

**Office of the Dean of Research and Consultancy  
Indian Institute of Engineering Science and Technology (IEST) Shibpur  
P.O. Botanic Garden, Howrah – 711 103, West Bengal, India**

**Project Code: DRC/MOIL -CON /MIN /SS/080/17-18**

**Department of Mining Engineering  
Indian Institute of Engineering Science and Technology, Shibpur  
Howrah-711 103**

**Ref.: Advt. No. MN 1505, dated 12.06.2019**

**Notice Inviting Quotations**

Sealed quotations are invited for collection and analysis of air, water quality samples for in two manganese mining areas near Nagpur, Maharashtra. The relevant bidding document can be downloaded from the website. Last date of submission of sealed quotation is seven working days from the date publication of Tender Notice in the institution website

**Dean (R & C)**

**(A. Code DRC-T015/19-20)**

*This is downloadable*

**INDIAN INSTITUTE OF ENGINEERING SCIENCE AND  
TECHNOLOGY, SHIBPUR**



**BIDDING DOCUMENT**

**(Project Code: DRC/MOIL -CON /MIN /SS/080/17-18)**

*Collection of Water and Air quality samples from two mines near Nagpur  
Maharashtra*

**Under**

**R&D Collaborative Research Consultancy with Manganese Ore India Ltd.  
(MOIL)**

**Department of Mining Engineering**

**June 2019**

**SECTION I: TERMS & CONDITIONS AND IMPORTANT INSTRUCTIONS**  
**FOR BIDDERS**

1. Bidders are invited to submit sealed quotation for sample collection as per Technical Specifications in Section II to Dr.Suranjan Sinha , Professor, Department of Mining , within seven working days from the date of posting of the tender notice in the website of this institution . .
2. No quotations will be entertained after last date of submission indicated in the website .
3. Date and time of opening of bid will be after seven days from the date of posting of this notice in the website and the place of opening of bid is office of the Department of Mining Engineering , Indian Institute of Engineering Science and Technology , Shibpur, Howrah-711103.
4. Bidders should submit the quotations in sealed cover in the Department of Mining Engineering in the following address:

**Professor Suranjan Sinha**  
**Department of Mining Engineering**  
**Indian Institute of Engineering Science and Technology, Shibpur**  
**Howrah-711103, India**

5. All bids should be submitted in ONE-BID (TECHNO-COMMERCIAL BID) Format in covers (Enquiry Number must be mentioned on cover).

**TECHNO-COMMERCIAL BID – Both unit rate of air and water sample collection and analyses and total cost of number of samples indicated in the technical bid inclusive of transport charges from mine site to the laboratory of the bidder ( radicals to be analyzed are mentioned in Section II) should be clearly mentioned in the bidding document . Please specify the payment terms along with the bid**

6. Taxes including GST should be mentioned separately. Inclusion of Tax/Levy at a latter stage will not be entertained.
7. The analysis report should be submitted within seven days of collection of samples and reports should be sent to IEST, Shibpur . Failure to comply with the terms and conditions, stated in this notice, will be deemed as breach of this agreement.
8. **Bills in triplicate should be presented for payment within 15 days of completion of work. No advance payment can be made. All bills are to be accompanied by Order copies and Challan Receipt. The Order Number is to be noted on both the Challan and the Bill.**
9. **Documents to be submitted with the tender:**

Tender Documents/Terms & Conditions in Original duly signed by the Proprietor / Partner/ Director of the Company as a token of acceptance of Terms & Conditions of Tender.

**10. Indian Institute of Engineering Science and Technology , Shibpur, Howrah reserves the right to accept / reject all or any of the tenders without assigning any reason whatsoever.**

We accept the above terms and conditions.  
Dated:

Signature of Bidders/Suppliers  
With date & Seal

## **SECTION II: TECHNICAL SPECIFICATIONS**

This part (Section - II) of the Tender Documents provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the principal investigator of the collaborative project.

Detailed scope of work is as follows :

### **(i) Air quality survey**

**Seven air samples should be collected from Mansar and Khandri manganese mines of M/S Manganese Ore India Limited (MOIL) near Nagpur, Maharashtra. High volume dust samplers, as per specification of CPCB, should be deployed by the agency.**

**Concentration of particulate matters and gaseous pollutants, as mentioned below, should be measured.**

**a) PM<sub>10</sub>**

**b) PM<sub>2.5</sub>**

**c) NO<sub>2</sub>**

**d) SO<sub>2</sub>**

**e) CO**

**Selection of sample locations will be done by the faculty of IEST, Shibpur. Samples should be collected for 24 hours from seven sampling locations for a single season as per CPCB guidelines. During the sampling period relevant metrological data should be recorded.**

### **(ii) Water quality sampling**

**Six water samples should be collected, three each from Mansar and Khnadri manganese mines, of M/S MOIL , near Nagpur, Maharashtra. Collection , storage and preservation should be done as per CPCB guidelines.**

**The following water parameters should be measured.**

**a) pH**

**b) Dissolved Oxygen**

**c) COD**

- d) BOD 3days at 27° C**
- e) Suspended Solids**
- f) Oil & Grease**
- g) Manganese (as Mn )**
- h) Total Dissolved Solids**
- i) Total Hardness**
- j) Total Coliforms**

**(iii) Location of Laboratory**

- a) In order to comply to the collection, storage and preservation guidelines of CPCB the bidder should have an established laboratory near the mine site or at Nagpur .**

**(iv) Recognition of the environmental laboratory of the bidder**

- a) The laboratory should be recognized by the Ministry of Environment and Forest , Government of India for carry out environmental studies,**
- b) The laboratory should be ISO 14001 accredited.**
- c) The laboratory should be NABL accredited**

**(v) Other requirements**

**The bidder should have adequate experience , knowledge and expertise of air and water quality sample collection, storage , preservation and analysis from opencast mine sites in a mining region. In this regard , for the purpose of technical evaluation it is necessary to enclose with the tender supporting documents indicating prerequisite experience of the bidder in sample collection in mining areas.**