



## TAMILNADU POLLUTION CONTROL BOARD

From, Er N. Sundara Gopal, M.E, Member Secretary Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-32.	To  Published in TNPCB website
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**Letter No: TNPCBd/Labs/ Pur-II/2378-9/2014 date 04. 07.2017**

Sub: TNPC Board - Labs -Purchase of 1 No of Flame photometer to DEL,Perundurai – Limited tender called for- Regarding

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Please furnish your sealed (**to be sealed with sealing wax**) and signed Tender for the supply of 1 No of **Flame photometer** to TNPC Board Labs as per the specification enclosed in the Annexure on or before **26. 07.2017** addressed to the Deputy Director (Labs) ,Tamil Nadu Pollution Control Board. If the rates quoted are for indigenous item it should be in Rupees and indicating Sales Tax, Packing, Forwarding and Delivering Charges. If the rates quoted are for the imported items the price should be quoted in foreign currency including freight, forwarding charges, insurance excluding customs duty. The Board is eligible for concessional customs duty. The Warranty period, offered by you and the delivery period required by you to supply the stores should be clearly mentioned in the Tender with the following specification. The actual manufacturers or their authorized agent and stockiest having at least three years experience in these products should only quote. In case of dealers, authorization letter for dealership from the original manufacturer should be enclosed

The sealed cover, super scribed as "**Tender for the supply of Flame photometer**" our reference number and due date of tender, should be sent to the following address:-

**THE DEPUTY DIRECTOR (LABS)  
TAMIL NADU POLLUTION CONTROL  
BOARD (ANNEXE),  
76, MOUNT SALAI,  
GUINDY,  
CHENNAI – 600 032.**

Tender received after the due date will not be considered.



## TAMILNADU POLLUTION CONTROL BOARD

If the tender is accepted supply order will be issued to successful bidder under the following terms and conditions stipulated below:-

01.	EMD	:	Rs 2,000/- (Rupees Two Thousand only) by the Name of Demand Draft in favor of TNPCB, Chennai
	Payment	:	30 days from the date of effecting full supply
02.	Penalty	:	10% p.a. on the value of goods for every day of delay beyond the time schedule of delivery till the date of completion of supply.
03.	Agreement	:	An agreement has to be concluded with the Tamil Nadu Pollution Control Board in a non-judicial stamp paper to the value of Rs.20/- at your cost within 15 days from the date of the order.
04.	Security Deposit	:	Demand Draft for 5% of the value of the order placed by the Board may be drawn in favor of Tamil Nadu Pollution Control Board, Chennai, from any one of the Nationalised Bank payable at Chennai towards Security Deposit and sent to this office within 7 days from the date of receipt of the order or before effecting the supply, whichever is earlier. This shall be refunded after Three years from the date the relevant supply and installation of the instrument.
05	Delivery Period required	:	21 days from the date of receipt of the supply order.
06.	Place of Delivery	:	DEL, Perundurai
07.	Buy back	:	Under buy back scheme of any make of obsolete Flame photometer from any lab

For Member Secretary

*[Handwritten signature]*  
6/7/17

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

Tel :22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141

Fax : 044-22353068

Email : tnpceb@md3.vsnl.net.in www.tnpceb.gov.in

**TAMIL NADU POLLUTION CONTROLBOARD**  
**TECHNICAL SPECIFICATION OF FLAME PHOTOMETER**

Sl. No.	Specification	Requirements	BIDDER'S RESPONSE (Bidder shall indicate "complied" or "Non Complied" as applicable in each row. In case of "Non Complied", detail shall be mentioned)															
1.	Measurement principle	Emission Flame Photometer for the determination of alkali and alkaline earth elements concentrations in aqueous solution.																
2.	Range	<table border="1"> <thead> <tr> <th>Element</th> <th>Na</th> <th>K</th> <th>Li</th> <th>Ca</th> </tr> </thead> <tbody> <tr> <td>In - ppm</td> <td>1-100</td> <td>1-100</td> <td>1-100</td> <td>15-100</td> </tr> <tr> <td>In - mEq*</td> <td>0-200</td> <td>0-100</td> <td>0-10</td> <td>0-5</td> </tr> </tbody> </table>	Element	Na	K	Li	Ca	In - ppm	1-100	1-100	1-100	15-100	In - mEq*	0-200	0-100	0-10	0-5	
Element	Na	K	Li	Ca														
In - ppm	1-100	1-100	1-100	15-100														
In - mEq*	0-200	0-100	0-10	0-5														
3.	Accuracy	≤ 1% of mean value over 20 request																
4.	Linearity	<table border="1"> <thead> <tr> <th>Element</th> <th>Na</th> <th>K</th> <th>Li</th> <th>Ca</th> <th>in%</th> </tr> </thead> <tbody> <tr> <td colspan="6">-----Better than 2%-----</td> </tr> </tbody> </table>	Element	Na	K	Li	Ca	in%	-----Better than 2%-----									
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-----Better than 2%-----																		
5.	Sensitivity	<table border="1"> <thead> <tr> <th>Element</th> <th>Na</th> <th>K</th> <th>Li</th> <th>Ca</th> </tr> </thead> <tbody> <tr> <td>In ppm</td> <td>0.5</td> <td>0.5</td> <td>0.5</td> <td>15</td> </tr> </tbody> </table>	Element	Na	K	Li	Ca	In ppm	0.5	0.5	0.5	15						
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6.	Reproducibility	<table border="1"> <thead> <tr> <th>Element</th> <th>Na</th> <th>K</th> <th>Li</th> <th>Ca</th> </tr> </thead> <tbody> <tr> <td>In%</td> <td colspan="4">----1% CV for 20 consecutive samples-----</td> </tr> </tbody> </table>	Element	Na	K	Li	Ca	In%	----1% CV for 20 consecutive samples-----									
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In%	----1% CV for 20 consecutive samples-----																	
7.	Flame system	LPG & Oil- free dry air																
8.	Detector	Photo Diode																
9.	Data presentation	<table border="1"> <tbody> <tr> <td>Readout</td> <td>2 line 24 characters Dot Matrix backlight LCD module</td> </tr> <tr> <td>Hard Copy</td> <td>Parallel Centronic Printer</td> </tr> </tbody> </table>	Readout	2 line 24 characters Dot Matrix backlight LCD module	Hard Copy	Parallel Centronic Printer												
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10.	Detector control	Photo diode Auto Shut Off at power pack for LPG Gas live																
11.	Power requirement	110V/220V± 10% 50 Hz to 60 Hz, Max. 35 VA																
12.	Physical dimensions	Size (WxDxH)in mm: 430 X 230 X 235 (+ 100 <sup>1</sup> ) Weight In kg : Approx. 10																
13.	Accessories supplied	<table border="1"> <tbody> <tr> <td>With Instrument</td> <td>Filters for Na, Air Compressor with buffer tank and 5cc Beakers.</td> </tr> </tbody> </table>	With Instrument	Filters for Na, Air Compressor with buffer tank and 5cc Beakers.														
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14.	Out put	Supplied with printer as interfacing																
15.	Warranty	3 years Comprehensive warranty																

Deputy Director (Labs)

6/7/17

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