

# **BRIHANMUMBAI MUNICIPAL CORPORATION**

(Hydraulic Engineer Department)

Dy.H.E. /Stores Purchase/ 441 dt. 30.05.2025

**Procurement Procedure & Other Details For:**

**Subject: Supply of Poly Aluminium Chloride (PAC) as per IS:15573 of 2018 in Liquid form(Medium Basicity) for Water Treatment Plants of BMC for the period of one year.**

- A) [Technical Specifications](#)
- B) [Bill of Quantities](#)
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For Your Feedback please [mail.to below Dy.HE \(store/Purchase\)](mailto:dyhestores.he@mcmgm.gov.in) .

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Note : In case of any queries, enquires, information ,

please contact Shri P. D. Bhosle -9152079650

Asstt. Engineer(Stores) E.S. & O.C. div.

Note:- Last date of feedback is 13.06.2025

Please read Disclaimer section.

Specifications

**TECHNICAL SPECIFICATIONS & CONDITIONS**

Tender Id		Due on	. .2025 (At 4.00P.M.)
Subject S	<b>Supply of Poly Aluminium Chloride (PAC) as per IS:15573 of 2018 in Liquid form(Medium Basicity) for Water Treatment Plants of BMC for the period of one year.</b>	Validity of offer	<b>180 Days</b>
EMD/Tender Deposit	Rs.-----/-		
Contract period	One calendar year from the date of Acceptance letter.		

**1. Technical Capacity:**

The tenderer or their Manufacturer in their own name should have satisfactorily completed the supply work of Poly Aluminium Chloride (PAC) in liquid form (medium basicity) in BMC /Semi Govt. / Govt. & Public Sector Organizations during last seven (7) years ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had involved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)

a) **Three similar completed** works (i.e. completed supply contract ) **each** of value not less than the value equal to **30%** of estimated cost put up to tender.

**Or**

b) **Two similar completed** works (i.e. completed supply contract) **each** of value not less than the value equal to **35%** of estimated cost put up to tender.

**Or**

c) **One similar completed** work (i.e. completed supply contract ) of value equal and or not less than the **50%** of estimated cost put up to tender,

The value of completed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

**2. Financial Capacity :**

Achieved an average annual financial turnover as certified by ‘Authorised Chartered Accountant’ ~~(in all classes of civil engineering construction works only)~~ **equal to 30% of the estimated cost of the tender work in last three (3) financial years** immediately preceding the Financial Year in which bids are invited with Audited Balance Sheets.

The value of completed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10 % per annum; calculated from the date of completion to last date of receipt of applications for tenders.

- To ascertain this, tenderer(s) shall furnish /upload the financial statement (Audited balance sheet) duly certified by Chartered Accountant.

3. The bidders have to quote for one(01) item-1) Supply rate of PAC (Rs. Per MT)  
Failing which will cause disqualification.
4. a) Successful tenderer shall deliver the material as per schedule given by the indenting authority along with the M.P.O. within 30 days from the date of placing MPO.  
b) Municipal Commissioner reserves the right to place MPO up to the last date of contract period and in that case, contract period automatically stands extended up to the expiry of delivery period of the MPO or actual consumption of 100% quantity or additional 25% quantity of PAC i.e. upto 3 months. BMC reserves right to fix longer delivery period if found necessary. And also to fix shorter delivery period with the consent of the supplier, depending upon the urgency of the material and availability of storage place etc.  
c) Late supply shall be penalized as prescribed in the tender agreement.
5. At no time, the supply of material shall be stopped as this is a vital ingredient for maintaining the quality of water supply. If in certain situation supplier changes manufacturer's source destination during the operation of contract the prices will be remain same. If there are changes in the manufacturer's source destination then the supplier will have to comply GLP certification as per clause mentioned in Sr. No.27.
6. Tenderers shall submit their past performance for the last 7 years in respect of supply of PAC (Poly Aluminium Chloride) in liquid form as per IS:15573 of 2018 to any Govt. or Semi Govt. or public sector undertakings.
7. Preference shall be given to the manufacturer. The supply of PAC(Poly Aluminium Chloride) by the manufacturer through his authorized dealer/dealers will be treated as the 'Supply of the manufacturer'. However, if the tenderer is a Dealer, his tender must accompany manufacturers authorization letter in the prescribed format having dealership for minimum previous 3 years and undertaking from the trader that their supply is assured, guaranteed and they have taken the responsibility of uninterrupted supply, on the Rs.200.00 stamp paper in the prescribed format enclosed.
8. The material supplied by the successful tenderer shall have to conform to the standards, applicable for PAC (Poly Aluminium Chloride) as per IS specification described under IS :15573 of year 2018. Material shall be free from any organic matter/impurities and irritating/aromatic odour even if such abnormalities are detected at any stage after unloading the material in storage tank, material shall be rejected.

9. Tenderer should acquaint themselves with the arrangements available and existing at the treatment plant. They shall have to maintain regular contact with the plants officers so that uninterrupted and smooth supply is maintained as per the requirement at the treatment plant.
10. Tenderer must submit 03 Nos. of samples of 500 ml. of PAC in bottles, labelled with tender No; Due date of tender and properly identified, signed and sealed by the manufacturer in the office of Deputy Hydraulic Engineer (Store/Purchase), Engg.Hub Bldg;1<sup>st</sup> floor, Dr.E.Moses Road, Worli Naka, Worli, Mumbai - 400 018 on or before due date and time. Samples submitted after the due date and time shall not be accepted. Tenders received without samples shall not be considered. Samples submitted by tenderer shall be tested in the Municipal Laboratories and/or any Govt. approved Laboratory as per IS 15573 of 2018. Even if sample is passed and tenderer is awarded the contract, it does not absolve the responsibility of the supplier to supply pure liquid PAC during the tenure of contract as per IS 15573 of 2018 and PAC shall only be accepted after passing the tests in Municipal Laboratory for each and every tanker.
11. The tender should accompany the copies of latest report obtained from reputed laboratories of the samples of liquid PAC manufactured by the tenderer's themselves or their principals as per IS 15573 of 2018 in Technical bid.
12. The tenderers should note that the successful tenderer shall have to make available additional samples, if necessary, which shall be drawn by B.M.C. representatives so deputed in their presence, which shall be tested at the Contractor's/Supplier's cost.
13. Method of sampling for quality check:  
  
The supply shall be tested by BMC/manufacturer as per the provisions of IS:15573 of the year 2018 (up to date) . The method of testing shall be as follows:-  
  
The following parameters will be tested at BMC's cost .First liquid PAC supply received at site shall be tested for –

1. Specific Gravity
2. Alumina as  $Al_2O_3$
3. Viscosity.
4. pH
5. Chloride

The following parameters will be tested at NABL (National Accreditation board for testing and calibration laboratories) approved Laboratory of every batch/lot & test reports will be submitted by the suppliers with each tanker.

6. Selenium (as Se)
7. Total Organic Carbon (TOC)

If the test results of above are satisfactory then tanker shall be accepted else the same will be rejected right away. Apart from the above tests Dy.H.E.(B.C.) and Dy.H.E.(PPC) will test parameter no. (6)Selenium (as Se) and (7)Total Organic Carbon (TOC) from Govt. Approved laboratory 4 times randomly in one calendar year. The cost of testing will be borne by the suppliers. If supplier fails to supply PAC as per the specification, BMC will procure at the risk and cost of the supplier. This decision shall be final and binding on the contractor. The contractor shall have to depute his representative with each and every supply, if required. Contractor's claim shall not be admitted about sampling and testing procedure for test no. 1 to 5.

14. a) The material shall be unloaded by the supplier after procedure of weighments etc. at the place of storage at Bhandup Complex and Pise Panjrapur Complex to be arranged by the supplier. The arrangement for loading as well as unloading shall be borne by the supplier at his own cost. The tanker bringing in PAC (Poly Aluminium Chlorine) in liquid form shall be weighed on the weighing facilities available with B.M.C. as they are the net contents worked out on the basis of such weights, shall only be paid and the same shall be binding on the contractors. In case of any disputes/difficulty in this connection, the contractors shall have to arrange for weighments, as may be necessary on nearby Public Weight Bridges, at their own cost, in presence of the Municipal staff.
- b) If the weight difference between the weight mention in the Company's challan and the weight of weighing at the delivery point is within  $\pm 2\%$ , the weight of the material

stated in Company's challan shall be accepted and payment will be made accordingly.

15. All parameters of PAC mentioned in the IS:15573 of year 2018 would be tested and if any variation in any of the parameters is found during supply of PAC, the product will be outrightly rejected. Supplier will have to supply PAC as per specification. If supplier fails to supply PAC as per specifications, B.M.C. will procure PAC at the risk and cost of the supplier.
16. Any deviation from the norms stipulated in the tender specifications will lead to disqualification outrightly.
17. Since the poly Aluminium chloride being acidic, the supplier shall have to transport the bulk by means of specially fabricated/constructed tanker built in acid proof material.
18. The manufacturer should submit the attested copies of test certificates of their product from renowned laboratory.
19. Documentary evidence for the purchase of raw material shall be submitted by the tenderer along with the clarification of use of raw material in Technical bid.
20. PAC should be odourless.
21. For verification of the procurement of alumina hydrate, photocopy of excise document of Alumina hydrate purchased at works for PAC manufacturing will have to be submitted in Technical bid.
22. It is necessary to mention the safe dose as per non-toxicity test report enclosed in tender.
23. All tenderer shall submit the study report on residual aluminium in treated water after treatment with their product in Technical bid.
24. BMC's technical staff will visit the factory for the inspection of the raw material used for the manufacturer of liquid PAC randomly during existence of contract period. All the charges towards such visit shall be borne by the contractor including to & fro travelling, lodging & boarding etc. for the Municipal Engineers.
25. The PAC in liquid form shall be manufactured from the virgin raw material without any

impurities, organic matter. The Hydrochloric Acid used in the manufacture of PAC shall be manufactured from plant having membrane technology. Successful tenderer shall have to submit the copies of excise gate pass of the material so procured. If the manufacturer of PAC is also manufacturing some of the raw materials used in the manufacture of PAC, they should submit copies of GST invoice and E-way bill as and when called for. The tenderer must specify the quantities of raw material used for making 1 MT of liquid PAC to be supplied. The original GST invoice and E-way bill for Liquid PAC shall accompany with each delivery challan of the tanker supplied to BMC. The batch no./lot no. should be mentioned in the test certificate accompanying with each tanker. The tanker without above documents shall be rejected out right.

26. The suppliers can visit the BMC Water treatment plants at Bhandup Complex and Pise Panjrapur Complex on any working day to check up the feasibility of storing capacity.
27. The supplier/manufacturer shall enclose the necessary Valid Non toxicity certificates from a GLP (Good Laboratory Practice) Certified Laboratory/Institute, as regards to the safety of the material from the point of its application in the treatment of drinking water, in Technical bid, as per the recommendations of IITR Lucknow (formerly ITRC, Lucknow)

As per the recommendations of IITR Lucknow (formerly ITRC, Lucknow), the supplier/manufacturer should submit following Valid non-toxicity test certificates,

- 1) Acute Oral Toxicity Certificate
  - 2) Acute Dermal Toxicity Certificate
  - 3) Sub- Chronic Oral Toxicity Certificate
  - 4) Sub-Acute Dermal Toxicity Certificate
  - 5) Primary Skin Irritation Test Certificate
  - 6) Mucous Membrane Irritation Test Certificate
28. i) Tenderer shall submit the details of vehicles/tankers with copies of their respective HAZCHEM certificates from competent authority which they shall be sparing for the

supply of liquid PAC, as may be ordered by B.M.C. from time to time

ii) The tankers supplying PAC to Bhandup Complex and Pise Panjrapur Complex Water Treatment Plants should have HAZCHEM symbol encrypted on vehicle/ tankers.

29. The original excise gate pass for liquid PAC shall accompany with each challan of the tanker supplied to B.M.C. The tanker without above documents shall be rejected.
30. The supply of liquid PAC shall only be accepted after passing the test in Municipal laboratory for each & every tanker. The test certificate of liquid PAC shall be submitted along with the supply in the prescribed format given in the tender documents on the Manufacturer's letterhead.
31. The manufacturer / supplier should specify and enclose the material safety data sheet of their product, in Technical bid.
32. The tenderer shall get the samples of the items to be supplied pre-tested from the approved laboratories and submit the test report thereof along with the tender. The tenderer shall also submit sufficient samples as stated along with the tender. The respective municipal authorities will get these samples retested from one of Govt. Approved laboratory by specifying the time limit for submission of such report. In case there is any delay in submission of test report by the laboratories in the prescribed time period, in order to avoid delay in further processing of the tender, the concerned department may take further steps like opening of packet 'B' etc. by treating such tenders as 'Responsive' on the basis of the test report of the approved laboratories, submitted by the tenderers.

Unless the test report of the samples sent to the laboratories by the B.M.C. is found "Satisfactory" the further process of awarding contract shall not be undertaken and the security deposit of the defaulting tenderer shall be forfeited and the firm shall be permanently blacklisted."

"In order to avoid delay in receiving the test report from the laboratories due to late submission of required testing charges, the bidder shall pay the required testing charges alongwith the E.M.D. at the time of submission of the tender ."

33. Payment will be made by respective user department within 30 days from the date of receipt of bill on satisfactory supply & after the execution of written contract.
34. The successful bidder within 30 days from the date of issue of the acceptance letter for executing the contract work under reference shall enter in to a contract agreement with the B.M.C. The contract agreement shall be adjudicated for payment of stamp duty by the successful bidder and accordingly the successful bidder shall pay the stamp duty on the contract agreement within such time so as to ensure that the contract agreement is executed within the stipulated period as aforesaid.
35. The successful tenderer shall submit Rate Analysis as per Annexure-D of the tender after opening of Commercial Bid i.e. packet 'C' after demand notification via email from BMC
36. After bid submission, any changes in vendor code due to change/ updation in Company name , Change of business or LLP, Joint venture will not be allowed as the said tender falls in the category of essential services of BMC.
37. The tender conditions stated in the technical specifications and these conditions supersede similar conditions stipulated else where in the Tender Document.

**TENDERER'S FULL SIGNATURE  
WITH RUBBER STAMP**

[BILL OF QUANTITIES](#)

**BILL OF QUANTITIES**

<b>SR. NO.</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT</b>	<b>Tender QTY.</b>
1	<b>Supply of Poly Aluminium Chloride (PAC) as per IS:15573 of 2018 in Liquid form(Medium Basicity) for Water Treatment Plants of BMC for the period of one year.</b>	<b>MT</b>	<b>24520</b>

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## Post Qualification Criteria :-

### **The bidders fulfilling the following technical and financial criteria are eligible to quote:**

#### **1.1 Technical Capacity:**

The tenderer or their Manufacturer in their own name should have satisfactorily completed the supply work of Poly Aluminium Chloride (PAC) in BMC/ Semi Govt. / Govt. & Public Sector Organizations during last seven (7) years ending last day of month previous to the one in which bids are invited as a prime Contractor (or as a nominated sub-Contractor, where the subcontract had involved similar nature of work as described in the scope of works in this bid document, provided further that all other qualification criteria are satisfied)

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#### **1.2 Financial Capacity :**

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**- To ascertain this, tenderer(s) shall furnish /upload the financial statement (Audited balance sheet) duly certified by Chartered Accountant.**

#### **1.3 Similar Experience:**

**For assessing the technical capacity of Regular, Routine and Maintenance works; Similar work shall mean, the completed works of supplying of Poly Aluminium Chloride (PAC) to Govt. / Semi-Govt. / Public Sector Undertakings etc, during last Seven (7) years.**

**1.4 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:**

--made misleading or false representation in the forms, statements and attachments submitted in

proof of the qualification requirements; and/or

**--Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.**

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[Commercial: Cost Estimate](#)

e-Tender for **“Supply of Poly Aluminium Chloride (PAC) as per IS:15573 of 2018 in Liquid form(Medium Basicity) for Water Treatment Plants of BMC for the period of one year. ”** will be invited on Item Rate Basis. Hence, estimate of the same cannot be disclosed before Due Date.

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[Disclaimer](#) :

The Corporation retains the liberty to change the specifications of the items to be supplied and the terms of procurement of supply and other conditions prior to issue of the tender. The suggestions / objections received may or may not be considered if the same is not in consonance with the requirements of the project. BMC reserves its right to reject the same.

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**E.E.W.W. (Stores/Purchase)**

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**Dy.H.E. (Store/Purchase)**