



केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
(पर्यावरण एवं वन मंत्रालय, भारत सरकार)
(MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA)

C-45013/02/2010-11/mat.

Dt.25.08.2011

To

Total 6 (Six) firms. List Attached.

Sub: Quotation for the supply of Container for our Monitoring Station, DCE and Siri Fort, Delhi/New Delhi.

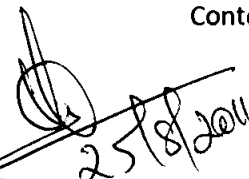
Sirs,

Sealed quotation superscribing above mentioned file number are invited for the supply of Container in Rupees as per specifications attached at Annexure – I.

2. The quotation should reach this office by 26.09.11 (Monday) at 5.00 pm.
3. The EMD of Rs. 60,000 should be submitted alongwith the Tender.
4. The quotation is to be submitted in two parts i.e. first sealed envelope will contain full information required to judge pre-qualification, earnest money, complete details and technical specification including leaflets and catalogues, List of credentials with documentary evidence i.e. purchase/work order etc, copy of Income Tax Return filed in the last two financial year PAN number, VAT/Sales Tax Registration No. Affidavit for not being black listed, Commercial terms & conditions etc. It shall be marked as "Pre-qualification technical specification" due on 27.09.11 (Tuesday) at 11.00 AM. The second envelope should contain only price and shall be marked "Price bid" The price bid of only those firms, whose bid are technically qualified in all respect will be opened, which will be informed on the same day or on a later date.
5. It may be noted that mere quoting of lowest rate will not entitle any firm to get the order. All the terms and conditions such as taxes, validity, guarantee period etc. should be clearly mentioned in the quotations. The quotation should be accompanied with technical literature.
6. The validity of the quotation would be for a minimum period of 90 days from the date of opening of the quotation. Rate quoted for a shorter period i.e. less than 90 will be rejected as non-responsive. However, the extension of the validity of quotation beyond 90 days will be subject to mutual agreement between Board and the supplier.

Contd..

o/c


25/8/2011

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032

'Parivesh Bhawan', East Arjun Nagar, Delhi - 110032

दूरभाष/Tel. : 43102030, फ़ैक्स/Fax : 22305793, 22307078, 22307079, 22301932, 22304948

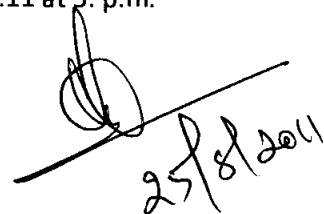
ई-मेल/e-mail : cpcb@nic.in वेबसाइट/Website : www.cpcb.nic.in

7. Earnest Money Deposit: The bidder are to deposit the "Earnest Money" alongwith the quotation in the form of Demand Draft in favour of "Central Pollution Control Board" Payable at Delhi. Quotation shall not be entertained without earnest money. The Firm who seek exemption from depositing earnest money being small scale industry, being registered with NSIC, DGS&D and other Government agencies which entitles them for exemption must submit the valid Registration Certificate – cover the Item offered by them alongwith the permissible value. The copy of Government Notification granting exemption from deposit of EMD must be submitted along with the Techno-commercial part of tender alongwith the bid. (EMD Exemption will be granted only to those items specified in the certificate of Registration).
8. The earnest money of the unsuccessful bidder will be returned on the same shape without any interest after the purchase is finalized or within three months from the opening of the quotation which ever is earlier. The earnest money of successful bidder will refunded without any interest within one month of the successful completion of supply & satisfactory installation of the system.
9. Payment Terms: 100% payment will released on supply and installation of the systems, on good and satisfactory condition and on furnishing performance security/Performance Bank Guarantee equivalent to 10% of the purchase order value till warranty period. The Performance Security / Bank Guarantee be furnished by the supplier. No Proposal for advance payment will be allowed in any case. Proposal for Advance payment, document and payment through bank will not be considered. Hence no preference will be given for such advance payment proposals.
10. The supplier should attach a copy of financial bid/Proforma Invoice of the Container quoted (without cost/price figures) alongwith the technical bid to assess the item/components quoted in the bid. The rate for AMC for next five years after the warranty period should be mentioned in the Price Bids.
11. No C/D form will be issued against VAT/CST.

The rate for specification mentioned in the annexure will only be considered and rates quoted for any other kind of specifications will not be considered. Therefore, it is advised to see the specifications carefully and quote the rate accordingly. The quotation should be free from over writing and erasures. Corrections/additions, if any, should be attested by authorized person.

Arithmetical error will be rectified on the following basis. If there is discrepancy between the unit price and total price, that is obtained by multiplying the unit price prevail and the total price shall be corrected. If there is discrepancy in words and figures, the amount in words will prevail.

No quotation will be accepted after the closing date i.e. 26.09.11 at 5. p.m.

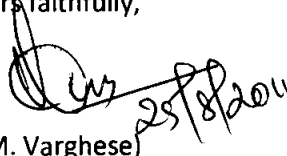


A handwritten signature is written over a horizontal line. Below the signature, the date "25/09/2011" is written in a cursive style.

..3..

12. The charges towards installation transportation and other levies/charges etc. should clearly be mentioned. The Containers are to be installed at our monitoring station DCE and Sirifort, Delhi/New Delhi.
13. If the last date of, submission and opening of Tenders falls on any Government declared holidays, the next working day at the same time will be considered last dated of the same.
14. The warranty period for item for three years from the date of installation.
15. The Chairman, Central Board reserves the right to cancel any or all the quotations without assigning any reason thereof.
16. The quotation may either be sent through Registered post or drop in the Tender Box kept in the Material Section, first floor.
17. All correspondence in this regard may be addressed to the Admn. Officer (Material), CPCB.
18. **Important:** The Containers alongwith the items offered are to be supplied and installed within 45 days from the date of issue of the purchase order.
19. Typographical and clerical errors are subject to corrections.

Yours faithfully,


(M. Varghese)
Admn. Officer (M)

Encl:- Detailed Technical Specification

Copy to :

1. I/c. Air Lab. – for information.
2. Office Order File
3. ACO & I/c. Finance - for information.

List of CAAQM Station Container Manufacturer/Supplier

01. M/s. Thermo Fisher Scientific Pvt. Ltd.
Environmental Instrument Division,
Plot No. 327, TTC Industrial Area,
Pawane, Navi Mumbai – 400 705
02. M/s. Environment S.A. India Pvt. Ltd.,
C- 387, TTC Industrial Area,
Pawane, MIDC, Pfizer Road,
Turbhe, Navi Mumbai – 400 705
03. M/s. Chemtrol Industries Limited,
A-10, Green Park Main,
New Delhi – 110 016
04. M/s. Envirotech Instruments Pvt. Ltd.,
A-271, Okhla Industrial Estate,
Phase – I, New Delhi – 110 020
05. M/s. Alfa Tech Services,
3rd floor Mohit House,
D-3 Shopping Centre II,
Mansarovar Garden,
New Delhi – 110 015
06. M/s. Space Tech.
22 A, Bhaskara Plaza,
Murugan Koil Street,
Fairlands, SALEM
TAMILNADU – 636 016

TECHNICAL SPECIFICATIONS

1.0 MONITORINGS STATION

01. Monitoring Station: is designed for housing the ambient air quality monitoring instruments to protect them from dust and heat. Temperature and Humidity sensors shall be installed in the housing for checking the humidity and temperature inside the station. Three Nos. 19" racks shall be installed inside the station so that the analysers are easily accessible from front & back for calibration and maintenance.

02. Dimensions:
Inside length: Approx. 4200 mm
Inside width: Approx. 3500 mm
Inside height: Approx. 2500 mm

03. Frame: All the material used for the construction of the floor, frame, roof frame etc, the 4 corner posts and 8 integrated, reinforced container corners should be of metal. The exterior panel of the container shall be made of pre-coated MS Sheet of approved colour shade. All other steel parts should be hot dipped galvanized having minimum rate of galvanisation of 275 gram per square meter. All joints of like metal such as steel-to-steel or aluminium-to-aluminium shall be protected against corrosion by liberal application of joining compound. All joints of dissimilar metals such as steel to aluminium shall be protected against corrosion due to galvanic action by liberal application of dielectric compound as well as jointing compound on both mating surfaces. For lifting / fixing the container, International Standard eyebolts should be provided at the corners.

04. Paneling: The outer paneling will be of 1.6 mm of Pre-coated MS sheet to withstand external impacts and abrasions. Outer side of the MS Sheet i.e. exposed face of the sheet, shall be permanently colour coated with silicon modified polyester coating of dry film thickness (DFT) 20 micron (min.) of approved colour shade over primer. Inner face of the sheet shall be provided with suitable pre-coating of minimum 7 micron off-white colour. The inner paneling will be of PVC coated 2 mm thick aluminium sheet, fixed over an inlay of 4 mm marine plywood. 100 mm thick polyurethane insulation will be used between the outer and inner walls (Pre-coated MS sheet and Marine plywood) as insulating material. Z spacers if required shall be made out of at least 2 mm thick galvanized steel sheet of grade 275 as per IS:277

05. Floor: The floor will be laid in frame of 600 x 600 mm centre to centre with 50 x 50 x 6 mm MS angle. The floor surface will be of 19 mm marine plywood covered with robust quality Vinyl flooring, 2 mm thick of approved colour. The floor should be of acid and alkaline resistant, waterproof, easily cleanable / washable. Bottom plate of thickness 2 mm hot dipped galvanized MS Plate shall be provided.

06. Outdoor: One door of size approx. 2000 x 900 mm will be provided at the front side (L = 4200 mm) of the station with isolated 3 - point locking & door handle flush fitted.

07. Electric Power Supply Box: Three - phase (3 Ø) electrical wiring will be laid in ducts. Copper wiring of appropriate gauge will be used. The terminal board should be mounted in a central power distribution box. Over voltage protection for each phase shall be provided along with the lightning arrestor. 2 Nos. Emergency cut off switch & Thermostat switch (35 °C) for power disconnection, 6 free sockets and 3 fluorescent lamps for lighting will be provided. The station shall be properly grounded atleast on 2 corners (diametrically opposite). One

three phase energy meter (Digital Type) shall be installed. Weatherproof cubicles / enclosure for housing of MCB / TP & N Switch of main power termination (out side shelter) weatherproof telephone junction box for terminations of telephone line are to be provided.

Option: Proper earthing for telescopic mast of meteorological system shall be provided, if supplied along-with the station. There should be conduction between the telescopic mast of the meteorological system and the station. The guy ropes shall be provided for supporting the mast.

List of Consumables:

All Fuses	:	02 set
Lightning arrestor	:	02 set
Emergency Switch	:	02 pcs
Thermostat	:	01 pc

08. The housing will be partitioned as per drawing to create space for storing of gas cylinders, Meteorological mast & UPS. The size will be 2000 x 1400 x 2300 mm. A lockable door of size 900 x 2000 mm along-with 3 – Point locking system shall be provided on the outer wall of the housing. A 300 mm, single-phase (230 volts \pm 10 volts AC and 50 Hz \pm 3%.) exhaust fan with safety grills will be provided. Mounting brackets in 2 levels for fixing of atleast 06 gas bottles should be provided.

Air conditioners shall be mounted on proper rust proof supporting structures with rubber blocks to avoid vibration of structures. Proper caging / grill should also be provided for the safety of ACs. Sun shades for external AC units shall be provided with fabricated pre-coated MS sheet (same as monitoring station) with supporting arrangements. AC unit's external piping shall be placed in GI trays. Cable trays fixed on exterior wall shall be covered with pre-coated MS sheet, of same colour shade of monitoring station. Roof top sheet to be levelled and sloped properly. Rain water spout shall be fixed at top with rain water down corner pipe.

09. Station Furnishing:

- (i) 19" racks – 3 Nos.
- (ii) Fire extinguishers – 2 Nos.
- (iii) Furniture:
 - a) Material - Furniture made of water resistant laminated board
 - b) Cupboard – As per drawing
 - c) Working table – Powdered coated MS frame size 1400 x 900 x 750 mm (w x d x h) and top 19 mm thickness Board
 - d) Revolving tilting chair – 2 Nos.
- (iv) Miscellaneous
 - a) The exhaust gases from the analyser should be collected and vented by a common exhaust pipe.
 - b) Folding aluminium ladder for roof access
 - c) Thermostat for controlling the temperature of the station
 - d) Hygro Meter for measurement of Humidity inside the station
 - e) Mounting bracket for the ladder
 - f) No smoking stickers

2.0 AIR CONDITIONER

- a. Type: 2 Nos. split type roof mounted, energy efficient (minimum 4 star rating) operated alternately by an automatic timer.
- b. Capacity: 2.0 Ton
- c. Nominal Cooling: Btu /hr – 24000, Kcal / hr: 6000
- d. Fan type: Propeller Fan
- e. Fan Motor type: Permanent Split Capacitor, 1/8 Horse power
- f. Control Type: Remote
- g. Compressor: Reciprocating / Rotating
- h. Refrigerant: Eco friendly
- i. Power supply: 230 volts \pm 10 volts AC and 50 Hz \pm 3%.

3.0 ON LINE UNINTERRUPTIBLE POWER SUPPLY (UPS)

Three phase 15 kVA UPS along with Automatic Delayed Restoration Device (ADRD) with 4 hours backup in full capacity should be provided for the smooth operation of the station along with Air Conditioners.

01.	Capacity	:	15.0 kVA
02.	Technology	:	PWM using IGBT / MOSFETS
03.	Crest Factor	:	More than 3: 1
04.	Input		
	Voltage	:	415 V AC
	Voltage Range	:	\pm 25%
	Frequency	:	50 Hz \pm 3%
05.	Output		
	Voltage	:	415 V AC
	Voltage regulation	:	\pm 1%
	Frequency	:	50 Hz
	Frequency regulation	:	\pm 0.01%
	Waveform	:	Pure sine wave
06.	Battery		
	Battery type	:	Sealed maintenance free
	Back up time	:	4 Hrs. (Full load)
	Battery Capacity	:	Depends upon backup time
	Recharge time	:	5 hrs to 90% after complete discharge
07.	Distortion	:	Less than 1% on linear load
08.	Power factor	:	0.8 to 1
09.	Indicator	:	L.E.D. – Battery Charge, load level, on Line, over load, on battery, replace battery
10.	Alarm	:	Audible alarm for battery back up, battery low, and fault
11.	Protections		
	Surge	:	Surge suppression meets BIS or International standard
	Overload	:	Fuse & current limited
	Short circuit	:	Fuse & current limited & cut - off
	Battery low cut - off	:	No battery drain after cut - off
12.	Overload Capacity	:	110% for continuous load
13.	Efficiency	:	More than 90%
14.	Environment		
	Operating Temperature	:	0 – 50 ° C
	Operating Humidity	:	10% to 95% (Non condensing)
	Audible Noise	:	Less than 45 db (at 1 meter)
15.	Size	:	Not exceeding 1000 x 1000 x 1000 mm

4.0 SPECIFICATIONS OF SAMPLING SYSTEM

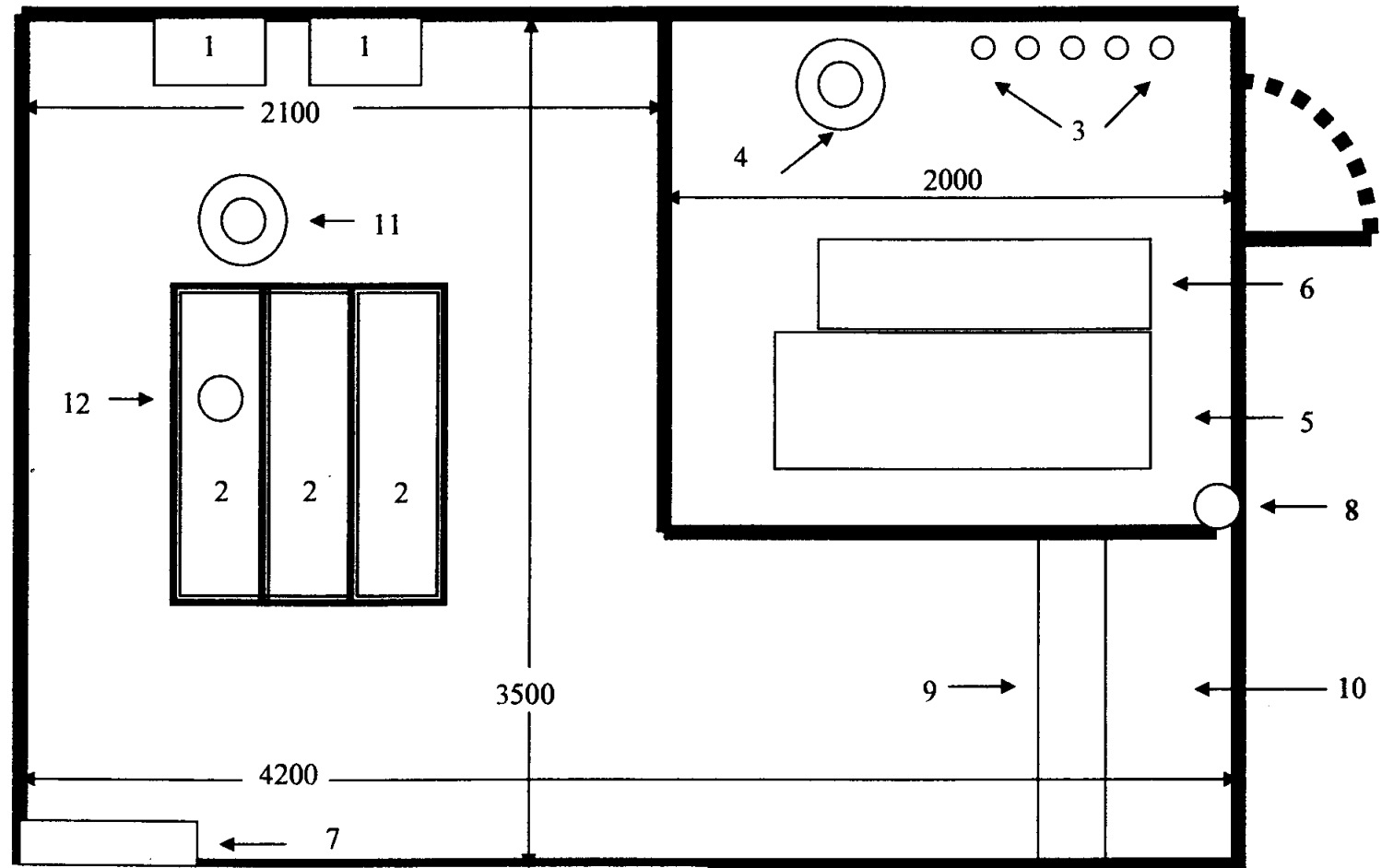
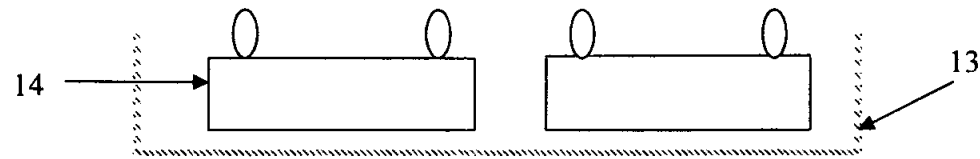
A suitable sampling system as specified by USEPA having 10 ports manifold and fitted with a suction pump to draw ambient air. System duly equipped with moisture removal systems should be provided for sampling of ambient air separately for gaseous and dust measurement.

Gases sampling system:

- | | | |
|----|-------------------------------|--|
| a) | Height of the sampling system | : Approx. 1.0 meter above the roof |
| a) | Roof entry cut out | : Stainless Steel |
| b) | Conduit | : Stainless Steel |
| c) | Inner sampling system | : Borosilicate glass |
| d) | Sampling head | : Stainless Steel |
| e) | Manifold | : 10 port for tubes 6 x 1 mm,
self-tightening |

5.0 SPECIFICATIONS OF 19" RACK

Suitable 19" Rack cabinet to accommodate all analyzers, calibrators, Zero air generators, data logger etc. The dimension of the rack without doors, with aluminum section and rear of 2 mm steel sheet, one removable roof plate, fitted with 4 lifting eyebolts. Four roof fixing screws included in package to replace the lifting eyebolts. One gland plate three part, one pair of 475 mm (19") mounting angles depth adjustable in 25 mm pitch pattern fitted on two fixing angles approximately 150 mm unit from the front standard. To accommodate panel width of 19" size: width = 600 mm, Height = 1400 mm and Depth = 800 mm. The 19" racks should be screwed to the floor of the station. All nuts and bolts shall be cadmium coated.



- 1. Roof Mounted Split AC
- 2. 19" Rack
- 3. Gas Bottles
- 4. Mast for Meteorological Sensors
- 5. Battery Box for UPS
- 6. UPS Unit
- 7. Electric supply Box
- 8. Exhaust fan
- 9. Working Table
- 10. Racks for spare parts
- 11. Ambient Air Sampling System
- 12. Dust Sampling System
- 13. Sun Shed
- 14. Air Conditioning unit

All Dimensions are in mm

AMBIENT AIR QUALITY MONITORING STATION

Drawing of Cup Board and Working Table

