

**URBAN AFFAIRS
DEPARTMENT GOVERNMENT OF
MEGHALAYA**

EXPRESSION OF INTEREST (EOI)

FOR

**PROPOSAL FOR SUITABLE TREATMENT METHODS AT
THE OUTFALL OF WAH RO RO OF UMIAM LAKE**

**Directorate of Urban Affairs, Government of Meghalaya. Raitong Building, Secretariat
Hill, Shillong, Meghalaya – 793001 Email- duashillong@yahoo.co.in Tele No : 0364-
2210037**

**DIRECTORATE OF URBAN AFFAIRS,
GOVERNMENT OF MEGHALAYA, RAITONG BUILDING, SECRETARIAT HILL,
SHILLONG - 793001**

Email: duashillong@yahoo.co.in

TeleNo: 0364-2210037

No.DUA/P/56/2019/564,

Dated Shillong, the 28th June, 2022

**INVITATION FOR EXPRESSION OF INTEREST (EOI)
FOR PREPARATION OF PROPOSAL OF SUITABLE TREATMENT METHODS AT THE
OUTFALL OF WAH RO RO TO THE UMIAM LAKE.**

Expressions of interest (EOI) are invited from any reputed Companies / Consortium / Joint Ventures / Firms / Agencies / Individuals / Organizations / Institutions interested to associate with the Urban Affairs Department, Government of Meghalaya for "Preparation of Proposal of Suitable Treatment Methods at the outfall of Wah Ro Ro to the Umiam Lake". Interested parties shall submit Expression of Interest in sealed envelope to the office of the undersigned on or before **15:00 Hours IST on 18th July, 2022** and it will be opened at **16:00 Hours IST** on the same day. If the date of submission happens to be a holiday, EOI will be open on the next working day.

Details will be available in the office of the undersigned and also the Government of Meghalaya website @ meghalaya.gov.in and Urban Affairs Department website @ meghurban.gov.in.



Joint Director, Urban Affairs
Meghalaya, Shillong


Dated Shillong, the 28th June, 2022

Memo No.DUA/P/56/2019/564-A,

Copy forwarded to:

1. The Director, Information & Public Relation (DIPR), Meghalaya, Shillong with a request to kindly publish the Notice in one issue of two leading Local Newspaper. Bills may be routed through your department and submitted to the undersigned.
2. The Deputy Director General/ State Informatics Officer, National Informatics Centre, Shillong with a request to kindly upload advertisement in the State Government website and Urban Affairs Department website <http://megurban.gov.in/>
3. The Director, Printing and Stationary, Meghalaya, Shillong with a request to arrange publication of this Notice in at least in one issue of the Meghalaya Gazette.
4. The Deputy Secretary to the Govt. of Meghalaya, Urban Affairs Department for information.
5. Office Notice Board.

D/C



Joint Director, Urban Affairs
Meghalaya, Shillong

1. BACKGROUND

The Umiam Lake is located on the Umiam River in the Ri-Bhoi District of Meghalaya. It is 16 kms away from Shillong has been a bright jewel on the crown of Meghalaya. The lake draws its name from the River Umiam, which was dammed in 1965 to create North East India's first hydel power project.

Umiam River is formed by the meeting of two rivers Wah Umkhrach and Wah Umshyrpi. Today, Shillong's river systems are a sad story of Paradise Lost. Shillong has turned its back towards its natural ecosystems. Rivers Umkhrach and Umshyrpi are little but open drains in summer, where the water is polluted with sewage, kitchen waste. During monsoons, it is deep brown, carrying huge amounts of sediments as land use continues to change upstream.

Both these rivers cut across Shillong city and many people dump their household wastes into them. All this is carried to the Umiam Lake which is terribly polluted. The lake water cannot be used for any domestic purpose whatsoever without treatment. Umiam Lake has good potential for sustainable tourism. It can generate local employment for the young unemployed.

Umshyrpi River originates from the foothills of Shillong peak. (The Umshyrpi River joins with Umkhrach at the northwest direction of the Shillong city to form the **Wah Ro-Ro**. The **Wah Ro-Ro** joins with the Umiam River, which is the main source of water to Umiam reservoir). As it flows through the heart of the Shillong city from Southeast to Northwest direction it receives all types of wastes generated in the city either directly or through drains.

a) Major Towns or Cities in the catchment of Umkhrach and Umshyrpi River

Umkhrach River is one of the major rivers flowing across the Shillong city. It flows from Northeast to Northwest direction of the city. The river passes through some localities viz. Nongthymmai, Rynjah, Lapalang, Umpling, Umkaliar, Nongmynsong, Polo, Wahingdoh, Jaiaw, Mawlai areas.

Umshyrpi river passes through some congested and heavily populated localities viz. Dhankheti, Malki, Laban and Rilbong. On its way the river is joined by many streams which pass through some localities viz. Laban, Lawsotun, Kench's Trace.

b) Source of Pollution in River Umkhrach and Umshyrpi

The sources of pollution of the river include both point and non-point sources. Point sources of pollution are from the residents located along the river and its tributaries, effluents from hotels, restaurants, automobile workshops, hospitals, nursing homes, slaughter houses, vegetable, meat and fish markets situated in the catchment areas. Non-point sources of pollution include indirect discharge of untreated sewage, municipal waste water, dumping of solid wastes, agricultural runoffs.

c) Major Industrial Areas in the Catchment of River Umkrah and Umshyrpi

There is no major industrial area but isolated industries are present in the catchment area of the River.

d) Major Drains contributing to Pollution in River Umkrah and Umshyrpi

There are 20 major drains which pass through some localities viz Nongrah-Poktieh part of Mawlynrei, Nongrim Hill, Laitumkrah, Lachumiere, Nongmynsong, Polo, Wahingdoh, Jaiaw, Mawlai, Mawprem, Garikhana and discharging the untreated sewage and municipal wastes into the Umkrah river.

And there are 12 major drains which flow through some localities viz Laban, Lawsohtun, Kench's Trace, Malki, which are discharging the untreated sewage and municipal wastes into the Umshyrpi river.

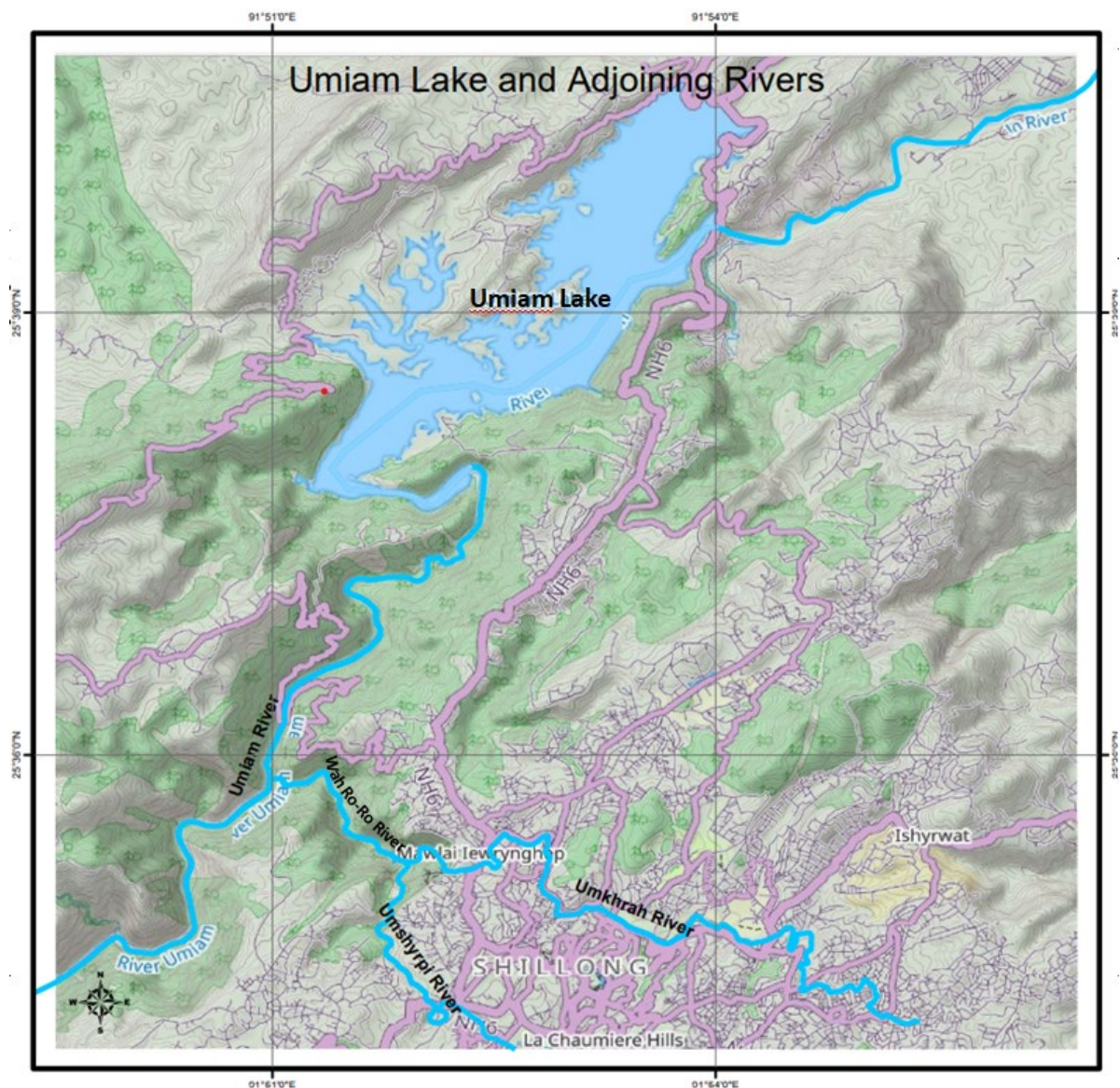


Fig 1: Umiyam Lake

The State Govt. has been putting up many initiatives to control the pollution and improve the conditions of these rivers. While the Action Plan to rejuvenate the polluted river stretches is under implementation, there is however a thought that in addition to the ongoing measures, developing a suitable treatment method at the meeting point of the rivers or at the outfall before flowing into the Umiam Lake would be very essential. It is in this backdrop that the proposal has been conceptualized and evolved.

2. OBJECTIVE

The Government of India has recognized the importance of water bodies and has already been pushing the rejuvenation agenda through its various policies and programmes. Recently, the AMRUT and SMART CITIES programmes have integrated water body rejuvenation as a critical aspect in planning. Water body rejuvenation has also been recognized as one of the main agenda items of JAL SHAKTI, under the water vision.

Department of Urban Affairs invites to prepare a compendium on feasibility of suitable treatment methods and wire mesh trap at the outfall of the Wah Ro Ro of Umiam Lake and to arrest the floating garbage including robotic method of cleaning of accumulated garbage at the trap.

The objective is also to restore the water quality of the two rivers and reduce the stinking by increase the self purification capacity, improving the aquatic life in the rivers by reducing the ecological toxicity and also to get ecologically corrected water so as to reduce the organic matter load in Umiam lake.

It is an important aspect for restoration and preservation of Umkharh and Umshyrpi River in context of meeting water quality for designated uses. It would not be possible to achieve the river quality of Class 'B' since the rivers are flowing across the Shillong City and it is passing through the most congested and densely populated localities. The water of the rivers has never been used for bathing purposes but it has been used for agricultural purposes and hydro power generation at the downstream of the river. Efforts would be made to improve the river quality class by prevention and control measures. However, goals can be met for Class 'E' i.e, for irrigation, industrial cooling and controlled waste disposal.

The water quality can be maintained at the level as per the **Primary Criteria for irrigation, industrial cooling and controlled waste disposal stipulated by CPCB**

Sl. No	Parameters	Class 'E' Water Quality Criteria for Irrigation
1	pH	6 to 8.5
2	Dissolved Oxygen (DO)	-
3	Sodium Absorption Ratio	< 26
4	Boron	<2mg/l
5	Free Ammonia	-
6	Electrical Conductivity at 25 ° C μ mhos/cm	< 2250

7	BOD	-
8	FC	-

The project is purely focused upon treatment of waste water flowing from the rivers before entering the Umiam Lake and to reinstating the natural ecosystem and making the water quality adequate to support life, with a clear and straightforward objective to remove all harmful aquatic weeds, increase the Dissolved Oxygen (DO) level, reduce Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD), increase the depth of the water body, significant reduction of nutrient elements (like Nitrogen and Phosphorus) access of which is harmful for aqua life to balance the ecology, and plantation of *Phyllostachys pubescens* or other equivalent for natural air purification and CO₂ absorption.

3. SCOPE

- To prevent polluted water from flowing to the Umiam Lake.
- To ensure that garbage and other plastic waste are prevented from flowing into Umiam River.
- To proposed remedial solutions for which will include both treatment methods and preventive measures in nature.
- To demarcate zones where construction can be permitted from the edge of the water at its highest level and subject to conditions pertaining to sewage not seeping into the Umiam waters.

1. The bidder may express their willingness and interest, singly or jointly, in doing this work in writing along with their Company profile, Capability, Experience, Experience in similar work (Similar work means in-situ treatment of lake water) and annual turnover etc to the Department.

2. The bidder is free to offer / suggest proven technique with design, relevant calculations, implementation sequences/strategy to achieve goals (as per standard requirements) etc.

3. Technology offered should be such that flow of rivers is not affected during the work. Also no harmful chemicals should be used for the above said project.

4. Bidders will be short listed based on information submitted as above (1) and /or if required will be invited for the presentation with information mentioned at (1).

5. Short listed bidders based on above, may be further invited for presentation. The presentation should include;

- a. Concept
- b. Detailed methodology
- c. Operation and Maintenance

- d. Scope of services
- e. Project Deliverables
- f. Treatment level @ Environmental norms & other parameters.
- g. Comparison with other systems/techniques.

4. GENERAL CONDITIONS

- The conditional EOI shall not be accepted and shall be rejected outright unless, the Nature of condition(s) put forward by Companies / firms is acceptable to Department.
- The Department reserves the right to reject all or any of the EOI who does not appear to be in its best interest and the Companies / firms shall have no cause of action or claim against the Department or its officers, employees, Successors for assignees for rejection of its EOI.
- Interested Companies / firms/agencies shall carefully read the eligibility criteria, furnish the details and satisfy the same; otherwise the EOI shall be rejected without assigning any reason.
- The Department shall have the right to call for clarification/original of the supporting documents, furnished by any agency/bidder for verification, as it may deem fit and also to cross check /cross verify, from the original issuer, any details/credentials furnished by any of the agency/bidder. None of the agency/bidder shall have any objections whatsoever in this regards.
- Attached is the prescribed format of qualifying details. Interested parties may use this format & add additional information, if any, as part of annexure, if they wish to.
- The agency/bidder shall offer the bid amount for preparation of complete proposal for suitable treatment methods at the mouth of Umiam Lake.
- The agencies are requested to check the feasibility of the locations and verify the area on their own and at their own cost.
- After approval of the EOI by the Department, work order shall be issued to the approved shortlisted agency/bidder (the agency/bidder which has been selected by the Department in EOI) to prepare the detailed proposal report along with bidding documents.
- The concept of the work for the Project shall be energy efficient and environment friendly materials to be used.
- The proposal should include the detailed project scope of work and estimation of project cost.
- The agency/bidder shall bear all its costs associated with or relating to the preparation and submission of its EOI including but not limited to preparations, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by Department or any other cost incurred in connection with or relating to its EOI. All such costs and expenses will remain with

the bidder and Department shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an agency/bidder except bid amount.

- The Department, at its discretion, reserve the right to change, modify, alter and amend the terms and conditions of the EOI
- The Department reserve the right to reject any or all the bids without assigning any reasons thereof and no claims or correspondence shall be entertained in this regard
- The selected agency/bidder shall not be allowed in any condition to take part in the tendering process for implementation of the project.
- The proposal submitted by the selected agency/bidder shall be sent to Government Approved Agency for vetting of the proposal being safe for use.
- If the vetting agency suggest any alteration or changes to be included in the proposal and the same shall be incorporated by the selected agency/bidder in the proposal and resubmit the proposal for vetting purpose.
- Completion of work shall be considered when the proposal submitted by the agency/bidder is successfully vetted.
- The Department shall pay the approved bid amount only, no extra charges/fees shall be payable for preparation of the proposal.
- The payment of bid amount shall be made after the successfully vetting of the proposal.
- No advance or partial payment shall be made to the bidder before successfully vetting the proposal.

5. ELIGIBILITY REQUIREMENT

1. **Net Worth:** A firm must have an aggregate tangible net-worth as per the previous three year's available audited results, to be certified by a chartered accountant. The Minimum Net Worth criteria will be 50.00 Lakh in the last five consecutive financial years i.e. 2017-2018 to 2021-2022. CA certified/IT certified copy to be submitted

2. **Gross Annual Turnover:** A firm must have a minimum average Gross Annual Turnover of 1 Crore in the last five consecutive financial years i.e. 2017-2018 to 2021-2022. CA certified/IT certified copy to be submitted.

3. The company of the bidder shall be registered under the Indian Companies Act, 1956. The Bidder shall submit background information of the firm viz. Office setup, contact details and working phone / cell number, authority letter for signing the tender documents.

4. The bidder should have a minimum experience of 5 years in the field of Research & Development on the subject matter.

5. The Company/ registered Agencies/ Firms should have relevant ISO Certifications for Research & Development.

6. The Bidders must have prepared the comprehensive detailed proposal or completed the project work for at least one such project with any government office or undertaking or local body under central or state government. Work order/Completion report for the completed project should be attached along with technical bid.

6. PROCESSING FEES

1. Non-refundable cost of 5,000/- (Rupees Five Thousand only) in the form of DD in favour of The Director, Urban Affairs Department payable at Shillong towards cost of tender document.

7. FORMAT OF APPLICATION

(To be submitted on the letterhead of Prospective Bidder)

To,

The Director,
Urban Affairs Department,
Government of Meghalaya, Raitong Building,
Shillong, Meghalaya, Pin-793001,

Subject: EXPRESSION OF INTEREST (EOI) FOR PROPOSAL FOR SUITABLE
TREATMENT METHODS AT THE OUTFALL OF WAH RO RO OF UMIAM.

Dear Sir

With reference to the above advertisement, we hereby file this **'Expression of Interest (EOI)'** to undertake the development of this project.

We understand that this is an initial expression of interest on our part and mere submission of this EOI does not entitle us to receive any documents or be invited to bid for this project.

Name and details of applicant and its representative authorized to file this EOI	
FULL NAME	
DESIGNATION	
NAME OF ORGANIZATION	
ADDRESS	
PHONES	
FAX	
MOBILE	
WEBSITE	
EMAIL	
Legal constitution of applicant: (Public limited/Private Limited/Partnership etc)*	
Current nature of Business or activities:*	
Last five years average annual turnover of the applicant /Lead Developer:* CA certified /IT certified copy shall be attached	
FY 2017-2018	
FY 2018-2019	
FY 2019-2020	
FY 2020-2021	

FY 2021-2022			
Net worth of the agency/firm/bidder:*((computed from the latest audited balance sheet)			
FY 2017-2018			
FY 2018-2019			
FY 2019-2020			
FY 2020-2021			
FY 2021-2022			
Brief history of operations and activities of the applicant:*			
Name and Detail of Business House/Group to Which applicant belongs:*			
Name of	Group company/ies	Primary activity	Turnover (last three financial years for each group) please provide separately for each year
Previous experience of Development and/or Operations & management of projects if any?			
Briefly explain your concept proposed and proposed components considered for the proposed FOR SUITABLE TREATMENT METHODS AT THE OUTFALL OF WAH RO RO OF UMIAM LAKE.			

Note: * Applicants shall attach documents/brochures/corporate literature and give more details which you may feel necessary to justify profile.

I/We declare that the information stated hereinabove is accurate.

Full Name:

Designation:

Organization:

Address:

Date: