

The scope of the contract for Hydroblasting services at ISRPL Panipat

## SCOPE OF WORK

The scope of the contract is to provide experienced manpower to execute High Pressure Waterjet cleaning at ISRPL.

Pre-Qualification Criteria for the Bidders:

### **Technical Qualification Criteria for Bidders**

1. The Bidder must minimum 5 years of experience in Hydro-Blasting Field.
2. Bidder must be having atleast 3 nos Annual Contract of similar nature either running or completed in similar type of industry in last five years in Refinery, Petrochemical, Chemical, and Synthetic Rubber Manufacturing Industry, where cleaning of pipes, vessels, tanks, exchangers are being done through manual methods.

The definition of Similar Nature of Contract in Technical and Financial PQC implies work related to cleaning of pipes, vessels, tanks, exchangers by Hydrojetting using manual HydroBlasting method.

The Bidder must submit sufficient documentary evidence like detailed work orders & completion certificates clearly mentioning the detailed description of work done, with start & end dates along with the executed values.

### **HydroBlasting Facility at ISRPL:**

The High Pressure Water Jet is used for mainly cleaning and dechoking of Process pipelines and equipment like vessels(internal), tank(internal), columns, exchangers, Steel Conveyor Dryers, Dewatering Press, Disintegrator etc. The plant is having its own HydroBlasting Equipment and Accessories. The system comprises of High Pressure Water Blasting Pumps, CS Pipe network for transportation of High Pressure Water, Flow Splitters, Water Jet Guns, Rigid and Flexible Lance, Foot Valves, Rubber Hoses etc.

The maximum discharge pressure of the pump is 500 Kg/cm<sup>2</sup> with a flowrate of 227 lpm. The orifice(bore) size of the Nozzles used are single or in combination of Front, Back, Radial Fire. Typical nozzle in Gun and Lance is with 1.55 mm(bore/orifice), front fire with a flow rate of around 36 lpm at 430 kg/cm<sup>2</sup>. The Water Blast Guns used are of dump gun type, where the blaster/operator must take care of the reaction forces.

General Scope:

- 1.ISRPL will provide all Hydro Blasting Machine and accessories for normal day to day requirement
- 2.In case of requirement of additional Machine & accessories, the machines arranged by the contractor shall be paid through SOR.
- 3.All Utilities/arrangements shall be in ISRPL Scope.

4.ISRPL shall interview & assess skill level of the personnel deployed at ISRPL Site. The contractor shall be allowed to mobilise manpower only after approval from EIC.

5.Daily and Routine Maintenance of the Machine and Equipment shall be under Contractor Scope.

6.The contractor has to take proper care of all the hydro blasting machines & accessories issued by ISRPL and used by contractor at site. In-case of any damage to the equipment / accessories owing to mal-operation, the decision of EIC regarding penalty will be binding on the contractor.

7.The Contractor shall provide manpower experienced as per SOR who are capable of executing Hydro-Blasting with facility and pressure as described under 'HydroBlasting Facility at ISRPL'

8.All necessary & applicable PPE is under the scope of Contractor.

9.Contractor shall must provide overall suit (boiler suit) for the personnel deployed at site.

10.All personnel shall be required to come in Shifts or General Shift as per Plant requirement and instruction of EIC.

11.The Manpower deployment shall be intimated by EIC from time to time, as per plant requirement. The manpower has to come in shifts all 7 days as per the instruction of EIC. The tentative total Manpower deployment at site is as below:

HydroBlast Supervisor -3 Nos

HydroBlast Operator – 4 Nos

HydroBlast Blaster – 21 Nos

During Shutdown the manpower & machine requirement and deployment shall be communicated separately.

12. In case of change in regular requirement at Plant, EIC may change the regularly mobilised crew (both increase & decrease). Contractor to implement such changes within a week time.

13. In case the contractor wants to change any manpower mobilised at site the same needs to be intimated and approved by EIC.

14. All jobs to be completed within the schedule as mutually agreed with EIC. In order to meet the target, if required, Operator shall also do the lancing/Gun Operation and both Operator and Blaster shall be required to work continuously.

15. Supervisor/ Shift Hydroblast Operator shall ensure implementation of all applicable HSE guidelines like work permit, PPE etc. Contractor's supervisor/shift hydroblast operator will organise and ensure availability of planned personnel in each shifts. Supervisor/shift hydroblast operator to report all the daily jobs to the EIC or his representative. Any delay (if occurred) for execution of any job needs to be explained by supervisor/shift hydroblast operator to EIC, failing which EIC may decide to impose suitable penalty for the delay.

**FINANCIAL PRE QUALIFICATION CRITERIA (PQC)**

1. Bidders must have an Average annual Turnover of at least INR 2.56 Crores during last 3 financial years.

2. Bidders must have experience of having successfully carried out and completed similar work during last 3 financial years ending last day of the month previous to the month in which bids are invited, of which experience should be any one of the following

a. Three similar completed works, each costing not less than the amount equal to INR 44.76 Lacs or

b. Two similar completed works, each costing not less than the amount equal to INR 57.55 Lacs or

c. One similar completed work costing not less than the amount equal to INR 95.91Lacs.

3. The Vendor must have a positive Net Worth for the last three financial years (Audited Annual accounts statements are required to be submitted)

4. The Vendor's business should not be into continuous cash losses for last three financial years.

**2. Detailed SOR is mentioned as per below (Next Page)**

| Line no. | Serv.Line no | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Approx Qty | UOM |
|----------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----|
| 1        | 10002938     | <p>HydroBlasting Supervisor shall have minimum 7 years of relevant experience of operation and maintenance of HydroBlasting Machines along with sound knowledge of HydroBlasting Equipment like hose, lance, nozzles, flow splitters etc.</p> <p>The person should be capable of</p> <ol style="list-style-type: none"> <li>1. Planning and Execution of jobs as per the instruction of EIC.</li> <li>2. Handling Work Permits as per the instruction of EIC.</li> <li>3. Managing and guiding Hydro-Blast Crew for safe and timely execution of Jobs.</li> <li>4. Planning for Shift Manpower and Job Progress reporting to EIC.</li> <li>5. Shift Manpower and Job Progress reporting to EIC.</li> </ol> | 1,880      | MAD |

|   |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |     |
|---|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|
| 2 | 10002939 | OverTime Rates for HydroBlast Supervisor beyond Normal 8Hrs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 744      | HR  |
| 3 | 10002936 | <p>HydroBlasting Operator shall have minimum 5 years of relevant experience of operation and maintenance of HydroBlasting Machines along with sound knowledge of HydroBlasting Equipments like hose, lance, nozzles, flow splitters etc.</p> <p>The person should be capable of</p> <ol style="list-style-type: none"> <li>1. Planning and Execution of jobs as per the instruction of EIC.</li> <li>2. Handling Work Permits as per the instruction of EIC.</li> <li>3. Managing and guiding upto 5 nos Hydro-Blast Blasters for safe and timely execution of Jobs.</li> <li>4. Shift Manpower and Job Progress reporting to EIC.</li> </ol> | 2,190    | MAD |
| 4 | 10000377 | OverTime Rates for HydroBlast Operator beyond Normal 8Hrs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1,056.00 | HR  |
| 5 | 10002937 | <p>HydroBlasting Blaster shall have minimum 2 years of relevant experience of HydroBlast Lance and Gun Operation. Blaster shall have sound knowledge of HydroBlast Equipment like hose, lance, nozzles, flow splitters etc.</p> <p>The person should be capable of</p> <ol style="list-style-type: none"> <li>1. Execution of Jobs as per the instruction of HydroBlast Operator &amp; Supervisor along with EIC.</li> <li>2. Safe and timely execution of Jobs.</li> <li>3. Maintenance of HydroBlasting Machine and Equipment under the guidance of HydroBlast Operator &amp; Supervisor along with EIC.</li> </ol>                         | 13,115   | MAD |
| 6 | 10000378 | OverTime Rates for HydroBlast Blaster beyond Normal 8Hrs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5,976.00 | HR  |
| 7 | 10002941 | Electric motor driven 600 kg/cm <sup>2</sup> water blasting machine with complete safety hood and mounted on a trolley. The machine should have at least 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 60       | DAY |

|   |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |     |
|---|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
|   |          | <p>mtrs of hose connected and complete with required guns/lance/ flexible lance for hydro blasting at site.</p> <p>The machine should be in good working condition. All maintenance in scope of contractor. All spares and other consumables in scope of contractor.</p> <p>No charges shall be paid incase the machine breakdown's or cannot be operated owing to non availability of any accessories under the scope of supply.</p> <p>Machine Mobilisation Charges will be paid extra.</p> <p>This SOR shall be operated only after written confirmation from ISRPL EIC.</p>                                                                                                                                                                                                  |    |     |
| 8 | 10004853 | <p>Diesel Engine driven 600 kg/cm2 water blasting machine with complete safety hood and mounted on a trolley. The machine should have at least 100 mtrs of hose connected and complete with required guns/lance/ flexible lance for hydro blasting at site.</p> <p>The machine should be in good working condition. All maintenance in scope of contractor. All spares and other consumables except Diesel in scope of contractor. Diesel shall be provided by ISRPL.</p> <p>Machine Mobilisation Charges will be paid extra.</p> <p>No charges shall be paid incase the machine breakdown's or cannot be operated owing to non availability of any accessories under the scope of supply.</p> <p>This SOR shall be operated only after written confirmation from ISRPL EIC.</p> | 32 | DAY |

|    |          |                                                                                                                                                                                                                                                                                                                                 |     |     |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| 9  | 10004857 | <p>This SOR refers to mobilisation charges for diesel machine/ electric machine. This will be paid when the machine is mobilised at site.</p> <p>In case the machine needs to be replaced owing to malfunction or any reason attributable to the contractor, , the contractor shall not be eligible for additional payment.</p> | 5   | NO  |
| 10 | 10005852 | <p>This SOR shall be applicable for additional HydroBlast Supervisor mobilised during ShutDown on instruction of EIC.</p> <p>The competency of the manpower shall be same as the regular mobilised HydroBlast Supervisor.</p> <p>The rate includes all payables as applicable for 08 hrs duty.</p>                              | 75  | MAD |
| 11 | 10005853 | <p>This SOR shall be applicable for additional HydroBlast Operator mobilised during ShutDown on instruction of EIC.</p> <p>The competency of the manpower shall be same as the regular mobilised HydroBlast Operator.</p> <p>The rate includes all payables as applicable for 08 hrs duty.</p>                                  | 100 | MAD |
| 12 | 10005854 | <p>This SOR shall be applicable for additional HydroBlast Blaster mobilised during ShutDown on instruction of EIC.</p> <p>The competency of the manpower shall be same as the regular mobilised HydroBlast Blaster.</p> <p>The rate includes all payables as applicable for 08 hrs duty.</p>                                    | 750 | MAD |
| 13 | 10005855 | <p>This SOR shall be applicable for OverTime Rates beyond Normal 8Hrs for additional HydroBlast Supervisor mobilised during ShutDown</p>                                                                                                                                                                                        | 300 | HR  |
| 14 | 10005856 | <p>This SOR shall be applicable for OverTime Rates beyond Normal 8Hrs for additional HydroBlast Operator mobilised during ShutDown</p>                                                                                                                                                                                          | 400 | HR  |

|    |          |                                                                                                                                 |       |     |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------|-------|-----|
| 15 | 10005857 | This SOR shall be applicable for OverTime Rates beyond Normal 8Hrs for additional HydroBlast Operator mobilised during ShutDown | 3,000 | MAD |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------|-------|-----|

**Note: EMD of INR 2 Lacs to be submitted along with bid.**