosed)	
7.	GST Number (Copy to be enclosed)	
8.	Whether copies of income Tax return for last 2 years attached	
9.	Earnest Money Deposit (EMD) of Rs. 9,200/- (Rupees Nine Thousand Two Hundred Only) in the form of Demand draft/ Banker's Cheque of any scheduled bank drawn in favour of Director, CDTL, Mumbai payable at Mumbai	
10.	Whether a copy of terms & conditions – Annexure – I duly signed as token of acceptance of the same is attached	
11.	Whether the firm is blacklisted by any Government Department or any criminal case is registered against the firm or its owner / partners anywhere in India (if no, an undertaking to this effect is attached in this regard)	

(Signature of the authorized person)

Date :

Name:

Place :

Designation:

Seal:

30. The firm/Agency shall get the treated water tested once in a three months from approved Laboratory. The firm /Agency shall send a supervisor to check the Plant once a month.
31. The firm /Agency shall provide all spare parts for pumps, Motors, clarifier, chlorination, electrical panels, and fittings/fixtures as required ensuring proper functioning of the Plant.
32. Penalty : The firm shall rectify any breakdown within 24 hours failing which penalty for non-performance @ 0.5 % per week of delay subject to a maximum of 10% of the contract price will be imposed and in the event of any damage to the property or life arising out of non performance, contractor will be solely responsible
33. The contractor shall be responsible for proper maintenance of decorum, punctuality, discipline work output and cleanliness of the Plant and its surroundings.
34. Levy/Taxes payable by contractor - Sales Tax/ VAT or any other tax on materials in respect of this contract shall be payable by the contractor and CDTL , Mumbai shall not entertain any claim whatsoever in this respect
35. If the job assigned is not completed in time or done satisfactorily, CDTL will be free to get the same done from other dealer at higher rates; the loss sustained will be deducted from the Security Deposit or any other due payments apart from penalty that may be imposed for deficiency in service.
36. The tenderer shall verify that the staff/workers deputed to CDTL are of good character and no criminal record is against any of them.
37. The successful tenderer will be obliged to attend the work as per the required without damaging the CDTL properties and if any loss/damage sustained to the CDTL property it will be recovered from the successful tenderer.
38. JURISDICTION: The Contract/PO shall be governed by the Law of India for the time being in force. The Courts of Mumbai only shall have jurisdiction to deal with and decide any legal or dispute arising out of this contract

Annexure III

Scope of Works & Design of Sewage Treatment Plan and other parameters at CDTL, Mumbai

Sewage Treatment Plant (based on extended aeration Technology) of 25KLD capacity at CDTL/Mumbai			
Process Description			
<ul style="list-style-type: none"> ➤ Wastewater generated from different sources gets collected in sump near STP. ➤ Manually cleaned bar screen installed in a screen chamber ahead of inlet to sump ➤ Oil & grease, grit or any other material, which hinders the operation of plant, gets separated before equalization sump ➤ From equalization sump the sewage to be pumped to Bioreactor through submersible pumps. ➤ Extended aeration through bio-diffused fine bubble aerators followed by tube settler for sludge settling. ➤ The digested sludge settles down in clarification tank from where the sludge is bumped to Filter Press. ➤ The clear water is then pumped to dual media filter & activated carbon filter from where it gets stored in treated water tank after chlorination ➤ Treated water is then used for gardening and other purpose through submersible pump. 			
Design Parameters			
A) FLOW: 25 KL/D.		Sewage Flow rate: 2 KL/hr	
Effluents Characteristics			
Parameter	Unit	Raw Sewage	Treated Sewage
1.pH	-----	5.5-8.5	6.5-7.5
2. BOD	(mg/lit)	350-600	<20
3.COD	(mg/lit)	500-800	<100
4.SS	(mg/lit)	150-300	<10
5. Oil & Grease	(mg/lit)	1-50	<10
6.Bio assay Test		-----	Survival of fish after 96 hrs 100%
Design Characteristics.			
1) Bar Screen Chamber (BSC)		Bar Screen (BS)	
Capacity	25 KLD	Flow Rate, Q peak	6 KL/hr
Average flow rate	2 KL/hr	Velocity of flow	0.3 m/sec
Peak flow factor	3	Angle of placement of Bar Screen	60°
Peak flow rate Q Peak	0.6m/sec	Area for Bar Screen	2.77x10 ⁻³ m ²
Surface area required	2.77x10 ⁻³ m ²	Bar screen size Reqd	170 mmx170 mm
Surface area provided	0.8 sq.mt	Provided bar screen Size	300mm x 300mm
Volume provided	0.4m ³	Bar size	10 sq.mm
Size provided	(1.00x0.8x0.5)m SWD+2.0mFB	Clear spacing c/c	20 mm
2. Oil & Grease Trap(OGT)		3. Equalisation Tan (CET)	
Peak Flow Rate, Q peak: 6 KL/hr		Peak FlowRate6KL/hr+1KL/hr(filtrate)=7 KL/hr	
12 m/sec		Detention time : 1Hr at peak flow	
Volume required :1m ³ (effective)		Volume required: 7 KL (Effective)	
Size: 3.9m ³ (1.00x3.0x1.4)m SWD+2.1FB		Volume provided:25 KL	
		Size: 5mx4mx1.3m SWD+2.2 FB	
		<u>Air requirement for mixing in Equalisation Tank</u>	
		Air for mixing: 0.01 m ³	
		Tank Volume : 25m ³	
		Air requirement : 0.01x25x60=15m ³ /hr	
4) BIOREACTOR		Bio reactor Air requirement	
Flow rate :2 KL/hr		BOD loading/day :13 kgs	
F/M ratio :0.20-0.60		Kg O ₂ required/kg BOD removal: 1.5	
Inlt BOD to Aeration Tank:540 mg/lit		O ₂ transfer efficiency at 3.5 mtr level: 18%	
Outlet BOD(considering 90-95% reduction: 20 mg/lit		Percentage of O ₂ in ir;0.21	
MLSS consideration: 4000 mf/lit		Air requirement (m ³ /hr) :18m ³ /hr	
Bio Reactor Volume required:16.25m ³ (effective)		Diffusers	
		Capacity: 10m ³ /hr each	
Bio Reactor Volume provided: 24m ³		Total Nos of diffusers required:18/10=1.8	
Side water depth : 3.0 m ³		Total Diffusers Provided: 4 Nos.	
Size provided:2mx4mx3mSWD+0.5FB			

5) Secondary Tube Settler	6) Supernatant Sump	7) Mechanical Filter Press
Overflow rate : 50m ³ /m ² /day	Flow rate: 2kl/hr	Required for sludge dewatering:
Flow rate : 25m ³ /day	Retention Time: 1 hr	Sludge to be waste(P _x)= 0.25x25x(540-20)/1000=3.25 kg
Surface of Area required :0.5m ²	Tank Volume required: 2 kl	Considering 1040kgs/m ³ Sludge Density total Sludge Volume.
Size provide: 1m x 1.5 m	Tank Volume provided: 3.9 kl	Total sludge volume:0.003125KL/Day
Side water depth :1.5 m	Size: 1.5mx1.3mx2.0m SWD+1.5 m FB	Sludge consistency after filter press : 40%
Volume provided : 3 KL		Total Sludge Volume after Filter press:0.0078 KL/day=7.8 Ltrs/day
Retention Time provided: 1.5 hrs	Pressure Feed Pump	Time required for one batch: 3 hrs.
Size provided: 1mx1.5mx1.5m SWD+1.0 FB	Capacity: 2 KL/hr @36 MLC	No. of batches considered/day : 3 Nos
Tube Module	Quantity : 2 Nos (1 W+1 S)	Filter press Volume required: 3 Lit/batch, max
Plan area of tine settler : 1.5 m ³		Filter press selected: 300mm x 300 mmx 32 mm deep
Media height : 0.6m		Filter press volume/chamber: 2.1 Lit/chamber.
Media Quantity required; 0.9m ²		Provided Filter Press Size: 300mmx300mmx32mm deepx3 plates+2 end plated.
Media Quantity provided :1.0m ³		Qty: 1 No.
Flute size : 40 mm		Filter press feed Pump
Angle of Inclination:60° from Horizontal		Total sludge generated :7.8 kg
		Considering 1.5% sludge consistency, total sludge generated: 7.8/0.015=520Lts/day
		Pump capacity considering 3 cycles/d:0.14KL/hr
		Pump provided: 1 KL/hr@40MLC
		Quantity:2 Nos (1W+1S)
8. Sludge Sump	9. Dual Media filter	10. Activated Carbon filter
Considering total sludge generation: 520 litres per day & detention time of 1 hr	Capacity :2 m ³ /day	Capacity: 2 m ³ /hr
Sludge sump volume:0.5 KL	Rate of filtration: 12 m ³ /hr.m ²	Filtration rate: 12m ³ /hr.m ²
Provided : 1 KL	Surface area required: 0.16m ²	Sectional Area required: 0.16m ²
Size: 1.5 m x1.3 m x 2.0 SWD+1.5mFB	Diameter required: 460 mm	Diameter required: 460 mm
	Height of Strait : 1000 mm	Height of straight portion: 1000 mm.
	Disc Height :300 mm each side	Disc Height: 300 mm each side
	Size provided: 500mmdia x 1000 mm HOS	Size provided: 500 mm dia x 1000 mm HOS
11. Air Source Capacity	12. Treated Water Sump	
Air requirement for eq.tank stream I:15 m ³ /hr	Flow Rate : 2 kl/Hr	
Air requirement for Bio Pack Tank :18m ³ /hr	Retention time : 8 hrs	
Total requirement : 15+18=33m ³ /hr	Tank Volume Required : 16 kl	
Provided: 60m ³ /hr@4500 mmWC	Tank volume provided: 25 kl	
Qty : 2 Nos (1 W+1S)	Size:4.0m x 2.0mx3.2 m SWD+0.3 mFB	
Disinfection System Dosage Specified (avg)-3 ppm	Treated Sewage Transfer	
Qty : 2 Nos (1W+1S)	Capacity : 2 KL/hr@40 MLC	
Chlorine required: 3x25/1000=0.075 kgs/day	Quantity : 2 Nos (1W+1S)	
NaOCl solution (7% Cl ₂ content)=0.075/.07=1.07 LPD		
Tank for day storage = 1.07 liter		
Dosing PumpCapacity: 0-4 lph		

Annexure – IV

(Financial Bid)

FINANCIAL BID FOR COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT FOR INDOOR PLANTS AND OUTDOOR PLANTS AND FLOWER BEDS IN CENTRAL DRUGS TESTING LABORATORY, ZONAL FDA BHAWAN, GMSD COMPOUND, BELLASIS ROAD, MUMBAI CENTRAL, MUMBAI – 400 008.

With reference to CDTL – Mumbai letter No. : _____
dated _____ Regarding tender for supply and installation of _____, I
/we quote the rate, inclusive of supply / installation/ freight etc. as under : -

Sr. No.	Item Name	Specification	Amount (₹)
1.	Comprehensive Annual Maintenance Contract for Sewage Treatment Plant	As per Annexure-III	
2.	Taxes, if any		
3.	Grand Total		

(Signature of the authorized person)

Date :

Name :

Place :

Designation :

Seal :