### दीनदयाल पोर्ट प्राधिकरण DEENDAYAL PORT AUTHORITY









Office of the Dy. Chief Engineer (PL),
Pipeline Division,
Administrative Office Building
Post Box No. 50, Gandhidham-Kachchh
Email: seplkpt@gmail.com
www.deendayalport.gov.in

o: PL/WK/483/AppointmentofTechnical/2024	Date: 23/05/2024

# **Expression of Interest.**

Sub:- Appointment of Technical Advisor for the work of up-gradation of water supply infrastructure facility, pipeline network system & allied facilities inside & outside cargo jetty area and oil jetty area.

Sir.

Deendayal Port Authority intends to carry out the subject work of Pipeline Division of Civil Engineering Department.

Kindly submit your Expression of Interest along with budgetary – offer for the items considered in preparation of the estimate under Annexure-I.

The rates quoted must be inclusive of all taxes, duties for performing scope of work & exclusive of GST. The GST applicable shall be shown separately, which shall not be considered for evaluation purposes.

Your expression of interest along with budgetary quotation for the above work should reach to the following address on or before **03/06/2024 by 15:00 Hrs.** 

#### Address:-

Office of the Superintending Engineer (PL),
Pipeline Division, Room No.113, Administrative Office Building,
Ground floor, Annexe,
P.O. Box No. 50, Gandhidham – Kachchh.
Phone No. (02836) 220009.

Thanking you,

Yours faithfully,

Dy. Chief Engineer (PL)
Deendayal Port Authority

### PIPELINE DIVISION BUDGETARY OFFER

# Sub: Rates for Supply of the Below Items

Sr. No	Description of the Item	Unit	Qty	Rate
1.	Design of the Desalination Plant of 5MLD capacity as per the scope of the Work under PART A and All the existing structures shall be tested (NDT or any other relevant tests), reviewed and analysed for the structural stability. Based on the test results, the consultant shall provide the necessary remedy, retrofitting details, and Detailed engineering calculations/ solutions for the structures as per the scope of the Work under PART B	Job Work	01	
2.	PMC- Providing the following qualified staff during the execution of work till completion of the work. The broad scope is to review the contractor execution, drawings, a detailed construction schedule and planning. All the material testing and performance tests shall be fully witnessed at Manufacturing Plant. Project Manager- 01 Nos(15 Years' experience) Project Engineer- 03 Nos (08 Years' Experience.	Per Month	24	

#### Scope of Work

# Location- Deendayal Port Authority

## Part A- Desalination Plant Facility (5 MLD)

Checking the feasibility / site survey for intake and safe disposal of saline / brine at Deendayal Port including (but not limited to);

- Availability and feasibility of using source of water (Sea Water/Brackish water)
- Feasibility and relative ease of routing Intake & Reject piping, and the permeate piping
- Availability of Power
- Any other limitations at the sites
- Statutory requirements from agencies like CRZ, MOEF, MPCB, etc.
- Operational flexibility
- Expansion potential
- Topographical study/Geography/ Bathymetry/soil survey Off shore/Onshore
- Oceanographic measurements/Onshore/offshore studies (In case Intake/outfall is included in the DPR), Tide measurements
- Site location/Map, Area available for SWRO
- Water analysis preferable for 12 months so that all seasons are covered (min.for 6 months)
- Study of End user requirement for treated water quality
- Location of existing reservoirs
- ✓ Preliminary water balance and process design for desalination package including intake bay and pumping station.
- ✓ Review and consideration for utilization of existing idle fire-fighting pumping equipment and pipeline network.
- Preparation & review of complete Basic Engineering Package (BEP) including (but not limited to) documents like water balance, PFD, HFD, complete process design with Civil Unit Sizing, Equipment list, PID, Plant Layout, Chemical Consumption, Units / equipment treatment scheme, RO projection, Pump Head / Flow & other characteristics, energy recovery system, booster pump, RO membrane, RO pressure vessel, Chlorine and other Dosing systems, Control Philosophy of entire plant, SWRO, BWRO & ERD skids design drawing, electrical installations / requirements & other relevant details/documents.
- ✓ Preparation of draft tender papers & Pre bid query replies.
- ✓ Techno-commercial Bid Evaluation
- ✓ PMC Support
- ✓ Review of Complete Detail engineering Package (Process and its allied units)
- ✓ Review of Civil G.A. drawings.
- ✓ Review of Instrument schedule, data sheets, control system.
- Review of Single line diagram, Electrical bought out specifications.
- ✓ Review of O&M Manual.

# Part B- Water Supply System

Sr.No	Details of the Existing facilities	Scope of the work
	Outside Cargo Jetty Area	
A	Water tower no.1	
	1. Under ground water tank No.1 Capacity 450 KL	
	2. Under ground water tank No.2 Capacity 450 KI	
	3. Over ground water tank No.1 Capacity 2000 KI	
	4. Overhead water tank No.1 Capacity 240 KI	
	5. Compound wall	
	Outside Cargo Jetty Area	
В	Water tower no.2	
	1. Under ground water tank No.1 Capacity 680 KL	
	2. Under ground water tank No.2 Capacity 680 KL	
	3. Under ground water tank No.3 Capacity 680 KL	
	4. Under ground water tank No.4 Capacity 2000 KL	
	5. Under ground water tank No.5 Capacity 2000 KL	
	6. New Underground water tank No.6 Capacity 2000	
	KL	
- 1	7. Over ground water tank No.1 Capacity 2000 KL	
	8. Overhead water tank No.1 Capacity 340 KL	All the existing structures shall be tested
	9. Compound wall	(NDT or any other relevant tests), reviewe
	10. Water supply grid- Existing grid consist of HDPE/	and analysed for the structural stability.
	cement pipe	Based on the test results, the consultant
	11. No existing Chlorination plant and water treatment	shall provide the necessary remedy,
	plant available	retrofitting details, and Detailed engineering
	pante a variable	calculations/ solutions for the structures.
	Oil Jetty Area	solutions for the structures.
C	Water tower no.3	Note: Detailed design and drawings
		including necessary proof checking of the
	1. Under ground water tank No.1 Capacity 450 KL	same shall be carried out through the
	2. Under ground water tank No.2 Capacity 500 KL	reputed agency or any other reputed agence
	3. Over head water tank No.1 Capacity 240 KL	in the field.
	4. Existing water supply grid- Oil jetty area 1,2,3 and 4	
	Inside cargo Jetty Area	
D	Water tower no.4	
	1. Underground water tank No.1 Capacity 680 KL	
	2. Under ground water tank No.2 Capacity 680 KL	
	3. Overhead water tank No.1 Capacity 340 KL 4. New structure	
	5. Compound wall	
	Inside covgo Letty A	
	Inside cargo Jetty Area Water tower no.5	
	1. Under ground water tank No.1 Capacity 500 KL	
	2. Under ground water tank No.2 Capacity 1000 KL	
	3. Overhead water tank No.1 Capacity 340 KL	
	4. Compound wall	

F	Inside cargo Jetty Area	
	Other requirements inside cargo jetty area Berth no 1	
	to Berth no 16 except Berth 11 & 12	
G	Inside cargo Jetty Area- Berth No 1 to Berth No 10	
	Existing Pipeline facility	
H .	Inside cargo Jetty Area- Berth No 13 to Berth No 16	
	New Pipeline facility	
I	Kandla colony Area	
	Existing Pipeline facility	