

Vashi Complex, Navi Mumbai - 400 703 Tel: 2788 7169

TeleFax: 2784 0032

Government of India Bhabha Atomic Research Centre POWDER METALLURGY DIVISION

Ref.: PMD/Tender Inv/2022/594

March 01, 2022

Tender Enquiry

Sub: "Refurbishment and renovation work in SMP, PMD" Vashi, Navi Mumbai.

For & on behalf of the President of India, quotations are invited by undersigned for the above said work to be carried out at Powder Metallurgy Division, Vashi Complex Navi Mumbai 400703. The scope of work is detailed below.

Nature / Description of Work		
Refurbishment and renovation work in SMP, PMD" Vashi Navi Mumbai. As per	As per	
attached ANNEXURE -1	annexure	

The quotation in sealed cover super scribed as "Refurbishment and renovation work in SMP, PMD" and addressed to the following officials should reach him by speed post/Registered Post through Indian Postal Service on or before the date and time mentioned below.

Shri. N. E. Mawal SO/E,	
Powder Metallurgy Division, BARC, Sec	On or before 15/03/2022 up to 13:00Hrs
Vashi Complex, Navi Mumbai-400073	

The technical and commercial bids shall be submitted separately in two sealed envelopes and should super-scribed as "Technical Bid" and "Commercial Bid" duly furnishing all the required information. Both the bids should be placed in a common cover, which should be super-scribed as "Refurbishment and renovation work in SMP, PMD, Vashi complex, Navi Mumbai" and addressed to above given person, should reach him on or before the date and time mentioned. The quotation should be sent only by speed post or registered post of Indian Postal Department.

Instructions to the suppliers:

- The party should write in words as well as figures, the rate(s) quoted by him. All corrections must be attested by the dated initials of the tenderer.
- The party may note that in case the work is awarded to him, he has to produce police verification
 certificate for the employees to be deputed for fabrication and erection work inside the BARC/BRIT
 complex, Navi Mumbai.

Cont---

- Income-Tax @ 2% and GST TDS @3% or as applicable shall be deducted from the bill. The payment for the work done shall be paid by our Accounts Division, only on satisfactory completion of the work.
- The supplier must provide PAN No. and GST No of the firm/company along with offer.
- The time allowed for completion of the job is 90 working days. The same shall be reckoned from the date
 of issue of the work order.
- The acceptance of the tender rests upon the undersigned with a right to reject the tender without assigning any reason.

Thanking you,

Yours faithfully

(N. E. Mawal)

Scientific Officer (E)

Tel: 2788 7169

Specification and scope of work for

"Refurbishment and renovation work in SMP of PMD"

1. Scope of Work:-

a) Installation of Fume hood :-

A powder coated metallic fume hood is planned to install. The size of fume hood is 4mtrs H X 1.5mtr L X 1mtr Depth. It consists of two parts. Mounting table and hood placed above.

Following works are involved

Existing wooden fume hood to be isolated electrically as well as from its suction point by removing nut bolts from FRP duct system and shifted to the place as per guidelines of supervisor. Powder coated fume hood shall be shifted inside plant to the installation place, from the interim storage room(Around 200mtr distance)

Mounting table to be fixed by measuring the centre of hood and hood is to be fixed on table with nut and bolt. Outlet of hood should be connected to the FRP exhaust duct. Any change in the height or size of the duct to be rectified by party as a part of scope of this tender. If height is in excess, necessary cutting and flange joining to be carried out. If it is less, required FRP extension be provided and connected to ventilation duct. All required electrical connection to be restored with new caballing from panel.

Material required: Electrical wire : 2.5sqmm around 100mtr length. Nut & bolts : As required for two flanges of 300mm dia.

"Logistic required for lifting and shifting to be arranged by party"

b) Furnace and related System decommissioning:-

The system consists of furnace, water circulation tank, scrubber system and suction blower and two overhead cranes with rail and enclosure of size 6mtrs X4mtrs X 5mtrs.

Works to be carried out for decommissioning:-

All electrical connection to the different equipments is to be disconnected under the guidance of PMD electrical engineer. Electrical cables of suction blower, cranes and water circulation pumps to be removed and all isolators to be removed from enclosure. Firstly all pipes of water circulation tank to be removed and tank to be taken out of enclosure. Scrubber system 1.5mtr dia and 2.5mtrs height be dismantled and removed. Demister along with packing material be removed and bought down. Packing material removal will be carried out by plant person. Suction blower to be detached from system by removing/cutting down inlet and outlet flange connection from system.

Enclosure is made from 3mm thick MS sheet on the angle of size 75mm X 75mm X 8mm thick. All vertical and horizontal angles are at 600mm apart. Covering sheet of the enclosure to be removed and cut down to size of 1mtr X 1mtr.Frame angles to be cut down to the suitable length as per structural position and stacked at a particular place in the plant. Sliding doors and sliding rail to be removed and cavity after removing rail to be filled with mortar.

"Necessary chain pulley to be arranged by party"

c) Lifting & shifting of material from plant:-

- All scrap material generated during dismantling and installation shall be removed and shifted to scrap yard.
- 2. Around 30 drums filled with material (around 200 Kg) to be shifted to marked location in plant from another building. (Around 200 meter away.)
- 3. Graphite material lying in the plant shall be shifted from plant to the marked location as per instruction. It is around 400 items varying from 5 kg to 25 kg. All pieces shall be stacked in the rack. Storage rack shall be shifted from our workshop to the plant area. All graphite crucibles be packed in polythene sheet and stacked.

d) Minor works:-

1. In the wall of one of the room a glass window having size of 4ft X 4ft shall be removed and necessary brick work shall be carried for filling the gap created and plastering followed with painting to be carried out from inside as well as outside.

2. Five numbers of wooden fume hoods are to be isolated from duct and shifted to suitable place for dismantling. Each fume hood is weighing around 500 kg, height 3mtrs, width

1.5mtr and 1mtr depth.

e) Painting Work:-

Inside plant area of SMP, epoxy painting work shall be done as follow.

8 meter height wall: 45 meter length and column
 4 meter height wall: 32 meter length and column
 Ceiling at 8 meter elevation with beams
 FRP ducts of various diameter:

Area: 409 sq. meter
Area: 255 sq. Meter
Area: 492 sq. Meter
Area 723 sq. Meter

Total area with epoxy paint: 1387 sq M & with oil paint: 492 sq M

Note: Walls should be painted with two coat white epoxy, ducts with two coat grey epoxy & ceiling with white oil paint.

Work:-

Party will assemble the scaffolding. All internal surface of walls & ceiling shall be scrapped to remove damaged surface and filled with wall putty of reputed make. (Birla white or equivalent). Two coats white epoxy paint to be applied on wall. Second coat shall be applied after minimum three days of first coat. Same process to be followed for ceiling oil paint. (Asian paint or equivalent).

All the ducts to be painted with gray epoxy paint. Ducts are circular in shape and diameter ranges from one foot to six feet. All ducts are at elevation of four meter to eight meter and laid vertical, horizontal and inclined.

2. Other Terms and conditions

a) Conditions for qualifying for opening price bid

- Party should have past experience in conducting epoxy painting, installation and decommissioning in any plant area. Necessary supporting document (work order) mentioning the same work done shall be included as a part of technical bid. At least one work order during last 2 years will be considered as a condition for opening the price bid.
- In view of security reasons past experience in working with DAE units also become a
 mandatory requirement. Party shall include supporting document (work order)
 indicating work done as a part of technical bid. At least one work order of similar type
 in DAE during last 2 years will be considered as a condition for opening the price bid.

a) General Terms and Conditions

- Party shall arrange all equipment and personnel required for the successful completion of the work. Contractor shall stick to the schedule given and complete the work before work order expiry. The contractor has to carry out the job maintaining all the safety norms. The contractor has to provide safety helmet and safety goggles to staff employed for execution of the work at site.
- Party should do the needful things, which may not be specifically mentioned in above, but necessary for the completeness of work, without any additional cost.

- Work shall be carried out during working hours i.e. 9.30 A.M. to 5.00 P.M. Monday to Friday.
 Prior permission will be required to work in holidays and beyond office hours on working and holidays.
- Party may note that the staff employed for execution of work at site will have police verification certificate.
- Party should arrange transport of materials required for carrying out the work in advance.
 Please note material/ tools etc entry to the site & their exits is subjected to security check.
- No free issue material will be provided.
- The supplier/bidder, who requires technical clarification, may contact Shir N. E. Mawal Telephone No. 27887176 OR Shri. S. Narasimhan, Head PMS on 27887160.

3 Site visit:-

- If necessary the vendor can visit the site to comprehend the scope of work and site conditions with prior intimation, before submission of the offer. The site can be visited on working days between 10.00 Hrs to 15.00 Hrs. However, for site visit prior intimation of at least two working days is necessary for arranging the gate entry permits. For preparing entry permit, the supplier can contact undersigned on phone no. 022 27887169 or mail to nemawal@barc.gov.in OR 022-27887160 nemawal@barc.gov.in</a
- In case of any technical doubts, supplier shall contact the above mentioned persons for clarifications.

5. Warranty

• 12 months from the date of work competition.

6. Completion Period

• The job is to be completed within **90 days** from the date of receipt of the order any delay which is liable to the contractor is liable for penalty @ 0.5% per week (5% maximum) to be imposed on the contractor.

8. Safety

- Party should follow all the safety procedure while working inside BARC Vashi complex. During the
 execution of the work, party will be responsible for all safety precautions to be maintained in the work
 area. The party should arrange all the safety gears.
- All the personnel of the contractor should take care of safety and follow the industrial safety regulation
 while working at site. Specific personnel protective equipment (PPE) required for the job will be
 provided by BARC as and when required. Any mishap occurring on the job due to unsafe work practice
 shall be vendor's liability.

9. Security

Police Verification Certificates (PVC) is required for supervisor and all workers employed by the
contractor inside the BARC, Vashi complex. Security instructions on entry of workers, working time etc
are to be followed strictly.

(N.E.Mawal) Scientific Officer (E)