Tender for inviting quotations from the manufacturer/authorized distributor for the complete set of Skid, gas flow meter and water flow meter at ONGC, Bokaro, Jharkhand.

TERI/MAT/2023–24/006

Tender Date: 25-09-2023

Last Date for Submission of Bids: 08-10-2023

The Energy and Resources Institute (TERI)
6-C, Darbari Seth Block
IHC Complex, Lodhi Road
New Delhi – 110003, India
About TERI:

TERI is an independent, multi-dimensional organization, with capabilities in research, policy, consultancy and implementation. We are innovators and agents of change in the energy, environment, climate change and sustainability space, having pioneered conversations and action in these areas for over five decades.

General Information

TERI invites Bids from Prospective Bidder through tendering for inviting quotations from the manufacturer / authorized distributor for the complete set of Skid, gas flow meter and water flow meter at ONGC, Bokaro, Jharkhand, as per the details given in tender document.

The tender document is available on TERI’s, website: http://www.teriin.org/Announcements/ from 25th September, 2023. Interested bidders may view/download the Bid document and submit their Bid up to the date and time mentioned in the table.

Schedule of activities:-

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Milestone</th>
<th>Date and Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Release of tender</td>
<td>25.09.2023</td>
</tr>
<tr>
<td>2</td>
<td>Last date for submission of financial bid</td>
<td>08.10.2023; 15:00 hrs</td>
</tr>
<tr>
<td>5</td>
<td>Opening of financial bid</td>
<td>09.10.2023; 11:00 hrs</td>
</tr>
<tr>
<td>6</td>
<td>Shortlisted firms on the basis of technical evaluation</td>
<td>09.10.2023; 15:00hrs</td>
</tr>
<tr>
<td>7</td>
<td>Financial bid opening of only of technically qualified bidders</td>
<td>10.10.2023; 11:00 Hrs</td>
</tr>
<tr>
<td>8</td>
<td>Finalization of Bidder</td>
<td>Intimation to be given only to finalized Bidder(s)</td>
</tr>
<tr>
<td>9</td>
<td>Venue of opening of technical and financial details</td>
<td>The Energy and Resources Institute, 6C, Darbari Seth Block, India Habitat Centre, Lodhi Road, New Delhi – 110 003</td>
</tr>
<tr>
<td>10</td>
<td>Project Time frame</td>
<td>02 months</td>
</tr>
</tbody>
</table>
**Technical Specification of PCV Skid Mounted**

1. **Gas Flow meter**
   - Type: Smart Cone
   - Flow rate: 20 to 200SCMH
   - Medium: Gas Measurement
   - Temperature: Maximum 85 Degree C
   - Solar Module: 40 watt solar module, 12V, 26Ah
   - Power Supply: 24 VDC, Output: 4~20mA (HART), 2 Wire
   - Make: Rockwin Flowmeter / Cameron / Emerson
2. Pressure Indicating Controller

- **Type**: Pneumatic, Indicating with Proportional & Reset Action
- **Function**: Indicating Controller
- **Mounting**: 2” Pipe
- **Action**: Direct/Reverse
- **Set Point**: Manual
- **Range**: 0-30 kg/cm²
- **Supply Pressure**: 1.4 kg/cm²
- **Operating Temp.**: AMB (°C)
- **Design Temp.**: 55°C
- **Operating Pressure**: 5-30 kg/cm²
- **Design Pressure**: 40 kg/cm²
- **Process Conn. Size**: ¼” NPT
- **Make**: V Automat/Fisher

3. Pressure Control Value

- **Type**: Globe
- **Inlet Pressure**: 7-30 kg/cm²
- **Outlet Pressure**: 5 kg/cm²
- **DP Size**: 2 kg/cm²
- **Temp. Minimum**: 40°C
- **Set Pressure**: 5 kg/cm²
- **Set Sizing Data**: 2.4 to 5.5 kg/cm²
- **Valve sizing Data**
  - Regulation: Downstream
- **Valve & Actuator**
  - Body size: 1”
  - End Connection: Flanged
  - Rating: ANSI 300#
- **Make**: Nirmal / Maskot

4. Pressure Safety Value

- **Model**: Spring Loaded
- **Set Pressure**: 30 kg/cm² (Adjustable)
- **Range**: 0-40 kg/cm²
- **Connection**: ANSI 300#
- **Operating Temp.**: AMB (°C)
5. Gas Filter

- **Range**: 0~40 kg/cm²
- **Make**: Rockwin/RM Katter/Multitech/Ground Prix
- **Type**: Cartridge

6. Pressure Gauge

- **Range**: 40 kg/cm², Dial size: 150mm
- **Connection**: ½” 300# Flange (Bottom entry)
- **Make**: Baumer / GIC/Warry/ITT Barton

7. Air Filter Regulator

- **Valve Connection size**: 1” NPT (F)
- **Set Pressure**: 2.4 ~ 5, 5kg/cm²
- **Make**: Divya Control

8. Globe Valve

- **Valve Connection size**: 2” 300# Flange
- **Valve Connection size**: 1” 300# Flange
- **Make**: Mascot / Manisha

9. Ball Valve

- **Valve Conn.Size**: 1” 300# Flange
- **Valve Conn.Size**: 2” 300# Flange
- **Valve Conn.Size**: ½” 300# Flange
- **Make**: Dembla Valves/Flotex Industries/GM Engineers / padmabati
10. Pressure Regulating Valve

- **Inlet Pressure**: 30 kg / cm$^2$
- **Outlet Pressure**: 5 kg / cm$^2$ (adjustable)
- **Filter & Gauge**: Provided
- **Make**: Nirmal / Andeson Green wood Crosby sanmar

11. Flame Arrester

- **Size**: 2” 300#
- **Make**: Process instrument; Teleflo

12. NRV

- **Size**: 2” 300#

13. Pipe, Flanges and Pipe Fitting

- **Size**: 2” Elbow, CS;
  - ½” Elbow, CS;
  - ½” TEE, CS;
  - ½” Sch 40 Pipe, CS;
  - 2” Sch 40 Pipe, CS;
  - 2” TEE, CS
- **Size**: 2” 300# SORF Flange, CS;
- **Make**: Shib Das/Kwality Tubes/Evergreen Seambss Piper/Lalit Pipes / Anandmayee

14. Air Header

- **Size**: 2” pipe with 5 ports with ½” ball valve

14. Flanges

- **Make**: Good Luck/lal Metal Forgings/Aramount/Sawan Engineers
- **Flanges Companion flange**: 2 Nos (Inlet & Outlet)
Scope of the Work

Online water Flowmeter & Water Filter Assembly is required to monitor the quantum of produced water flows pre and post in-situ bio stimulation job in the CBM Wells in the field for ongoing DST funded R&D Project to ONGC Energy Centre, Delhi in collaboration with TERI.

Technical specification of Online Water Flowmeter

Flow Type : Turbine
Flow Range : 0.8 to 8 m³/ Hr
Maximum Temp : 120°C
Body Material : Stainless Steel
End Connections : Flanged 1” ANSI 150#RF
Linearity : ±0.5% of the reading
Fluid : Produced Water
PO Sensor : Standard Magnetic
Installation : Horizontal
Mounting : Direct on the flow meter
Display : Flow Rate (5 Digit LCD) & Totaliser (8 Digit LCD)
Power Supply : Self Powered
Enclosure : Aluminum enclosure to IP 66
NRV : 1” Wafer type, 2 nos.
Water Filter Assembly : 2”150# with DPG
By-Pass Arrangement : 1” by-pass arrangement with values
Inlet : 2”150# flanged
Outlet : 1” NPT (F) threads
Make : 1) Flowmeter-Emerson/ABB/Smith/Rockwin
2) DPG-AN Instruments/H Guru
3) BV - BDK/ Microfinish/Petrotech

The detailed scope of work / technical specifications are as per drawing provided.
The interested manufacturer / authorized distributor are requested to please send their technical and financial proposal through closed envelop by 08th October 2023 on the below given address:

Mr. Manoj Kumar Tiwari  
Head-Materials  
The Energy and Resources Institute (TERI),  
6C, Darbari Seth Block,  
IHC Complex, Lodhi Road,  
New Delhi – 110003.