



ट्रॉम्बे, मुंबई — ४०००८५ Trombay, Mumbai – 400 085 फ़ोन/Telephone 022-25594802

#### भारत सरकार / GOVERNMENT OF INDIA

भाभा परमाणु अनुसंधान केंद्र / BHABHA ATOMIC RESEARCH CENTRE रेडियोकेमिस्ट्री एंड आइसोटोप ग्रुप / RADIOCHEMISTRY AND ISOTOPE GROUP उत्पाद विकास प्रभाग / PRODUCT DEVELOPMENT DIVISION

### निविदा आमंत्रित करने की सूचना (दो भाग निविदा) NOTICE INVITING TENDER ON TWO PART TENDER BASIS

TENDER NOTICE No.: BARC/PDD/2022/Fab-51

Date: 20th JANUARY, 2022

### **NIT Details**

On behalf of the President of India, by Head, Product Development Division, Bhabha Atomic Research Centre, Trombay, Mumbai – 400 085, sealed bids are hereby invited in two parts i.e. "Part 1 –Technical Bid" and "Part 2 – Price Bid" for the following work from eligible manufacturers on limited tender basis.

1. Tender No.

BARC/PDD/2022/Fab-51

2. Description of the

work

Design, Drawing approval, Manufacture, Pre-dispatch Inspection, Packing, Supply and Warranty of Glovebox HEPA filters as per the Specifications Mentioned in the Annexure - 1

3. Quantity

a. HEPA filter of 50 m $^3$ /h with male connector, M62×2.5 – 6g - 15 No.

b. HEPA filter of 5 m³/h thread size – 1" BSP (female) – 15 No.
c. HEPA filter of 5 m³/h thread size – ¼" BSP (male) – 15 No.

d. HEPA filter of 50 m³/h with male connector, thread size: M38×1.5 – 15 No

a No

Sketch/Dwg. No Specifications

As per Annexure – 1

5. Due date & Time

08/02/2022, 14:30 hrs.

6. Mailing Address

Dr. S.K. Rakshit

SO/G, Product Development Division S-62, South Site, BARC, Trombay

Mumbai - 400 085

7. Person to contacted for any clarification

Dr. S.K. Rakshit, Head, FDCS, PDD, BARC Tel. 25594802 swarupkr@barc.gov.in

8. Validity of offer

Offers should be kept valid for 180 (One Hundred Eighty) days

from the last date of submission of tenders.

9. Terms of Submission

Quotation to be submitted in sealed envelope super scribing

with

i) Tender No. ii) Due Date & iii) Name of work

### to be sent by Indian post only

Bidders are required to be submitted their offers in separate sealed and super scribed envelopes containing the respective bids and indicating the following:

| 1 | FIRST ENVELOPE  | PART – 1 (TECHNICAL BID) |
|---|-----------------|--------------------------|
| 2 | SECOND ENVELOPE | PART – 2 (PRICE BID)     |

All these sealed envelopes should be sealed inside a single envelope super scribing with i) Tender No. and ii) Due Date & iii) Name of work. The acceptance of tender offer shall rest with the department which does not bind itself to accept the lowest tender and reserves rights to itself the authority to reject any or all of the tenders received, without assigning any reason whatsoever. Offers in which any of the prescribed conditions are not fulfilled or incomplete (in any respect) are liable to be rejected.

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

Financial bid of those firms whose technical bids are qualified only will be opened.

### **Other Terms and Conditions:**

- 1. Quotation should be on printed Letter Head / Quotation Format Which should consist of
  - a) GST number
  - b) PAN number
  - c) CST registration number of the firm.
- 2. Please mention the delivery period, validity of offer and any other Govt. taxes applicable and payment terms clearly in the offer.
- 3. BARC is a Central Govt. Institution and the materials fabricated through this tender inquiry will be utilized for R&D purpose, hence, GST concessional certificate will be issued against GST rate of 5%.
- 4. Bidder's quotation in "Technical part" should contain schematic drawing along with full description and supported documents (if any). Without these documents, quotations will be invalid.
- 5. Price quoted shall be for safe delivery up to our site at BARC, Trombay, Mumbai PIN 400 085.
- 6. The material supplied will be covered by guarantee for one year from the date of completion of the work order. Guarantee / Warranty certificate should be produced along with the bill.
- 7. Packing: The manufacturer shall ensure that the items covered by this tender work is properly and sufficiently packed for shipment by road so as to ensure they are being free from any loss, damage or deterioration during transit.
- 8. Delivery & Completion: Delivery, installation & commissioning of all items against this inquiry should be completed within 02 months from the date of receipt of this order. The materials should be delivered at PDD, South site, BARC, Trombay, Mumbai.
- 9. Any delay which is attributable to the contractor is liable for penalty @½% per week (max. 5%) to be imposed on the contractor.
- 10. **No FIM:** No Free Issue Material will be supplied for the fabrication job.
- 11. **Payment:** 100% Payment will be released against shipping release certificate duly certified by authorized personnel from the department and after satisfactory completion of the work on submission of following documents:
  - a) Satisfactory work completion certificate from user
  - b) Invoice in triplicate, Last 2-year IT return acknowledgement
  - c) Advance stamped receipt, GST undertaking, ITR undertaking
  - d) Guarantee/warranty certificate
- 12. Income Tax: Income tax as applicable and GST-TDS @2% shall be deducted from your bill.

- 13. Dr. S.K. Rakshit, Head, FDCS, PDD, BARC will act as an "Officer-in-charge" for this work. Any clarification regarding the above work can be obtained from him on Tel. 2559 4802 / 4462 or by email: swarupkr@barc.gov.in.
- 14. All other terms of general contract are also applicable.

### IMPORTANT: Following clauses are part of terms and conditions of this contract.

### I. CONFIDENTIALITY

No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as "**PROPRIETARY**" in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party.

This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by a party with equal force.

# II. "RESTRICTED INFORMATION" CATEGORIES UNDER SECTION 18 OF THE ATOMIC ENERGY ACT, 1962 AND "OFFICIAL SECRETS" UNDER SECTION 5 OF THE OFFICIAL SECRETS ACT, 1923

Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.

## III. PROHIBITION ÁGAINST USE OF BARC'S NAME WITHOUT PERMISSION FOR PUBLICITY PURPOSES.

The contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public media like Press, TV, Radio or Internet without the prior written approval of BARC.

### **ENCLOSURE**

- 1. TECHNICAL SPECIFICATION (ANNEXURE 1)
- 2. FORMAT OF GST UNDERTAKING
- 3. FORMAT OF ITR UNDERTAKING

(S.K. Rakshit)

SO(G), PDD, BARC

(For & on behalf of President of India)

डॉ. एस. के. रक्षित / Dr. S. K. RAKSHIT

अध्यक्ष. ईंधन विकास रसायन अनुभाग Head, Fuel Development Chemistry Section उत्पाद विकास विभाग/Product Development Division

भाभा परमाणु अनुसंधान केंद्र /Bhabha Atomic Research Centre भारत सरकार / Government of India द्रॉम्बे, मुंबई - 400 085 / Trombay, Mumbai - 400 085

### Technical specifications of glovebox HEPA filters

Item description: Design, Drawing approval, Manufacture, Pre-dispatch Inspection, Packing, Supply and Warranty of "Glovebox HEPA Filters" as per the Specifications Mentioned in the Annexure - 1

Item 1: HEPA filter of 50 m<sup>3</sup>/h Quantity required: 15 No.

Material of construction = SS 316 with 1 mm thick sheet

Shape: cylindrical with threaded (outer) piping connection at top with silicone rubber gasket (OD = 83 mm; ID=63 mm, thickness = 5 mm)

Outer most diameter = 160 mm, internal diameter of the tube = 50 - 60 mm, thread size:  $M62 \times 2.5 - 6g$  (sample can be given if required)

Height of filter: 150 mm, height of thread portion pipe: 15 mm, silicone asket thickness: 5 mm, Total height of the filter: 170 (±5) mm

Filtration media: 0.3 µm good quality submicronic glass fiber media pleated design, inside pipe - ss 316, 8 mm dia hole, shape: perforated cylinder,

filtration media should be wrapped around this pipe

Outer case body: SS 316, sealing (wherever required) - epoxy resin/hardener (industrial grade), gasket: silicon rubber 5 mm thick, air flow:  $50~\text{m}^3/\text{h}$ , efficiency: 99.99% down to  $0.3~\mu\text{m}$ , EU - 14 class confirming to ISO 29463, differential pressure drop: 26~mm of water column at inlet ( $\pm 20\%$ ), maximum operating temperature:  $70^\circ\text{C}$ . A cross should be made on outer casing of the filter at the bottom to lock & unlock the filter from glovebox surface.

Item 2: HEPA filter of 5 m<sup>3</sup>/h Ouantity required: 15 No.

Material of construction = SS 316 with 1 mm thick sheet

Shape: cylindrical with threaded (outer) piping connection at top with silicone rubber gasket (OD = 32 mm; ID=23 mm, thickness = 4 mm)

Outer most diameter = 93 mm, ID (with filter) = 80 mm, thread size: 1" BSP (female) (sample can be given if required)

Height of filter: 35 mm, silicone gasket thickness: 4 mm

Filtration media: 0.3 µm good quality submicronic glass fiber media pleated design, inside pipe - ss 316, 6 mm dia hole, shape: perforated cylinder, filtration media should be wrapped around this pipe

Outer case body: SS 316, sealing (wherever required) - epoxy resin/hardener (industrial grade), gasket: silicone rubber 4 mm thick, air flow: 5 m³/h, efficiency: 99.99% down to 0.3  $\mu$ m, EU - 14 class confirming to ISO 29463, differential pressure drop: 22 mm of water column at inlet (±20%), maximum operating temperature: 70°C

Item 3: HEPA filter of 5 m³/h with ¼" BSP male connector Quantity required: 15 No.

Material of construction = SS 316 with 1 mm thick sheet

Shape: cylindrical with threaded (outer) piping connection at top with silicone rubber gasket (OD = 32 mm; ID=23 mm, thickness = 4 mm) with  $\frac{1}{4}$ " BSP male connector with silicone rubber gasket (OD = 32 mm; ID=23 mm, thickness = 4 mm).

Filtration media:  $0.3 \mu m$  good quality submicronic glass fiber media pleated design, inside pipe - ss 316, 6 mm dia hole, shape: perforated cylinder, filtration media should be wrapped around this pipe

Outer case body: SS 316, sealing (wherever required) - epoxy resin/hardener (industrial grade), gasket: silicone rubber 4 mm thick, air flow: 5 m³/h, efficiency: 99.99% down to 0.3  $\mu$ m, EU - 14 class confirming to ISO 29463, differential pressure drop: 22 mm of water column at inlet (±20%), maximum operating temperature: 70°C

Item 4: HEPA filter of 50 m<sup>3</sup>/h with male connector Quantity required: 15 No.

Material of construction = SS 316 with 1 mm thick sheet

Shape: cylindrical with threaded (male, outer) piping connection at top with silicone rubber gasket (OD = 83 mm; ID=63 mm, thickness = 5 mm)

Outer most diameter = 160 mm, internal diameter of the tube = 50 - 60 mm, thread size: M38×1.5 (sample can be given if required)

Height of filter: 150 mm, height of thread portion pipe: 15 mm, silicone

gasket thickness: 5 mm, Total height of the filter: 170 (±5) mm

Filtration media: 0.3 µm good quality submicronic glass fiber media pleated design, inside pipe - ss 316, 8 mm dia hole, shape: perforated cylinder, filtration media should be wrapped around this pipe

Outer case body: SS 316, sealing (wherever required) - epoxy resin/hardener (industrial grade), gasket: silicon rubber 5 mm thick, air flow: 50 m³/h, efficiency: 99.99% down to 0.3 µm, EU - 14 class confirming to ISO 29463, differential pressure drop: 26 mm of water column at inlet ( $\pm 20\%$ ), maximum operating temperature: 70°C. A cross should be made on outer casing of the filter at the bottom to lock & unlock

the filter from glovebox surface.

### Salient points:

1. Vendors should have their own facility for testing of these filters at their premises or should arrange for witnessing testing by user's at their own cost and attach test certificates for these filters.

2. Fabrication schematic drawing should be submitted along with the quotation. Offers without the drawing will not be considered and the same will summarily be rejected.

### **General Terms and Conditions**

- Fabrication drawing should be made by the manufacturer and the same should be submitted to user for their approval. After approval, one piece of each filters (ITEM 1 TO 4) should be made and sent to user for testing and its fitting as sample filter. After receiving the approval of sample filters, bulk manufacturing of the filters of should be carried out. Manufacturer should be able to accommodate suggestions on threaded portion of the sample filters if found not suitable at existing glovebox surfaces.
- 2. Pre-dispatch inspection, testing and certification: Theses HEPA filters shall be subject to pre-dispatch inspection and testing at manufacturer's site with the help of their expert. The supplier has to provide the testing facility along with sample HEPA filters with all adequate and calibrated measuring units or equipment required for testing at their workplace. Pre-dispatch inspection will be carried out after the factory acceptance test which should be

well documented by the supplier. These document(s) should be submitted to users for its approval before the pre-dispatch inspection.

- 3. Acceptance criteria: Vendor/manufacturer's should arrange testing of these filters as per prevalent industrial norms using a well-equipped testing facility. Following technical specification will be checked during the acceptance test of the HEPA filters at vendor/manufacturer's works during pre-dispatch inspection and at user's site:
  - a. Dimensional check as per approved fabrication drawing
  - b. Threaded male-female matching with proper sealing of gasket of the filters
  - c. Air flow test: with industrial standard conditions
  - d. Efficiency test, air flow test with DOP
- 4. **Installation & commissioning:** Installation & commissioning of these filters are in the scope of users.
- 5. **Packing and shipment:** All components shall be packed with individual PVC bags and sealed properly to avoid damage during shipment and its storage and dust collection.
- 6. **Manuals/labels:** Labels showing drawing with dimensions, MOC, air flow direction, air flow value, differential pressure, maximum working temperature etc. should be mentioned in the individual filters and in leaflet.
- 7. **After Sales Services:** The Company shall provide free after sales service during the warranty period and should provide maintenance services after the warranty period on payment basis.
- 8. **Warranty:** Warranty/Guarantee of equipment from manufacturing defect shall be furnished for one years from the date of delivery.
- 9. **Delivery Period:** The filters shall be delivered within 2 months from the date of order.
- 10. **Workmanship:** Machined surfaces should be free from sharp corners, burr, sharp edges etc having an impact on a common application of the product.

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