



BIDHANNAGAR MUNICIPAL CORPORATION

Poura Bhawan, FD-415A, Sector-III
Salt Lake City, Kolkata-700 106

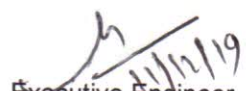
Memo No. 675 /PHE (C)/BMC

Dated 11/12/2019

Corrigendum Notice


Ref: NIQ (RFP) No. 620/PHE(C)/BMC, Dated: 22/11/2019
E-Tender Id 2019_MAD_254896_1

The Project Information Memorandum of MOLLAR BHERI BIOREMEDIATION of above NIQ (RFP) has been modified. Please read the Project Information Memorandum (revised) attached herewith.


Executive Engineer
Bidhannagar Municipal Corporation.

Memo No. 675/1(8) /PHE (C)/BMC

Date. 11/12/2019


11/12/2019

Copy forwarded for information and necessary action to:-

1. Controller of Finance, Bidhannagar Municipal Corporation.
2. P.A to Hon,ble Mayor, Bidhannagar Municipal Corporation.
3. P.A to Hon,ble Deputy Mayor, Bidhannagar Municipal Corporation.
4. P.A to MMIC, Conservancy, Bidhannagar Municipal Corporation.
5. P.A to Commissioner, Bidhannagar Municipal Corporation.
6. P.A to Joint Commissioner, Bidhannagar Municipal Corporation.
7. Office Notice Board.
8. BMC website.


Executive Engineer
Bidhannagar Municipal Corporation.


11/12/2019



BIDHANNAGAR MUNICIPAL CORPORATION
POURA BHAVAN, FD-415A, Sector-III,
Kolkata - 700 106.

CORRIGENDUM NOTICE INVITING e-QUOTATION

NIQ No. 620/PHE(C)/BMC Dt. 22/11/2019

The Executive Engineer PHE, on behalf of Commissioner, Bidhannagar Municipal Corporation invites e-bid Tender from reliable and resourceful Companies/Firms/Contractors having experience and in similar nature of works as noted below:

Sl. No.	Name of work	Earnest Money (INR.)	Total Project Completion Period
1.	RFP (Request for Proposal) for the work of Scientific Dumpsite Land Reclamation through Bio-mining resource recovery and Scientific Rejects Disposal at Mollar Bheri Bidhannagar Municipal corporation.	2% of the project value or INR 10,00,000 (INR ten lakhs), whichever is lower.	15 Months

1.	Location of Work:		Mollar Bheri Dumping Ground under Bidhannagar Municipal Corporation.
2.	Eligibility to participate in the Tender		Refer to Bidding Document
3.	Earnest Money and Cost of Bid Document	<u>a</u>	Initial Earnest money to be deposited online through e-tender portal only by Net Banking / NEFT / RTGS. (balance earnest money if any, @ 2% of the quoted amount to be paid later on) for all participant Bidder.
		<u>b</u>	<u>All documents in original to be produced in due course of time as & when asked by the Tender Inviting Authority</u>

4. Date and Time Schedule :-

Sl. No.	Particulars	Date and Time
a)	Date of uploading of N.I.T. and Tender Documents (online). (Publishing Date)	22/11/2019 after 19.00 Hrs.
b)	Documents download start date.	22/11/2019 after 19.00 Hrs.
c)	Bid submission start date (online)	22/11/2019 after 19.00 Hrs.
d)	Last date of receiving pre bid queries	13/12/2019
e)	Last date of uploading pre bid queries reply	16/12/2019
f)	Bid Submission closing (online)	31/12/2019 up to 15.00 Hrs.
g)	Bid opening date for Technical Proposals (online)	03/01/2020 after 15.00 Hrs.
h)	Date of presentation	06/01/2020

i)	Date of uploading list for Technically Qualified Tenderers (online)	To be notified later on
j)	Mail id to contact for query	monodip.bmc@gmail.com

No financial information should be uploaded to the folder marked for technical bid.

Executive Engineer

Bidhannagar Municipal Corporation.

Copy forwarded for necessary information to:-

1. Controller of Finance , Bidhannagar Municipal Corporation.
2. P.A. to Hon'ble Mayor, Bidhannagar Municipal Corporation.
3. P.A. to Hon'ble Deputy Mayor, Bidhannagar Municipal Corporation.
4. P.A. to MMIC,Conservancy, Bidhannagar Municipal Corporation
5. P.A. to MMIC,Health, Bidhannagar Municipal Corporation.
6. P.A. to Commissioner, Bidhannagar Municipal Corporation.
7. P.A. to Joint Commissioner, Bidhannagar Municipal Corporation.
8. Office Notice Board.
9. Official Website.
10. Publication to the News paper

Executive Engineer
Bidhannagar Municipal Corporation.

Selection of Contractor for

The Work of "Scientific Dumpsite Land Reclamation through Bio-mining, Resource Recovery and

Scientific Rejects Disposal at Mollar Bheri"

Ref: NIQ No. 620/PHE(C)/BMC Dt. 22/11/2019

Corrigendum for

Request for Proposal

Bidhannagar Municipal Corporation

Government of West Bengal

VOLUME I: Request for Proposal (RFP) Document

DISCLAIMER

The information contained in this Request for Proposal (RFP) document or subsequently provided to Bidder, whether verbally or in documentary or any other form by or on behalf BMC, is provided to Bidder on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by BMC to the prospective Bidder or any other person. The purpose of this RFP is to provide interested firms with information that may be useful to them in the formulation of their Proposals pursuant to this RFP.

Information provided in this RFP to the Bidder is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. BMC accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

BMC also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any Bidder upon the statements contained in this RFP.

BMC may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this RFP.

The issue of this RFP does not imply that BMC, is bound to select a Bidder or to appoint the Selected Bidder for the Consultancy and BMC, reserves the right to reject all or any of the Proposals without assigning any reasons whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by BMC, or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Bidder and BMC, shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Proposal, regardless of the conduct or outcome of the Selection Process.

I. Bid Data

#	Particulars	Data
1.	Cost of Bid Document	INR 12,500/-
2.	EMD	2% of project value or INR 10 lakh (INR Ten lakh), whichever is lower
3.	Bid Validity Period	180 Days from the due date of Bidding
4.	Eligible Bidder for Bidding	Individual Bidder/Consortium/JV
5.	Method of Bid Submission	Online Submission - Technical & Financial Bid
7.	Erection period (installation of machineries)	3 months
8.	Operation period (bioremediation activities)	12 working months after erection
9.	Total project completion period	15 working months from date of signing of agreement

- II. All the correspondences should be in written, the written correspondence may be sent through email, fax or letter. All the communication and the bids submissions should be addressed to the undersigned on the address below:

To,

Client Representative: Commissioner

Bidhannagar Municipal Corporation (BMC)

Address: Poura Bhawan, FD - 415A, Sector - III, Salt Lake City, Kolkata, West Bengal, India, 700106

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1. Introduction

Background

Mollar Bheri is the current unscientific disposal site, where all unprocessed fresh wastes from all locations under BMC, NDITA, NKDA, are getting disposed off. The total land area of the disposal site is about 55 acres, out of which around 45% area is covered by accumulated garbage. Average height during the reconnaissance survey was observed visually as ~ 12 ft. Mostly compactors bring the waste to the disposal site, along with few numbers of open trucks etc. Two dedicated front-end loader are available at the site to spread and level the fresh incoming waste after the disposal.

Mollar bheri falls under two different Mouzas. Mouza – Dhapa Manpur Mouza and Mahisbathan Mouza. From verbal discussions with BC officials, it is understood that Dhapa Manpur mouza falls under wetland (Kulipara, Durgabhasan, Gorumera etc.). However, Mahoshbathan mouza does not fall under wet land and it is primarily a “Sali” land (Boro paresh, chhoto paresh etc.)

A number of water bodies surrounds the site. On the northern side, Mollar bheri is surrounded by a residential colony, slum area as well as high rises. IDL Aquaview residential complex is located within 1 km of vicinity. The other localities at Mollar Bheri periphery are Khasmahal and Sardarpara

The Bidhannagar Municipal Corporation (herein after referred to as “the Authority” in this Bid Document) is seeking proposals from eligible Bidders to undertake the works required for Scientific dumpsitereclamationthroughBio-miningoflegacywaste/un-processedmunicipalsolidwasteby excavationofcompletemixedMSWfromthedumpsitewhichunderwentbiologicalandphysical degradation, resource recovery by using suitable mechanical sieving machine or any other suitable equipment/method, segregating, sorting, retrieving recoverable materials, storing, selling, diverting for recycling, dumpsite land reclamation, development of disposal facility and scientific residual Solid Waste disposal in disposal facility at Mollar Bheri dumpsite during contract period and hand back of reclaimed land and disposal facility to BMC at the end of contractperiod.

Objective of the Bid Document

This Bid Document is structured to provide prospective Bidders with sufficient information on which to prepare a Proposal and is organized in the following manner:

Volume I: Request for Proposal

- Document Introduction
- Instruction to Bidders
- Preparation of Bid
- Submission of Bid
- Bid Opening and Evaluation Scope of Project
- Payment Schedule
- Miscellaneous

Volume II: Draft Contract Agreement

Volume III: Conditions of Contract

2. Instruction to Bidder

Scope of Bid

The Authority invites bids for the execution of works (herein after referred to as "the works") detailed in this Bid Document.

The successful bidder will be expected to complete the works by the intended completion date specified in the section “**Scope of Work**” of this RFP document.

Checklist of documents as Prequalification Criteria for Eligible Bidder

S. No.	Criteria	Document required
1.	The Bidder should be an enterprise firm incorporated in India and operating for at least last five complete Financial Years	<ul style="list-style-type: none"> • Certificate of Incorporation in case of company along with Articles of Association and Memorandum of Association
2	In case of partnership firm	<ul style="list-style-type: none"> • The bidder needs to submit copy of Registered Deed of Partnership
3	In case of sole proprietorship	<ul style="list-style-type: none"> • Bidder needs to submit Certificate of Enlistment
4	In case of Consortium/JV /Consortium/JV	<ul style="list-style-type: none"> • A formal letter of intent to enter into an agreement should be produced • In case of Consortium/JV, a Consortium/JV agreement should be produced • Members of the Consortium/JV/Consortium/JV should be incorporated in India and operating for at least last five complete Financial Years. The Lead member should have a stake of at least 51% and will be held responsible in all respect for execution of the mentioned work.
5	In case of foreign companies	<ul style="list-style-type: none"> • Foreign companies - 100% wholly owned subsidiary incorporated in India, of the foreign company, may participate. In this case, a Parent company/subsidiary guarantee is required.
6.	<p>i. Should have handled, during preceding five financial years prior to the due date of this bid submission, projects as mentioned in sub-clause (i) above, atleast:</p> <p>(a) One Project of 1,00,000 Metric Ton; Or,</p> <p>(b) Multiple Projects (more than one) of 50,000 Metric Ton each</p>	<p>Bidders Kindly Note:</p> <ul style="list-style-type: none"> • Credential Certificate issued by the Executive Engineer or equivalent or competent authority of a State/Central Government, State Central Government undertaking, Statutory/ Autonomous bodies constituted by the Central/State stature, on the completed /commissioned work will be taken as credential. • Credentials for Completed/Commissioned projects should be submitted as per the enclosed format, • Order, Agreements and Completion/ Successful Commission Certificate should be submitted along with the technical bid. If Credentials are not submitted, it won't be considered for evaluation. • Credentials for Completed/Commissioned project will be considered for evaluation.

S. No.	Criteria	Document required
		<ul style="list-style-type: none"> Credentials for bidder working as sub-contractors will not be considered for evaluation. If the projects have been executed as Consortium/JV then proper legal documents should be submitted mentioning the bidder was a partner of the venture and not a sub –contractor. <p>In case of Consortium/JV/Consortium/JV any member of the Consortium/JV should have atleast 1 (One) commissioned work related to Bio-mining of legacy waste at dumpsite in India, during the last seven years</p>
3.	Power of Attorney for mentioning authorized signatories	<p>A Registered Power of Attorney issued on Non- Judicial Paper.</p> <p>OR</p> <p>A company Board Resolution mentioning the names of the authorized signatories</p> <p>In case of Consortium/JV/Consortium/JV all the members should submit a power of attorney mentioning the Lead member as the authorized signatory for this tender.</p>
5.	Any debarred or blacklisted agency shall not be allowed to participate.	<p>An undertaking on Non Judicial Stamp Paper stating the same, dated on or after the ‘RFP Download Start Date (Online)’ , must be submitted, stating the Bidder is Not Blacklisted, debarred or terminated due to unsatisfactory performance or Bankruptcy.</p> <p>In case of Consortium/JV all members should submit the undertaking</p>
6.	Valid Scanned Copies of the following documents	<p>Trade License/Certificate of Enlistment, PAN Card, Professional Tax Registration Certificate and Goods and Service Tax (GST) registration certificate mentioning the 15 digit Goods and Service Tax Payer Identification Number under the GST Act 2017</p> <p>Income Tax Return Certificate for the Financial Years 2016-17</p> <p>Bidder should note: In Case any document is not required in any particular state/country the bidder should provide an undertaking on its company letterhead duly signed by the authorized signatories mentioning it is not applicable in that particular state for its business.</p> <p>In case of Consortium/JV all members should submit the required</p>

S. No.	Criteria	Document required
		documents.
7.	The Bidder should have an average Annual Turnover of INR 20 Crores in the 3 financial years (FY 2016-17, FY 2017-18 and FY 2018-19).	<p>Copies of Balance Sheets and Profit & Loss Statements endorsed by the Statutory Auditor of the bidder for the last 5 financial years</p> <p>In case of Consortium/JV the Lead member should have average Annual Turnover of INR 20 Crores in the 3 financial years (FY 2016-17, FY 2017-18 and FY 2018-19).</p>
8.	The bidder should have a Registered Office in India	<p>Documentary Proof of having a registered office in India.</p> <p>In case of Consortium/JV the Lead member should submit Documentary Proof of having a registered office in India.</p>
9	GST Certificate	<p>GST Certificate</p> <p>In case of Consortium/JV the Lead member should submit the GST Certificate</p>
10	Professional Tax Registration Certificate	<p>Professional Tax Registration Certificate</p> <p>In case of Consortium/JV the Lead member should submit the Professional Tax Registration Certificate</p>
11	Income Tax Return Certificate for the FY 2017-18	<p>Income Tax Return Certificate for the FY 2017-18</p> <p>In case of Consortium/JV the Lead member should submit Income Tax Return Certificate for the FY 2017-18</p>
12	Trade License	<p>Trade License</p> <p>In case of Consortium/JV the Lead member should submit the Trade License</p>
13	PAN Card	PAN Card

S. No.	Criteria	Document required
		n case of Consortium/JV the Lead member should submit the PAN Card
14	Covering Letter as per Annexures	Duly signed Annexures In case of Consortium/JV the Lead member should submit the Annexures on their letterhead

Bidder should note: In Case any document is not required in any particular state the bidder should provide an undertaking on its company letterhead duly signed by the authorized signatories mentioning it is not applicable in that particular state for its business.

Criteria for Consortium/JV Bids

- Consortium/JV is allowed as per the rules and regulations of Government of India, subject to a maximum of 3 members. A Consortium/JV bid will be considered in the name of the lead partner, registered agreement (named as Consortium/JV Agreement) signed by all the members should be furnished along with the bid .
- All members of the Consortium/JV should have joint and several liabilities for execution of the project. The Consortium/JV should share copy of the work sharing bipartite/ tripartite (depending upon the number of Consortium/JV members) agreement, clearly specifying work share of each Consortium/JV member, along with the technical bid, dated on or after the RFP download start date.
- It should be stated in the Consortium/JV Agreement the name of the Lead member. Lead member should be having more than **51% stake** in the Consortium/JV and will be responsible on behalf of the Consortium/JV in all matters related to the project. The percentage stake of other members should also be stated in the Consortium/JV agreement. In Case of any failures the Lead member will be responsible to compensate the liquidated damages and penalties to BMC in addition to all matters related to the project. The Lead Member of the Consortium/JV must be registered and/or incorporated under appropriate laws of India,
- The Consortium/JV Agreement must clearly spell out the identity of the lead member, the proportion of financial involvement of the respective members and must state unequivocally that an action by the lead member will bind all the other members, jointly and severally, irrespective of their respective financial involvements in the Consortium/JV. An attested true copy of a legally binding Consortium/JV Agreement must be submitted along with the technical bid.
- It should be clearly mentioned in the Consortium/JV agreement that if any Consortium/JV gets selected as the successful bidder then none of the members can exit the Consortium/JV or get replaced till the project is executed. Any deviation or violation on part of the successful Consortium/JV will cause it to forfeit the Security Deposit. Any change in the membership of the Consortium/JV be required to be made by the members of the Consortium/JV, the same shall be done with the prior consent of Bidhannagar Municipal Corporation subject to the conditions as may be stipulated by them in this regard.
- The applicant or any member of the Consortium/JV should not be blacklisted/terminated/debarred by any Municipal Corporation in India, State Government, PSU, Government of India or Government of any foreign country. An undertaking as per Annexure 6 towards the same must be submitted by all members of the Consortium/JV dated on or after the RFP download start date.
- The lead member (for Consortium/JV) should **have an Average Annual Turnover of INR Twenty Crores Only in the last 3 financial years (FY 2016-17, FY 2017-18 and FY 2018-19)**. Balance Sheets and Profit & Loss Statements for the 3 Financial Years, as mentioned above, must be submitted. Also, a certificate

from the auditor must be submitted clearly mentioning the annual turnover for the 3 Financial Years as mentioned above. In addition, each member of the consortium/Joint venture should have at least an average annual turnover of INR 5 crore in the last 3 financial years (FY 2016-17, FY 2017-18 and FY 2018-19) and provide audited financial statements to qualify the same.

- All members of the consortium/joint venture should have positive net worth of minimum INR 25,00,000 (INR twenty five lakhs) in the preceding financial year (FY 2018-19)
- Every member of the consortium/Joint venture should have availability of Liquid assets and/or availability of credit facilities of no less than INR 12,50,000 (INR twelve lakhs fifty thousand) at the time of submission of this bid, wherein, liquid assets means the assets which are readily available to convert into cash within a short span of time, i.e; within 6 months. The bidder shall furnish Certificate for availability of Liquid asset duly certified from its statutory auditor/ certificates from banks for meeting the fund requirement to this effect.
- The applicant or any member of the Consortium/JV (in case of Consortium/JV) should have **the necessary credentials as mentioned in the eligibility criteria (even for technical evaluation)**
- Bidder or Bidder’s Parent Company or Subsidiaries must satisfy the qualification criteria described below:

“A parent company is company that owns 100% of the outstanding voting stock in another company (second company) and controls management and operation of the second company by influencing or electing its board of directors; the second company being deemed a subsidiary of the parent company”. Under the definition of a ‘parent company’, a bidder that is a subsidiary can have only one parent company. ‘Bidders’ using the contractual experience of the Parent Company or Subsidiaries must satisfy the criteria stated below for the Parent Company or Subsidiary. A failure to meet this criterion shall result in rejection of the bid. A failure to furnish the Parent Company Guarantee (TECH-1) or the Subsidiary Company Guarantee(s) (TECH-2) as appropriate, shall result in the rejection of the tender.

- Copies of the Work Order/ Agreement/ Contract Copy and Work Completion Certificates between the participating bidder and the client as mentioned above must be submitted to fulfil this criterion.

Technical Capability

For demonstrating technical capacity (“the technical capacity”), the bidder has to comply with both of the following conditions below:

- Should have handled, during preceding five financial years prior to the due date of this bid submission, projects as mentioned in sub-clause (i) above, atleast:
 - (a) One Project of Minimum 100,000 Metric Ton; Or,
 - (b) Multiple Projects (more than one) of aggregate 50,000 Metric Ton each
- In case an eligible project for accessing “the technical capacity” has been jointly executed by the Bidder (as part of a Consortium/JV), then the entity claiming such eligibility should satisfy both of below conditions:
 - (a) Have held minimum 51% share in the project for which the experience is being claimed the claiming entity shall produce proof of percentage shareholding in the project for which experience is being claimed.
 - (b) The project shall be qualified as ‘eligible project’ for “the technical capacity only if the percentage shareholding in the project multiplied with the total project capacity is satisfying the criteria laid down in pre-qualification criteria

- The eligible projects claiming “the Technical Capacity” should have been executed (and/or ongoing) for any Local Body/ any Government / Semi-Government Organizations / Public Sector Undertakings in India with direct contract with them. For completed projects, completion certificate from the ULB, signed by executive engineer shall be submitted along with the bid. For ongoing projects, the payment certificate or running bills (with mentioned of quantity), duly certified by an official not below the grade of executive engineer/ finance officer, should be furnished.

Financial Capacity

For demonstrating the financial capacity (“the Financial Capacity”), the bidder has to comply with each of the following conditions:

- (i) Minimum average turnover of INR 20,00,00,000 (INR twenty crore) in the preceding five financial years from the due date of submission of this bid;

One bid per Bidder

A Bidder is eligible to submit only one Bid for the Project in entire bidding process either individually or as a member of any one Consortium/JV. Applicant/Bidder shall not be entitled to submit another bid either individually or as a member of any other Consortium/JV, as the case may be.

Cost of Bidding

The Bidders shall be responsible for all the costs associated with the preparation of their Bids and their participation in the Bidding Process. The Authority will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

Site Visit and verification of Information

Prior to submitting the Proposal, the Bidders are advised to visit and examine the project site and its surroundings, obtain and ascertain for themselves all technical data, and other information necessary for preparing their Proposal (bid) including carrying out necessary technical surveys, field investigations, assets condition assessment etc. at its own cost and risk. Bidders are encouraged to submit their respective Bids after visiting the Project site/area to ascertain the ground situation, coverage, quality of assets or any other matter considered relevant by them. The Bidders shall be deemed to have full knowledge of the site conditions, whether physically inspected or not, if Bidder submits a Proposal for this project.

For the above purpose, the Bidders may approach the Authority for assistance during any site visit. The Bidders shall be responsible for all arrangements and shall release and indemnify the Authority and/or any of its agencies/consultants/advisors from and against all liability in respect thereof and shall be solely responsible for any personal injury, loss of or damage to property or any other loss, damage, costs or expenses, however caused, which, but for the exercise of such permission, would not have arisen due to this RFP.

It shall be deemed that by submitting a Bid, the Bidder has:

- (i) Made a complete and careful examination of the Bidding Documents;
- (ii) Received all relevant information;
- (iii) Acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the Bidding Documents or furnished by the Authority and shall not be a basis for any claim for compensation, damages, extension of time of performance of its obligations, loss of profit etc. from the Authority, or a ground for termination of the Contract Agreement;
- (iv) satisfied itself about all matters, things and information necessary and required for submitting an informed Bid, execution of the Project in accordance with the Bidding Documents and performance of all of its obligations there under;

Pre-Bid Meeting

The bidders or their official representatives are invited to attend a pre-bid meeting. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage. The date, time and address of the Pre-bid meeting shall be as specified in the bid data sheet.

Bidders requiring any clarification on the bidding documents or questions on any matter that may be raised at that stage, may send their queries in written, addressed to contact person as mentioned in the Bid Data Sheet, latest by one day before the pre-bid meeting date mentioned in the bid data sheet. The responses of the Authority will be uploaded only on the Website <https://www.bmcwbgov.in> and shall not be communicated separately to the bidders.

The Authority shall endeavor to respond to the questions raised or clarifications sought by the Bidders. However, the Authority reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring the Authority to respond to any question or to provide any clarification which will have material adverse effect on the bidding outcome.

The Authority may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by the Authority shall be deemed to be part of the Bidding Documents. Verbal clarifications and information given by Authority or its employees or representatives shall not in any way or manner be binding on the Authority.

Amendment in the Bidding Document

At any time prior to the deadline for submission of proposals, the Authority may amend the RFP documents, including any contractual document, by issuing an Addendum.

Any Addendum thus issued shall be part of the RFP documents and shall be published on the website <https://www.bmcwbgov.in>. The Authority may communicate in writing by mail or by fax to all short-listed

Bidders to whom the RFP documents are issued. The Authority bears no obligation for any bidder not receiving the information of the addendum issued to this RFP for any reason whatsoever.

Conflict of Interest

A Bidder shall not have the conflict of interest (the “Conflict of Interest”) that affects the Bidding Process. Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, the AUTHORITY shall forfeit and appropriate the Bid Security or Performance Security the 5% of contract value will be the value of performance security – Refer to Form -12 of the RfP), as the case may be. Without limiting the generality of the above, a Bidder shall be considered to have a ‘conflict of interest’ that affects the ‘Bidding Process’, if:

- (i) Such Bidder (or any constituent thereof) and any other Bidder (or any constituent thereof) have common controlling shareholders or other ownership interest;
Or
- (ii) A constituent of such Bidder is also a constituent of another Bidder;
Or,
- (iii) Such Bidder receives or has received any direct or indirect subsidy from any other Bidder, or has provided any such subsidy to any other Bidder;
Or
- (iv) Such Bidder has the same legal representative for purposes of this Bid as any other Bidder;
Or
- (v) Such Bidder has a relationship with another Bidder, directly or through common third parties, that puts them in a position to have access to each other’s information about, or to influence the Bid of either or each of the other Bidder.

A Bidder shall be liable for disqualification and forfeiture of Bid Security or Performance Security and termination of contract as the case may be, if a conflict of interest on part of Bidder is discovered by the Authority during the Bidding Process or subsequent to the (i) during the bidding process, or (ii) issue of letter of award (LoA) (To be awarded within 10 days of opening of the Financial Bid) or (iii) execution of the Contract Agreement.

3. Preparation of Bids

Procedure for Participation in Tendering

Registration of Bidders on e-Tendering System

All the bidders must register on the website <https://www.bmcwb.gov.in>. User-id/contractor-id and password will be provided to the bidders on their registered e-mail id after completing the registration process. After signing in through the user-id/contractor-id, the bidder can download the bidding document and participate in further bidding process. For more details on the e-tendering procedure, the bidders may refer the information provided on the website <https://www.bmcwb.gov.in>.

Digital Certificate

The bid submitted online should be signed electronically with a Digital Certificate to establish the identity of the bidder submitting the bid online. For more details on the process of getting a digital certificate and signing the bid document through a digital certificate, the bidders are advised to refer the information provided on the website <https://www.bmcwb.gov.in>.

Key Dates

The bidders are strictly advised to follow the time schedule (Key dates) of the bid of their side for tasks and responsibilities to participate in the bid, as all the stages of each bid are locked before the start time and date and after the end time and date for the relevant stage if the bid is set by the Authority.

Preparation and Submission of Bids

The bidders have to prepare their bid online, encrypt their bid data in the Bid forms and submit the bid. All the envelopes and documents related to the bid required to be uploaded as per the time schedule mentioned in the key dates provided in this RFP document after signing of the same by the Digital Signature of their authorized representatives.

Note:

- (i) Bidders are requested to visit our e-tendering website regularly for any clarifications and/or due date extension or corrigendum.*
- (ii) Bidder must positively complete the online e-tendering procedure.*
- (iii) The Authority shall not be responsible in any way for delay/difficulties/inaccessibility of the downloading facility from the website for any reason whatsoever.*
- (iv) In case, due date for submission & opening of tender happens to be a holiday, the due date shall be shifted to the next working day for which no prior intimation will be given.*
- (v) The Authority reserves the right for extension of due date of opening of technical bid.*

Bid Validity Period

The bids shall remain valid for a period specified in the RfP from the due date of bidding as prescribed by the Authority. The validity of the bid can be extended by mutual consent in writing.

Bid Document Fees

The Bid Document shall be available for download to concerned eligible bidders immediately after online release of the bids and upto scheduled time and date as set in the key dates. The bid document can be downloaded free of cost; however, the bidders have to pay Bid document fees, of the amount as mentioned in the bid data sheet, at the time of their online bid submission. The payment for the cost of bid document shall be made online through Debit/Credit card, Net banking or NEFT Challan as per the instruction provided on the website.

Earnest Money Deposit

The Bidder shall furnish, as part of his Bid, an Earnest Money Deposit (EMD) of the amount as mentioned in bid data sheet of the RFP document. The EMD must be submitted online through Debit/Credit card, Net banking or NEFT Challan as per the instructions provided on the website <https://www.bmcwb.gov.in>

No interest shall be payable on the EMD. The Bidder shall bear the cost relating to providing its EMD.

Any Bid not accompanied by the EMD shall be rejected by the Authority as being a non-responsive Bid.

The EMD of unsuccessful Bidders will be returned within 30 days of the date of finalization of successful Bidder or signing of the contract agreement with the successful bidder whichever is later. If the Bid is cancelled for any reason whatsoever, the EMD shall be returned to all the bidders within 30 days from the date of such cancellation.

The EMD of the successful Bidder will be retained by the Authority and returned after 15 days of signing of contract agreement and furnishing the performance guarantee by the successful bidder. The successful bidder shall ensure that its EMD remains valid during such period.

The EMD will be forfeited if:

- (i) Any bidder withdraws its bid during the validity period of the Bid;
- (ii) The successful Bidder fails to sign contract agreement or submit performance guarantee, as the case may be.
- (iii) The Authority finds out that the bidder has involved in corrupt and fraudulent practice or has given any material misrepresentation in its bid knowingly or unknowingly
- (iv) Any other reason thereof mentioned in this bid document.
- (v) The Bidders fails to comply with the Bid process

Language of Bid

The bid and all related correspondence and documents shall be written in the English language. Supporting documents and printed literature furnished by the Eligible Bidder with the Proposal may be in any other language if they are accompanied by an appropriate translation into English.

Supporting materials that are not translated into English shall not be considered. For the purpose of interpretation and evaluation of the Proposal, the English language translation shall prevail.

4. Submission of Bids

Online submission of Bids

The bidders must submit their respective bids online, as per the instructions provided on the website <https://www.bmcwb.gov.in> for online submission of bids. The bidders shall submit their bids fully completed in all respects on or before the due date of bid submission after signing of the same by the Digital Signature of their authorized representatives. The bids submitted online by the Bidder shall be in the following part:

Part 1: Responsiveness and Technical Bid

Part 2: Price bid

Bid Due Date

The due date and time of the bid submission is as mentioned as follows:

31st December 2019, at 3:00 PM

Pre bid conference: 30th November 2019 at 3:00 pm at BMC Conference room

The Online Bid and the physical bid should be submitted on or before the due date of bid submission.

The Authority may, in its sole discretion, extend the Bid Due Date by issuing an Addendum "while extending the Bid Due Date on account of an addendum, the Authority shall have due regard for the time required by Bidders to address the amendments specified therein. In the case of significant amendments, at least 15 (fifteen) days shall be provided between the date of amendment and the Bid Due Date, and in the case of minor amendments, at least 7 (seven) days shall be provided."

BMC will publish the Addendum on the website of <https://www.bmcwb.gov.in>

Withdrawal, Substitution and Modification of Bids

Bidders can withdraw and modify their respective online submitted bid still the end of the due date of bid submission. The Bidder will not be able to modify a Bid after the due date of submission of this Bids. The bid for which withdrawal request has been received by the Authority after the due date of bidding shall be declined from the bidding process. In the event of withdrawal of a Bid by the Bidder, after the due date of its submission, the Authority reserves the right to forfeit the EMD of the bidder at its sole discretion.

5. Bid Submission

Technical Bid Submission

The checklist of documents to be submitted as a part of technical proposal by the responsive bidders will be as per the followings:

Checklist of documents to be submitted for the responsiveness evaluation under Technical Bid

1. This RFP document, with all pages signed by the Authorized Signatory
2. Payment Receipt of EMD
3. Power of Attorney or Company Board Resolution establishing the Authorized Signatory
4. Certificate of Incorporation/ Registered Partnership Deed
5. Covering Letter
6. General Information of the Bidder
7. Credentials of the Bidder along with relevant Work Orders, Agreements and Completion/Commissioning Certificates
8. Financial Capabilities of the Bidder
9. Undertaking on Non-Judicial Stamp Paper stating the Bidder is Not Blacklisted , Bankrupt and debarred for any unsatisfactory performance
10. Valid Scanned copies of the following documents:
 - a. Trade License /Certificate of Enlistment
 - b. PAN Card
 - c. Professional Tax Registration Certificate
 - d. Goods and Service Tax (GST) registration certificate mentioning the 15 digit Goods and Service Tax Payer Identification Number under the GST Act 2017
11. Income Tax Return Certificate for the Financial Years 2017-18
12. Others – all documents as mentioned in the table “checklist of documents as prequalification criteria”

Financial Bid Submission

Financial bid shall be submitted as per the BOQ format given in the financial bid form. The bidder shall have to quote rates inclusive of GST (as per prevailing applicable rates), all duties, taxes and other levies.

Technical and Financial Bid Evaluation

Technical Bid Evaluation

Once the above all documents (which are part of technical bid) are found in order, the responsive bidders shall be called for a presentation, which comprises 100 marks. The presentation shall be framed within five numbers of slides.

Slide	Contents	Marks
Slide 1	Experience of the firm on the similar Biomining or dumpsite closure & reclamation projects (in past 5 years or ongoing)	10
Slide 2	Technical details of proposed Biomining & reclamation - approach & methodology inclusive of manpower, machinery, process, steps, timelines	20
Slide 3	Detailed disposal strategy and mechanism for inert/rejects, combustible, any others etc	30
Slide 4	Detailed quantity and quality assurance mechanism of end product and its utilization strategy; laboratory testing	20
Slide 5	Environmental safeguard & EHS compliance statement and action/management plan, adhering to the prevailing rules, laws, guidelines and orders of MSW 2016, MoEFCC, CPCB, SPCB & other competent statutory authorities such as NGT etc	20

Technical Proposals shall be evaluated as per the evaluation criteria of combined quality (technical) and cost (financial) based solution. For this purpose first the technical proposal shall be opened for evaluation. The technical evaluation shall be done on the responsiveness and a technical presentation.

Financial Bid Evaluation

The minimum technical cut off score is 60. Bidders, whose technical proposal is found responsive and the technical score is found equal and more than 60 marks, shall be considered for opening of financial proposal. Financial proposal for the bidders who are not found responsive or secure below cut off marks, shall not be considered for further evaluation.

Financial Proposals shall be given scores as follows: $Pf = 100 \times Fm/F$

Where:

- Pf is Financial Score
- Fm is the Lowest Bid Price
- F is the price of the proposal under consideration, quoted by other bidders

Overall or Total Bid Evaluation

Overall evaluation and selection of bidder will be based upon the composite score of Financial and Technical evaluation. The weightage for Technical Proposal and Financial Proposal has been given 80% and 20% respectively. The Eligible Bidder getting highest composite score would be declared Successful.

Clarifications

To facilitate evaluation of Proposals the Authority may, at its sole discretion, seek clarifications from any Bidder during the evaluation period. Such clarification(s) shall be provided within the time specified by the Authority for this purpose. Any request for clarification(s) and all clarification(s) shall be in writing. If a Bidder does not provide clarifications sought within the prescribed time, its Proposal shall be liable to be rejected. In case the Proposal is not rejected, the Authority may proceed to evaluate the Proposal by construing the particulars requiring clarification to the best of

its understanding, and the Bidder shall be barred from subsequently questioning such interpretation of the Authority.

Bidders are advised that the evaluation of Proposals will be entirely at the discretion of the Authority. Bidders will be deemed to have understood and agreed that no explanation or justification on any aspect of the Bidding Process or selection will be given.

Any information contained in the Proposal shall not in any way be construed as binding on the Authority, its agents, successors or assigns, but shall be binding against the Bidder if any Project is subsequently awarded to it under the Bidding Process based on such information.

The Authority reserves the right not to proceed with the Bidding Process at any time without notice or liability and to reject any Proposal without assigning any reasons.

Confidentiality

The Authority shall ensure that the rules for the bidding proceedings for the Project are applied in a non-discriminatory, transparent and objective manner. The Authority shall not provide to any Bidder information with regard to the Project or the bidding proceedings, which may have the effect of restricting competition.

Information relating to the examination, clarification, evaluation, and recommendation for the short-listed pre-qualified Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising the Authority in relation to or matters arising out of or concerning the Bidding Process. The Authority will treat all information, submitted as part of Proposal, in confidence and will require all those who have access to such material to treat the same in confidence. The Authority may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or the Authority.

Any effort by a Bidder to influence Authority's evaluation of Bids or award decisions will result in the rejection of the Bidder's Bid.

Award of Contract

The Authority shall notify the successful bidder by issuing a 'Letter of Acceptance' (LOA) that his bid has been accepted.

The successful Bidder shall acknowledge his acceptance of the LoA issued by the Authority within 7 (seven) days as evidenced by signing and sending a copy of the LoA issued. In the event the duplicate copy of the LoA duly signed by the Authorized signatory of the Selected Bidder is not received within the stipulated date, the Authority may, unless it consents to extension of time for submission thereof, appropriate the EMD of such Bidder on account of failure of the Selected Bidder to acknowledge the LoA.

Performance Security

Prior to the signing of the contract agreement, the successful Bidder shall have to furnish Performance Security to the Authority in the form of bank guarantee (“the Performance Bank Guarantee” (PBG)) issued by a nationalized / scheduled bank located in India or a reputable bank located abroad having corresponding bank in India, in the format given in Form 12, for an amount equivalent to 10% of the Contract value. The performance security of a Consortium/JV shall be in the name of the Consortium/JV.

Failure of the successful bidder to comply with the requirements of clause 5.7.1 above, shall constitute a breach of contract, cause for annulment of the award, forfeiture of the EMD, and any such other remedy the Authority may take under the contract, and the Authority may resort to awarding the contract to the next ranked bidder.

Signing of Contract Agreement

The successful bidder shall have to furnish the Performance security as directed above and sign the contract agreement within 21 days of issue of LoA.

The signing of contract agreement shall be reckoned as intimation to commencement of work. No separate work order shall be issued by the Authority to the contractor for commencement of work.

In the event of failure of the successful bidder to submit Performance Security and/or sign the Contract Agreement, his EMD shall stand forfeited without prejudice to the right of the Authority for taking action against the bidder.

Fraud and Corrupt Practices

The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process and subsequent to the issue of the LoA and during the subsistence of the Contract Agreement. Notwithstanding anything to the contrary contained herein, or in the LoA or the Contract Agreement, the Authority shall reject a Bid, withdraw the LoA, or terminate the Contract Agreement, as the case may be, without being liable in any manner whatsoever to the Bidder or Contractor, as the case may be, if it determines that the Bidder or Contractor, as the case may be, has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process. In such an event, the Authority shall forfeit and appropriate the EMD or Performance Security is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices.

For the purposes, the following terms shall have the meaning hereinafter respectively assigned to them:

- (i) **Corrupt Practice** means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly with the Bidding Process or the LoA or has dealt with matters concerning the Contract Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or (ii) engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LoA or after the execution of the Contract Agreement, as the case may be, any person in respect of any matter relating to the Project or the LoA or the Contract Agreement, who at any time has been or is a legal, financial or technical adviser of the Authority in relation to any matter concerning the Project;
- (ii) **Fraudulent practice** means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;

- (iii) **Coercive practice** means impairing or harming or threatening to impair or harm, directly or indirectly any person or property to influence any person’s participation or action in the BiddingProcess;
- (iv) **Undesirable Practice** means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict ofInterest;
- And;
- (v) **Restrictive practice** means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the BiddingProcess.

6. Scope ofWork

The current project intends to undertake the works required for Dumpsite Land Reclamation throughBio-mining of old Dumped Municipal Solid Waste/Legacy Waste, resourcerecoveryandScientificdisposalofresidualsolidwaste from MollarBheri disposal site. The contract shall be awarded to the successful bidder (“the contractor”) for a periodof 15 monthsreckoned fromthedate ofsigningofcontractagreementorthedateofissue of Consent to Establish (CTE) to the project, whichever is later. The Authority shall appoint an Engineer (the “Engineer-in charge”) for overall supervision, monitoring and certification of the works executed by the contractor. The brief scope of work to be carried out by the selected contractor during the execution of the intendedproject includes, but not limited to, the following component:

The detailed scope of work are specified as follows:

- Removal of around 3 (three) lakhs MT of legacy waste from 25 acre of area dumped at the dumpsite at Mollar Bheri through Biomining process and disposing the material retrieved from the legacy waste without stacking them at site for not more than 20 days, including the cost of Electrical consumption and required field arrangements and finally reclaiming the land occupied by the legacy waste to the useful purpose of Bidhannagar Municipal Corporation. It is further specified that not more than 10 (ten) percent inert disposal (out of the total quantum of legacy waste) shall be allowed.
- Setting up of a weighbridge of required capacity or any other suitable system for weighing as approved by Bidhannagar Municipal Corporation for measurement of legacy waste to be processed. This weighing system shall be fully online electronic, automatic system equipped with the latest technology along with backup server facility. Data of weighing system shall be maintained properly for the entire contract period with backup server facility and shall be provided as & when required by BMC officials and other competent authorities.

Conditions for Weigh Bridge

- a. It shall be fully online electronic, automatic system equipped with the latest technology along with backup server facility. Data of weighing system shall be maintained properly for the entire contract period with backup server facility and shall be provided as & when required by BMC officials and competent

authorities.

- b. It shall be operated in CCTV surveillance with data storage of entire contract period. For CCTV surveillance High Definition IP based cameras in adequate numbers (as directed by BMC) shall be provided by the Operator.
 - c. CCTV Recordings of operation of weighing system shall be provided as and when required by BMC officials and competent authorities.
 - d. Any malfunctioning in operation of weighing system shall be the responsibility of the Operator.
 - e. In case any malfunction/technical problem in the functioning of weighing system, the same shall be rectified by the Operator within period of 24 hrs. During this period of failure, weighing of SW shall be carried out at private weighbridge located outside which shall be approved by BMC at the Operator’s cost and no additional charges shall be paid by BMC.
- The contractor shall carryout Total Station Survey of complete project site including area earmarked in which Bio-mining is to be done. Total Station Survey shall be certified by the Engineer-in-charge. The survey shall be done at the time of possession of the site as well as at every three months of interval and also at the end of the wntore reclamation work. The output of the survey shall be shared with the implementing authority and volume of biomined portion and volume of remaining portion shall be clearly presented in the drawing. The area earmarked by Authority for Reclamation through Bio-mining shall be considered as 100% area for the scope ofwork.
 - Disposal of the recovered material from the legacy waste to the identified vendors without stocking them at site for more 20days.
 - The Operator shall disintegrate the legacy waste for Bio mining process using the required Bio culture.
 - The Operator shall execute the bio mining process to the legacy waste in complete adherence to the rules and regulation of the West Bengal Pollution Control Board, SWM Rules 2016 and all other applicable rules and regulations.
 - The bidder should use methods and processes to stabilize of the open dumpsite, control of foul odour and other such eco-friendly and nonpolluting processes for minimizing the impact of the bio mining activity in the adjacent areas of the dumpsite.
 - Removal of biomined and segregated inert/reject from the site and disposal of the same shall be bidders responsibility at their cost with proper environmental measures as per the provision of prevailing rules, laws, guidelines and orders of MSW 2016, MoEFCC, CPCB, SPCB & other competent statutory authorities such as NGT etc.
 - Packing, storing, stacking, selling, diverting for recycling, marketing and recycling of all Useful Material within twenty days of segregation at the cost of the Contractor, without accumulation in thestoragefacilityattheprojectsitebeyond twenty days, and complying all prevailing rules, laws, guidelines and orders of MSW 2016, MoEFCC, CPCB, SPCB & other competent statutory authorities such as NGT etc.

- The revenue or the income from the sale of the segregated Useful Material such as reusable and recyclable, Compost, soil conditioner, raw RDF, C&D, Soil or any other by-product materials shall go to the contractor's account. However, before selling their covered material the Contractor, at its own cost, will conduct a lab testing of such materials from an NABL accredited lab, for the parameters as recommended by the Engineer-in-charge or applicable rules/guidelines, and submit the report of the same to the Engineer-in-charge. The contractor shall initiate the sale or disposal process of the such material by-products only after the acceptance/approval of the engineer-in-charge. The parameters of the biomined waste for laboratory analysis will be but not limited to organic fraction, combustible fraction, inert fraction and calorific value, density etc.
- The bidder should use methods and processes to excavating the soil which lost its stability due to legacy waste dumping with necessary dewatering works in the portion of the land earmarked and segregate the excavated legacy waste in the land portion earmarked, into as many kinds and categories as possible.
- Selling, diverting for recycling, marketing and recycling the excavated materials within 20 (twenty days) of segregation, without any accumulation in the storage facility at the project site will be the responsibility of the bidder.
- All work should be done as per the guidelines for disposal of Legacy waste published by CPCB in Feb'19.
- Creation and maintenance of infrastructure, facilities and amenities at Bidder's risk and cost, for sieving the excavated legacy waste and storing the segregated materials before selling/taking out them from the project site.
- Construction of office room facilities for the Project, arrangement for water supply and power supply at the site.
- Carrying out the entire project work in accordance with the detailed plan of action presented by bidder.
- The Contractor shall conduct its own due diligence for site investigation, analyzing the characteristics, composition and quantum of the waste at the Project site.
- The Operator is required to submit the action plan for bio mining operations during monsoon season and during emergencies.
- Deployment of necessary manpower, materials, equipment, tools and construction of plants and monsoon sheds and creation of facilities for handling, separating, segregating, storing and weighing facilities for the operation of the plant and using only covered body vehicles for the transportation of materials taken out not limited to
 - a. Installation of trommel of required sieve sizes with necessary shredder, screener, hopper, conveyors with adequate capacity of motors and pulleys.
 - b. Engaging chain dozer/ Excavator and loosening the legacy waste.
 - c. Spraying the bio culture over the loosened partially degraded legacy waste and to stabilize the same.
 - d. Spraying deodorizer over the waste as required to control odour.
 - e. Shifting and loading of the legacy waste into the hopper and segregating the materials size wise and type wise by engaging the manpower on both sides of conveyors with proper safety precautions.
 - f. Processing the legacy waste on everyday basis and segregating the recyclables material and the enriched soil, debris like stone etc. Shredding of the remaining non saleable RDF material with plastic etc which has the calorific value of at least to 1500 kcal/kg and converting them into RDF.

- g. Windrow making of partially degraded wastes for stabilization.
 - h. The material collected shall be disposed of by engaging closed vehicles
 - i. Other wastes like Hazardous Waste, E-Waste; Bio-medical Waste (if any) and Construction & Demolition Waste shall be managed by the Operator as per the guidelines in close coordination with BMC, under the relevant rules & regulations as amended from time to time.
 - j. Monitoring and recording all the activities to account for the quantity and quality of recovered materials.
- Create all facilities and make arrangements for controlling the emission, pollution and contamination of the environment including but not limited to control of dust, odour, air quality, water quality and noise pollution.
- The Bidder shall adhere to Health and Safety norms as per the industrial standards in the work area and the site premises.
- Setting up of provision for safe leachate management or containment mechanism (appeared during the Biomining process)
- Operator should provide sufficient machineries / equipment to clear the dumpsite as per the timelines mentioned in this tender document.
- Providing security arrangement for the plan project site, machineries, equipment etc.
- The contractor shall submit the specifications and the drawings showing the proposed works and Temporary Works as required to the Employer, who is to approve them if they comply with the Specifications and Drawings.
- The Operator shall be responsible for the design of the Works
- BMC’s approval shall not alter the Operator’s responsibility for design of all the project’s work including Temporary Works
- The Operator shall be responsible for the safety of all activities on the Site.
- Using only covered body vehicles for the transportation of materials at the cost of the Contractor.
- Anything of historical, anthropological, geological or other interest or of significant value unexpectedly discovered on the Site is the property of BMC. The Operator is to notify the BMC of such discoveries and carry out the BMC’s instructions for dealing with them.
- The Operator shall allow the any person authorized by the BMC to access the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.
- The Operator shall carry out all instructions of the BMC which comply with the applicable laws where the Site is located.
- Carry out the work in accordance with the provisions of the Solid Waste (Management & Handling) Rules, 2016, amended from time to time and all other applicable rules & regulations at the cost of the Bidder.
- The Bidder shall be responsible for the electrical energy consumption process and subsequent remittance payment for the electricity bill.

- The Bidder shall be responsible for the payment towards fleet management in order to dispose the material recovered from the legacy waste
- The compost/ good earth recovered shall be weighed and thereafter the Operator is free to sell it.
- The Bidder shall scientifically dispose the inert not exceeding 10 (ten) percent of the total quantum of legacy waste at the location specified by BMC in accordance with provisions of the Solid Waste (Management & Handling) Rules, 2016, amended from time to time and all other applicable rules & regulations. All transportation cost has to be borne by the bidder.
- The bidder has to transport the segregated output to the processing plant at its own cost.
 - (i) The land shall be reclaimed to its original state prior to dumping of waste i.e. all the legacy waste must be removed till it reaches the surface of the original land as per the official map/records. The bidder shall record of the residual solid waste disposal quantity (inCubic meter, and metric tons along with its density), on monthly basis.
- The Bidder shall maintain a record of the daily processed legacy waste measured in the Weigh Bridge. The Operator shall also keep proper record of the all the legacy waste recovered and disposed of. The Bidder shall prepare all periodical reports, applicable to the Projects, as may be required by BMC, other stakeholders or the State Government etc.
- The Bidder has to carry out contour survey every month for monitoring volumetric reduction of existing dump and contour survey reports shall be submitted along with every monthly bill clearly showing monthly volumetric reduction of existing legacy waste.

Obligation of the bidder

- Prior to the start of project operations, the Bidder shall be responsible for obtaining all Statutory Clearances, Permission, Licenses, and Authorizations necessary for the Project at their own cost and Bidhannagar Municipal Corporation shall provide the assistance accordingly.
- The Bidder shall make the necessary changes in the work plan and finalize it as per discussions with BMC.
- Construction and erection of the plant and creation of other allied facilities shall be completed within 3 months from the receipt of LOA/work order. This shall include the mobilization period and time period required for getting necessary statutory clearances/permissions, and pre stabilization of waste. After this 3 months, the reclamation of the site shall be done within 12 working months.
- It is the sole responsibility of the Bidder to dispose of the rejects/inert generated during the process. Byproducts from such processing viz. recyclables, gas, energy etc shall be the property of the Operator. It is expected that e-waste, hazardous waste and recyclables such as the plastic, glass, metal etc does not any way form the part of inert waste, and shall be addressed as per the prevailing rules (MSW 2016, CPCB guideline and relevant other statutory norm)
- The Bidder shall process the legacy waste on a daily basis and the final archive shall not be kept for more than 20 days within the Project Site.

- The Bidder shall ensure that all the aspects of project and process employed, for Bio-mining thereof shall confirm with the laws pertaining to environment, health and safety aspects including rules such as SW rules 2016, policies and guidelines related thereto. The aspects relating to employee and worker safety, control mechanisms of litter, pest, fire, surface runoffs etc., needs to be followed.
- The Bidder shall hand over all the assets and take back machines/ equipment in connection to this project at the end of the project period at their own cost.
- Arrangement of water and electricity required for the project shall be the responsibility of the Bidder at their own cost. BMC shall provide assistance in this regard. However, the cost of usage shall be paid by the Operator as per actuals based on appropriate meter readings from the meters installed.
- The Bidder shall not be permitted to use the municipal land at any point of time of contract to mortgage (or) to be used as a security for mobilizing finance for this purpose (or) any other purpose.
- Submission of progress report to BMC on fortnightly, monthly and quarterly basis. The monthly and quarterly reports shall be submitted within 7 (seven) days of the subsequent month and quarter respectively.
- Environmental Standards:-
 - a. The Operator has to follow the Environmental Standards and Guidelines as mentioned below
 - i. Air Quality Monitoring: As per Solid Waste Management Rules 2016 (SWM Rules 2016) or amendments thereafter with respect to baseline site parameters.
 - ii. Noise Monitoring – As per Noise Pollution Rules 2000 or amendments thereafter with respect to baseline site parameters.
 - iii. Leachate Treatment must be made as per Solid Waste Management Rules 2016 (SWM Rules 2016) or amendments thereafter with respect to baseline site parameters.
 - iv. Odour Monitoring – As per CPCB guidelines ‘Odour Pollution & Its Control or amendments thereafter with respect to baseline site parameters.
 - v. Water Quality Monitoring - As per Solid Waste Management Rules 2016 (SWM Rules 2016) or amendments thereafter with respect to baseline site parameters.
 - vi. Aggregate Disposal- As per Solid Waste Management Rules 2016 (SWM Rules 2016) or amendments thereafter with respect to baseline site parameters.
 - vii. Guidelines for disposal of legacy waste (old municipal solid waste) by the CPCB , February 2019.
 - b. The Operator has to make all the necessary arrangement to monitor and comply all environmental standards.
 - c. The Operator may appoint a Professional Consultant/ Company approved by MoEF / NABET to achieve these standards.
- The Operator shall segregate any Hazardous waste [as defined in Hazardous and other waste (Management and Trans- Boundary movement) Rules 2016 existing inside the site and separately earmarked. BMC shall dispose of the same at WBPCB’s approved sites in

accordance with Hazardous and other waste (Management and Trans- Boundary movement) Rules 2016 or amendments thereafter.

- It is the sole responsibility of the operator to abate the odour and fire nuisance on site. The Operator has to use enzyme/herbal based products which shall help to abate the odour and flies nuisance. Necessary fire fighting vehicles shall be arranged to abate the fire nuisance. However, in case of major fire incidence, BMC may assist by providing fire fighting vehicles according to availability at that time. Necessary safety gears shall be provided by the operator to all staff working as per the good industry practice.
 - The Operator shall ensure that material which is to be transported for disposal after scientific processing is not dumped at Mollar Bheri Dumping Ground. They can make necessary arrangement like fencing or any other suitable arrangement as directed by BMC authorities to prevent such events.
 - Quality Control
- (a) **Identifying defects:** BMC shall check the Operator’s work and notify the Operator of any Defects that are found. Such checking shall not affect the Operator 's responsibilities. BMC may instruct the Operator to search for a Defect and to uncover and test any work that the Employer considers may have a Defect
- (b) **Tests:** If the Employer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.
- (c) **Uncorrected defects :** If the Operator has not corrected a Defect within the time specified by BMC, appropriate penalty has to be paid by the Operator.

Role of BMC

- BMC shall handover the dumpsite to the Operator as per the approved Work Plan. After completion of contract period (extended period as the case may be), within 3 months, the bidder has to remove the plant, machineries , equipment from the site and clear the area. There will be no lease of land to the operator nor is he permitted to raise money mortgaging the land. Operator can use the land for the purpose of this project only till contract period or termination of contract whichever is earlier.
- Initial land requirement of the Operator to set up processing plant and machineries and with natural ground level inside the dumpsite.
- Throughout the project period, BMC shall ensure that no fresh waste will be dumped during the Biomining process at the site
- BMC may facilitate all forms of support to the Successful bidder for obtaining certification/ statutory clearances required for accessing water, electricity and other utility services.

- **Provision for building ancillary facilities:** In case the Operator is required to set up ancillary facilities at site like Fuel storage, DG set etc., BMC may assist the Operator in getting the same installed at site for period of contract only. However, the necessary permissions required are to be obtained by the Operator at his cost. All handling of explosives, including storage, transport shall be carried out under the rules approved by the “Explosives Department of the Government”.

7. PaymentSchedule

Payment Mechanism

PaymentfortheworkonachievementofeachmilestoneshallbecalculatedbytheAuthoritybased on the followingformula:

Payment calculation for Work (P_w) = (WXR)

Where,

W = *Weight of Waste bio mined (feed quantity to the trommel after pre stabilization)*

R = *Quoted rate per tonnes of waste*

The Contractor shall, on completion of the particular Milestone of the work, before the 20th (twentieth) day of the Month or in case the 20th (twentieth) day of a Month is a holiday then on the following working day of such Month, submit to the Authority a statement (“the Running Bill”) providing the followingdetails:

- Items of Work Completed at site including photographic evidence of thesame
- Certificate from the Engineer-in-charge certifying the work done and milestone achieved, in terms of quantity of the feed waste (MT), quantity of the segregated output (weight of all segregated components)
- Data on laboratory test results for the output (inert quality, calorific value for combustible, organic content, density) – fortnightly
- Quarterly data and maps on topographical survey, stating the total quantum of the waste at the beginning, waste removed from the site and the remaining volume of the waste.
- The challan copy, furnishing the proof of disposal/ utilization (with date, quantity, other details) at the suitable location for the end product (inert, combustible, others if any)

The invoice may be raised on monthly basis. However the payment shall be released on quarterly basis, subject to the compliances of all clauses mentioned in the scope of work. No mobilization advance shall be made.

The Authority shall not pay interest on the bill amount, if delay occurs in the release of the payment, for any reasonwhatsoever.

LiquidatedDamage

In case the work is not completed within the stipulated period of completion of whole or part of work (achievement of milestones specified by authority) along with all such extensions which are granted to the Contractor for either Authority's default or Force Majeure, the compensation shall be

levied on the contractor at the rate of 0.05% of the contract amount per day of delay limited to maximum of 10% of contract amount.

The Authority will deduct the liquidated damages from payments due to the Contractor.

If the liquidated damage attains to a maximum of 10% of the contract amount the authority may:

- (i) Terminate the contract agreement and forfeit the EMD and the Performance Security.
- (ii) Retain the contractor on depositing the amount equivalent to the such liquidity damage of 10% of the contract amount. However, the retention of the contractor on such ground shall not free him from his liabilities for completion of the work or any future imposition of liquidity damages.

The decision of the Authority in this regard shall be final and binding upon both the parties.

Penalty for Non-Compliance

Sr. No.	Penalty Description	Penalty Amount
1.	Non-Compliance to SWM Rules 2016 and other Environmental Standards notified by regulatory authorities or as specified in the Contract.	Rs.20000/- per Incidence per day till the compliance of the failure in addition to the Penalties/ Actions imposed by various authorities.
2.	Non-provision of Site Facilities as per specifications	Rs. 10000/- per item per day
3.	Non-compliance of Safety Standards, use of Personal Protective Equipment, fire safety, slope stability while forming windrows (if any during pre stabilization process) by the workers	Rs.10000/- per Incidence per day till the compliance of the failure in addition to the Penalties/ Actions imposed by various authorities.
	Non compliance against disposal mechanism as prescribed in the scope of work (for inert, combustible or any other end product)	Rs.10,000/- per Incidence per day till the compliance of the failure in addition to the Penalties/ Actions imposed by various authorities.
4	Delay in completion	Rs 20,000/- per day beyond the scheduled working months

In case of five or more than five such instances of non compliances, bidders equipment & machinery will be forfeited and the performance bank guarantee will be revoked

Dispute Resolution and Arbitration

Any dispute between the parties arising out of this RFP Document, relating thereto, or arising therefrom will be settled by a binding arbitration in Kolkata under the Arbitration and Conciliation Act, 1996. The parties specifically agree to be bound by the decision rendered by the Sole Arbitrator and agree not to submit a dispute to any Court except as may be necessary to enforce the arbitration procedures of this clause or to enforce the decision rendered by the Sole Arbitrator or as permitted in law. The proceedings will be conducted in English. The language of the proceedings and the Award will be in English. Each party will pay its own costs.

Courts at Kolkata will alone, to the exclusion of all other Courts, have jurisdiction over all matters between the parties arising out of the present RFP Document or relating thereto.

Applicable Law

The applicable law for the purpose of this RFP is the laws of India

8. Miscellaneous

The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Kolkata shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the Bidding Process. The AUTHORITY, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to:

- (i) Suspend and/or cancel the Bidding Process and/or amend and/or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;
- (ii) Consult with any Bidder in order to receive clarification or further information including justification of financial bids submitted;
- (iii) Retain any information and/ or evidence submitted to the AUTHORITY by, on behalf of, and/or in relation to any Bidder; and/or
- (iv) Independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any Bidder.
- (v) It shall be deemed that by submitting the Bid, the Bidder agrees and releases the Authority, its employees, agents and advisers, irrevocably, unconditionally, fully and finally for many and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection herewith and waives any and all rights and/ or claims it may have in this respect, whether actual or contingent, whether present or future.

Forms for Technical Bid Submission

Form 1: Letter Comprising the Bid cum undertaking

(On Non-Judicial Stamp of INR.100)

Date:

To,

The Executive Engineer,

Dear Sir,

Sub:RFPReference No._Dated_for Selection of Contractor to execute theworkofBio-miningofolddumpsiteat_____

With reference to your RFP document dated....., I/we, have examined the Bidding Documents and understood their contents, hereby submit my/our Bid for the aforesaid Project “**Selection of Contractor for execute the work of Bio-mining of old dump site at Mollar Bheri**” and state asunder:

1. The Bid is unconditional andunqualified.
2. All information provided in the Bid and in the Appendicesis true and correct.
3. This statement is made for the express purpose of qualifying as a Bidder for the Project as explained in this RFP document.
4. I/We shall make available to the Authority for any additional information it may find necessary or require supplementing or authenticate the Bid.
5. I/We acknowledge the right of the Authority to reject our Bid without assigning any reason or otherwise and here by waive our right to challenge the same on anyaccount whatsoever.
6. We certify that in the last three years, we/any of the Consortium/JV Members have neither

failed to perform on any contract, as evidenced by judicial pronouncement or arbitration award, nor been expelled from any project or contract nor have had any contract terminated for breach on our part.

7. I/We declare that:
 - a. I/We have examined and have no reservations to the Bidding Documents, including any Addendum issued by the Authority.
 - b. I/We do not have any conflict of interest in accordance with Clauses 2.10 of the RFP document.
 - c. I/We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as defined in the RFP document, in respect of any tender or request for proposal issued by or any agreement entered in to with the Authority or any other public sector enterprise or any government, Centre or State; and
 - d. I/We hereby certify that we have taken steps to ensure that in conformity with the provisions of Clause 5.9 of the RFP, no person acting for us or on our behalf has engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
8. I/We understand that you may cancel the Bidding Process at any time and that you are neither bound to accept any Bid that you may receive nor to invite the Bidders to Bid for the Project, without incurring any liability to Bidders.
9. I/We believe that we/our Consortium/JV/proposed Consortium/JV satisfies(ies) the pre-qualify in g criteria and meet(s) the requirements as specified in the RFP document and am/are qualified to submit this Bid.
10. I/We declare that we/any Member of the Consortium/JV am/are not a Member of any other Consortium/JV submitting a Bid for the Project.
11. I/We certify that we have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which could cast a doubt on our ability to undertake the Project which relates to a grave offence that outrages the moral sense of the community.
12. I/We further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our Associates.
13. I/We undertake that in case due to any change in facts or circumstances during the Bidding Process, we are attracted by the provisions of disqualification in terms of the guidelines referred to above, we shall intimate the Authority of the same immediately.
14. We acknowledge that our Consortium/JV/proposed Consortium/JV shall bear the following

composition:

A. Lead Member: M/s.....

B. Technical Member: M/s.....

And we further undertake that above Consortium/JV composition shall be maintained till the end of this contract period or extension thereof. We further acknowledge that the lead member takes the full responsibility towards execution of the project and the terms and condition laid down in the contract agreement. *(Individual Bidder to strike out this point).*

15. I/We hereby irrevocably waive any right, which we may have at any stage at law or howsoever otherwise arising to challenge, or question any decision taken by the Authority in connection with the selection of the Bidder, or in connection with the Bidding Process itself, in respect of the above-mentioned Project and the terms and implementation thereof.
16. In the event of my/our being declared as the Selected Bidder, I/We agree to enter into a Contract Agreement in accordance with the draft that has been provided to me/us prior to the Bid Due Date. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.
17. I/We have studied all the Bidding Documents carefully and also surveyed the project area. We understand that except to the extent as expressly set forth in the Contract Agreement, we shall have no claim, right or title arising out of any documents or information provided to us by the Authority or in respect of any matter arising out of or concerning or relating to the Bidding Process including the award of Contract.
18. The Financial Bid has been quoted by me/us after taking into consideration all the terms and conditions stated in the RFP and draft Contract Agreement, our own estimates of costs and careful assessment of the site and all the prevailing and expected conditions that may affect the Bid.
19. I/We offer to the Authority a Bid Document Fees of INR 12,500 (INR Twelve Thousand Five Hundred) and EMD of 2% of project value or INR 10 lakh (INR Ten lakh), whichever is lower, submitted online as specified in this RFP document.
20. I/We agree and understand that the Bid is subject to the provisions of the Bidding Documents. In no case, I/We shall have any claim or right of whatsoever nature if the Project/Contract is not awarded to me/us or our Bid is not opened.
21. I/We hereby submit our Bid in the form as specified in the RFP document for undertaking the aforesaid Project in accordance with the Bidding Documents and the Contract

Agreement.

22. I/We agree to keep this offer valid for 180 (One Hundred Eighty) days from the Due Date of online Bid submission as specified in the RFP document or any other such duration as directed by the Authority.
23. I/We agree and undertake to abide by all the terms and conditions of the RFP document. In witness thereof, I/we submit this Bid under and in accordance with the terms of the RFP document.
24. I/we have received all the clarifications issued by the Authority.
25. I/we will abide by the terms and condition set forth in the RFP document, condition of contract and draft Contract agreement and a copy of the same bearing initial of the undersign on every page is attached herewith.
26. Notwithstanding any qualification or conditions, whether implied or otherwise, contained in our Proposal we hereby represent and confirm that our Proposal is unqualified and unconditional in all respects.

Yours faithfully,

Date:

(Signature of the Authorized Signatory)

Place:

**(Name and designation of the
Authorized Signatory)**

Name and Seal of Bidder/Lead Firm

Form 2: Format for Description of Bidder

S.No.	Particulars	Details		
		Individual Bidder Company (1)	Lead Member of Consortium/JV (2)	Technical Member of Consortium/J V (3)
1.	Name of the Bidding company			
2.	Date of incorporation and /or Commencement of Business			
3.	Brief description of the Bidder's main line of business			
4.	Details of individual (s) who will serve as the point of contact/ communication for Authority with the Bidder:			
a.	Name			
b.	Designation			
c.	Company/Firm			
d.	Address:			
e.	Mobile Number			
f.	Email Address			
g.	Fax Number			
5.	Details of Authorized Signatory of Bidder			
a.	Name			
b.	Designation			
c.	Company/Firm			
d.	Address:			
e.	Mobile Number			
f.	Email Address			
g.	Fax Number			

Note:

Column ‘1’ to be filled by the Individual Bidder and Column ‘2’ & ‘3’ to be filled by the respective members of the Consortium/JV

Form 3: Power of Attorney for Signing of Bid

Know all men by these presents, We, _____ (name of Firm and address of the registered office) do hereby constitute, nominate, appoint and authorize Mr. / Ms.

_____ Son / daughter / wife and presently residing at _____ who is presently employed with / retained by 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 (Project), proposals and other documents and writings, participating in pre-bid and other conference and providing information / responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts and undertakings consequent to acceptance of our proposal and generally dealing with the Authority in all matters in connection with or relating to or arising out of us Proposal for the said consultancy job and/or upon award thereof to us till the entering of the Agreement with the Authority.

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 _____, 2019.

For (Signature, Name, Designation and Address)

Witnesses:

1) _____

2) _____

Notarized

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 executants (s) and when it is so required the same should be under common seal affixed in accordance with the required procedure. Wherever required, the Applicant 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 Applicant.

Sample Form of Joint Venture Agreement

(For Joint and Several Liability of Joint Venture Partner)

The members(referred hereinafter as) and (referred hereinafter as) have agreed to the following :

1. So as to bid collectively and, if the Contract is to be awarded to us, to complete and fulfill the work by concluding the Contract for the(Job), for which tenders have been sought by, the Members have established a Joint Venture in the form of, the members of which will have joint and several liability.

2. If the Contract is awarded to our Joint Venture , the Contract Agreement will be signed byand

3. which is the Member in Charge of our Joint Venture is fully authorized to act in the name and on behalf of our Joint Venture and we hereby attach the resolution adopted by each of us authorizing to act on our behalf.

4. The ratio of participation in the joint venture by the Members is as follows :

..... : %

..... : %

..... : %

5. Under the provision that all the Members will be jointly and severally responsible and liable to the specific involvements and work subdivisions (if any) of the Members will be as follows :

6. The Agreement to form this Joint Venture is entered on // 20

7. This Agreement form for joint and several liability is an integral part of the Joint Venture Declaration and will be finalized in case the Contract is awarded to our partnership/legal entity prior to the signature thereof.

8. The composition of the constitution of the Joint Venture shall not be altered without the prior consent of the Employer.

.....

.....

.....

(Signature)

(Signature)

(Signature)

FORM TECH -1 -Draft Form for Undertaking on Parent Company Guarantee

(To be furnished in Company's letterhead)

Name of Contract/Contract No.; _____

Name and address of Employer: _____

_____ (together with successors and assigns)

We have been informed that _____ (Name of Contractor) (hereinafter called the "Contractor") is submitting an offer for such Contract in response to your invitation, and that the conditions of your invitation require his offer to be supported by a parent company guarantee.

In consideration of you, the Employer, awarding the Contract to the Contractor, we

_____ (name of parent company) irrevocably and unconditionally guarantee to you, as a primary obligation, (i) the due performance of all the Contractor's obligations and liabilities under the Contract, including the Contractor's compliance with all its terms and conditions according to their true intent and meaning; (ii) for the entire duration of the Contract, we will make available to the Contractor our technical capacity, expertise and resources required for the Contractor's satisfactory performance of the Contract; and (iii) that we are fully committed, along with the Contractor, to ensuring a satisfactory performance of the Contract.

If the Contractor fails to so perform his obligations and liabilities and comply with the Contract, we will indemnify the Employer against and from all damages, losses and expenses (including legal fees and expenses) which arise from any such failure for which the Contractor is liable to the Employer under the Contract. This guarantee shall come into full force and effect when the Contract comes into full force and effect. If the Contract does not come into full force and effect within a year of the date of this guarantee, or if you demonstrate that you do not intend to enter into the Contract with the Contractor, this guarantee shall be void and ineffective. This guarantee shall continue in full force and effect until all the Contractor's obligations and liabilities under the Contract have been discharged, when this guarantee shall expire and shall be returned to us, and our liability hereunder shall be discharged absolutely.

This guarantee shall apply and be supplemental to the Contract as amended or varied by the Employer and the Contractor from time to time. We hereby authorise them to agree any such amendment or variation, the due performance of which and compliance with which by the Contractor are likewise guaranteed hereunder.

Our obligations and liabilities under this guarantee shall not be discharged by any allowance of time or other indulgence whatsoever by the Employer to the Contractor, or by any variation or suspension of the works to be executed under the Contract, or by any amendments to the Contract or to the constitution of the Contractor or the Employer, or by any other matters, whether with or without our knowledge or consent.

This guarantee shall be governed by the law of the same country (or other jurisdiction) as that which governs the Contract and any dispute under this guarantee shall be finally settled under the Rules of Arbitration provided in the Contract. We confirm that the benefit of this guarantee may be assigned subject only to the provisions for assignment of the Contract,

Signed by: _____

Signed by: _____

(signature)

(signature)

(name)

(name)

(Position in parent company)

(Position in parent company)

Date: _____

Note: A failure to furnish the Parent Company Guarantee (TECH-1) as appropriate, shall result in the rejection of the tender.

FORM TECH – 2 - Draft Form for Undertaking on Subsidiary Guarantee
(To be furnished in Company's letterhead)

Name of Contract/Contract No.; _____

Name and address of Employer: _____

_____ (together with successors and assigns)

We have been informed that _____ (Name of Contractor) (hereinafter

called the "Contractor") is submitting an offer for such Contract in response to your invitation, and that the conditions of your invitation require his offer to be supported by a **Subsidiary** company guarantee.

In consideration of you, the Employer, awarding the Contract to the Contractor, we

_____ (name of **Subsidiary** company) irrevocably and unconditionally guarantee to you, as a primary obligation, (i) the due performance of all the Contractor's obligations and liabilities under the Contract, including the Contractor's compliance with all its terms and conditions according to their true intent and meaning; (ii) for the entire duration of the Contract, we will make available to the Contractor our technical capacity, expertise and resources required for the Contractor's satisfactory performance of the Contract; and (iii) that we are fully committed, along with the Contractor, to ensuring a satisfactory performance of the Contract.

If the Contractor fails to so perform his obligations and liabilities and comply with the Contract, we will indemnify the Employer against and from all damages, losses and expenses (including legal fees and expenses) which arise from any such failure for which the Contractor is liable to the Employer under the Contract. This guarantee shall come into full force and effect when the Contract comes into full force and effect. If the Contract does not come into full force and effect within a year of the date of this guarantee, or if you demonstrate that you do not intend to enter into the Contract with the Contractor, this guarantee shall be void and ineffective. This guarantee shall continue in full force and effect until all the Contractor's obligations and liabilities under the Contract have been discharged, when this guarantee shall expire and shall be returned to us, and our liability hereunder shall be discharged absolutely.

This guarantee shall apply and be supplemental to the Contract as amended or varied by the Employer and the Contractor from time to time. We hereby authorise them to agree any such amendment or variation, the due performance of which and compliance with which by the Contractor are likewise guaranteed hereunder.

Our obligations and liabilities under this guarantee shall not be discharged by any allowance of time or other indulgence whatsoever by the Employer to the Contractor, or by any variation or suspension of the works to be executed under the Contract, or by any amendments to the Contract or to the constitution of the Contractor or the Employer, or by any other matters, whether with or without our knowledge or consent.

This guarantee shall be governed by the law of the same country (or other jurisdiction) as that which governs the Contract and any dispute under this guarantee shall be finally settled under the Rules of Arbitration provided in the Contract. We confirm that the benefit of this guarantee may be assigned subject only to the provisions for assignment of the Contract,

Signed by: _____

(signature)

(name)

` (Position in subsidiary company)

Date: _____

Signed by: _____

(signature)

(name)

(Position in subsidiary company)

Note: A failure to furnish the Subsidiary Company Guarantee(s) (TECH-2) as appropriate, shall result in the rejection of the tender.

Form 4: Form for Financial Pre-Qualification

A. Turnover

Financial Year	Annual Turnover (in INR)
Year1	
Year2	
Year3	
Year4	
Year5	
Average Turnover	

B. Net Worth as on Year1 (Financial Year preceding to Due date of Bidding): INR

Note:

- 1. The financial year shall mean the period commencing from April1 of any given year to March31 of the succeeding year.*
- 2. The Bidder shall provide the Audited Annual Financial Statements of the corresponding years. Failure to do so would result in the Proposal being considered as non-responsive. In case the annual accounts for the latest financial year are not audited and therefore cannot make it available, the applicant shall give an undertaking, to this effect and the statutory auditor shall certify the same. In such case, the applicant shall provide the audited annual reports for five years preceding the year for which audited annual report is not being provided.*
- 3. A certificate from Statutory Auditor should be provided as supporting document certifying the Financial Pre-Qualification*

(Signature of the Authorized signatory)

Form 5: Format for Banker's Certificate

To,

Chief Officer,

Dear Sir/Madam,

Ref: Request for Proposal issued by the _____ **dated** _____

Sub: RFP Reference No. _____ **Dated** _____ **for Selection of**
Contractor to *(Name of Work)*

This is to certify that M/s. _____ * is a reputed company with a good financial standing. If the contract for this work _____ *(Name of Work)*, is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. _____ to meet the working capital requirements for executing the above contract.

Sd./ Senior Bank Manager

Name of Bank

Address

Contact No.

***Change the text as follows for Consortium/JV:**

This is to certify that M/s *(Name of Lead Member)* who has formed a Consortium/JV/Consortium/JV with M/s _____ *(Name of Tech*

(Name of Work), is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. _____ to meet the working capital requirements for executing the above contract.

Sd./ Senior Bank Manager

Name of Bank

Address

Contact No.

Form 6: Format for summary of Technical Pre-Qualification

(List only those works, which are similar to the proposed works for which the Qualification Information is submitted)

A. SummaryTable

Name of Applicant/Member of Consortium/JV (in case of Consortium/JV) Claiming the Project Experience:							
S. No.	Brief Project Description	Project Award Date <i>(Only those Project(s) awarded in preceding 5 FY from due date of bidding shall be considered)</i>	Project Completion Date/ expected completion date	Project Cost in INR (Cr)	Project Capacity (M ³ / MT) (A)	Claiming Entity's Share in theProject (%) (B)	Effective Handled Capacity Ax B (c) (M ³ / MT)

B. Average Project Capacity (As per column 'C') of eligible projects handled (as mentioned in summary tableaboveis_____ (m³/MT)

- 1. The detailsof eachoftheworksmentioned intheabovetablemust beprovidedseparatelyinForm8 (A).*
- 2. Use a separate sheet for each member in case of aConsortium/JV.*
- 3. Provide attested copies of Work Orders and /or Completion Certificates for each project. Work orders/ testimonials will be verified ifrequired.*

4. *Each certificate of experience will be duly signed/confirmed by a representative of the client (to be of at least Executive Engineer Rank)*

Form 6(A): Details of Projects eligible for Technical Pre-Qualification

(Provide Details for Only those Projects listed in Form 8, use separate sheet for each project)

Name of Applicant/Member of Consortium/JV (In case of Consortium/JV) Claiming the Project Experience:_____	
1.	Name of Project
2.	Location of Project
3.	Name of the Client
4.	Client’sAddress&TelephoneNumber,FaxNumberandemailIDofcontact person
5.	Project Cost (in INR Cr)
6.	Nature of works and special features relevant to this project. (Details pertinent to the Technical Criteria of this RFP shall be submitted)
7.	Contract role (check one) <input type="radio"/> SoleContractor <input type="radio"/> Consortium/JV/Consortium/JV <input type="radio"/> Sub-Contractor
8.	a) ProjectCapacity: b) Your Company’s share in the Project(%):
9.	Date of Award
10.	Contractduration_____years_____Months
11.	Date of Completion
12.	Whether Completed in specified duration, If No, reason for delay
13.	Specified requirements
14.	Nameandprofessionalqualificationsofapplicant’sEngineer-in-Chargeofthe work:
15.	Were there any penalties/fines/stop-notice/compensation/liquidated damages imposed? (Yes or No). If yes, give amount and explanation.

Form 7: Format for Submitting Dumpsite Reclamation and Gas/ Leachate Management Plan

The Bidder will submit a Dumpsite Reclamation, Gas and Leachate Management Plan covering the following topic:

1. Dumpsite land reclamation: Present the proposed Site layout development, land reclamation sequence on layout drawing, general arrangement of machineries, screening, sorting, storing, packing areas.
2. Excavation, Screening & Resource Recovery: Indicate number, type and capacity of equipment's/machinery to be deployed for the purpose of excavation, segregating, sorting, retrieving recoverable materials, storing, baling, packing, selling, provide the basis for deciding the number and justify the time period estimated for the activity and operation and maintenance details. The detailed approach, methodology and work plan is required.
3. Bio-mining of un-processed municipal solid waste: Specify the proposed method in detailed, quantity of resources required, provide the basis for deciding the quantity of resources, number and justify the time period estimated for the activity and operation and maintenance details.
4. Inert Disposal mechanism.
5. Recyclable or combustible utilization mechanism
6. Leachate collection, treatment system and surface water drainage work: Present leachate collection system and surface water drainage system including the alignment, treatment, disposal locations and invert levels

All the above should be suitably supported with the engineering drawings, man-power requirement, fuel/power requirement and explanation of estimated time schedule.

Based on the above work requirement, the Bidder will provide details of plant, machinery and equipment proposed to be deployed in the works in the other forms. The Bidder shall also provide a list of key personnel proposed to be deployed for the work with their curriculum vitae in the Format Provided in the other forms.

Warranty for the Work

The successful bidder warrants that all work under this Agreement will be performed with promptness and diligence and will be executed in a workman like and professional manner, in accordance with the practices and high professional standards used in well-managed operations performing work similar to the work under this tender document.

Insurance

Successful bidder will, during the entire project period, at its sole cost and expense, obtain and maintain in full force and effect, adequate standard forms of insurance which are mandatorily to be maintained as per the applicable laws

Form 7 (A): Format for Providing Details of Machinery to be Deployed for the Project

Name of the bidding company/Consortium/JVmembers' company owning the Machinery/Equipment_____					
Item of Equipment Including Make	Number and Capacity	Ownership Status		Age and Condition	Remarks Regarding Condition/Source/ Availability
		Owned/ Leased / to be Procured	Number & Capacity		

Note:

- 1. List only the key equipment for construction, standby power, material handling and vehicles for site, etc., which the Company proposes to use for the proposed works at the site.*
- 2. The applicant should clearly demonstrate that he has access to all key equipment which will be required for the successful completion of the works.*

Form 7 (B): Details of Key Personnel to be deployed for the Project

(Use separate Sheet for each key personnel)

Name of Bidder Company/Consortium/JV members' company <i>(in case of Consortium/JV):</i>			
Proposed Position			
Key Personnel Information	1. Name 2. Date of Birth 3. Contact Number 4. Professional Qualification 5. Current Designation 6. Years With Present Employer		
Experience Summary Relevant to this Project			
Professional Experience over the last 10 Years <i>(in chronological order)</i>	From	To	Company/Project/Position/Relevant Technical and Management experience

Form 8: Format for Providing Environment, Health and Safety Management Plan

The Bidder shall furnish a brief write-up of the following points:

1. Plan for Mitigation of Pollution during Project Executionwork
2. Measures to manage hazardous waste if any during the projectexecution
3. PlanforHealthandsafetyinandaroundtheworkplacetobefollowedduringproject execution
4. Emergency preparednessplan
5. Measures for Firesafety.
6. Measures for Health and safety ofworkers.

Form 9: Format for Letter of Acceptance (LoA)

LETTER OF ACCEPTANCE (LOA)

(On the Letter Head of the Authority)

Date:

M/s. _____

(Name and address of the contractor)

Subject: _____

(Name of the work as appearing in the bid for the work)

Dear Sir (s)/ Madam(s),

Your bid for the work mentioned above has been accepted on behalf of the *(Name of Authority)*, at your bided offer as per scope of work given therein. You are requested to submit within 21 (Twenty-One) days from the date of issue of this letter:

- (i) The performance security/performance guarantee of INR. _____ (in figures) Rupees _____ (in words only).

The performance security shall be in the form of bank guarantee of any nationalized / schedule commercial bank.

- (ii) Sign the Contract Agreement.

Please note that the time allowed for carrying out the work as entered in the bid is 6 months including rainy season, shall be reckoned from the date of signing the contract agreement or issuance of Consent to Establish to the project whichever is later.

Signing the contract agreement shall be reckoned as intimation to commencement of work and no separate letter for commencement of work is required. Therefore, after signing of the agreement, you are directed to contact Authority/Engineer-in-charge for taking the possession of site and necessary instructions to start the work.

Yours faithfully,

Form 10: Format for Performance Bank Guarantee

To:

_____ [the Authority] _____

[Address of the Authority] WHEREAS _____ [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ Dated _____ to execute _____ [name of Contract and brief description of Works] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sums specified therein as security for compliance with his obligations in accordance with the Contract; AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf Of the Contractor, up to a total of ____ [amount of guarantee]

_____ [In words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [Amount of guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand. We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification. This guarantee shall be valid until (date of Validity as per the Bid Document)

Signature and seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

Form 11: Format of Financial Bid

Name of Work: _____

I/We do hereby BID to execution of the above work within the time specified at the rate Mentioned below in all respects and in accordance with the specifications, designs, drawings and instructions in writing in all respects in accordance with such conditions so far as applicable. I/We have visited the site of work and am/are fully aware of all the difficulties and conditions likely to affect carrying out the work. I/We have fully acquainted myself/ourselves about the conditions regarding accessibility of site and quarries/kilns, nature and the extent of ground, working conditions including stacking of materials, installation of tools and plant conditions effecting accommodation and movement of labor etc. required for the satisfactory execution of contract.

SN	Head	Rate (INR/ ton)	Quantity (Ton)	Total (INR lakh)
1	Biomining of legacy waste			
2	Disposal of inert			
3	Total			

Should this bid be accepted, I/We hereby agree to abide by and fulfill all the terms and provisions of the said conditions of contract so far as applicable, or in default thereof to forfeit and pay to the Chief executive officer, _____ or his successors in office the sums of money mentioned in the said conditions.

Signature of Bidder

Name of Bidder

Appendix

Volume II- Draft Contract Agreement Format

Draft Contract Agreement Format

This agreement made the _____ day of 20____, between Bidhannagar Municipal Corporation (Hereinafter called as "the Authority") of the one-part M/S_ and [name and address of contractor] (hereinafter called "the Contractor") of the second part.

Whereas the Authority is desirous that the Contractor execute

_____ [name and identification number of Contractor] (hereinafter called "the Works") and the Authority has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein at a contract price of INR _____.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Authority to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Authority to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Authority hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. Change in Law and Additional costs
 - i. Change in Law shall mean the occurrence or coming into force of any of the following, after the Appointed Date:
 - a) The enactment of any new Indian law including laws related to environment/emission/ discharge standards
 - b) The repeal, modification or re-enactment of any existing Indian law;
 - c) A change in the interpretation or application of any Indian law by a court of record;

Provided that Change in Law shall not include:

- a) Coming into effect, after the Appointed Date, of any provision or statute which is already in place as of the Appointed Date,
 - b) Any new law or any change in the existing law under the active consideration of or in the contemplation of any government as of the Appointed Date which is a matter of public knowledge
 - c) Any change in the rates of the Taxes which have a direct effect on the Project.
- ii. Subject to Change in Law resulting in Material Adverse Effect and subject to the Contractor taking necessary measures to mitigate the impact or likely impact of Change in Law on the Project, if as a direct consequence of a Change in Law, the Contractor is obliged to incur Additional Costs, BMC shall subsequently reimburse to the Contractor % of such Additional Costs, as mutually agreed between BMC and the Contractor.
 - iii. Upon occurrence of a Change in Law, the Contractor may, notify BMC of the following:
 - a) The nature and the impact of Change in Law on the Project in sufficient detail;
 - b) The estimate of the Additional Costs likely to be incurred by the Contractor on account of Change in Law;

- c) The measures, which the Contractor has taken or proposes to take to mitigate the impact of Change in Law, including, minimizing the Additional Costs; and
 - d) The relief sought by the Contractor
 - iv. Upon receipt of the notice of Change in Law issued by the Contractor pursuant to the preceding Article, BMC and the Contractor shall hold discussions and take all such steps as may be necessary including determination / certification of the quantum of the Additional Costs to be borne and paid by BMC.
 - v. BMC shall within 30 days from the date of determination of quantum of Additional Costs and submission of requisite documents, reimburse 50% of such Additional Costs incurred by the Contractor in the manner as mutually agreed upon by the Parties.
5. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
- i. Letter of Acceptance;
 - ii. Notice Inviting Bid;
 - iii. Bid Document issued by the Bidhannagar Municipal Council and its subsequent amendments and corrigendum
 - iv. Contractor's Bid;
 - v. Conditions of contract (including Special Conditions of Contract);
 - vi. Specifications;
 - vii. Drawings and Site Map;
 - viii. Any other document listed in the Condition of Contract forming part of the contract.

In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of _____ was here unto affixed in the presence of:

Signed, Sealed and Delivered by the said

In the presence of:

Binding Signature of Authority

Binding Signature of Contractor (To be signed by the Authorized Signatory of the Bidder)

*****END OF DRAFT CONTRACT AGREEMENT*****

Volume III- Conditions of Contract

Conditions of Contract

A. General Conditions of Contract (GCC)

1. Definitions

"Authority" means the Commissioner, Bidhannagar Municipal Corporation who will execute the contract agreement with the Contractor to carry out the work. The Authority may delegate any or all functions to a person or body nominated by him for specified functions. The word Authority/Government/Department wherever used denotes the Authority.

"Completion" means completion of the work, as certified by the Engineer-in-Charge, in accordance with provisions of agreement.

"Contract" means the Contract between the Authority and the Contractor to execute, complete and/or maintain the work. Agreement is synonym of Contract and carries the same meaning wherever used.

"Contractor" means a person, or a legal entity whose bid to carry out the work has been accepted by the Authority.

"Contractor's bid" means the completed bid document submitted by the Contractor to the Authority.

"Contract amount" means the amount of contract worked out on the basis of accepted bid.

"Completion of work" means completion of the entire contracted work. Exhaustion of quantity of any item mentioned in the bid document shall not imply completion of work or any component thereof.

"Day" means the calendar day.

"Defect" means any part of the work not completed in accordance with the specifications included in the contract.

"Drawings" means drawings including calculations and other information provided or approved by the Engineer-in-Charge.

"Engineer in charge" means the person nominated by the Authority for overall supervision and coordination of the work, provide approval to work plan and work schedules submitted by the contractor for commencement of the work, approval of drawings and specification, certification of the work executed by the contractor and invoice raised by the contractor. The Word “Engineer” wherever used, other than mentioned or specified, means the Engineer-in—charge

"Equipment" means the Contractor's machinery and vehicles brought temporarily to the Site for execution of work at his own cost.

"Government" means the Government of West Bengal or the Government of India as the case may be.

"In Writing" means communicated in written form and delivered against receipt.

"Material" means all supplies including consumables used by the Contractor for incorporation in

thework.

"Stipulated date of completion" means the date on which the Contractor is required to complete the work. The stipulated date is specified in the Contract Data.

"Specification" means the specification of the work included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.

"Start Date" means the date 14 days after the signing of agreement for the work. However, the Authority may extend this time limit by another 14 days, as and when required.

"Sub-Contractor" means a person or corporate body who has a Contract (duly authorized by the Authority) with the Contractor to carry out a part of the work under the Contract.

"Temporary Work" means work designed, constructed, installed, and removed by the Contractor that are needed for the work.

"Tender/Bid/Bid Document/Request for Proposal (RFP), Tenderer/Bidder" are the synonyms and carry the same meaning where ever used.

"Variation" means any change in the work which is instructed or approved as variation under this contract.

"Work" the expression **"work"** or **"works"** or **"Project"** where used in these conditions shall unless there be something either in the subject or context repugnant to such work, be construed and taken to mean the work by virtue of contract, contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional.

"Work Plan" means the implementation plan, including phasing of works, physical completion milestones and other such details that the Authority shall seek from time to time with respect to tracking progress of the works.

2. Interpretations

In the contract, except where the context requires otherwise-

- Words indicating one gender include all genders;
- Words indicating the singular also include the plural and viceversa;
- Provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;
- Written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
Words have their normal meaning under the language of the Contract unless specifically defined.
- The Engineer will provide instructions clarifying queries about the Conditions of Contract.

3. Documents Forming Part of Contract:

Notice Inviting Bid with all amendments. Tender Document (Tender Notice No.-16/2017-18) with all amendments and corrigendum Contract Agreement

Conditions of Contract:

- Part A: General Conditions of Contract and Contract Data with all Annexures;
- Part B: Special Conditions of Contract.

Specifications;

- Drawings and sitemap
- Technical and Financial Bid submitted by the Contractor
- Any other document (s), as specified or important to execute this contract.

4. Language and Law

The language of the Contract and the law governing the Contract are stated in this condition of contract.

5. Communications

All certificates, notice or instruction to be given to the Contractor by Authority/Engineers shall be sent to the address or contact details given by the Contractor in Form 2 of his submitted Bid. The address and contract details for communication with the Authority/Engineer shall be as per the details given in bid data sheet of the RFP Document or as specified in writing from time to time. Communication between parties that are referred to in the conditions shall be in writing. The notice sent by facsimile (fax) or other electronic means (email) shall also be effective on confirmation of the transmission. The notice sent by registered post or speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service. In case of any change in address for communication, the same shall be immediately notified to Engineer-in-Charge.

6. Engineer's Decisions

- Except where otherwise specifically stated, the Engineer will decide contractual matters between the Authority and the Contractor in the role representing the Authority.
- The Engineer may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

7. Subcontracting

The Contractor may subcontract with the approval of the Engineer but may not assign the Contract without the approval of the Authority in writing. Subcontracting does not alter the Contractor's obligations.

8. Personnel

The Contractor shall employ the key personnel named in the Schedule of Key Personnel in the Form 9 (B) of his submitted technical bid to carry out the functions stated in the Schedule or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.

If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force or sub-contractor, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

9. Force Majeure

The term "Force Majeure" means an exceptional event or circumstance:

- Which is beyond a party's control;
- Which such party could not reasonably have provided against before entering into the contract;
- Which, having arisen, such party could not reasonably have avoided or overcome, and;
- Which is not substantially attributed to the other Party

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) in the sub-clause 9.1 above, are satisfied:

- War, hostilities (whether war be declared or not), invasion, act of foreign enemies);
- Rebellion, terrorism, sabotage by persons other than the contractor's Personnel, revolution, insurrection, military or usurped power, or civil war;
- Riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel;
- Munitions of war, explosive materials, ionizing radiation or contamination by radio activity, except as may be attributed to the Contractor's use of such munitions, explosives, radiation or radio activity, and;
- Natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

In the event of either party being rendered unable by force majeure to perform any duty or discharge any responsibility arising out of the contract, the relative obligation of the party

affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties.

For the period of extension granted to the Contractor due to Force Majeure the penalty clause shall not apply. It is clarified that the clause '9' shall not give eligibility for any adjustment or escalation in contract amount.

The time for performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such cause lasts. Should the delay caused by force majeure exceed six months, the parties to the contract shall be at liberty to foreclose the contract after holding mutual discussions.

10. Contractor's Risks

- All risks of loss of or damage to physical property and of personal injury and death which
arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.
- All risks and consequences arising from the inaccuracies or falseness of the documents and/or information submitted by the contractor shall be the responsibility of the Contractor alone, notwithstanding the fact that designs/drawings or other documents have been approved by the department.

11. Safety

The Contractor shall be responsible for the safety of all activities on the Site. The contractor shall comply with the safety guidelines and best industrial practice to implement safety at workplace.

12. Liability for Accidents to Person

The contractor shall be deemed to have indemnified and saved harmless the Government and/or the Authority, against all action, suits, claims, demands, costs etc. arising in connection with injuries suffered by any persons employed by the contractor or his subcontractor for the works whether under the General law or under workman's compensation Act, or any other statute in force at the time of dealing with the question of the liability of employees for the injuries suffered by employees and to have taken steps properly to ensure against any claim thereunder.

13. Contractor to Complete the Works

- The Contractor shall execute the Works in accordance with the Milestone, Workplan, work schedule, Specifications, Drawings and site map as specified in the Bid Document. In the case of any class of work for which there is no such specification as is mentioned in the Tender Document, such work shall be carried out in accordance with the instructions and requirement of the Engineer-in-charge.
- The contractor shall supply and take upon himself and at his cost the entire

responsibility of the sufficiency of all the means and resources used for the fulfilment of this contract whether such means may or may not be specified in the scope of work, Bid Document, contract agreement or recommended by the Engineer-in-charge.

14. Discoveries

Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Authority/Government. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

15. Dispute Resolution System

- No dispute can be raised except before the Authority in writing giving full description and grounds of Dispute. It is clarified that merely recording protest while accepting measurement and/or payment shall not be taken as raising a dispute.
- No issue of dispute can be raised after 45 days of its occurrence. Any dispute raised after expiry of 45 days of its first occurrence shall not be entertained and the Authority shall not be liable for claims arising out of such disputes.
- The Authority shall decide the matter within 45 days.
- Appeal against the order of the Authority can be preferred within 30 days to the court of Pune.
- The contractor shall have to continue execution of the works with due diligence notwithstanding pendency of a dispute before any authority or forum.

16. Approval by the Engineer

- The Contractor shall submit the work plan, work schedule, Specifications and Drawings for the commencement of the proposed work/part of proposed work/milestone of proposed work, before the commencement of such works. The contractor shall proceed for the commencement of such work only after the approval of the Engineer-in-charge.
- The Contractor shall be responsible for design of the proposed Works.
- The Contractor shall obtain approval of third parties to the design of the Works where required.
- All Drawings, work plan and work schedule prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.
-

17. Time Frame for completion of works

- The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the milestone achievement schedule set out in the Bid

Document as updated time to time by the approval of the Engineer-in-Charge and complete them by the Intended Completion Date.

- The Engineer's approval of the work schedules shall not alter the Contractor's obligations

18. Extension of Time

- If the Contractor desires an extension of time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other grounds, he shall apply, in writing, to the Engineer-in-charge, on account of which he desires such extension. Engineer-in-charge shall forward the aforesaid application to the competent authority as prescribed.
- The Authority shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Engineer for a decision upon the effect of grounds of having unavoidable hindrance in execution of work or on any other such grounds, and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

19. Liquidated Damages

- Failure to take possession of the site within 7 days of issuance of the Lol: If the successful bidder fails to take possession of the site within 7 days from the issuance of the Lol by BMC to the successful bidder, the EMD will be forfeited, the bid will stand cancelled and Bidhannagar Municipal Corporation as per their discretion will have the right to either approach the L2 bidder or issue fresh tender for the said work.
- Failure to execute the Agreement after issue of Letter of Intimation: If the successful bidder fails to sign the Agreement in the format shared by Bidhannagar Municipal Corporation within 30 days of issue of Letter of Intimation from Bidhannagar Municipal Corporation without any valid ground, then the EMD will be forfeited, the bid will stand cancelled and Bidhannagar Municipal Corporation will have the right to either approach the L2 bidder or issue fresh tender for the said work.
- Delay in Completion of Work: In case the bidder fails to commissioning the proposed plant within the 1 months from the date of issuance of the Lol, then the bidder will be liable to pay a fine of Rs. 10,000/- (Rupees Ten Thousand only) for every day of delay as liquidated damages. In case the successful bidder is not solely liable for the delay, amount of liquidated damages shall be deducted on proportionate / pro rata basis depending upon the successful bidder's extent of fault in causing such delay. BMC shall have the right to determine such extent of fault and liquidated damages in consultation with the successful bidder. Payment of liquidated damages shall not be the sole and exclusive remedies available to BMC and the successful bidder shall not be relieved from any obligations by virtue of payment of such liquidated damages. BMC may in its discretion, have the right to terminate the Agreement.
- In case the commissioning of the plant gets delayed beyond 1 year over and above the allotted period, BMC may decide to complete the project by itself and terminate the agreement. In this

scenario, the Performance security and EMD will be forfeited BMC will not be required to refund it to the bidder. The plant in the As-Is state will continue to be the sole property of BMC and the termination of the agreement with bidder will not constitute any transfer of ownership.

- e) Failure to start the Operation: If the successful bidder fails to start the operation and maintenance from the date of commissioning of the plant, the Performance security and EMD will be forfeited, the bid will stand cancelled and Bidhannagar Municipal Corporation as per their discretion will have the right to either approach the L2 bidder or issue fresh tender for the said work
- f) Failure to complete the project within stipulated timeline: If the successful bidder fails to complete the work within the time mentioned in the tender document BMC the project will be terminated and BMC will have the right to forfeit the Performance security and EMD . Bidhannagar Municipal Corporation as per their discretion will have to issue fresh tender for the said work.

20. Penalty for Non-Compliance

The Contractor shall pay penalty for Non-compliance to the SWM Rules 2016, Environmental standards, Safety Standards, Specifications as set out in the RFP document etc. as per the schedule mentioned in clause 7.4 of the RFP document.

21. Contractamount

- The contractor's quoted contract amount can't bechanged.
- No interest shall be payable to the Contractor on any payment due or awarded by the authority.
- The bidder shall have to quote rates inclusive of GST (as per prevailing applicable rates), all duties, taxes and other levies.

22. QualityControl

IdentifyingDefects

- The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have aDefect.
- The contractor shall permit the Authority's Technical auditor to check the contractor's work and notify the Engineer and Contractor of any defects that are found. Such a check shallnotaffecttheContractor'sortheEngineer'sresponsibilityasdefinedintheContract Agreement.

Correction of Defects

- The Engineer shall give notice to the Contractor of any Defects, in writing.
- Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time and satisfaction level of the Engineer as specified in the Engineer's notice.
- If the Contractor has not corrected a Defect, within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

23. Termination of Contract

The Authority or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract. Fundamental breaches of Contract include, but shall not be limited to the following:

- (a) Abandons the works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the contract;
- (b) The Engineer-in-charge instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 60 days;
- (c) The Authority or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (d) The Contractor without reasonable excuse fails to comply with the notice to correct a particular defect within a reasonable period of time;
- (e) the Contractor does not maintain a valid instrument of financial Security, as prescribed;
- (f) the Contractor has delayed the completion of the Works by such duration for which the maximum amount of liquidated damages is irrecoverable;
- (g) if the Contractor, in judgment of the engineer in charge has engaged in corrupt or fraudulent practices in competing for or in executing the contract, the definition of corrupt and fraudulent practices shall be as defined in clause 5.9 of the RFP document;
- (h) the contractor fails to perform in the manner as specified in the Contract agreement, bid document, bids submitted by him or recommendation by the engineer-in-charge;

- (i) The contractor (in case of Consortium/JV/Consortium/JV) has modified the composition of the Consortium/JV/Consortium/JV and/or the responsibility of each member of the Consortium/JV/Consortium/JV from what is stated in Consortium/JV/Consortium/JV agreement without prior approval of the Authority.

Notwithstanding the above, the Authority may terminate the Contract for convenience.

- If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.
- All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Authority, if the Contract is terminated because of a Contractor's default.

24. Payment upon Termination

- If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineers shall issue a certificate for the value of the work done less adjusted advance payments (on pro-rated basis) received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as per the percentage of milestone achievement. Additional Liquidated Damages shall not apply. If the total amount due to the Authority exceeds any payment due to the Contractor, the difference shall be a debt payable to the Authority.
- If the Contract is terminated at the Authority's convenience or because of a fundamental breach of Contract by the Authority, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

25. Performance Security

The Contractor shall have to submit performance security as set out in the clause of the tender document. The contractor shall have to ensure that such performance security remains valid for the period as specified in the tender document.

26. Payment of contract Amount

- Payment of the 'contract amount' shall be made to the contractor in accordance to the provision as set out in the RFP document.
- No advance payments shall be made to the contractor in any case.
- The invoice for the payment shall be raised by the contractor, after the certification of the work completed by the contractor and the invoice by the Engineer-in-charge

- The payments shall be made through Demand Draft/Cheque/NEFT/RTGS. No payments shall be made in cash
- All payment shall be made in Indian currencies.
- The payment shall be done on monthly running bill on the input quantity (MT), against compliance of the clauses mentioned in the payment mechanism section

27. Completion Certificate

- A provisional completion certificate in the prescribed format as given in Annexure I of these conditions of contract shall be issued by the Engineer in charge after physical completion of the work.
- After final payment to the contractor, a final completion certificate in the prescribed format as given in Annexure II of this conditions of contract shall be issued by the Engineer in charge.
- The Authority shall take over the Site and the Works within seven days of the issue of the provisional Completion certificate.

*****END OF

GCC*****

B. Special Conditions of Contract (SCC)

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of

Contract(GCC).wheneverthereisaconflict,theprovisionshereinshallprevailoverthoseinthe GCC.

1. Role of Parties to the Contract

Role of the Authority

The Authority shall play the following role in this project-

- (i) The Authority shall handover the Project Site and the detailed information is mentioned in the Project information Memorandum (PIM) as mentioned in **Annexure - IV** on an as-is-where-is basis, free from encumbrances, for the execution of the Project. The Authority will not provide any equipment or vehicle for the project. All equipment and machinery required by the successful contractor shall be arranged by the contractor at his own cost.
- (ii) The Authority shall earmark the land (to be reclaimed and to be used for segregation and processing of excavated mixed MSW) and give possession to the Contractor within one week of the execution of the Contract Agreement.
- (iii) The Authority shall provide access to the land earmarked to the contractor for implementing the project.
- (iv) The Authority shall provide necessary clearances, permits, approvals, authorizations, and no objection certificates, at its own cost, which are required by the contractor to execute the project and obtain Water and Sewage Connection and Power Connection.
- (v) The Authority shall permit the contractor to carry out the project till the conclusion of the Contract Period of Six months or any extension thereof.

Role of the Contractor

- (i) The contractor shall execute and complete the project in accordance with the provisions set out in the tender document, the Conditions of contract and the contract agreement.
- (ii) The contractor shall have no right or title or leasehold right on the land earmarked to them. The Land earmarked to the Bidder shall not be used for any other purpose other than for the project purpose.
- (iii) The contractor is entitled to switching over to the technologies according to the viability of the implementation of the project commercially subject to prior submission of proposal for such technology switch describing the details of such technology and advantage of using the technology and such proposal being approved by the engineer-in-charge.
- (iv) The employees of the Contractor and the Sub-Contractor in no cases shall be treated as the employees of the Authority at any point of time.

2. Compliance to Law, Rules and Regulations

The contractor shall abide with all the rules and regulations of the Government of India, Government of West Bengal, Local Governments or any other Government bodies that has direct or indirect incidence on the project, in addition to the rules and regulations mentioned below.

The Contractor shall keep the Authority indemnified in case any action is taken against the Authority by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Authority is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Authority shall have the right to deduct any money due to the Contractor including his amount of performance security. The Authority/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Authority.

The contractor shall perform his obligations for the completion of the works under the umbrella of the below given rules and regulations.:

Compliance with Labour Regulations

During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority.

Protection of Environment

The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the contractor and his sub-contractor shall abide at all times by all the terms and conditions prescribed in the Environmental Clearance/ Consent to Establish/Consent to operate issued to the project, existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority. The contractor shall commence the project activities as per the rules, regulations and guidelines as set forward by the Solid Waste Management, 2016 and its subsequent amendments thereof, Construction and Demolition Waste Management Rules 2016 and its subsequent amendment thereof, Plastic Waste Management Rules 2016 and its subsequent amendment thereof, Bio- Medical Waste

management rules 2016 and its subsequent amendment thereof, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and its subsequent amendment thereof, E-waste management rules 2016 and its subsequent amendment thereof, Environment Protection Act 1986 and its subsequent amendment thereof. Contractors to note that this is the minimum criteria required for the commencement of this work and the contractor will practice the best possible method to protect the Environment.

*****END OF SCC*****

Annexure I: Provisional Completion Certificate

Name of Work:

AgreementNo. _____ Date _____ Amount of Contract Rs. _____

Quantity ofWasteProcessed _____ m³.

Certified that the above-mentioned work was provisionally completed on (Date) and taken over on(Date) and that I have satisfied myself to best of my ability that the work has been done properly.

Date of issue

Engineer-in-Charge

Annexure II: Final Completion Certificate

Name of Work:

AgreementNo. _____ Date: _____

NameofAgency: _____ Certified that the
above-mentioned work wasphysically completed on _____ (date) and takenover
on _____ (date).

Agreement amountRs. _____

Final amount paid tocontractorRs. _____.

Quantity ofWasteProcessed _____ m³

Project Information Memorandum

MOLLAR BHERI BIOMINING

The Site Details

MollarBheri is currently a disposal site, where unprocessed fresh wastes from BMC and a few neighboring areas are getting disposed off. The total land area of the disposal site is about 55 acres, out of which around 45% area is covered by accumulated garbage. Average height during the reconnaissance survey was observed visually as ~ 12 ft. Mostly compactors bring the waste to the disposal site, along with few numbers of open trucks etc. Two dedicated front-end loaders are available at the site to spread and level the fresh incoming waste after the disposal.

Mollarbheri falls under two different Mouzas. Mouza – DhapaManpur Mouza and Mahisbathan Mouza. From verbal discussions with BC officials, it is understood that DhapaManpur mouza falls under wetland (Kulipara, Durgabhasan, Gorumera etc.). However, Mahoshbathan mouza does not fall under wet land and it is primarily a “Sali” land (Boropareash, chhotopareash etc.)

A number of water bodies surrounds the site. On the northern side, Mollarbheri is surrounded by a residential colony, slum area as well as high rises. IDL Aqua-view residential complex is located within 1 km of vicinity. The other localities at MollarBheri periphery are Khasmahal and Sardarpara.

Figure 1 - Satellite Imagery of the Disposal Site at MollarBheri



Site Vulnerability

MollarBheri site is extremely vulnerable to the environmental impacts due to this continuous dumping of untreated municipal solid waste and with the generated leachate eventually flowing into the adjacent wetland, thereby contaminating the ground water table below. The uncontrolled disposal at this site poses a potential threat due to release of leachate, landfill gas and suspended particulate matter. In addition to this, uncollected waste, which falls on the road during transportation, causes blockage in the drains adjacent to the disposal site. A number of water bodies and wetlands surround this site. There is also a high potential for real estate development and high-rise buildings, very close to the site (within 500 m distance).

The site area falls under East Kolkata Wetland, which has been declared as one of the Ramsar sites.¹ The satellite image of the location of disposal site is presented in the following figure.

The specific situations associated with MollarBheri disposal site are being discussed in the following sections.

Groundwater Contamination

In absence of any liner at the bottom, the leachate percolated through the base of the dumpsite meets the groundwater making it contaminated. Besides this, there are a large number of wetlands adjacent to the dumping ground. The leachate from the site also contaminates both the groundwater and surface water.

Soil Contamination

The current dumpsite is un-lined; the contaminant from waste and leachate is absorbed onto the underlying soil. Since it is an uncontrolled disposal site, the mixed waste contains different types of pollutants, which eventually have an impact on the soil.

Ambient Air Quality

The issue of ambient air quality of the MollarBheri dumpsite is twofold and are discussed below:

Greenhouse Gases

Since the dumpsite receives fresh untreated waste, anaerobic decomposition of the organic matter is a rampant phenomenon, which leads to release of methane gas, which is a potential greenhouse gas. It has many times more global warming potential than carbon dioxide. At the local level, due to release of methane gas, the adjoining settlements, and residential areas etc. experience obnoxious smell throughout the day and the surrounding area turns unhealthy.

Open Burning

In this dumpsite, open burning of waste has been a common practice. It releases toxic components such as furans, dioxins in the adjoining area, which has critical health impact for children and adults.

Social Impact and Health Hazard

Since the disposal site receives untreated unorganized mixed waste stream, there are biomedical, hazardous items within the accumulated waste in the dumping ground. Items like broken glass, blades, needles, explosive container, batteries, CRT, ULAB etc. pose risk of injury or chronic illness to the children and adult rag pickers who are associated with the garbage disposal site for their livelihood.

¹ https://en.wikipedia.org/wiki/List_of_Ramsar_sites_in_India

Figure 2 Pictures of the disposal facility in Mollar Bheri



Entrance to disposal site



Waste lying at Mollar Bheri



Access through waste dump



Refuge compactor at disposal site



Rag picker consultation



Animals at disposal site

Key Issues with MollarBheri Disposal Site

Key Environmental Issues

Some of the key issues can be effectively summarized below-

- Uncontrolled waste dumping. The nature of waste being dumped is untreated fresh waste
- The waste stream is of mixed type.
- No Compaction done, No Liner, or bund which shall contain the landfill, no leachate collection drain etc. Disposal is being done unscientifically.
- Contamination of soil, groundwater, ambient air quality
- Potential risk from hazardous and biomedical items within the garbage
- Fire at site due to uncontrolled open burning.

- Sliding of garbage heap due to instability
- Aesthetics and health impact to the neighborhood settlement due to odor and fumes from bio-degradation and open-burning.

Key Social Issues

Since the disposal site receives untreated unorganized mixed waste stream, there are biomedical, hazardous items within the accumulated waste in the dumping ground. Items like broken glass, blades, needles, etc. pose risk of injury or chronic illness to the children & adults rag pickers who are associated with the garbage disposal site for their livelihood.

During site visit and focus group discussions with the rag pickers, local people and site in-charge of MollarBheri disposal site, the following were the main observations:

- Death of animals due to accidental consumption of polythene spread all over is a common problem
- People face sleepless nights due to bad odor and smoke
- It is further assumed that, the land value might increase in future after scientific closure of dumping ground which might lead to further urbanization

Intervention Areas

As discussed earlier, MollarBheri is an unscientific disposal site where the mixed municipal solid waste is being dumped since last couple of decades. The total area of the said site is about 55 acre out of which, active dumping has happened in more than 45% area. As of now, the waste confined area of the site is around 25 acre with a height of around 12-15 ft. The quantum of the accumulated waste at the site is close to 3 lakh MT.²

In order to comply to the environmental norms and to mitigate the social & environmental hazard due to this dumpsite, a reclamation process of the site through Biomining process has been conceptualized. Under this process, the accumulated portion (25 acre) has been proposed to be biomined and reclaimed. The reclamation process will comprise segregation of combustible part and inert part from the mixed legacy waste and then to separate out them from the site.

It may be noted that no fresh waste would be dumped during the Biomining process at the site and after reclamation the site would not receive any fresh waste into it.

² This value is only a tentative and for indicative purpose. Bidders are advised to undertake all relevant site visit, investigation, and surveys at their discretion in order to understand the condition of the site and also to assess the waste accumulation status and its property/nature. Bidders are suggested to assess the quantity of accumulated waste (volumetrically or on weight basis), along with its density before submission of the bid at their discretion. The authority will render all necessary coordination support to the prospective bidders to undertake the same.



Source: 1 Official Website of EKMWW - <http://ekwma.in/ek/maps-2/>

Surveys and Investigations Data

Baseline survey has been conducted for the purpose of the feasibility study. The survey included topographical survey, geotechnical survey, waste characterization survey and water quality analysis survey. The details of the surveys and investigations are being discussed in the below sections:

Waste characterization survey (for Indicative Purpose Only)³

Physical Parameters

Sl. No.	Particulars	Legacy waste
1.	Bulk Density (Ton/M ³)	0.9975
2.	Moisture content (%)	21.93

Chemical Parameters

Sl. No.	Particulars	Legacy waste
1.	Organic Content (%)	6.29
2.	Calorific Value (kcal/kg)	Nil
3.	C/N Ratio	20.0

³ The analysis result shown in the PIM document has been done on grab basis at a particular section and in the month of June 2019. This is indicative and does not represent the entire condition of the disposal site. Bidders are advised to undertake the physical and physico-chemical assessment of the site and the waste on their own.

Physical Composition

Sl .No.	Old legacy waste sample from the disposal site	Composition	Percentage (Individual)	Total Percentage
1.	Organic Waste		Nil	29.64
i)		Food		
ii)		Food Waste	Nil	
iii)		Vegetable Waste	Nil	
iv)		Fruits	Nil	
v)		Garden waste	Nil	
vi)		Yard and Park waste	Nil	
		Partially decomposed organic waste	29.64	
2.	Recyclable Broken Colour Glass			Nil
3.	Recyclable Plastic			Nil
4.	Polythenes			2.89
5.	Metals			Nil
6.	Papers			Nil
7.	Cardboard			Nil
8.	Thermocols			Nil
9.	E-Waste			Nil
10.	Stone			34.82
11.	Aggregate (Inert material)			32.65
12.	Rubber			Nil

Geotechnical survey

Figure 3 Bore lab data of Geotechnical Investigation at Mollar Bheri

Date (dd / mm)	Depth (m)		Length (m)	Nature of Sampling	SPT : No. of blows					Description
	From	To			0-15 cm	15-30 cm	30-45 cm	45-60 cm	N° Value	
12.05.19	0.50			D						Top soil filled with soil roots, organic matter , plastic, brickbats, kankars etc.
	1.00			D						
	1.50	2.10	0.60	P	2	2	3	3	5	Firm greyish clayey silt with brown spot and sand mixed.
	3.00	3.45	0.45	U						
	4.50	5.10	0.60	P	8	12	17	20	29	.Medium dense to dense whitish grey silty fine to medium sand with mica.
	6.00	6.60	0.60	P	9	14	21	22	35	
	7.50	8.10	0.60	P	11	18	24	24	42	
12.05.19	9.50	10.10	0.60	P	13	21	26	28	47	
	10.10	(Termination Depth)								
Abbreviations: U-Undisturbed Sample D-Disturbed Sample P-Standard Penetration Test										

Figure 4 Geotechnical Investigation results at Mollar Bheri

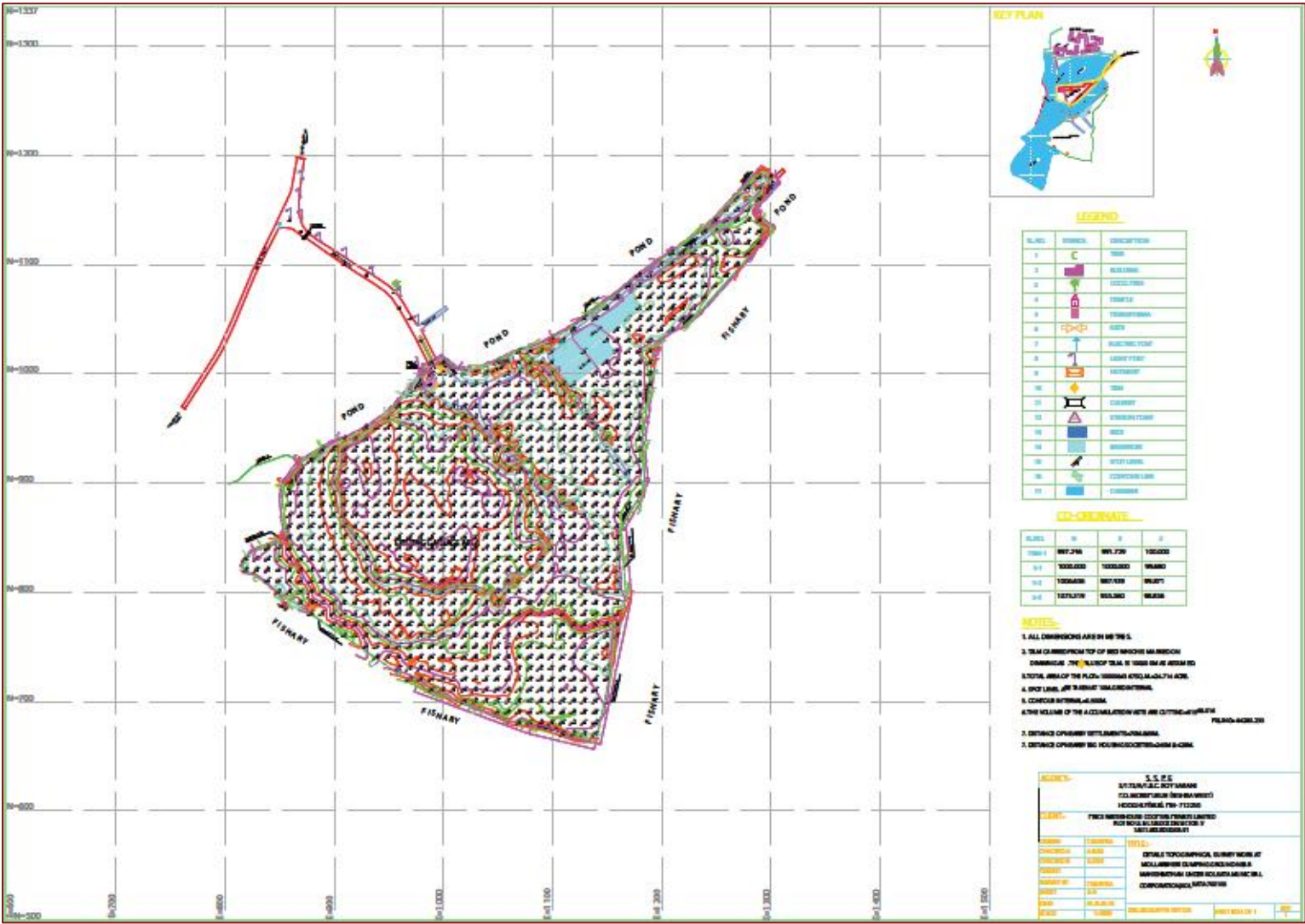
Layer Details				Average Field N-Value	Bulk Density (t/m3)	Liquid Limit (%)	Plasticity Index (%)	Shear strength Parameters
Stratum No.	Description	Depth below EGL (m)						
		From	To					
I	Top soil filled with soil roots, organic matter , plastic, brickbats, kankars etc.	0.00	1.20	-	-	-	-	-
II	Firm greyish clayey silt with brown spot and sand mixed.	1.20	3.80	5	1.89	45.4	21.3	C= 3.1 t/m ² , ϕ =0 deg
III	.Medium dense to dense whitish grey silty fine to medium sand with mica.	3.80	10.10	29 to 47	1.90*	Non- Plastic		C= 0 t/m ² , ϕ =30 to 32*deg

* Suggested

Figure 5 Soil sampling for Geotechnical and Topographical Survey at Mollar Bheri



Topographical survey⁴



⁴ Original map in autocad version is available with BMC.

Water quality analysis survey

Chemical Report (Ground Water)

Sl. NO.	Name of Parameters	Test Methods	Bore well
			Date of Collection 27.05.2019
1	Temperature °C	APHA 22nd EDN 2550	31.5
2	Turbidity (NTU)	IS 3025 (P-10), R.A. 2006	<1.0
3	Dissolved Oxygen, (mg/l)	APHA, 22 nd EDN,4500 O ₂ C	6
4	Colour, (Cobalt units)	APHA 2120 B, 22 nd EDN	<1.0
5	Taste	IS 3025 (P-07), R.A. 1984	Agreeable
6	pH Value	IS 3025 (P-11), R.A. 2009	7.28
7	Alkalinity as CaCO ₃ mg/l	IS 3025 (P-23), R.A. 2014	378
8	Total Hardness as CaCO ₃ ,mg/l	IS 3025 (P-21), R.A. 2006	604
9	Iron as Fe, mg/l	APHA 22 nd EDN 3111 B	0.432
10	Chloride as Cl mg/l	IS 3025 (P-32), R.A. 2009	326
11	Residual Free Chlorine, mg/l	IS 3025 (P-26), R.A. 2009	NIL
12	Total Dissolved Solids, mg/l	IS 3025 (P-16), R.A. 2006	910
13	Bio Chemical Oxygen Demand 3 Days at 27° C (mg/l)	IS 3025 Part 44,1993, RA 1999	<3.0
14	Chemical Oxygen	APHA 22nd EDN 5220 B	23

	Demand mg/l		
15	Calcium as Ca mg/l	APHA 22nd EDN 3500 Ca B	152
16	Magnesium as Mg, mg/l	APHA 22nd EDN 3500 Mg B	54.43
17	Sulphate as SO ₄ , mg/l	APHA 22nd EDN 4500 SO ₄ E	13.872
18	Cadmium as Cd, mg/l	APHA 22nd EDN 3111 B & C	<0.003
19	Arsenic as As,mg/l	APHA 22nd EDN 3120 B	<0.01
20	Lead as Pb mg/l	APHA 22nd EDN 3111 B & C	<0.01
21	Total Chromium as Cr+6, mg/l	APHA 22nd EDN 3500 B	<0.05
22	Phenolic Compounds as C ₆ H ₅ OH, mg/l	APHA 22nd EDN 5530 D	0.05
23	Oil & Grease mg/l	IS 3025 (P-39), R.A. 2009	0.54
24	Phosphate as PO ₄ -P mg/l	APHA 22nd EDN 4500 P-C	0.268
25	Potassium as K, mg/l	APHA 22nd EDN 3500 K,B	8
26	Sodium as Na, mg/l	APHA 22nd EDN 3500 Na,B	168
27	Total Suspended Solids, mg/l	IS 3025 (P-17), 1984 R.A. 2012	5
28	Nitrate as NO ₃ mg/l	APHA 22nd EDN 4500 NO ₃ - B	0.258

Sl. No.	Name of Parameters	Test Method	Surface Water (Pond Water)
			Date of Collection 27.05.2019
1	Temperature °C	APHA 22nd EDN 2550	32.7
2	Turbidity(NTU)	IS 3025 (P-10), R.A. 2006	
			30
3	Dissolved Oxygen,mg/l	APHA, 22 nd EDN,4500 O ₂ C	3.8
4	Colour , (Cobalt units)	APHA 2120 B, 22 nd EDN	63
5	Taste	IS 3025 (P-07), R.A. 1984	Bitter
6	pH Value	IS 3025 (P-11), R.A. 2009	8.9
7	Alkalinity as CaCO ₃ mg/l	IS 3025 (P-23), R.A. 2014	170
8	Total Hardness as CaCO ₃ ,mg/l	IS 3025 (P-21), R.A. 2006	240
9	Iron as Fe, mg/l	APHA 22 nd EDN 3111 B	0.52
10	Chloride as Cl, mg/l	IS 3025 (P-32), R.A. 2009	220
11	Residual Free Chlorine, mg/l	IS 3025 (P-26), R.A. 2009	NIL
12	Total Dissolved Solids, mg/l	IS 3025 (P-16), R.A. 2006	591
13	Bio Chemical Oxygen Demand 3 Days at 27° C (mg/l)	IS 3025 Part 44,1993, RA 1999	16
14	Chemical Oxygen Demand mg/l	APHA 22nd EDN 5220 B	94

15	Calcium as Ca mg/l	APHA 22nd EDN 3500 Ca B	43
16	Magnesium as Mg, mg/l	APHA 22nd EDN 3500 Mg B	32.07
17	Sulphate as SO ₄ , mg/l	APHA 22nd EDN 4500 SO ₄ E	56.362
18	Cadmium as Cd, mg/l	APHA 22nd EDN 3111 B & C	<0.003
19	Arsenic as As,mg/l	APHA 22nd EDN 3120 B	<0.01
20	Lead as Pb mg/l	APHA 22nd EDN 3111 B & C	<0.01
21	Total Chromium as Cr+6, mg/l	APHA 22nd EDN 3500 B	<0.05
22	Phenolic Compounds as C ₆ H ₅ OH, mg/l	APHA 22nd EDN 5530 D	0.08
23	Oil & Grease mg/l	IS 3025 (P-39), R.A. 2009	0.92
24	Phosphate as PO ₄ -P mg/l	APHA 22nd EDN 4500 P-C	4.32
25	Potassium as K, mg/l	APHA 22nd EDN 3500 K,B	58
26	Sodium as Na, mg/l	APHA 22nd EDN 3500 Na,B	117
27	Total Suspended Solids, mg/l	IS 3025 (P-17), 1984 R.A. 2012	96
28	Nitrate as NO ₃ mg/l	APHA 22nd EDN 4500 NO ₃ - B	11.9

Bacteriological test result (Ground water)

Sl. NO.	Name of Parameters	Test Methods	Result
			Bore well Water
			Date of Collection

			27.05.2019
	2	3	4
1	Coliform /100 ml	IS :1622-81	1000/100 ml
2	Faecal Coliform/100 ml	IS: 1622-81	200/100 ml

Bacteriological test result (Surface water)

Sl. NO.	Name of Parameters	Test Methods	Result
			Surface Water (Pond Water)
			Date of Collection 27.05.2019
	2	3	5
1	Coliform /100 ml	IS :1622-81	9000/100 ml
2	Faecal Coliform/100 ml	IS: 1622-81	3000/100 ml