



Invitation for Expression of Interest (Eoi) regarding Commissioning, Operation and Maintenance of Micro STPs at 16 No. villages in Districts Faridabad, Karnal, Panipat and Yamunanagar under Yamuna Action Plan from Public Health Engineering Department Haryana

April 2023

Public Health Engineering
Department

Bays No. 13-18, Sector - 4, Panchkula, Haryana – 134112 || Contact no.
0172 - 2561672 E-mail: ce.mech@phedharyana.gov.in

Table of Contents

1.	Terms of Reference	1
1.1	Background	1
1.2	Water sources and availability status	2
1.3	Objective	2
1.4	Layout	2
1.4.1:	General information.....	2
1.4.2:	Technical Requirements.....	4
1.4.3:	Eligibility Criteria.....	6
1.4.4:	Evaluation Criteria of Assessment Parameters.....	6
1.4.5:	Documents to be submitted by EoI Respondents.....	7
2.	Annexures.....	8- 16

1. Terms of Reference

1.1 Background

The Public Health Engineering Department is the principal department of the State Government for providing and maintaining drinking water supply in rural habitations and drinking water supply, sewerage and storm water drainage facilities in the urban areas as well as construction of Sewage Treatment Plants in all the Towns except that in Faridabad, Gurugram & Panchkula.

The main function of the Public Health Engineering Department is to plan, implement & maintain Rural and Urban Water Supply Schemes, rural sewerage. The Division Level administration of the Public Health Engineering Department undertakes field investigation, survey, data collection, preparation, execution & maintenance of schemes. The department plans & executes water supply schemes programs for adequate safe drinking Water Supply to Rural and Urban population in villages and towns.

Key functions of the department are as follows:

- Piped Drinking Water Supply in Villages & Towns
- Sewerage Facilities in Towns & Big Villages
- Storm Water Disposal in Towns
- Construction of Sewage Treatment Plants

Public Health Engineering Department has a strong reputation in respect to capabilities and quality manpower. Generally, the drinking water supply schemes are based on tube-wells / surface sources, Rainey Wells and pipeline distribution system is laid in the villages for facilitating private water connections. Sewage & Sewage treatment is emerging as a major area of concentration.

Aligning to the targets fixed under United Nation Sustainable Development Goal, Government of Haryana has initiated steps to implement Jal Jeevan Mission to provide 100% coverage with functional Household Taps Connection (FHTC) by 2022. Another, ambitious scheme '*Mahagram Yojana*' is under progress in which it is targeted to provide sewerage facilities to all villages having population (as per Census 2011) more than 10,000 persons by 2024.

PHED Haryana proposes to further improve the existing processes of the Department for effective implementation of various schemes; the Department seeks the support of a expert Agency having experience of providing Micro STP for treatment of grey water / black water.

1.2 Water sources and availability status:

Habitations wise water source availability		
Sr. No.	Water Source Type	Number of Habitation
1	Canal Based	2993
2	Tube Well Based	3990
3	Rainy Well, Spring etc.	672
Total		7555

Norms for Water Allowances in Rural Areas		
Sr. No.	Type of Area	Water Allowance
1	DDP Area *	70 LPCD
2	Non DDP Area	55 LPCD
3	For villages with sewerage system	135 LPCD
*Desert Districts include Bhiwani, Charkhi Dadri, Fatehabad, Hisar, Sirsa, Jhajjar, Rewari and Mahendergarh		

1.3 Objective

The objective of this EoI is to seek responses from eligible Indian industries and to shortlist potential companies. Responses to EoI will be evaluated as per the assessment criteria given in the EoI. Project shall be progressed ahead even if only one EoI respondent is found meeting eligibility criteria.

1.4 Layout

The EoI has been covered under the following parts:

- 1.4.1: General information
- 1.4.2: Technical Requirements
- 1.4.3: Eligibility Criteria
- 1.4.4: Assessment Parameters
- 1.4.5: Evaluation Criteria of Assessment Parameters
- 1.4.6: Documents to be submitted by EoI Respondents
- 1.4.7: Queries and Clarifications

1.4.1 GENERAL INFORMATION

The project, i.e. Commissioning, Operation, Maintenance of Micro STPs in 16 villages of District Faridabad, Karnal, Panipat and Yamuna Nagar. The details of villages are mentioned below in the table:

SNo.	District	Villages
1	Faridabad	8 villages - Chahainsa, Mohana, Chandpur, Shahajhapur, Immamudinpur, Sahupura Khadar, Aruwa & Ghusan/Bela
2	Karnal	4 villages – Dera Halwana, Naraina, Khorakheri & Dhola Kuan
3	Panipat	3 villages – Uriana Kalan, Naultha & Bursham
4	Yamuna Nagar	1 village - Gadola

District and Blockwise details of 16 villages in terms of population, wastewater generated per day are tabulated below:

SNo	District	Block	Village	Census Population 2011*	Current Population upto 2023 (2% increase of V)	Total water supplied per day (MLD)*	W/W MLD (80 % of VII)
I	II	III	IV	V	VI	VII	VIII
1	Faridabad	BALLABGARH	Chahainsa	14216	14500	1.39	1.11
2	Faridabad	BALLABGARH	Mohana	9843	10039	0.70	0.56
3	Faridabad	TIGAON	Chandpur	2766	2821	0.42	0.34
4	Faridabad	TIGAON	Shahajhapur	2393	2440	0.26	0.21
5	Faridabad	TIGAON	Immamudinpur	935	953	0.14	0.11
6	Faridabad	TIGAON	Sahupura Khadar	2567	2618	0.39	0.31
7	Faridabad	TIGAON	Aruwa	2963	3022	0.21	0.17
8	Faridabad	TIGAON	Ghusan/Bela	756	771	0.12	0.10
9	Karnal	KUNJPURA	Dera Halwana	238	242	0.04	0.03
10	Karnal	NILOKHERI	Naraina	3553	3624	0.54	0.43
11	Karnal	MUNAK	Khora Kheri	2244	2288	0.34	0.27

SNo	District	Block	Village	Census Population 2011*	Current Population upto (2% increase of V)	Total water supplied per day (MLD)*	W/W MLD (80 % of VII)
I	II	III	IV	V	VI	VII	VIII
12	Karnal	NISING	Dhola Kuan	-	711	0.11	0.09
13	Panipat	MADLAUDA	Urlana kalan	8759	8934	1.34	1.05
14	Panipat	ISRANA	Naultha	8655	8828	1.08	0.86
15	Panipat	ISRANA	Bursham	4664	4757	0.50	0.40
16	Yamuna Nagar	MUSTAFABAD	Gadhola	1426	1454	0.15	0.12

* Actual flow will be measured at the site by the Department.

Eligibility to Respond to an EoI

a) Indegenious Content – Vendors offering indegeniously designed, developed and manufactured product having minimum of 50% Indigeneous content (IC) on cost basis of the base contract price are eligible. Apart from overall IC as detailed above, the same percentage of IC will also be required in a) Basic Cost of equipment; b) Cost of manufacturers' Recommended List of Spares; c) Cost of Special Maintenance Tools (SMT) and Special Test Equipment (STE), taken together at all stages. Compliance to the same will be ensured by the PFT.

b) Embedded Software – Wherever software is used, details of the software including Source Code and Firmware Software Manual for embedded software shall be provided. All supplied software should be verified and validated by OEM for the use of designated Production Agency. Further the software must meet the requirements.

c) Intellectual Property Rights (IPRs) – Development Agency/Agencies shall retain title or ownership and all other rights in intellectual property generated during the development of the project.

d) A trusted supply chain that will include the engineering support requirements would be established for all the components of STP. All documents related to the STPs project are liable to be audited by PHED Department or its nominated agency.

e) Detailed information about blacklisting of the company by any Govt Agency in India/ any other country would be provided as a part of the response. Companies currently blacklisted by any Indian/State Govt Agency are ineligible for participation. Any such information not disclosed but revealed at a later stage would render the Company ineligible for further participation.

1.4.2 TECHNICAL REQUIREMENTS

1. Scope of the Project

The scope of Project Micro STPs include:

- a) Firms carrying Indigenous design and development of effective and reliable Micro STPs are eligible.
- b) STPs should comply with latest regulations.

2. Design

The STPs should be designed for their intended operational exploitation. The salient features are as follows:

- a) The Sewage Treatment Plant is required to treat drain water (untreated water). The Raw influent and treated effluent characteristics are as follows –

Raw Influent Characteristics			
SNo.	Raw Sewage Characteristics	Limiting Value Option No. 1	Limiting Value Option No. 2
i)	pH	6.5 - 8	7.4
ii)	Biological Oxygen Demand (BOD)	250 mg/L	100 mg/L
iii)	Chemical Oxygen Demand(COD)	1000 mg/L	500 mg/L
iv)	Oil & grease	10 mg/L	10 mg/L
v)	Total Suspended Solids (TSS)	200 mg/L	200 mg/L
vi)	Faecal Coliform Count	9×10^6 (MPN /100 mL)	4×10^4 (MPN /100 mL)

Treated Effluent Characteristics or as per any latest amendment from the date of allotment till the completion of O & M		
SNo.	Treated Water Characteristics	Limiting Value
i)	pH	6.5 - 8
ii)	Biological Oxygen Demand (BOD)	≤ 10 mg/L
iii)	Chemical Oxygen Demand(COD)	50 mg/L
iv)	Oil & grease	10 mg/L
v)	Total Suspended Solids (TSS)	≤ 20 mg/L
vi)	Faecal Coliform Count	≤ 100 (MPN / 100 mL)
vii)	NH ₄ - N	< 5 mg/L
viii)	Total Phosphorous	< 1.0 mg/L
ix)	Total N	< 10.0 mg/L

- b) The necessary treatment units shall be self contained in the micro STP. The total time period for treatment to be such that daily hydraulic load of STP can be treated within 08 -12 hours of the operation of the plant per day.
- c) Recommended volumes for Sewage Collection tanks (Holding tank) and Sludge tanks should be indicated by the vendor.
- d) **Safety Mechanism** – The STPs should have suitable mechanical and electronic safety mechanisms to ensure safety during operation. It should have Safety sensors, alarms, cut-off for overflow, malfunction, and hazardous gas discharge sensors.
- e) **Maintenance** – The maintenance methodologies/schedules should be provided in the form of manuals for the service life of 20 years.
- f) **Specifications** – The STPs should confirm the latest version/equivalents as issued and updated time to time by Government of India.
- g) **Life Extension** – The STP should be fully amenable to life extension after 20 years, to resume an extended life of at least 05 years.

1.4.3 ELIGIBILITY CRITERIA

Indian entity satisfying all of the following criteria shall be considered as eligible vendor for issue of EoI by PFT-

- a) Public Limited Company, private limited company, partnership firms, limited liability partnership, one person Company registered as per applicable Indian Laws.
- b) The entity needs to be registered for minimum five years; three years in case of MSMEs.
- c) Net worth of entities, ending 31st March of the previous financial year, should not be less than 1 crore.
- d) This EoI is being published on National Newspaper inviting Companies to participate in it.
- e) Vendors are required to be compliant to Section 3 of the Environment (Protection) Rules, 1986 & Section 17 of Water (Prevention and Control of Pollution) Act, 1974.

1.4.4 EVALUATION CRITERIA OF ASSESSMENT PARAMETERS

- a) The responses to this EoI will be evaluated based on the assessment parameters given at **Clause 2** to identify the indigenization, technical strengths and capabilities of Companies. The weightage for each criterion would be finalized by the Project Facilitation Team.
- b) PHED, Haryana reserves the right to modify these criteria at any time before the responses are opened for evaluation. PHED, Haryana also reserves the right to disqualify a respondent if he/they fail to comply with specific criteria at any stage of the evaluation process by the PFT. **No amendment/change in response to EoI will be accepted under any circumstances once the EoI response is submitted.**

Note

- i) **Details regarding proposed expenditure/establishment of facilities/lab etc. are liable to be included in the contract in case the Company gets shortlisted for the development of Micro STP.**
- ii) **Company giving False/Misleading information will be barred from participation in the Project Micro STP.**

1.4.5 DOCUMENTS TO BE SUBMITTED BY EoI RESPONDENTS

- a) Following documents are required to be submitted by EoI respondents -
 - i) Performa for application letter as per Annexure – A.
 - ii) Performa for General Information as per Annexure – B.
 - iii) Bidder's Authorization Certificate as per Annexure – C.
 - iv) Performa for Declaration for Conflict of Interest as per Annexure – D.
 - v) Performa for Declaration the bidder is not blacklisted /debarred as per Annexure E.
 - vi) Performa for project experience/completion certificate as per Annexure – F.
 - vii) Curriculum Vitae (CV) of Professional Personnel as per Annexure – G.
 - viii) Financial Turnover certificate as per Annexure - H.
 - ix) Performa for Technical Proposal as per Appendix - I
- b) The EoI respondents shall submit three (03) copies of response to EoI, clearly marking one copy as 'Original Copy' and the remaining two as 'Copy No. 2 & 3'. The respondents are also required to submit a soft copy of the response to EoI at Email ID – ce.mech@phedharyana.gov.in. Each page of the response will bear the signatures of the authorized signatory of the Company.
- c) The responses should be submitted strictly as per the formats given in the appendices.
- d) All response appendices should be submitted in a single file/folder. Supporting documents/additional reference should be submitted in a separate folder with proper reference mentioned against each parameter in respective appendices.
- e) Any supporting document/evidence without any reference to specific parameter of criteria will not form part of the assessment.
- f) The envelopes shall be addressed as under –
Engineer – in – Chief , Public Health Engineering Department,
Address: Bay No. 13-18, Sec, - 4, Panchkula, Haryana – 134112 || contact no. 0172 – 2564083, Email: ce.mech@phedharyana.gov.in
- g) The response of this EoI must be submitted by 05:00 PM on 31.05.2023 at the address mentioned above.
- h) PHED, Haryana at its discretion can extend this deadline for the submission of responses to EoI and the same shall be notified in writing.

Enclosure – Appendices and Annexures

ANNEXURE - A

**APPLICATION LETTER
(On the Letter head of the Bidder)**

Date:

To
The Engineer – in – Chief,
Public Health Engineering Department (PHED),
Haryana
Tel: _____, Email: _____

**Subject – Expression of Interest (EoI) for Providing Services including
Commissioning, operation and maintenance of Micro STP in Public Health
Engineering Department Haryana**

Sir,

Being duly authorized to represent and act on behalf of..... (herein after referred to as "the Bidder/ Party") and having reviewed and fully understood all the requirements of the EoI document and information provided, the undersigned hereby apply for the project referred above.

We are enclosing our EoI including Technical Proposal and Financial Proposal with the details as per the requirements of the Proposal Documents, for your evaluation.

.....

Signature
(Authorized Signatory)

ANNEXURE - B

Performa for General information of the bidders

General Information			
Details of the Bidder			
Name			
Address			
Telephone		Fax	
E-mail		Website	
Details of Authorized person/representative of the bidder			
Name		Designation	
Address			
Mobile Number (s)		Landline Number (with Extension if any)	
Email			

Dated:

Place: Signed & sealed :(Authorized representative of the Company /Agency / Firm)

ANNEXURE - C

**Bidder's Authorization Certificate
(To be provided on Rs. 50/- Stamp paper)**

POWER OF ATTORNEY

Know all men by these presents, We, _____ (Name of Party/Agency), having our registered office at _____ (Registered Office address) do hereby irrevocably constitute, nominate, appoint and authorize _____, who is presently employed with us holding the position of _____ as our true and lawful attorney (herein after referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of **Expression of Interest (EoI) regarding commissioning, Operation and Maintenance of Micro STPs under Yamuna Action Plan in Public Health Engineering Department Haryana** proposed by the Chief Engineer (Mech), Public Health Engineering Department (PHED), Haryana (hereinafter referred to as "Authority") including but not limited to signing and submission of bids and other documents and writings, participate in Pre-Applications and other conferences and providing information/ responses to the Authority, representing us in all matters before the Authority, relating to the bid process and generally dealing with the Authority in all matters in with or relating to or arising out of our application.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, _____, THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS _____ 2021.

For, _____

Witnesses:

- 1.
- 2.

Accepted

ANNEXURE - D

Performa for Declaration for Conflict of Interest

I, authorized representative of _____, hereby solemnly undertake as to the existence / absence of any potential conflict of interest on the part of the bidder due to prior, current, or proposed contracts, engagements, or affiliations with Department. Additionally, such disclosure shall address any and all potential elements (time frame for service delivery, resource, financial or other) that would adversely impact the ability of the bidder to complete the requirements as given in the RFP.

In the event of any change/deviation from the factual information/declaration Department, Government of Haryana, reserves the right to terminate the contract without any compensation to the selected agency.

Dated:

Signed & sealed: (Authorized representative of the Company/Agency/Firm)

Place:

ANNEXURE - E

Performa for Declaration the bidder is not blacklisted /debarred

"I/ We have not been debarred or blacklisted or suspended or debarred from the business from any department of Central Government of India/ State Government / PSU/ any other government / semi government department etc. or under declaration of ineligibility for fraudulent or corrupt practices or inefficient/ineffective performance during the last five years"

Date:

Authorized signatory:

Place:

Name and Seal of Bidder:

Name of Company:

Address

Annexure - F

Performa for Project experience/Completion Certificate

Assignment Name:	Value: INR
Country: Location within Country:	Duration of assignment (months):
Name of Client:	Total no. of Staff: Total number of staff-months:
Address of Client:	Approx. value of the services provided by your firm:
Start Date (Month/Year): Completion Date (Month/Year):	No of professional staff-months provided by associated Consultants:
Name of associated Consultants, if any:	Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):
Approx. value of the contract:	Area of the land/park, if applicable:
Client references: Name, Telephone, Email id.	
Narrative Description of Project:	
Description of Actual Services Provided by Your Staff:	

Annexure - G

Curriculum Vitae (CV) of Professional Personnel

<Photo>	Name			
	Position:			
	Date of Birth			
	Education:		<input type="checkbox"/>	
Employment Record	From	To	Company	Position Held
Brief Profile				
Countries of Work Experience				
Languages				
Work Undertaken that Best Illustrates Capability to Handle the Task Assigned				
Name of Assignment: Client: Year: Position Held: Project Features:				

I, certify to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any willful misstatement described herein may lead to my disqualification.

Additionally, I also certify that I shall be available for the entire duration of the contract.

Signature of Staff Member

Date -

ANNEXURE - H

FINANCIAL TURNOVER CERTIFICATE

TO WHOMEVER IT MAY CONCERN

S. No.	Financial Year	Annual Turnover (Rs. in Crores)
1	Year 2020-2021	-
2	Year 2021-22	-
3	Year 2022-23	-
AVG. ANNUAL TURNOVER (Rs. in Crores)		

Note: Turnover Certificates shall be duly signed by Chartered Accountant should be submitted on his / her letter head.

Technical Proposal

Appendix - I

Understanding:

Approach & Methodology:

List of deliverables:

Work Plan: