

TENDER

Bank of Baroda Invites Tender for "Supply, Installation, Testing and Commissioning of 500 Kg Wet Garbage Processing unit at Bank of Baroda, Baroda Corporate Center, C-26, G-Block, Bandra Kurla Complex, Mumbai".

Tender form has to be downloaded from the Bank's website www.bankofbaroda.com (tender section). Application form available on website alone needs to be used. Tender forms will be available on the bank's website from 24/11/2017 till 14/12/2017 up to 2:30 p.m.

Sealed tender shall be submitted in three separate envelopes consisting of the following:

- 1. Cover 1: Part I, Technical Bid including pregualification documents.
- 2. Cover 2 : Earnest Money Deposit (EMD)
- 3. Cover 3: Part II, Price Bid

Cover 1: Part - I, Technical Bid shall contain following documents

- 1. Technical bid accepting terms and conditions of the tender
- 2. Pre qualification documents
 - i. Specified in Annexure A
 - ii. Proforma showing detail for having executed minimum

Contractors desirous to apply for said work shall fulfill the following:

Minimum pre-qualifying/short listing criterion:

The Biogas plant technology provider should be license holder of Nisargruna technology, provided by BARC (Bhabha Atomic Research Centre) or equivalent.

- 1. They should have completed similar jobs* in last seven years (as on 30.11.2017) as per the following criteria (Proforma enclosed):
 - a) One similar completed work costing not less than ₹ 28.00 Lacs

OR

b) Two similar completed works, each costing not less than ₹ 17.50 Lacs

OR

c) Three similar completed works, each costing not less than ₹ 14.00 lacs

(*Similar work means works of supply and installation of wet garbage processing units with all accessories).

- 2. Average annual financial turnover of the firm during last 3 years, ending 31st March, 2017 should be at least ₹ 10.50 Lacs (supported with Audited Balance Sheets).
- **Cover 2**: Shall contain interest free **Earnest Money Deposit** (EMD) amounting to ₹ **35,000/**-(Rupees Thirty Five Thousand only) in the form of Demand Draft/Bankers Cheque in favour of Bank of Baroda payable at Mumbai.

Cover 3: Part - II - Price Bid shall contain following documents.



BOQ with rates without any condition duly signed and sealed by the bidder in all pages. Conditional offers shall be summarily rejected.

The bidder shall clearly write on Cover - 1: "Technical Bid - Cover 1 - Tender for Supply, Installation, Testing and Commissioning of 500 kg Wet Garbage Processing unit at Bank of Baroda, Baroda Corporate Center, C-26, G-Block, Bandra Kurla Complex, Mumbai".

On cover – 2: "Cover 2 - Earnest Money Deposit for Supply, Installation, Testing and Commissioning of 500 kg Wet Garbage Processing unit at Bank of Baroda, Baroda Corporate Center, C-26, G-Block, Bandra Kurla Complex, Mumbai".

The bidder shall clearly write on Cover – 3 - "Price Bid for Supply, Installation, Testing and Commissioning of 500 kg Wet Garbage Processing unit at Bank of Baroda, Baroda Corporate Center, C-26, G-Block, Bandra Kurla Complex, Mumbai".

Price Bid should contain BOQ with rates without any condition and sign & seal of the bidder at all pages.

The interest free Earnest Money Deposit (EMD) amounting to ₹ 35,000/- should be provided through Demand Draft/Bankers Cheque in favour of Bank of Baroda payable at Mumbai. The tender not accompanied with earnest money will be summarily rejected and their tender will not be opened.

Three items (i) Technical Bid, Cover-1 (ii) Earnest Money Deposit (EMD) instrument, Cover-2 and (iii) Price Bid, Cover-3 should be placed in another single cover and superscribed as "Tender for Supply, Installation, Testing and Commissioning of 500 kg Wet Garbage Processing unit at Bank of Baroda, Baroda Corporate Center, C-26, G-Block, Bandra Kurla Complex, Mumbai" should reach at the following address on or before 14.11.2017 @ 14.30 hrs:

The General Manager & Head (Facilities Management & COA Dept.) Baroda Corporate Centre, 1st Floor C – 26, G - Block, Bandra Kurla Complex, Bandra (East), Mumbai 400 051

Validity of offer shall be 120 days from the last date of submission of Price Bid.

The Bank does not bind itself to accept the lowest or any tender and reserves the right to accept or reject any or all tenders either in whole or in part, without assigning any reasons whatsoever.

No conditions will be entertained. Conditional offers shall be summarily rejected. Disputes, if any, will be subject to Mumbai jurisdiction only.

If there is any query, you may mail to us on or before 05.12.2017 and same will be informed to you during the pre-bid meeting. **Pre-Bid meeting is scheduled to be held on 06.12.2017 at 2.30pm at our office.** Only written query will be discussed during the pre-bid meeting, those query will have received on or before 05.12.2017 up to 5pm.



Tender documents downloaded from Bank's website shall only be accepted.

In case of any clarification you may please contact following officials:

Mr. Narendra Hansdah, Sr. Manager (Civil) — 022-66985118 Mr. Anirban Biswas, Sr. Manager (Civil) — 022-66985102 Fax No. — 022 26525767

Mail Id - em.bcc@bankofbaroda.com

All the pages of tender documents are to be stamped and signed by the tenderer.

Last date of submission of tender is 14/12/2017 up to 14:30 hrs. The applications received will be opened on same day i.e. 14.12.2017 @ 15.00 hrs. The authorized representatives of the bidders may attend the same.

Date of opening of Price Bid Part-II shall be informed separately.

Bidders are advised to visit the site and get themselves fully acquainted with the general and local site conditions.

Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.

Seal & Signature of Tenderer



ANNEXURE - A

PART I – TECHNICAL BID (Cover 1)

Mandatory information required for Prequalification of the bidder

(To be furnished on the letterhead of the bidder)

Important:

- Please type or handwrite in capital letters.
 Attach copies of the supporting documents.
- 3. Please use additional sheets if required.

1	a) Name of the applicant / organization b) Address of the Registered Office c) Address of office at Mumbai. (With Phone Nos, Fax Nos & Email ID & Contact Person)	
2	Year of establishment	
3	Type of the organization (Whether sole proprietorship, Partnership, Private Ltd. or Ltd. Co. etc.) (Enclose certified copies of documents as evidence)	
4	Name & qualification of the Proprietor / Partners / Directors of the Organization / Firm a) b) c) Enclose certified copies of document as evidence	
5	Details of registration – Whether Partnership firm, Company, etc. Name of Registering Authority, Date and Registration number. Enclose certified copies of document as evidence	
6	Whether registered with Government / Semi – Government / Municipal Authorities of any other Public Organization and if so, in which class and since when? (Enclose certified copies of document as evidence)	
7	a. No. of years of experience in the field and details of work in any other field.b. Whether ISO certified, furnish the details.	
8	Area of business activities other than construction, if any, and place of business.	
9	Registration of firm under Shop & Establishment Act 1948	
10	Address of Mumbai office through which the proposed work of the Bank will be handled and the Name & Designation of officer-in-charge.	



	 (a) Three similar completed works each costing not less than 14.00 lacs. (b) Two similar completed works each costing not less than 17.50 lacs. (c) One similar completed works each costing not less than 28.00 lacs. 	
11	 a. Yearly turnover of the organization during last 3 years (year wise) (Avg. turnover of last 3 years should not be less than ₹ 10.50 Lacs) and furnish audited balance sheet and Profit & Loss A/c (Audited) for the last -3- years. b. Average turnover in 2014 - 2015 2015 - 2016 2016 - 2017 	
12	Name & Address of Bankers (Solvency certificate from a Bank to be enclosed for indicating satisfactory financial capacity of the organization)	1. 2. 3.
13	Enclose copy of latest income tax clearance certificate.	
14	PAN No.	
15	Details of registration for GST	
16	Detailed description and value of works done (Proforma-1) and works on hand (Proforma-2)	
17	Empanelment with other Companies/PSUs	
18	Other infrastructural information to be used/referred for this project (Proforma-4) List of available plants, machineries equipments etc.	
19	Furnish the names of -3- responsible persons along with their designation, address, Tel. No. etc., for whose organization, you have completed the above mentioned jobs and who will be in a position to certify about the performance of your organization.	 1. 2. 3.
20	Whether any Civil Suit / litigation arisen in contracts executed / being executed during the last 10 years. If yes, please furnish the name of the project, employer, Nature of work, Contract value, work order and brief details of litigation. Give name of court, place, and status of pending litigation.	Attach a separate sheet if required.



21	Information relating to whether any litigation is pending before any Arbitrator for adjudication of any litigation or else any litigation was disposed off during the last ten years by an arbitrator. If so, the details of such litigation are required to be submitted.	
22	Have you been ever disqualified or levied penalty by the bank in past for non fulfillment of the contractual obligations. If yes, please provide details.	
23	Have you in past carried out any works for Bank of Baroda or its subsidiaries? If yes, give details.	

NOTE: Attach extra sheets with Sr. No if the space found less.

(Please enclose this information in PART I (Technical Bid) of the Bid. Bid of agencies who are not furnishing above information will be summarily rejected).



PROFORMA - 1

LIST OF PROJECTS EXECUTED BY THE ORGANISATION DURING THE LAST 7 YEARS (Minimum Value of Work done not less than ₹ 14.00 lacs)

SI Name of work/ project No with address.	Name & full postal address of the owner. Specify	Amount (Rs.)	Stipulated time of completion (Years)		Any other relevant information. Actual amount of the Project, if increased, give reasons.	Enclose client's certificate for satisfactory completion.
1 2	3	4 5	5	6	7	8

Notes:

- 1. Information has to be filled up specifically in this format. Please do not write remark "As indicated in Brochure".
- 2. Date shall be reckoned up to 30.11.2017.
- 3. For certificates, the issuing authority shall not be less than an Executive In charge.



PROFORMA - 2

LIST OF IMPORTANT WORKS IN HAND

(Minimum Value of Work done not less than ₹ 14.00 lacs)

SI.	Name of work/ project with address.	Name & full postal address of the owner. Specify whether Govt. undertaking along with name, address and contact nos. of -2-persons (Engineers or top officials of the organization)	(for PMC work only) with copy of Work Order & completion certificate	·	Present status of the project	Any other relevant Information.
1	2	3	4	5	6	7

Note:-

Information has to be filled up specifically in this format.

Please do not write remark "As indicated in Brochure".



PROFORMA - 3

Details of Infrastructure in Office

Sr. No.	Items	Numbers	Details/qualification
1	Office Premises, Area, etc		
2	Biogas team details		
3	Telephones		
4	Other instruments		
5	Software used for planning.		
6	Reference books used		
7	Subscription to magazines,		
8	Any other information		

(Please enclose this information in the PART I (technical bid) of the bid. Bid of agencies who are not furnishing above information will be summarily rejected).

I/We confirm that to the best of our knowledge this information is authentic and accept that any deliberate concealment will amount to disqualification by the Bank at any stage.



GENERAL INSTRUCTIONS TO CONTRACTORS AND SPECIAL CONDITIONS

- Sealed Tenders should be addressed to The General Manager & Head (Facilities Management & COA), Bank of Baroda, Baroda Corporate Centre, 1st Floor, C-26, G-Block, Bandra Kurla Complex, Bandra (E), Mumbai 400 0051 and super scribed "Tender for Supply, Installation, Testing and Commissioning of Wet Garbage Processing unit at Bank of Baroda, Baroda Corporate Center, C-26, G-Block, Bandra Kurla Complex, Mumbai" so as to reach not later than 14.30 hrs on 14/12/2017.
- 2 No tender will be received after 14.30 hrs on 14/12/2017. Requests under any circumstances whatsoever will not be entertained.
- 3 (a) The Part-I of Tenders will be opened at 15.00 hrs on 14/12/2017 in the office of The General Manager & Head (Facilities Management & COA Dept.), Baroda Corporate Centre, 1st Floor, C 26, G Block, Bandra Kurla Complex, Bandra (East), Mumbai 400 051 or any other office designated for this purpose by him in presence of tenderers or their representatives, should they choose to be present.
- 3 (b) The tenderer must use only the forms displayed on the bank's website to fill in the rates. (Any addition/ alteration in the text of the tender form made by the tenderer shall not be valid and would be liable of rejection).
- 4 (a) The tender form must be filled in Hindi / English and all entries must be made by hand and written in ink. The rate and amount should be in figures and words. If any of the documents is missing or unsigned, the tender may be considered invalid by the Bank Representative in its discretion.
- 4 (b) Rates should be quoted both in figures and in words in columns specified. All erasures and alterations made while filling the tender must be attested by initials of the tenderer. Overwriting of figures is not permitted and failure to comply with either of these conditions will render the tender void at the Bank's option. No advice of any change in rate or conditions after the opening of the tender will be entertained.
- 4 (c) Each of the Tender documents should be signed by the person or persons submitting the tender in token of his/their having acquainted himself/themselves with the General Conditions of Contract, General Specifications, and Special Conditions etc., as laid down. Any tender with any of the documents not so signed will be rejected.
- 4 (d) The tender submitted on behalf of a firm shall be signed by all the partners of the firm or by a partner who has the necessary authority on behalf of the firm to enter into the proposed contract. Otherwise the tender may be rejected by the Bank.
- 5. The Bank does not bind itself to accept the lowest or any tender and reserves to itself the right to accept or reject any or all the tenders, either in whole or in part, without assigning any reasons for doing so. Lowest bidder will be decided on the basis of total of all the items to be supplied/installed for commissioning of the plant and AMC.
- 6 Intending tenderers shall pay an interest free Earnest Money Deposit for a sum of



₹35,000/- (Rupees Thirty Five Thousand Only) by a demand draft / Banker's Cheque in favour of Bank of Baroda at Mumbai. Tender not accompanied by earnest money deposit will not be considered. The earnest money deposit of unsuccessful bidders shall be refunded after the work order is issued to selected bidder.

Under no circumstances earnest money deposit will be accepted in the form of fixed deposit receipt or Bank or Insurance guarantee or Cheque.

- 7 The Earnest Money Deposit of ₹ 35,000/- paid by the successful tenderer shall be held by the Bank as security for the execution and due fulfillment of the contract. No interest shall be paid on the said deposit.
- On receipt of intimation from the Employer of the acceptance of his/their tender, the successful tenderer shall be bound to implement the contract agreement within Fourteen days thereof, the successful tenderer shall sign the agreement in accordance with the draft agreement and the schedule of conditions but the written acceptance by the Bank of a tender will constitute a binding contract between Bank of Baroda and the person so tendering, whether such formal agreement is subsequently executed or not. The cost of necessary stamp paper for execution of the agreement shall be borne by successful tenderer.
- 9(a) In additional to the Earnest Money Deposit, Lowest bidder shall further deposit 1% of accepted tender value. Thus Bank will keep 2% of accepted tender value as initial security deposit. Total 5% of the accepted tender value shall be kept as retention money which includes security deposit and retention money.
- 9(b) The retention amount will be retained by the Employer until all the defects pointed out during the Defects liability period of 12 months are rectified to the satisfaction.
- 9(c) All compensation or other sums of money payable by the contractor to the Employer under the terms of this contract may be deducted from his earnest money and security deposit if the amount so permits and the contractor shall, unless such deposit has become otherwise payable within ten days after such deductions make good in cash the amount so deducted.
- The Contractor shall not without the written consent of the Bank assign this Contract, and shall not without the written consent of the Bank (which consent shall not be unreasonably withheld to the prejudice of the Contractor) sublet any portion of the work.

Bank may serve a notice in writing on the Contractor rescinding the contract, whereupon the security deposit shall stand forfeited to the Employer, without prejudice to his/other remedies against the Contractor.



- The Contractor shall carry out all the work strictly in accordance with drawings, details and instructions of Bank's Architect & Engineer. If in the opinion of the Bank Representative, changes have to be made in the design and with the prior approval in writing of the Bank's representative, they desire the Contractor to carry out the same, the Contractor shall carry out the same without any extra charge.
- A schedule of Probable Quantities in respect of each work and Specifications accompany these Special Conditions. The Schedule of Probable Quantities is liable to alterations by omissions, deductions or additions at the discretion of the Bank. Each tender should contain not only the rates but also the value of each item of work entered in a separate column and all the amounts quoted against various items should be totaled in order to show the aggregate value of the entire tender.
- The tenderer must obtain for himself on his own responsibility and at his own expense all the information which may be necessary for the purpose of making a tender and for entering into a contract and must examine the Drawings, inspect the site of the work, acquaint himself with all local conditions, means of access of the work, nature of the work and all matters pertaining thereof.
- The rates quoted in the tender shall include all charges for clearing of site before commencement as well as after completion, water, electric consumption, meters, double scaffolding, centering, boxing, staging, planking, timbering and pumping out water including bailing, fencing, hoarding, plant and equipment, storage sheds, watching and lighting, by night as well as day including Sundays and Holidays, temporary plumbing and electric supply, protection of the public and safety of adjacent roads, streets. The rates quoted shall be deemed to be for the finished work to be measured at site. The rates shall also be firm and shall not be subject to exchange variations, Labour conditions, fluctuations in railway freights or any conditions whatsoever.

The successful tenderer may also note that the Bank reserves the right to deduct Sales Tax on works contract applicable and to be levied under relevant Act, from the bills and amount due to them from Bank and remit the same directly to the Government in case they are not submitting the proof / evidence of having paid the Sales Tax on work executed under this contract.

- The Contractor should note that unless otherwise stated the tender is strictly on item rate basis and his attention is drawn to the fact that rates for each and every item should be correct, workable and self supporting. The quantities in the Schedule of Quantities approximately indicate the total extent of work but may vary to any extent and may even be omitted thus altering the aggregate value of the Contract.
- 16. Time allowed for carrying out the work as mentioned in the Memorandum shall be strictly observed by the tenderer and it shall be reckoned from the tenth day after written order to commence the work is issued.



The work shall throughout the stipulated period of the Contract be proceeded with all due diligence and if the Contractor fails to complete all the work within the specified period he shall be liable to pay compensation of the Conditions of Contract/ work contract. The tenderer shall before commencing work prepare a detailed work program which shall be approved by the Employer. Contractors have to pay Liquidated damages against delay of the work @ 1 % per week of delay of the estimated amount shown in the tender or contract amount whichever is higher per week. Maximum liquidated damages will be 10 % of the accepted contract sum.

- Tenders will be considered only from recognized bonafide contractors in trade concerned. Each tenderer shall submit with his tender a list of large works of a like nature he has executed giving details as to their magnitude and cost of the proportion of work done by the Contractor in it and the time within which the work were completed.
- The Contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the cause of delays may be, including delays arising out of modification to the work entrusted to him.
- The successful tenderer is bound to carry out any or all items of work necessary for the completion of the job even though such items are not included in the quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing by Bank.
- The successful tenderer must co-operate with the other contractors appointed by the Employer so that the work shall proceed smoothly with the least possible delay and to the satisfaction of the Bank.
- The contractor must bear in mind that all the work shall be carried out strictly in accordance with the specifications made by the Bank and also in compliance of the requirements of the local public authorities and no deviation on any account will be permitted.
- The tenderer shall have to use materials of the makes/manufacturers specified in the list of material approved brand and/or manufacture contained in this tender form.
- The Contractor shall strictly adhere to the rules laid down by the Housing Society for carrying out repair & renovation works in the premises. Any penalty/ fine imposed by the Society due to non-adherence of laid down rules has to be borne by the Contractor.
- The contractor shall strictly comply with the provision of safety code annexed hereto.
- I.S. Code numbers wherever mentioned in the tender shall be the latest version of I.S. codes as on the date of opening of Tenders.
- The security deposit of the successful tenderer will be forfeited if he fails to comply with any of the conditions of the Contract.



27 **CONTRACTOR TO INFORM HIMSELF FULLY:**

The contractor shall be deemed to have carefully examined the work and sited conditions including Labour, the general and special conditions, the specifications, schedules and drawings and shall be deemed to have visited the site of work, to have fully informed himself regarding the local conditions and carried out his own investigations to arrive at the rates quoted in the tender. In this regard he will be given necessary information available with the department but without any guarantee about its accuracy.

If the contractor shall have any doubt as to the meaning of any portion of the general conditions, or the special conditions or the scope of the work or the specifications and drawings or any other matter concerning the contract he shall in good time, before submitting <u>his tender</u>, put forth the particulars thereof and submit them to the Bank, Mumbai in writing in order that such doubts may be clarified authoritatively in writing <u>before tendering</u>. Once a tender is submitted the matter will be decided according to tender conditions in the absence of such authentic pre-clarification.

I/We hereby declare that I/We have read and understood the above instructions for the guidance of tenderers.

Witness Signature	Contractor's Signature		
Addresses	Address		
Date	Date		



Special Condition of Contract

Materials workmanship confirm description & All materials and workmanship shall so far as procurable be of the respective kinds described in the Schedule of Quantities and/or Specifications and in accordance with the Bank's instructions, and the Contractor shall upon the request of the Bank furnish it with all invoices, accounts, receipts and other vouchers to prove that the materials comply therewith. The Contractor shall at his own cost arrange for and/or carry out any test of any materials which the Bank may require as per the testing schedule of tender.

Contractor's superintendence and representative on the works.

The Contractor shall give all necessary personal superintendence during the execution of the works, and as long thereafter as the Bank may consider necessary until the expiry of the "Defects Liability Period" stated in the Appendix hereto.

Dismissal workmen.

of The Contractor shall on the request of the Bank immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Bank be incompetent or misconduct himself and such persons shall not be again employed on the works without the permission of the Bank.

Access to works

The Employer, their respective representatives shall at all reasonable times have free access to the work and/ or to the workshops, factories or other places where materials are lying or from which they are being obtained and the Contractor shall give every facility to the Employer.

Schedule Quantities.

of The Schedule of Quantities, unless otherwise stated shall be deemed to have been prepared in accordance with the Standard Method of Measurement.

Sufficiency Schedule quantities of The Contractor shall be deemed to have satisfied himself before of tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the Schedule of Quantities, and/or the Schedule of Rates and Prices which rates and prices shall cover all his obligations under the Contract, and all matters and things necessary for the proper completion of the works.

Measurement works

of The Bank may from time to time intimate to the Contractor and Employer that he requires the works to be measured, and the Contractor shall forthwith attend or send a qualified Agent to assist the Bank.

The Contractor Should not attend or neglect or omit to send such Agent then the measurement taken by the Bank shall be taken to be correct measurements of the works. Such measurements shall be taken in



accordance with the Mode of Measurements detailed in the Specifications.

The Contractor or his Agency may at the time of measurement take such notes and measurements as he may require.

Unfixed materials when taken into account to be the property of the Employer.

Where in any Certificate (of which the Contractor has received payment), the Bank has included the value of any unfixed materials intended for and/or placed on or adjacent to the works such materials shall become the property of the Employer and they shall not be removed except for use upon the works, without the written authority of the Bank. The Contractor shall be liable for any loss of or damage to, such materials.

Defects after virtual completion.

Any defect, shrinkage, settlement or other faults which may appear within the "Defects Liability Period" stated in the Appendix hereto or, if none stated, then within twelve months after the virtual completion of the works, arising in the opinion of the Bank from materials or workmanship not in accordance with the contract, shall upon the directions in writing of the Bank, and within such reasonable time as shall be specified therein, be amended and made good by the Contractor, at his own cost and in case of default the Employer may employ and pay other persons to amend and make good such defects, shrinkage, settlement or other faults, and all damages loss and expenses consequent thereon or incidental thereto shall be made good and borne by the Contractor and such damage, loss and expenses shall be recoverable from him by the Employer.

Certificate of virtual completion & defects liability period.

The works shall not be considered as completed until the Bank has certified in writing that they have been virtually completed. The Defects Liability Period shall commence from the date of such Certificate.

Other persons employed by Employer.

The Employer reserves the right to use premises and any portions of the site for the execution of any work not included in this Contract which it may be desire to have carried out by other persons, and the contractor shall allow all reasonable facilities for the execution of such work. But shall not be required to provide any plant or material for the execution of such work except by special arrangement with the Employer. Such work shall be carried out in such manner as not to impede the progress of the works included in the Contract and the Contractor shall not be responsible for any damage or delay which may happen to or occasioned by such work.



Insurance in respect to damages to persons and property.

The Contractor shall be responsible for all injury or damage to persons, animals or things and for all damage to property which may arise from any factor omission on the part of the Contractor or any Sub-Contractor or any nominated Sub-Contractor or any of their employees. The liability under this clause shall cover also, interalia any damages to structures, whether immediately adjacent to the works or otherwise; any damage to roads, streets, footpaths, bridges as well as damage caused to the building and other structures and works forming the subject matter of this The contractor shall also be responsible for any damage caused to the buildings and other structures and works forming the subject, matter of this contract due to rain, wind, frost or other inclemency of weather. The contractor shall, indemnify and keep indemnified the employer and hold him harmless in respect of all and any loss and expenses arising from any such injury or damage to persons or property as aforesaid and also against any claim made in respect of injury or damage, whether under any statute or otherwise and also in respect of any award or compensation or damage consequent upon such claims. The Contractor shall, at his own expense, effect and maintain till issue of the virtual completion certificate under this contract, with an insurance company approved by the Employer, an All Risk Policy for Insurance for the full amount of the contract including earthquake risk in the joint names of the employer and the contractor (the name of the former being placed first in the policy) against all risk as per the standard all risk policy for contractors and deposit such policy or policies with the employer before commencing the works.

The Contractor shall reinstate all damage of every sort mentioned in this clause so as to do delivery of the whole of the works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to property or third parties.

The Contractor shall also indemnify and keep indemnified the Employer against all claims which may be made against the Employer by any person in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own expense, effect and maintain until the virtual completion of the contract, with an Insurance Company approved by the employer a policy of Insurance in the joint names of the Employer and the Contractor (name of the former being placed first in the policy) against such risk and deposit such policy or policies before commencement of the works.

The minimum limit of the coverage under the policy shall be Rs.2 lakhs per person for any one accident or occurrence and Rs.5 lakhs in respect



of damage to property for any one accident or occurrence. The contractor shall also indemnify the employer against all claim which may be made upon the Employer, whether under the Workmen's Compensation Act or any other statute in force, during the currency of this contract or at Common Law in respect of any employee of the contractor or of Sub-Contractor and shall be at his own expense effect and maintain until the virtual completion of the contract, or with an Insurance Company, approved by the Employer, a policy of insurance against such risks and deposit such policy or policies with the Employer from time to time during the currency of this contract.

In default of the contractor insuring as provided above, the employer may so insure and may deduct the premiums paid from any moneys due or which may become due to the contractor.

The contractor shall be responsible for any liability which may not be covered by the Insurance Policies referred to above and also for all other damages to any person, animal or defective carrying out of this contract, whatever, may be the reasons due to which the damage shall have been caused.

The contractor shall also indemnify and keep Indemnified the Employer against all and any costs, charges or expenses arising out of any claim or proceedings relating to the works and also in respect of any of damage or compensation arising there from.

Without prejudice to the other rights of the employer against contractors in respect of such default, the employer shall be entitled to deduct from any sums payable to the contractor the amount of any damages, compensation costs, charges and other expenses paid by the employer and which are payable by the contractor under this clause.

The Contractor shall upon settlement by the insurer of any claim made against the insurer pursuant to a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the money received from the Insurer in respect of such damage shall be paid to the Contractor and the contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing of the materials or goods destroyed or damaged.

The contractor, in case of re-building or reinstatement after damage shall be entitled to such extension of time for completion as the Bank deem fit, but shall, however, not be entitled to reimbursement by the employer of any shortfall or deficiency in the amount finally paid by the insurer in settlement of any claim arising as set out herein



Date of commencement and completion.

The Contractor shall be allowed admittance to the site on the "Date of Commencement" stated in the Appendix hereto, or such later date as may be specified by the Bank and he shall thereupon and forthwith begin the works and shall regularly proceed with and complete the same (except such painting or other decorative work as the Bank may desire to delay) on or before the "Date of Completion" stated in the Appendix subject nevertheless to the provisions for extension of time hereinafter contained.

Damage for noncompletion If the Contractor fails to complete the works by the date stated in the Appendix or within any extended time reasonably to have been completed the Contractor shall pay the Employer the sum named in the work order as "Liquidated Damages" for the period during which the said work shall so remain incomplete and the employer may deduct such damage from any moneys due to Contractor.

Delay and extension of time.

If in the opinion of the Bank the works be delayed (a) by force majeure or (b) by reason of any exceptionally inclement weather or (c) by reason of proceedings taken or threatened by or dispute with adjoining or neighboring owners or public authorities arising otherwise than through the Contractor's own default or (d) by the works or delays of other Contractors or Tradesmen engaged or nominated by the Employer or the Bank and not referred to in the Schedule of Quantities and/or Specification or (e) by reason of Bank's instructions as per Clause 2 hereof or (f) by reason of civil commotion, local combination of workmen or strike or lockout affecting any of the building trades or (g) in consequences of the Contractor not having received in due time necessary instructions from the Bank for which he shall have specifically applied in writing or (h) from other causes which the Bank may certify as beyond the control of contractor or (i) in the event, the value of work exceed the value of the priced schedule of quantities owing to variations the Bank may with previous approval in writing make fair and reasonable extension of time for completion of the Contract Works. In case of such strike or lockout the Contractor shall immediately give written notice thereof to the Bank but the Contractor shall nevertheless constantly use his endeavors to prevent delay and shall do all that may reasonably be required to the satisfaction of the Bank to proceed with work.

If the Contractor needs an extension of time for the completion of the work or if the completion of work gets delayed for any reason beyond due date of completion stipulated in the contract, the Contractor shall apply to the Employer for extension of time in writing at least 7 days before the expiry of the scheduled time and while applying for extension



of time Contractor shall furnish the reasons in detail and his justification. if any, for delays. Only that period of extension of time as granted by the Employer (on receipt of the application from the contractor or even in absence of any such application) will qualify for exemption of imposition of liquidated damages.

Further, the contract shall remain in force even for the period beyond the due date of completion irrespective whether the Contractor has applied or not, for the grant of extension of time for completion unless the Employer decides to terminate the contract. The delay for completion of work for any reason will not entail any right to the contractor to claim any revision of rates or any extra compensation for any reason.

Termination contract by **Employer**

of If the Contractor being an individual or a firm commits any "act of The insolvency", or shall be adjudged an insolvent or being an incorporated Company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up voluntarily or subject to the supervision of the Court and the Official Assignee or the Liquidator of such acts of insolvency or winding up, as the case may be, shall be unable within seven days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Bank that he is able to carry out and fulfill the Contract and to give security therefore, if so required by the Bank.

Or if the Contractor (when and individual, firm or incorporated Company) shall suffer execution or other process of Court attaching property to be issued against the Contractor.

Or shall suffer any payment under this Contract to be attached by or on behalf of any of the creditors of the Contractor.

Or shall assign or sublet this Contract without the consent in writing of the Employer first had and obtained.

Or shall charge or encumber this Contract or any payments due or which may become due to the Contractor hereunder.

Certificates payments

and

The Contractor shall be paid by the Employer from time to time by installments under Interim Certificates to be issued by the Bank to the Contractor on account of the works executed when in the opinion of the Bank found complete.

Settlement disputes arbitration.

of All disputes and differences of any kind whatever arising out of or in connection with the contract or the carrying out of the works (whether during the progress of the works or within 12 months from the date of virtual completion of the work and whether before or within 12 months of determination abandonment or breach of the contract) shall be referred



to giving inter-alia full details of the matter under dispute like quantities, rates, amount claimed and the reason thereto and settled by the Bank.

The Arbitrator shall have power to open up, review and revise any Certificate, opinion, decision requisition or notice, save in regard to the excepted matters, referred to in the preceding Clause and to determine all matters in dispute which shall be submitted to arbitration and of which notice shall have been given as aforesaid.

The Arbitrator shall make his award within one year (or such further extended time as may be decided by him or them as the case may be with the consent of the parties) from the date of entering on the reference. In case during the arbitration proceedings the parties mutually settle, compromise or compound their dispute or difference, the reference to arbitration, the reference to arbitration and the appointment of the Arbitrator shall be deemed to have been revoked and the arbitration proceedings shall stand withdrawn or terminated, with effect from the date on which the parties file a joint memorandum of settlement thereof; with the Arbitrator or the Arbitrators as the case may be.

The submission shall be deemed to be a submission to arbitration within the meaning of the Indian Arbitration Act, 1996 or any statutory modification thereof.

It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or dispute being referred to arbitration, but shall proceed with the works with all due diligence and shall, until the decision of the Arbitrator or Arbitrators as the case may be, is given.

Right of Technical Scrutiny of Final Bill.

The Employer shall have a right to cause a technical examination of the works by any of the persons or organization as appointed by the employer and the final bill of the Contractor including all supporting vouchers, abstracts, etc. If as a result of this examination or otherwise any sum is found to have been overpaid or over certified it shall be lawful for the Employer to recover the sum from any payment due to the Contractor for this works or any other works being carried out by the contractors elsewhere under the BANK OF BARODA.



Employer entitled to recover compensation paid to workmen.

If, for any reason, the Employer is obliged, by virtue of the provisions of the Workmen's Compensation Act, 1923, or any statutory modification or re-enactment thereof to pay compensation to a workman employed by the Contractor in execution of the works, the Employer shall be entitled to recover from the Contractor the amount of compensation so paid, and without prejudice to the rights of the Employer under the said Act. The Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by the Employer to the Contractor under this contract or otherwise. The Employer shall not be bound to contest any claim made against it under the said Act, except on the written request of the contractor and upon his giving to the Employer full security to the satisfaction of the Employer for all costs for which the Employer might become liable in consequence of contesting such claim.

Return of surplus materials

Notwithstanding anything to the contrary contained in any or all the clause of this Contract, where any material for the execution of the Contract is procured with the assistance of the Employer by purchases made under orders or permits or licenses issued by Government, the Contractor shall held the said materials economically and solely for the purpose of the Contract and not dispose of them without the prior written permission of the Employer and return it to the Employer, if required by the Employer, at the mutually agreed price. Price is inclusive of sales tax, octroi and other such levies paid by Contractor in respect thereof. In the event of breach of the aforesaid condition, the Contract shall, in addition to being liable to action for contravention of the terms of licenses or permit and or criminal breach of trust, be liable to Employer for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

Right of Employer to terminate contract in the event of death of contractor if individual. Without prejudice to any of the rights or remedies under this contract, it the Contractor, being an individual, dies, the Employer shall have the option of termination the contract without incurring any liability for such termination.



APPENDIX HEREINBEFORE REFERRED TO

Ref.: to Clauses in conditions herein before referred to

1. Defect Liability Period. : Twelve months

2 Period of Final Measurement. : One Month from the date of Completion.

3. Date of Commencement. : 7 working days from issue of work-order.

4.. Rate of Liquidated Damages. : As per terms and condition of agreement and

work-order.

5. Value of Work for interim certificate : ₹ 10,00,000/-

6. Retention Percentage : 8% of the gross value of each interim bill.

7. Security Deposit : 5 %

(EMD + ISD + Retention money)

8. Installment after Virtual Completion. : 50% of security deposit.

9. Period of honoring bill : 15 Days for R.A. Bills & 1 Month for final bill.

10. Completion Period : 30 days.



Technical Specifications:

- 1. Scope of work: The tenderer is required to supply and install one wet garbage processing unit at Bank of Baroda, Baroda Sun Tower, C-34, BKC, Bandra (East), Mumbai. We have about 500 kg of wet garbage, canteen waste etc. coming out of our office buildings (BCC & BST) every day except on holidays/Sunday. The processing unit will digest the entire garbage and convert the same into organic manure and cooking gas. The waste will come from kitchen biodegradable waste materials consisting of vegetable peelings, fruits, cooked food, wastes etc.
- 2. The system should not generate any bad odour, pollution and further garbage. The system should be ecofriendly and no harmless to man and animals.
- 3. The firm will submit the drawing make and Model of the biogas system to be installed by them. The machinery should be ISO approved.
- 4. The system should be easy to operate and maintain. It should be clean and generate no mosquito breeding. Electricity consumption should be as minimum as possible. It should completely convert the bio degradable waste to manures and cooking gas ready for use without further processing.
- 5. The system aims at:
 - a) Processing of biodegradable waste
 - b) Achieving the dream of zero garbage and zero
 - c) effluent Reduction in transportation costs of garbage
 - d) Biogas to be used for cooking gas purpose
 - e) Generation of manure/organic fertilizer.
 - f) Reduction in dumping yard menace
 - g) Quality improvement in dry waste as the wet and degradable portion is removed
- 6. The system should have scope to accept a variety of raw materials.
- 7. The reduction in volume of waste should be around 90-92% with a manure production of 8-10%. It should help in oxidation of sulphur compounds; thereby biogas formed is free of this corrosive gas.
- 8. The manure generated in the process need to be weed-free and rich in organic carbon contents. Hence it will be a better soil condition earthen any other organic manure. As biogas has better fuel value it can be used for thermal purpose or can be converted to electricity.
- 9. The technology can be upgraded as per user requirement in future



- 10. The firm will obtain all approvals / sanctions/clearance from local / state / central Govt. authorities, if any, required for execution of the system.
- 11. Fabrication, erection works including associated civil and electrical works shall be carried out by the contractor. Safety of the biogas system shall be completely the responsibility of the contractor.
- 12. The contractor will submit the complete design, structural layouts, electrical drawings etc. and get it approved before execution of the work.
- 13. The contractor will carry out everything necessary for completion of the work in all respects.
- 14. The system will be provided with:
 - a) Waste overload function
 - b) Indicators for power mode / power saving mode
 - c) Can run both in auto and manual mode
 - d) Separate door for waste input and separate door for waste removal
- 15. The system may consist of the following equipment's:
 - a. Primary Digester: SS 304, 4 M3 as per the required capacity- Round container,
 3 mm thick (Jindal / Tata steel SS sheet) for storage of grinded organic food waste for primary process with aerobic bacteria.
 - b. Main Digester: 25 M3 capacity or as required- SS-304, 3mm thick (Jindal/Tata SS sheets) body divided in two parts with water seal for floating of biogas storage dome. It is a reaction vessel which converts food waste coming from primary digester in to biogas with the help of an aerobic bacteria. The digester to be kept at RCC platform of size 3.6mx3.6m of thickness 6 inch. The 12 mm reinforcement will be provided with both ways at the interval of 125mm center to center.
 - c. Dome 3 M3 capacity or as required, SS-304, 3mm thick (Jindal/Tata SS sheets) cap shape cylinder floats in water seal with stored biogas.
 - d. Pipelines: Flexible PVC pipes connecting primary & main digester & gas carry should be with GI metal pipes & manure outlet etc.
 - e. Manure: At the end of process manure coming out of plant is stored in plastic drum for using it in garden.
 - f. One Air Compressor, (ISI standard make) used for aeration in primary digester.



- g. Biomass grinder:-SS-304 make, with 2 hp motor, sink & segregation tray. It grinds organic food waste with water & converts it in pest for fast growth of bacteria.
- h. Biogas stove: SS-204 body & EN8 casting burner.
- i. Weighing scale:- 1to 100kg capacity (ISI approved make)
- j. Storage balloon-20 M3 capacity HDPE material.
- k. Biogas Blower- 2 HP with minimum .5 bas pressure outlet
- Balloon Room: MS angle fabricated structure closed with Bakelite/plastic sheets for protection of biogas balloon of size – 2.6m x 2.6m x 4.5m. The size of the platform of balloon room is 2.8mx2.8m with PCC of thickness 6 inch.
- m. Plant commissioning: Procurement of bacteria & commissioning of plant at BST Tower, BKC.
- n. The equipment room consist of crusher, blower, compressor and slurry tank will be installed at PCC of 6 inch thickness of size 2.6mx2.6m. The equipment room will be covered with GI sheet of size 2.6mx2.6mx2.6m.

16. General operation of the system

a) Feed preparation:-

The organically rich bio-degradable portion of solid waste is mixed with recycled water to form slurry. The waste is converted in slurry by mixing with water (1:1) in a mixer. The solid waste is pulverized into a paste so that there would be no scum formation and no clogging in the system. Pulverization also assists in better digestion in the next stage. The other important thing is use of thermophilic microbes for faster degradation of the waste.

b) Aerobic digestion:-

The slurry is then aerobically digested in pre digester, where organic matter is converted to organic acids. The Pre digestion is accentuated by addition of hot water and intermittent aeration. Pre digestion reactions are exothermic and temperature rises to 40°C by itself. Hot water obtained using solar energy is added to raise the temperature to 50°C. If sunlight is not sufficient especially during winter, provision can be made to use part of the biogas generated to heat the required quantity of hot water using methane stoves. The smaller molecules like proteins and simple carbohydrates are degraded during Pre digestion. The pH of the feed slurry to pre digester is around 7-8. The retention time (Hydraulic time) of 4 days is maintained in the pre digester. After the Pre digestion the pH reduces to 4-5 pH units.



c) High rate anaerobic digestion:-

After the pre digester tank the slurry enters the main tank where it undergoes mainly anaerobic degradation by a consortium of archae bacteria belonging to Methanococcus group. These bacteria are naturally present in the alimentary canal of ruminant animals (cattle). The process of methanogenesis takes place in this digester. The slurry is digested under anaerobic conditions for about 15 days. Methane and carbon dioxide are the terminal products of this process.

d) The undigested lignocelluloses and hemi celluloses then flow out as high quality organic manure slurry. The pH of this slurry ranges from 7.5-8. As the waste is processed at higher temperature, weed seeds are killed completely and the manure becomes weed free.

e) Biogas storage:-

The biogas generated in the digester will be stored in MS gas holder mounted on the digesters. Its capacity depends up on the biomass handling capacity of the plant. For a 500kg plant, gas holder capacity shall be around 3 M3. It is mounted on top of the digester and along its periphery. The inlet and outlet connections are provided at the bottom of the gas holder. The gas is stored in the gas holder at NTP conditions. For removing moisture, suitable moisture traps and valves are used. For electricity generation liner pressure is required, therefore this gas is further stored in balloon made up of HDPE, Neosporin material. This biogas balloon is protected by balloon room made of MS or Cement Sheets. For 500kg plant 20 M3 biogas storage balloon is used.

f) Organic manure production system:-

The out coming slurry from the digester is an important manure for farms & will be collected in the slurry chamber made up of brick work. This slurry will be sprayed directly in farms with the help of slurry tanker. The sludge drying beds are made in brick work. Availability of manure in slurry form (Organic fertilizer) from 500 kg / day plant is around 800 liters/day.

g) Gas utilization system:-

The biogas generated will be used in canteen for cooking or in 100% run biogas engine to generate electricity.

h) Construction & Installation of plant:-

Based on the daily amount of bio degradable waste and possible increase in the daily waste levels with the future expansion plans, the capacity of the plant to be 500kg per day. The plant construction & installation includes

i. Supply of schematic drawing of civil construction of items Mixing platform, Pre digester, Main digester etc.



- ii. Fabrication and installation work that includes Roof cover for mixer platform, Gas holder, Dome balance, biogas storage balloon shade etc.,
- iii. Procurement and installation of mechanical equipment like mixers, pumps, compressor, fittings etc.

I) Commissioning of plant

- i. The undigested lignocelluloses and hemi celluloses then flow out as high quality organic manure slurry. The pH of this slurry ranges from 7.5-8. As the waste is processed at higher temperature, weed seeds are killed completely and the manure becomes weed free.
- ii. The firm should have full-fledged service center in Mumbai for the system. Firms having manufacturing site in Mumbai and having executed 2/3 works in Mumbai will be given preference.



FORM OF TENDER

To, Bank of Baroda, Baroda Corporate Centre, C-26, G-Block, Bandra Kurla Complex, Bandra East, Mumbai-400051

Dear Sirs,

Re: Tender for "Supply, Installation, Testing and Commissioning of 500 kg Wet Garbage Processing unit at Bank of Baroda, Baroda Corporate Center, C-26, G-Block, Bandra Kurla Complex, Mumbai".

Having examined the plans/ specifications and schedule of quantities, and satisfying ourselves as to various conditions stated, I/we hereby offer to execute the above works at the respective rates which I/we have quoted for the items in the Schedule of Quantities.

I/ we enclose demand draft/ banker's cheque /DD for ₹ 35,000/- (Rupees Thirty Five Thousand only) towards Earnest Money deposit for the execution of the works at my/ our tendered rates, together with any variations at later stage, should the work be awarded to me/ us.

In the event of this tender being accepted, I/we agree to enter into and execute the necessary contract required by you. I/ We do hereby bind myself/ourselves to forfeit the aforesaid deposit of ₹ 35,000/- (Rupees Thirty Five Thousand only) in the event of our refusal or delay in signing the Contract Agreement. I/we further agree to execute and complete the work within the time frame stipulated in the tender documents.

I/we agree to pay GST, Octroi, Duties, all Royalties and all other applicable taxes prevailing and be levied from time to time on such items for which the same are Livable and the rates quoted by me/us are inclusive of the same.

I/we understand that you are not bound to accept the lowest tender or bound to assign any reasons for rejecting our tender. I/we further understand that Bank of Baroda may award Contracts to more than one Contractor and that I/ we shall make no claims whatsoever if Bank of Baroda accept only a part of my/ our tender. We unconditionally agree to Bank of Baroda's preconditions as stipulated in the tender documents.

Bank reserves the right to terminate our contract and forfeit the Earnest money deposit paid by us in additions to recovery of all the dues to the Bank from the payment receivable by us. Further we may also be barred from tendering in future for the Bank and its subsidiaries.



Any Commercial discloser in the Envelope No. 1 will disqualify me/ us without any further scrutiny.

I/we enclose herewith the completed tender documents duly signed in duplicate.

Yours truly,

[To be signed by the Authorized Representative of Tenderer holding Power of Attorney]

Place:

Date



PART II (PRICE BID, in sealed Envelope no.-2)

For "Supply, Installation, Testing and Commissioning of 500 Kg Wet Garbage Processing unit at Bank of Baroda, Baroda Corporate Center, C-26, G-Block, Bandra Kurla Complex, Mumbai".

SI.No.	Description	Qty / Unit	Rate(₹)	Amount (₹)
1.	Digester(Including both Pre and Main Digester built in Concentric Circles)	33,000 Lts		
2.	Platform for Digester	3.6m x 3.6 m		
3.	Supply of Mixer	2 HP*2		
4.	Providing & supply of Compressor	1 HP, tank 20 ltr		
5.	Supply of Water pump	1 HP		
6.	Supply of Slurry Pump	2 HP		
7.	Supply of Gas Meter	WP 0.5 bar, 6 m3/hr		
8.	Supply of Gas Blower	2 HP		
9.	Providing & fixing of Gas Pipeline	Sizes of (1 ½", 2" & 2 ½"/3")		
10.	Gas Stove	1 No. 1.5 kg/hr		
11.	Weight Scale of garbage	Up to 100kg		
12.	Gas Balloon	20 m3		
13.	Electrical Connection	LS		
14.	Balloon room with all complete.	2.6 m x 2.6 m x 4.5m GI sheet		
15.	Providing & fixing feeding Tray.	SS 3 ft x 4 ft		
16.	Supply of Cow dung for commissioning of plant.	LS		
17.	Water meter and pipeline.	1 no.		
18.	Platform for balloon room & equipment room.	2nos- 2.6mx2.6m		
19.	Equipment room with all complete.	2.6 m x 2.6 m x 2.6m GI sheet		



(TOTAL)
	TOTAL		
22.	operation and maintenance cost for AMC period	36 months	
21.	Operation and maintenance during warranty period	LS	
20.	Sand Filtration	LS	

Amounts in words including all taxes, transportation and other all applicable charges except GST. GST will be paid as extra as per Govt. guidelines.

Signature and Seal of the Agency