Request for Quotation

for the Selection of Agencies to Carry-out Lab Testing of Municipal Solid Waste Samples Collected for Mumbai.



Published by:

National Institute of Urban Affairs (NIUA), 1st Floor, Core 4B, India Habitat Centre, Lodhi Road, New Delhi- 110 003

23 April, 2024

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The NIUA (in consultation with the concerned Committee and Director) may, in their absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this document or cancel this process

Letter of Invitation

New Delhi 23rd April, 2024

Dear Mr. / Ms.:

- 1. The National Institute of Urban Affairs (NIUA) (hereinafter called "Client") now invites proposals from agencies to provide the following Services: to Carry-out Lab Testing of Waste Samples Collected for the Study on Solid Waste Quantification, and Composition, Analysis in Mumbai. More details on the Services are provided in the Terms of Reference (TOR).
- 2. This Request for Quotation includes the following documents:
 - i. This Letter of Invitation;
 - ii. Terms of Reference;
 - iii. Evaluation Criteria;
 - iv. The Forms of Submission of the Proposal
 - Technical Proposal (Tech Forms);
 - Financial Proposal
 - v. Standard Form of Contract.
- 3. The agencies shall be selected under the Least Cost Selection (LCS). The Bidder clearing the technical criteria will be least financial quote shall be selected by the Client for a period of 5 months. Later on depending upon the requirement of Services, specific Work Order shall be issued. Additional details are provided in the Section III: Evaluation and Qualification of this RFQ Document.
- 4. The Agencies shall furnish a detailed quotation specifying the testing rate per sample, delineating the costs for physical, chemical, and heavy metals analysis separately (as outlined in point (d) of the scope of work in Section II of this RFQ). The total per-sample amount should encompass all expenses, including sample collection from the site and conducting all requisite tests.
- 5. The RFQ shall be published on the NIUA website and is free of cost for download. Bid Security / Earnest Money Deposit (EMD) is not required for the submission of the proposal. It is not permissible to transfer this invitation to any other firm.
- 6. The RFQ shall comprise your technical and financial proposal and must be received at the following address via physical copy to National Institute of Urban Affairs, Core 4B, 1st Floor, India Habitat Centre, New Delhi-110003 by 30 April, 2023, 17:00 hr IST. The Bidders are requested to provide their technical proposal and financial quotation separately in one sealed envelope.
- 7. Any queries in relation to the RFQ to be sent prior to 26th April, 2024, 17:00 hr IST at the mail ID procurement@niua.org and the responses will be available online by 27th April, 2024.
- 8. To substantiate their credentials and to respond to any queries, the Agencies may be asked to make a presentation of their Technical and Financial Proposal, during the evaluation stage.
- 9. NIUA is under no obligation to guarantee any assignments to you at any point of time during the period of empanelment.

- 10. The issue of the RFQ does not imply that the NIUA is bound to select bid(s), and it reserves the right without assigning any reason to
 - reject any or all of the bids, or
 - cancel the tender process; or
 - abandon the procurement process; or
 - issue another bid for identical or similar work

Yours sincerely,

Dr. Debolina Kundu

Director (Additional Charge), NIUA

Deboline Kunde

I. Terms of Reference

1. ABOUT THE ORGANISATION (NATIONAL INSTITUTE OF URBAN AFFAIRS)

The National Institute of Urban Affairs (NIUA) is India's leading national think tank on urban planning and development. As a hub for the generation and dissemination of cutting-edge research in the urban sector, NIUA seeks to provide innovative solutions to address the challenges of a fast-urbanizing India and pave the way for more inclusive and sustainable cities of the future.

2. ABOUT THE PROJECT

This project seeks to support the city of Mumbai to accelerate the delivery of the Pathway Towards Zero Waste strategy. NIUA is assigned by C40 CITIES CLIMATE LEADERSHIP GROUP, INC., a Delaware non- profit corporation ("C40") to conduct a study on solid waste quantification, composition, and mass flow analysis for the city of Mumbai for two seasons (Pre Monsoon: April-May & During Monsoon: July-August). The project aims to provide intensive support to strengthen the data baseline and its management, build technical and operational capacity amongst stakeholders, and support the implementation of pilot projects and a citywide deployment schedule, achieving highly visible wins, accelerating action and positioning them on the C40 Pathway Towards Zero Waste.

3. ABOUT THE ASSIGNMENT

The National Institute of Urban Affairs (NIUA) with the support of Ministry of Housing and Urban Affairs works closely with the various National and International agencies towards better management of Solid Waste in our cities. In this study, NIUA in consortium with KIF (Kushaagra Innovations Foundation) is assigned to assess the quantity, quality and composition of different waste streams flowing in Mumbai city during two seasons (pre-monsoon and during monsoon).

The agency will need to test approximately 20 waste samples collected from various collection points in the city of Mumbai. The test samples should be collected from the site for two seasons (Pre Monsoon: April-May & During Monsoon: July-August). The agency should conduct the required tests using the latest testing equipment available.

A specific work order will be given to the agency at the time of the contract.

4. OBJECTIVE

Given the nature of the project, NIUA is looking for an experienced agency that has a presence in Mumbai to carry-out lab testing of waste samples collected from various collection locations spread across the city.

5. SCOPE OF WORK

Following is the scope of work defined under this assignment by the agency:

- a) To carry-out lab testing for approx. 20 samples collected from various collection points in Mumbai city. The finalization of the number of samples to be collected per season per location would be decided based on the further discussions with BMC and C40.
- b) It is the agency's primary obligation to collect the required samples from each location during the sampling days and transport it to the lab for testing.
- c) The agency should be equipped with the state-of-art facilities for all the necessary tests.

- d) The agency should be able to carry out the following tests (tentative list) for the selected samples without compromising the quality.
 - i. Physical Analysis of Solid Waste:

Sr No.	Physical Composition	Units	Value
1	Plastic, Plastic Bags etc.	%	
2	Paper Waste	%	
3	Glass and Metal	%	
4	Leather, Rubber and Synthetics	%	
5	Tetra packs and laminated plastics	%	
6	Cloths and rags	%	
7	Food waste/ Organic	%	
8	Horticulture waste and Wood	%	
9	Miscellaneous	%	
10	Inerts	%	
	Total		4

ii. Chemical Analysis of Solid Waste:

Sr No.	Chemical Parameters	Limits	Units	Value
1	PH Value			
2	Bulk Density		Kg/m ³	
3	Calorific Value		Kcal/kg	
4	Moisture		%	
5	Conductivity		μmh/cm	
6	Total Volatile Solids (% By mass)		%	
7	Total Organic Carbon (% By mass)		%	
8	C/N Ratio			
9	Total Nitrogen (% By mass)		%	
10	Total Phosphate as P2O5,(% By mass)		%	
11	Total Potassium as K2O, (% By mass)		%	

iii. Heavy Metal Analysis of Solid Waste:

Sr No.	Chemical Parameters	Limits	Units	Value
1	Arsenic, (As)		mg/kg	
2	Nickel, (Ni)		mg/kg	
3	Zinc, (Zn)		mg/kg	
4	Cadmium, (Cd)		mg/kg	
5	Copper, (Cu)		mg/kg	
6	Chromium, (Cr ⁶⁺)		mg/kg	
7	Lead, (Pb)		mg/kg	
8	Mercury, (Hg)		mg/kg	
9	Chloride, (Cl) (% By mass)		%	

Sr No.	Chemical Parameters	Limits	Units	Value
10	Sulphur, (% By mass)		%	
11	Iron, (Fe)		mg/kg	
12	Manganese, (Mn)		mg/kg	

- e) The agency should deliver the test results in required formats within one week from each sampling day
- f) The agency should ensure the lab results are formatted and structured with details including date and time of collection, location, sampled quality etc.
- g) All logistics, equipment, technological devices, and testing procedures will be under the scope of the agency. It is the agency's responsibility to coordinate with the project team at the waste collection points to acquire the required samples and other requisite data.

6. DELIVERABLES

S. No.	PROJECT DELIVERABLES	TIMELINE
1.	To deliver the detailed strategy for collecting samples from various sampling locations covering quantity, point of collection, details of test parameters, transport details etc.	1 week (From the date of the signed contract)
2.	To deliver detailed test report (Hard Copy and Soft Copy) of the samples collected from various sites for premonsoon	Within 1 week of pre-monsoon sampling
3.	To deliver detailed test report (Hard Copy and Soft Copy) of the samples collected from various sites for during monsoon	Within 1 week of during monsoon sampling

7. PAYMENT SCHEDULE AND CONDITIONS

A Specific Work Order indicating the Contract amount will be signed with the selected agency. The payment against each Specific Work order will be paid to the agency or developer after the satisfactory completion of all tasks and deliverables assigned under the project deliverables and scope of work.

Release of payment will be made within 30 days of receiving the invoice along with relevant supporting documents.

Deliverables	Payment schedule (Percentage)
Detailed strategy for the collection and testing of waste samples	10%
Pre-Monsoon: Collection, segregate and testing of the waste samples from sampling locations (6 sites). Lab test reports for pre-monsoon.	45%
During-Monsoon: Collection, segregate and testing of the waste samples from sampling locations (6 sites). Lab test report for second season and final comprehensive test report for both the seasons	45%

8. DATA PRIVACY AND OWNERSHIP CLAUSE:

All data collected during the study shall be owned exclusively by the tendering agency. The party conducting the study agrees not to disclose, distribute, or share any collected data with any third party without prior written consent from the tendering agency. Any breach of this agreement shall result in legal action and may incur penalties as per applicable laws and regulations.

II. Evaluation and Qualification Criteria

1. ELIGIBILITY CRITERIA

- i. The agency should be a well-equipped laboratory with NABL accreditation or recognized by MoEFCC or CPCB.
- ii. Joint Venture / Consortium is not allowed. Copy of certificate of accreditation along with name change if any, copy of PAN Card and copy of GST Registration Certificate is required.
- iii. The agency/vendor should have the experience of conducting minimum 2 nos. of similar studies in last two years period and the list & supporting documents to be provided with the technical details.
- iv. On the last date of submission of the Proposal, the Agency should not be blacklisted by the Central Government/State Governments/Union Territories/PSUs in India for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices. The form for self-certified undertaking is attached in Tech Forms.
- v. The agency should have an office/branch in Mumbai.

If the above Eligibility Criteria are not satisfied, then the Technical Proposal will not be further evaluated.

2. SELECTION PROCESS

NIUA would assess the technical detail first and after qualification in technical, the financial quotation would be considered. Final Selection would be based on **Least Cost Selection (LCS)**. Non-compliant or inadequate technical proposals will be rejected.

To substantiate their credentials and to respond to any queries, the Agencies may be asked to make a presentation of their Technical and Financial Proposal, during the evaluation stage.

The agency must be able to function under strict deadlines.

Form-Technical Proposal

The Technical Proposal submitted by the agency should have the following details to substantiate credentials:

- a) Form Tech -1: Technical Proposal Submission Form
- b) Form TECH-2: Power of Attorney
- c) Form Tech 3 Declaration Regarding Blacklisting/ Non-Blacklisting from Taking Part in Govt. Tender
- d) Form Tech 4 Bidder Information Form
- e) Form TECH-5: Work Experience

Similar / Relevant projects functionalities/services developed (Experience in similar assignments – Completed) – Minimum two assignments. The agency must have prior experience dealing with government agencies in similar projects over the last two years. Similar Assignments mean – expertise in conducting solid waste characterization study and lab testing of MSW

Supporting documents required -

Copy of Contract/ Work Order and Completion Certificates from the Client OR Copy of Contract / Work Order and Self-Certificate of Completion by the Authorized Signatory on the Letter Head of the Company with relevant information like name of the assignment, date of start, date of completion, contract amount and total payment etc.

Form Tech -1: Technical Proposal Submission Form

(on the letterhead of the company specifying his name and address)

	Location				
	Date				
То:					
The Director,					
National Institute of Urban Affairs					
Core 4B, 01st Floor, India Habitat Centre					
Lodhi Road, New Delhi – 110003					
Zodan Reduc, New Zomi - 170005					
Dear Sir,					
We, the undersigned, offer to provide the services for solid characterisation at sampling locations in Mumbai, Maharashtra, Ir for Proposal dated [XXXX]. We are hereby submitting our Technic	ndia in accordance with your Request				
We hereby declare that:					
a) All the information and statements made in this Propose misrepresentation contained in this proposal may lead to client;					
b) Our proposal shall be valid and remain binding upon us for	the period of 60 days;				
c) Our proposal is binding upon us and subject to any modinegotiations.	fications resulting from the contract				
We acknowledge and agree that the client reserves the right to ann	ul the selection process and reject all				
Proposals at any time prior to the contract award, without thereby					
We remain,					
Yours sincerely,					
Name of the Agency:	_ = *				
Signature of the Agency's head:					
Address:					

Form TECH-2: Power of Attorney

Know all men by these presents, we, (name of Firm and address of the
registered office) do hereby constitute, nominate, appoint and authorise Mr /
Ms son/daughter/wife of and presently residing at
who is presently employed with us and holding the position of
as our true and lawful attorney (hereinafter referred to as the "authorized Representative") 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 our Proposal for XXXXXX, proposed to be developed by the
(the "Client") including but not limited to signing and submission of all
applications, proposals and other documents and writings, participating in pre-bid and other conferences
and providing information/ responses to the Client, representing us in all matters before the Client,
signing and execution of all contracts and undertakings consequent to acceptance of our proposal and
generally dealing with the Client in all matters in connection with or relating to or arising out of our
Proposal for the said Project and/or upon award thereof to us till the entering into of the Agreement with
the Client.
AND, we do hereby agree to ratify and confirm all acts, deeds and things lawfully done or caused to be
done by our said authorized Representative 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 authorized Representative 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 DAY OF
, 20
For
(Signature, name, designation and address)
Witnesses:
1.
2.
Notarised
Accepted

(Signature, name, designation and address of the Attorney)
Notes:

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure. The Power of Attorney should be executed on a non-judicial stamp paper of Rs. 100 (hundred) and duly

notarised by a notary public.

- Wherever required, the Bidder should submit for verification the extract of the charter documents and other documents such as a resolution/power of attorney in favor of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.
- For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, Bidders from countries that have signed the Hague Legislation Convention 1961 need not get their Power of Attorney legalized by the Indian Embassy if it carries a conforming Apostille certificate.

Form Tech – 3 Declaration Regarding Blacklisting/ Non-Blacklisting from Taking Part in Govt. Tender

(On non – judicial stamp paper of INR 100/- or such equivalent document duly attested by notary public)

I / We Proprietor/ Partner(s)/ Director(s) of M/s	- hereby declare that the
firm/company namely M/s	has not
been blacklisted or debarred in the past by any other Government organizat	ion from taking part in
Government tenders.	
.41	
Or	
I / We Proprietor/ Partner(s)/ Director(s) of M/s	hereby declare that
the firm/company namely M/s	was
blacklisted or debarred by any other Government Department from taking part	in Government tenders
for a period of years w.e.f The period is over on -	and now the
firm/company is entitled to take part in Government tenders.	
In case the above information found false I/We are fully aware that the tender/erejected/cancelled.	contract will be
Dated this, 2023	
Yours sincerely,	
Name of the Agency:	
Signature of the Agency's head:	
Address:	

Form Tech – 4 Bidder Information Form

a	Name of Bidder with full address	***	
b	Tel. No.	1440.	=
С	Fax No.	¥36	
d	Email	98	
e	Year of Incorporation.	:	Proof of registration of the Bidder to be submitted
f	NABL accreditation/ MoEFCC or CPCB recognition		Proof of accreditation to be submitted
g	Name and address of the person holding the Power of Attorney.	ă	
h	(i) Place of Business.	:	
	(ii) Date of Registration.	:	
I	Name of Bankers with full address.	i.	
j	Regional presence (Direct office)		The location details to be provided
k	GST Registration Number	•	Copy to be submitted.
1	Are you presently debarred / Blacklisted by any Central/ State Government Department / Union Territory (If Yes, please furnished details)		
m	Name and details (Tel / Mobile / Email) of contact persons		

Form- Financial Proposal

Location_

	Date						
То:							
The Director, National Institute of U Core 4B, 01st Floor, I Lodhi Road, New Del	ndia Habitat Centr	e					
Dear Sir,							
I, the undersigned, off Mumbai, Maharashtra Fechnical Proposal. Mand figures, including	a, India in accorda Iy Financial Propos	nce with your sal is for the amo	Request for Quo	otation dated []	XXXX] and or		
Descrpition	Unit Price (Man day rate in INR)/ services offered	Number of Days	Total (INR)	Taxes (INR)	Total including taxes(INR)		
		=					
					3		
My financial proposal	•			ations resultin	g from contra		
egotiations, up to the understand you reser	-		•	pposals at any 1	time prior to th		
egotiations, up to the understand you reser Contract award.	-		•	pposals at any 1	time prior to th		
egotiations, up to the understand you reser contract award.	-		•	pposals at any 1	time prior to th		
negotiations, up to the understand you reser Contract award. remain, Yours sincerely, Authorized Signature: Name and Title of Signature of the capacity of: Address:	ve the right to ann	ul the process a	and reject all Pro	[In	full and initial		

Standard Contract

THIS CONTRACT ("Contract") is entered into this XX April 2023, by and between the National Institute of Urban Affairs ("the Client") having its principal place of business at 1st Floor, Core 4B, India Habitat Centre, Lodhi Road, New Delhi - 110 003,

and [insert Agency's	name] ("the	Agency")	having i	ts principal	office	located	at	[insert	Agency	'S
address]; Telephone:		, Ema	ail:							

BACKGROUND

The Client requires the Agency to perform the Services described in Annex A as part of the implementation of the Project.

WHEREAS, the Client wishes to have the Agency performing the Services hereinafter referred to, and WHEREAS, the Agency is willing to perform these Services,

NOW THEREFORE THE PARTIES hereby agree as follows:

1.	Services	The Agency shall perform the Services and submit the E-Learning Module
		specified in Annex A, "Terms of Reference and Scope of Services," which is
		made an integral part of this Contract ("the Services").
2.	Contract Period	The Agency shall perform the Services during the period commencing [insert
		start date] and ending on [insert completion date] or any other period as may
15		be subsequently agreed by the parties in writing.
3.	Payment	A. Ceiling
		For Services rendered pursuant to Annex A, the Client shall pay the
		Agency an amount not to exceed a ceiling of [insert ceiling amount].
		This amount has been established based on the understanding that it
		includes all of the Agency's costs and profits as well as any tax
		obligation that may be imposed on the Agency.
		B. Payment modalities
		The payment schedule and conditions are specified in Annex B.
		Payments shall be made no later than 30 days following submission
		of original invoices in duplicate to the Coordinator designated in
		article 4 on the following bank account:
		Bank account number:

		Bank account's name:
4. Contract Administration		A. Coordinator The Client designates Mr. , Designation, Department, National Institute of Urban Affairs (NIUA) as Client's Coordinator; the Coordinator shall be responsible for the coordination of the Services under the Contract, for receiving and approving invoices for payment, and for acceptance of the deliverables by the Client. "Terms of Reference and Scope of Services" shall be submitted as part of the Services, and will constitute the basis for payments to be made
5.	Performance Standard	under article 3. The agency undertakes to perform the services in compliance with the highest ethical and professional standards.
6.	Confidentiality	The agency shall not, during the term of this contract and within two years after its expiration, disclose any proprietary or confidential information relating to the Services, this contract or the client's business or operations without the prior written consent of the client.
7.	Ownership of Material	Any study, report or other output such as drawings, software or else, prepared by the agency for the client under the contract shall belong to and remain the property of the client. The agency may retain a copy of such documents and software.
8.	Unfair Competitive Advantage and Conflicting Activities	The Agency had (or any of its Affiliates) been engaged by the Client to provide goods, works, or services for a project, shall be disqualified from providing consulting services resulting from or directly related to those goods, works, or services. Conversely, a Agency (or any of its Affiliates) hired to provide consulting services for the preparation or implementation of a project shall be disqualified from subsequently providing goods or works or services resulting from or directly related to the consulting services for such preparation or implementation.
9.	Insurance	The Agency will be responsible for subscribing to an appropriate insurance coverage to their employee.
10.	Assignment	The agency shall not assign this contract or subcontract any portion of it without the client's prior written consent.

11. Law Governing	The contract shall be governed by the laws of India, and the language of the
Contract and	contract shall be the English language.
Language	
12. Termination	The contract may be terminated by the client if the Agency fails to perform
	the Services or fails to submit satisfactory reports as specified in Annex A.
	The termination shall be preceded by a 15 days' notice. At the cost and
	liability of the Agency.
13. Dispute	Any dispute, controversy or claim arising out of or relating to this Contract or
Resolution	the breach, termination or invalidity thereof, shall be settled by arbitration in
	accordance with the Arbitration and Conciliation Act, 1996, as amended. Any
	arbitration proceedings shall, unless otherwise agreed by the Parties, be held
	at New Delhi in INDIA.
14. Agency's Status	If the Agency has the status of an independent Agency, the Agency shall not
	be deemed to be an employee of the Government of the Country of the Client
	or an employee of the Client by virtue of the Contract. The Agency shall have
	no right to payments, allowances, compensation, pension or reimbursements
	of any kind, except as explicitly specified in the Contract.

FOR THE CLIENT

FOR THE AGENCY

Signed by: Dr. Debolina Kundu

Signed by:

Title: Director (Additional Charge), NIUA

Title:

ANNEX A - Terms of Reference and Scope of the Services ANNEX B - Payment Schedule and Modalities