

সুডা

SUDA

রাজ্য নগর উন্নয়ন সংস্থা
STATE URBAN DEVELOPMENT AGENCY

"ইলগাস ভবন", এইচ-সি ব্লক, সেক্টর-৩, বিধাননগর, কলকাতা-৭০০ ১০৬, পশ্চিমবঙ্গ
"ILGUS BHAVAN", H-C Block, Sector - III, Bidhannagar, Kolkata - 700 106, West Bengal

SUDA-479/2019/9483

19.02.2020

ক্রমিক নং

তারিখ

From : Director, SUDA

To : The Branch Manager,
Axis Bank Ltd.,
Salt Lake, Sector-II Branch,
BJ-110, Sector-II
Salt Lake City, Kolkata - 700 091.

Sub : Electronic Transfer of Fund debiting this office
Current Account No. 916010072244925.



Recd
19/02/20

Capacity Building & A & OE - Swachh Bharat Mission (SBM)

Sir,

You are requested to kindly arrange for electronic transfer of fund as per details given below debiting the amount from this office Current Account No.916010072244925 lying with your branch in respect of Swachh Bharat Mission (SBM).

| Sl. No. | Name of Payee | Amount in Rs. | Bank Details |
|---|--|---------------|---|
| 01. | PricewaterhouseCoopers Private Limited | 1,53,366.00 | Citibank NA, New Delhi Branch, A/C No. 712912006 IFS Code. CITI0000002 |
| (Rupees One Lakh Fifty Three Thousand Three Hundred Sixty Six only) | | | |

Petrus Anuranjan Soreng
Finance Officer, SUDA

Finance Officer
State Urban Development Agency

18/02/2020

Debarati Datta Gupta,
Director, SUDA

Director
State Urban Development Agency

দূরভাষ : ২৩৫৮ ৬৪০৩ / ৫৭৬৭, ফ্যাক্স : ২৩৫৮ ৫৮০০

Tel : 2358 6403/5767, Fax : 2358 5800, E-mail : wbsudadir@gmail.com

Account Section : 2358 6408



TAX INVOICE

Tax Invoice No : 41316009598
Date : 28-NOV-19

Billing Location

State Urban Development Agency (SUDA), West Bengal
ILGUS Bhawan, HC Block, Sector-III, Bidhannagar Kolkata - 700106 West Bengal India

Client's GSTIN : Un-Registered

Kind Attention : Director, State Urban Development Agency

Project Code : 4153895

Bill Partner : Mr. Shivanshu Chauhan

Project Name : Appointment of Transaction Advisor for Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers & Operators

Project Ref : Cluster 9

Passed for Payment Rs. 1,70,728/-
(Rupees One lakh seventy thousand seven hundred twenty eight only
Only to be debited towards Capacity Building - SBM.

Govt. Amt. 1,70,728/-
(-) TDS (10%) 14,468/-
(-) IGST (2%) 2,894/-
Net. Amt. 1,53,366/-

Signature of Finance Officer, State Urban Development Agency, Govt of West Bengal

Dear Sir/Madam,

We append a memo of our charge for INR 341456 in connection with professional services rendered for which we shall be glad to receive a remittance at an early date.

For PricewaterhouseCoopers Private Limited

Digitally signed
Authorised Signatory

Place of supply : West Bengal, 19

10/02/2020

Table with 7 columns: Description of Services, HSN Code, Taxable Amount, CGST Rate, CGST Amount, SGST Rate, SGST Amount. Rows include Inception Reports, Grand Total, and Tax Amounts.

Amount in Words : Three Lakh Forty One Thousand Four Hundred Fifty Six Rupees only

PAN : AABCP9181H
GSTIN : 19AABCP9181H1Z1
HSN Code Description : Management consulting and management services including financial management

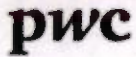
PricewaterhouseCoopers Private Limited, Plot No. Y-14, Block EP, Sector V, Salt Lake, Sech Bhavan Kolkata, West Bengal, -700091, 033
23579260
CIN: U74140WB1983PTC036093
Registered office: Y-14, Block EP, Sector V, Salt Lake, Kolkata, 700091

Govt. Amt. 1,70,728/-
(-) TDS (10%) 14,468/-
(-) IGST (2%) 2,894/-
Net. Amt. 1,53,366/-

Passed for Payment Rs. 1,70,728/-
One lakh seventy thousand seven hundred twenty eight only
Capacity Building - SBM.

Signature valid
Digitally signed by SANJAY CHATAK
Date: 2011.2019.11.16 15:19 +05:30
Location: Gurgaon

18/02/2020



- a) Please quote our bill number(s) while effecting payment.
- b) All payment in foreign currency may kindly be advised to us through an e-mail along with a scan copy of MT-103[SWIFT/IT].
- c) This invoice is raised in reference to the engagement letter/agreement we have with you. Unless otherwise agreed in the engagement letter/agreement the invoice raised is due on receipt. In case of any non-payment or delay in receipt of payment beyond 30 Days(or any other such time which may be specifically prescribed in the said engagement letter/agreement), we shall be entitled to charge you with interest on all outstanding amounts at the prevailing commercial rate of interest.
- d) Kindly ensure the withholding tax compliances as per the law applicable to you, no adjustment/refund of withholding tax will be done later on.
- e) Please send the TDS/WHT certificate (as applicable) within prescribed timeline.

Remittance Details:

| | |
|---|--|
| Amount for the bill no. 41316009598 dated 28-NOV-19 can be wire transferred to: | |
| Beneficiary Bank Details: | |
| Beneficiary Account Name | Pricewaterhousecoopers Private Limited |
| Beneficiary Bank Name | Citibank NA |
| Beneficiary Account Number | 712912006 |
| IFSC | CITI0000002 |
| MICR Code | |
| Swift Code | CITIINBX |



478/2019

রাজ্য নগর উন্নয়ন সংস্থা

SUDA

STATE URBAN DEVELOPMENT AGENCY

“ইলগাস ভবন”, এইচ-সি ব্লক, সেক্টর-৩, বিধাননগর, কলকাতা-৭০০ ১০৬, পশ্চিমবঙ্গ

“ILGUS BHAVAN”, H-C Block, Sector - III, Bidhannagar, Kolkata - 700 106, West Bengal

ক্রমিক নং SUDA-478/2019/9355

তারিখ 12.02.2020

To

Mr. Jogesh Daruka

Pricewaterhouse Coopers (PwC) Pvt. Ltd.

Plot No - DN 56-57, Sector - V,

Salt Lake, Kolkata - 700 091

Subject : Inception Report Approval

Dear Mr. Sumouleendra Ghosh,

With respect to the Inception report submitted by your office on 11th November, 2019 for Cluster - 9 (Ranaghat Municipality, Birnagar Municipality, Taherpur NAA & Coopers Camp NAA) the department accords approval on the inception report. You are now requested to initiate the work for Feasibility Report at the earliest and ensure its submission as per timelines mentioned in Contract.

Approver's Name : Debarati Dutta Gupta

Designation : Director

Organization : State Urban Development Agency

Approver's Sign : _____

DDP 12/2/20

Date :

দুরভাষ : ২৩৫৮ ৬৪০৩ / ৫৭৬৭, ফ্যাক্স : ২৩৫৮ ৫৮০০

Tel : 2358 6403/5767, Fax : 2358 5800, E-mail : wbsudadir@gmail.com

Account Section : 2358 6408



রাজ্য নগর উন্নয়ন সংস্থা

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STATE URBAN DEVELOPMENT AGENCY

“ইলগাস ভবন”, এইচ-সি ব্লক, সেক্টর-৩, বিধাননগর, কলকাতা-৭০০ ১০৬, পশ্চিমবঙ্গ

“ILGUS BHAVAN”, H-C Block, Sector - III, Bidhannagar, Kolkata - 700 106, West Bengal

SUDA-479/2019/৭৪২১

১০ .02.2020

ক্রমিক নং

তারিখ

From : Director, SUDA

To : The Branch Manager,
Axis Bank Ltd.,
Salt Lake, Sector-II Branch,
BJ-110, Sector-II
Salt Lake City, Kolkata – 700 091.


Sub : Electronic Transfer of Fund debiting this office
Current Account No. 916010072244925.

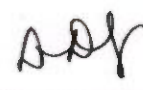
Capacity Building & A & OE - Swachh Bharat Mission (SBM)

Sir,

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| (Rupees One Lakh Fifty Three Thousand Three Hundred Sixty Six only) | | | |


Petrus Anuranjan Soreng
Finance Officer, SUDA
Finance Officer
State Urban Development Agency
Govt. of West Bengal


Debarati Datta Gupta,
Director, SUDA

Director
State Urban Development Agency

দূরভাষ : ২৩৫৮ ৬৪০৩ / ৫৭৬৭, ফ্যাক্স : ২৩৫৮ ৫৮০০

Tel : 2358 6403/5767, Fax : 2358 5800, E-mail : wbsudadir@gmail.com

Account Section : 2358 6408

Bank Guarantee Covering Letter

Date: January 10, 2020

To,
DIRECTOR,
STATE URBAN DEVELOPMENT AGENCY
ILGUS BHAWAN, HC BLOCK,
SECTOR-III, BIDHANNAGAR,
KOLKATA - 700106.

Bank Guarantee issued by us

| | | | |
|--|---|---------------|------------------|
| Bank Guarantee Number | PBGI01002000023 | BG Issue date | January 10, 2020 |
| Amount (In Figures) | Rs.2,89,368.00 | | |
| Amount (in Words) | Rupees Two Lakh Eighty Nine Thousand Three Hundred Sixty Eight Only | | |
| Valid Till Date | September 04, 2020 | | |
| Claim Valid Till Date (Final Validity Date) | September 04, 2020 | | |
| Applicant Name | PRICEWATERHOUSE COOPERS PRIVATE LIMITED | | |

Please find enclosed herewith the original of the above stated bank guarantee issued by us.

Despite our best efforts, since we have not been able to obtain / you have not provided the IFSC of your banker, we are unable to advise this guarantee through SFMS.

We advise you to obtain, in your own interest, confirmation of genuineness of the above stated guarantee from us by contacting us on the address below:

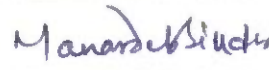
RBL Bank Limited
Global Trade Services
One Indiabulls Centre, Tower 2B, 20th Floor,
841, Senapati Bapat Marg, Lower Parel, Mumbai - 400013.
Tel: 022-48809303
E-mail: tfu@rblbank.com & tfsolutions@rblbank.com

For RBL Bank Limited

Name: 
Designation: ARPITA PRAMANIK
Emp. Code: 4212

Enclosure: As above.

For RBL BANK LTD.


Authorised Signatory
MANAS DEB SIKDER
Emp. Code : 05225

www.rblbank.com**RBL Bank Ltd.**

Branch Office : Thapar House, 25, Brabourne Road, 1st Floor, Kolkata - 700001.
Registered Office : 1st Lane, Shahupuri, Kolhapur - 416001, India | Tel.: +91 2316650214 | Fax: +91 2312657386
CIN : L65191PN1943PLC007308 . E-mail: customercare@rblbank.com



पश्चिमबङ्ग पश्चिम बंगाल WEST BENGAL

AC 534198

Bank Guarantee No : PBGI01002000023
BG Amount : Rs.2,89,368.00 (Rupees Two Lakh Eighty Nine Thousand
Three Hundred Sixty Eight Only)
BG Issue Date : January 10, 2020
BG Expiry Date : September 04, 2020
BG Claim Expiry Date : September 04, 2020

Bank Guarantee No. PBGI01002000023
BG Issue Date: January 10, 2020

Page 1 of 4

For RBL BANK LTD.

Arpita
Authorised Signatory
ARPITA PRAMANIK
Emp. Code: 4212

For RBL BANK LTD.

Manas Deb SIKDER
Authorised Signatory
MANAS DEB SIKDER
Emp. Code : 05225

61636

Sold to _____

100/- (Rupees One Hundred Only)

LICENSED STAMP VENDOR

A. K. MUKHERJEE

9, India Exchange Floor,

BASEMENT

RBL BANK LTD.
THAPAR HOUSE BRANCH
KOLKATA-700 001

20 NOV 2019

BANK GUARANTEE

To,
DIRECTOR,
STATE URBAN DEVELOPMENT AGENCY
ILGUS BHAWAN, HC BLOCK,
SECTOR-III, BIDHANNAGAR,
KOLKATA - 700106.
E-mail ID: wbsudadir@gmail.com

THIS DEED OF GUARANTEE is executed on this 10th day of January 2020 at The RBL Bank Ltd., a Company incorporated and registered under the Indian companies act, 1913 and deemed to exist within the companies Act 1956, and governed by the Banking Regulation Act, 1949 and having its registered office at 1st Lane, Shahupuri, Kolhapur - 416 001, Maharashtra, and its corporate office at One India Bulls Centre, Tower-2, 6th Floor, 841, Senapati Bapat Marg, Lower Parel (W), Mumbai- 400 013, India and having one of its Branch Office at RBL BANK LTD, Thapar House, 1st Floor, 25, Brabourne Road, Kolkata - 700001 (hereinafter referred to as "the Bank")

IN FAVOUR OF:

State Urban Development Agency, Urban Development and Municipal Affairs Department, Government of West Bengal (hereinafter referred to as the "Authority" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and permitted assigns)

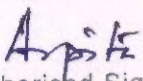
WHEREAS,

A. We understand that the Authority have entered into a contract SUDA-478/2019/6254 dated September 4, 2019 ("Contract") with PricewaterhouseCoopers Private Limited, having Corporate Identity Number or CIN: U74140WB1983PTC036093, and having its registered office at Plot No. Y-14, Block-EP, Sector-V, Salt Lake, Kolkata - 700091 ("PwC"/ "Consultant"), pursuant to the project involving selection of "Transaction Advisors for Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers & Operators for the Cluster No.9: Ranaghat Municipality, Birnagar Municipality, Taherpur NAA and Coopers Camp NAA" ("Project").

B. We understand that the Contract requires the Consultant to furnish a Performance Bank Guarantee to the Authority in a sum of Rs.2,89,368.00 (Rupees Two Lakh Eighty Nine Thousand Three Hundred Sixty Eight Only) ("Guarantee Amount"), which is equivalent to 10% of the contract value, to secure its obligation for providing the consultancy services for a period of twelve (12) months from the date of signing of the aforementioned Contract and amendments received thereafter.

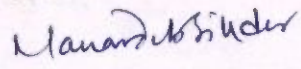
C. We, RBL BANK LTD, through our Branch at Thapar House, 1st Floor, 25, Brabourne Road, Kolkata - 700001 have agreed to furnish this Bank Guarantee by way of Performance Bank Guarantee.

For RBL BANK LTD.


Authorised Signatory

ARPITA PRAMANIK
Emp. Code: 4212

For RBL BANK LTD.


Authorised Signatory

MANAS DEB SIKDER
Emp. Code : 05225

Bank Guarantee No. PBGI01002000023
BG Issue Date: January 10, 2020

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby expressly, irrevocably and unreservedly undertake and guarantee the due and faithful performance of the Consultant's obligations during the Contract period, under and in accordance with the Contract, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, contest or protest, and without any reference to the Consultant, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Authority, under the hand of an officer not below the rank of Manager has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Contract shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Consultant is in default of due and faithful performance of its obligations during the Contract period and its decision that the Consultant is in default shall be final, and binding on the Bank, notwithstanding any differences between the Authority and the Consultant, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Consultant for any reason whatsoever.

3. Notwithstanding any right, the Consultant may have directly against the Authority or any disputes raised by the Consultant or any suit or proceedings pending in any competent Indian court or before arbitration tribunal, a written demand by the Authority shall be conclusive evidence to the Bank that such payment is payable under the terms of the Contract and shall be binding in all respects.

4. In order to give effect to this Bank Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Consultant and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Bank Guarantee. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Consultant before presenting to the Bank its demand under this Bank Guarantee.

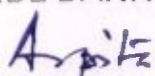
5. This Bank Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Contract or for the fulfilment, compliance and/or performance of all or any of the obligations of the Consultant under the Contract.

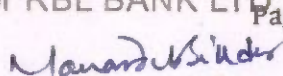
6. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Bank Guarantee is restricted to the Guarantee Amount and this Bank Guarantee will remain in force for the period specified in Paragraph 8 below, and unless a demand or claim in writing is made within such time period specified in Paragraph 8, all rights of the Authority under this Bank Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.

Bank Guarantee No. PBGI01002000023

BG Issue Date: January 10, 2020 For RBL BANK LTD. For RBL BANK LTD

Page 3 of 4


Authorised Signatory
ARPITA PRAMANIK
Emp. Code: 4212


Authorised Signatory
MANAS DEB SIKDER
Emp. Code : 05225

7. This Bank Guarantee shall cease to be in full force and effect till the subsistence of the Contract or till September 4, 2020. whichever is earlier We, the Bank, agree and undertake not to revoke this Bank Guarantee before the same is discharged in writing by the Authority or till the expiry of this Bank Guarantee i.e. up to September 4, 2020, whichever is earlier.

8. The Bank undertakes not to revoke this Bank Guarantee during its currency, except with the previous express consent of the Authority in writing and declares that it has the power to issue this Bank Guarantee and the undersigned has full powers to do so on behalf of the Bank.

9. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred Branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive provided the same is received by the Bank on or before September 4, 2020.

10. This Guarantee shall come into force with immediate effect and shall remain in force and effect for 12 months from the date of signing of the Contract i.e. September 4, 2020, or until it is released earlier by the Authority pursuant to the provisions of the Contract.

11. Payment by the Bank to you, the Authority, will be made within seven (7) working days from receipt of your written request received by us on or before September 4, 2020, making reference to this Bank Guarantee and on demand.

12. This guarantee is non-assignable and non-transferable.

NOTWITHSTANDING ANYTHING CONTAINED HEREIN ABOVE:

I. Our liability under this bank guarantee shall not exceed Rs.2,89,368.00 (Rupees Two Lakh Eighty Nine Thousand Three Hundred Sixty Eight Only).

II. This bank guarantee shall be valid up to September 4, 2020.

III. The Bank is liable to pay the Guarantee Amount or any part thereof under this Bank Guarantee only if you, the Authority serve upon us and we receive a written claim or demand and which should be received by us, on or before September 4, 2020 where after it ceases to be in effect in all respects whether or not the original bank guarantee is returned to the Bank.

In Witness Where Of The Bank Through Its Authorized Officer, Has Set Its Hand And Stamp On This January 10, 2020 At Kolkata.

For RBL Bank Limited

For RBL Bank Limited

Authorized Signatory

Sign / Emp No. ARPITA PRAMANIK
Emp. Code: 4212

Authorized Signatory

Sign / Emp No. MANAS DEB SIKDER
Emp. Code : 05225

Bank Guarantee No. PBGI01002000023

BG Issue Date: January 10, 2020

CONTRACT FOR CONSULTANT'S SERVICES

Project Name: "APPOINTMENT OF TRANSACTION ADVISOR for Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers & Operators"

Project Ref. Cluster 9

Memo No. SUDA-479/2019/6255 Dt: 04.09.2019

(For Cluster No.9: Ranaghat Municipality, Birnagar Municipality, Taherpur NAA and Coopers Camp NAA)

Memorandum of Agreement for providing service for "Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers & Operators"

Between

**State Urban Development Agency (STATE URBAN DEVELOPMENT AGENCY),
Department of Urban Development & Municipal Affairs, Government of West
Bengal**

ILGUS Bhawan, HC Block, Sector-III, Bidhannagar, Kolkata - 700 106

and

PricewaterhouseCoopers Private Limited,

Plot Nos 56 & 57, Block DN -57, Sector V, Salt Lake, Kolkata 700 091

Dated: 04.09.2019

SDX

**Director
State Urban Development Agency**

1





पश्चिमबङ्ग पश्चिम बंगाल WEST BENGAL

AC 029194

Dated: 04-09-2019

MEMORANDUM OF AGREEMENT

This MEMORANDUM OF AGREEMENT is made on this Fourth day of September 2019

BETWEEN

the State Urban Development Agency, Urban Development and Municipal Affairs Department, Government of West Bengal acting through the Director (hereinafter referred to as the "Authority") which expression shall where the context so admits, includes his successors in office and assigns on the One Part,

AND

PricewaterhouseCoopers Private Limited, a Private Limited Company registered under Companies Act 1956 with Corporate Identity Number or CIN: U74140WB1983PTC036093 and having its registered office at Plot Nos 56 & 57, Bock DN -57, Sector V, Salt Lake, Kolkata 700091 authorized signatory Yogesh Daruka (hereinafter called the "Consultants") which expression shall where the context so admits, includes his successors in office and assigns on the Other Part.

WHEREAS

(A) STATE URBAN DEVELOPMENT AGENCY has invited tenders for empanelled transaction advisor firms, enlisted by the Finance Department (PPP cell), Government of


Director
State Urban Development Agency





197 02/9/19 148

নং- তাং- মূল্য-

ক্রেতার নাম ও সাং.....

স্ট্যাম্প ভেডার স্বাক্ষর.....

বিধান নগর (স্ট্রাকচার ডি.ডি.এস আর.ও)

নোট স্ট্যাম্প ক্রয় তাং.....

চালান নং.....নোট কত টাকা খরিদ.....

ড্রেজারী-বারাকপুর, ভেডার-মিতা দত্ত

STATE URBAN DEVELOPMENT AGENCY
Ilgus Bhaban, H.C. Block, Sector-III,
Salt Lake City, Kolkata- 700 106

21 AUG 2019

658000

West Bengal, vide no.3738 F(Y) dated 11-06-2018 for Appointment of Transaction Advisor for Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers and Operators, through No. STATE URBAN DEVELOPMENT AGENCY-227/2018/1617, dated 31.12.2018 and subsequently revised through RFP No. STATE URBAN DEVELOPMENT AGENCY-227/2018/1760 dated 18.01.2019 and subsequent corrigendum No. STATE URBAN DEVELOPMENT AGENCY -227/2018/1796 dated 25.01.2019 (hereinafter called the "services"). Subsequently, STATE URBAN DEVELOPMENT AGENCY as per approval of Finance Department decided to award all subsequent clusters to the interested empaneled transaction advisor firms based on price discovered during the aforementioned first round of bid process;

(B) **M/s PricewaterhouseCoopers Private Limited**, Plot Nos 56 & 57, Bock DN -57, Sector V, Salt Lake, Kolkata 700091 being one of the empaneled transaction advisors evinced interest to undertake Cluster No.9: Ranaghat Municipality, Birnagar Municipality, Taherpur NAA and Coopers Camp NAA and have agreed to provide the services for a consideration of **Rs. 28,93,684/-** (Rs. Twenty Eight Lakh Ninety Three Thousand Six hundred and Eighty Four only) by entering into the contract;

(C) the Authority, on acceptance of the aforesaid proposals of the Consultant, and after receiving necessary approval from Finance Department, Government of West Bengal, vide U.O. No. Group-T/2019-2020/0363 dated 29.07.2019, awarded the Consultancy to the Consultant vide its Letter of Award vide no. STATE URBAN DEVELOPMENT AGENCY-227/2018/1899 dated 12.02.2019 (the "**LETTER OF ASSOCIATION**"); and

(D) in pursuance of the LETTER OF ASSOCIATION, the parties have agreed to enter into this Agreement.

NOW THEREFORE the parties hereto hereby agree as follows: -

The following documents attached here to (Schedule A and B) shall be deemed to form an integral part of this Agreement:

Schedule-A:

1. Main RFP (Annexure - 1)
2. Revised RFP (including the TORs) (Annexure -2)
3. RFP Corrigendum (Annexure -3)
4. LETTER OF ASSOCIATION. (Annexure-4)

Schedule-B:


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1. Appendix A: COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF AGREEMENT
2. Appendix B: Terms of Reference
3. Appendix C: Key personnel details
4. Appendix D: Time Schedule for Deliverables
5. Appendix E: Working arrangement and items to be provided by STATE URBAN DEVELOPMENT AGENCY
6. Appendix F: Price
7. Appendix G: Payment schedule/arrangement
8. Appendix-H: OBLIGATIONS OF THE CONSULTANT AND AUTHORITY
9. Appendix-I: FAIRNESS AND GOOD FAITH

The mutual rights and obligations of the Authority and the Consultants are set forth in this Agreement; in particular:




- (a) The Consultant shall carry out the Services in accordance with the provisions of the Agreement; and
- (b) The Authority shall make payments to the Consultant in accordance with the provisions of the Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be signed in their respective names as on the day and the year written above.

FOR AND ON BEHALF OF State Urban Development Agency, Urban Development and Municipal Affairs Department, Government of West Bengal

By 
 (Authorised Representative) **Director**
 State Urban Development Agency


FOR AND ON BEHALF OF
 (PRICEWATERHOUSE COOPERS PRIVATE LIMITED)

By 
 (Authorised Representative)




Director
 State Urban Development Agency

Witnesses

1)

Santanu Mukherjee . 
Gaurima Singh Gaurima Singh

2)

CONSULTANT

STATE URBAN DEVELOPMENT AGENCY



Director
State Urban Development Agency



CONDITIONS OF AGREEMENT

1. GENERAL PROVISIONS

1.1 Definitions:

Unless the context otherwise requires, the following term whenever used in this Agreement have following meanings:

- a) "Applicable Law" means the laws and any other instruments having the force of law in the India and the State of West Bengal as they may be issued and in force from time to time;
- b) "Agreement" means the Agreement signed by the Parties, together with all documents/ Appendices attached hereto and includes all modifications made in term of the Provisions of Clause 2 hereof;
- c) "Affiliate(s)" means an individual or an entity that directly or indirectly controls, is controlled by, or is under common control with the Consultant.
- d) "Authority" means "State Urban Development Agency, Urban Development and Municipal Affairs Department, Government of West Bengal";
- e) "Consultant" means and includes sub-consultant and their Personnel, if any, engaged for carrying out of Services under this Agreement;
- f) "Currency" means the Indian Rupees;
- g) "Key personnel" means the personnel referred to in Clause 4.
- h) "Personnel" means persons hired by the Consultants or by any sub-consultant as employees and assigned to the performance of the Services or any part thereof;
- i) "Party" means the Authority or the Consultants, as the case may be, and Parties means both of them;
- j) "Services" shall have the meaning ascribed to it in the RFP and *Term of Reference (TOR)* as set forth in APPENDIX-B hereto;

1.2 Law Governing Agreement

This Agreement, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.


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1.3 Language

This Agreement has been executed in English, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Agreement.

1.4 Headings

The Headings shall not limit, alter or affect the meaning of this Agreement.

1.5 Notices

1.5.1 Any notice, request or consent required or permitted to be given or made pursuant to this Agreement shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, speed post, Telegram, facsimile or email to such Party at the addresses specified hereunder: -

Authority:

[..........]
Director
State Urban Development Agency

Attention: Debarati Dutta Gupta

Phone

E-mail:

Facsimile:



Consultants: _____

Attention: Yogesh Daruka

E-mail: yogesh.daruka@in.pwc.com

Telex: + 9133 23572754, 44044288

Facsimile: +9830110790

[Note: Fill in the blanks]

1.5.2 Notice will be deemed to be effective as follows:



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The notice shall be deemed to be effective in the manner and at time as specified as follows:

- (a) In the case of personal delivery, speed post or registered mail, on delivery;
- (b) In the case of telexes, telegrams and facsimiles 24 hours following confirmed transmission;

1.6 Location:

The Services shall be performed in consultation with State Urban Development Agency, West Bengal to the Urban Local Bodies falling under cluster in State of West Bengal. However, it is not be mandatory for the key personnel of the Consultants to be stationed at the Authority office though it is preferable that the Transaction Advisor should have office setup at Kolkata for ease of interaction and they should be readily available.

1.7 Authorised Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed under this Agreement by the Authority or the Consultants may be taken or executed by the officials as under:

For the Authority: Debarati Dutta Gupta

State Urban Development Agency (STATE URBAN DEVELOPMENT AGENCY), Department of Urban Development & Municipal Affairs, Government of West Bengal

ILGUS Bhawan, HC Block, Sector-III, Bidhannagar, Kolkata - 700 106 (West Bengal)..

Phone

E-mail:

Facsimile:

For the Consultant: Yogesh Daruka

PricewaterhouseCoopers Pvt. Ltd., DN 56 &57, Sector V, Salt Lake, Kolkata 700091 (West Bengal)

Phone: + 9133 23572754, 44044288


Director
State Urban Development Agency



E-mail: yogesh.daruka@in.pwc.com

Facsimile: +9830110790

1.8 Taxes and Duties

The Consultants and the personnel shall pay the taxes, duties, fees, levies and other impositions levied under the existing, amended or enacted laws during life of this Agreement and the Authority shall perform such duties in regard to the deduction of such tax as may be lawfully imposed. Irrespective of the aforesaid, the payment to be made hereunder by the Authority shall be made net off applicable GST (at prevailing rates notified under Applicable Laws from time to time), which Authority shall pay over and above the fee payable hereunder.

- 1.9 The conditions shown in letter of invitation, term of reference, and RFP, and financial offers shall be deemed to be incorporated and form part of this Agreement by reference.

Schedule-A

1. Main RFP (Annexure – 1)
2. Revised RFP (including the TORs) (Annexure -2)
3. RFP Corrigendum (Annexure -3)
4. LETTER OF ASSOCIATION. (Annexure-4)

Schedule-B

Appendix-A

1. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF AGREEMENT

1.1 Effectiveness of Agreement

This Agreement shall come into force on the date of signing the Agreement.

1.2 Commencement of Services

The Consultants shall begin carrying out the Services within 15 days from the date of signing of the Agreement. If the Consultant fails to either acknowledge the LETTER OF ASSOCIATION or commence the assignment as specified herein, save and except for delays caused because of Force Majeure or Authority's breach, the LETTER OF ASSOCIATION shall stand automatically terminated, the earnest money of the bidder shall stand forfeited and in such a situation the authority shall be entitled to proceed with the matter as it deem fit.

1.3 Expiration of Agreement

Unless terminated earlier pursuant to Clause 1.9 hereof, the Agreement shall, subject to the conditions of Appendix-G of this Agreement and other terms hereof, expire upon completion of Services by the Consultant.

1.4 Liability of Parties

This Agreement contains all covenants, stipulations and provisions agreed by the parties. No agent or representative of either Party has authority to make, and the Parties shall not bound by or be liable for, any statement, representation, promise or Agreement not set forth herein.

1.5 Modification

Modifications of the terms and conditions of this Agreement, including any modification of the scope of the Services, may be made only by written Agreement between the parties upon mutual consent.

1.6 Force Majeure

1.6.1 Definition: -

- (a) For the purposes of this Agreement, "Force Majeure" means an event which is beyond the reasonable control of a party, and which makes a party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, war, riot, Civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockout or other industrial action are within the power of the party invoking force majeure to prevent, confiscation or any other action by Government agencies.
- (b) Force Majeure shall not include


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- (i) Any event which is caused by the negligence or intentional action of a party or such party's sub-consultant or agent or employees, nor
- (ii) Any event which a diligent party could reasonably have been expected to both (a) take into account at the time of the conclusion of this Agreement and (b) avoid or overcome in the carrying out of its obligations hereunder.
- (c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

1.6.2 No Breach of Agreement

The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of or default under, this Agreement insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Agreement.

- a) A Party affected by an event of Force Majeure shall take all reasonable measures to remove such Party's inability to fulfill its obligations hereunder with a minimum of delay.
- b) A Party affected by an event of Force Majeure shall notify the other party of such event as soon as possible, and in any event not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
- c) The Parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

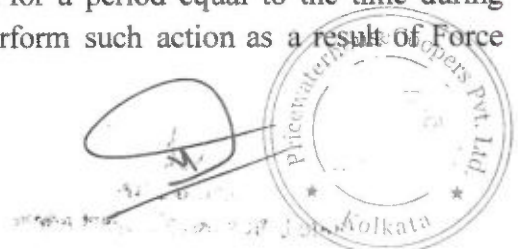
1.6.3 Consultation

Not later than thirty (30) days after the Consultants, as the result of an event of Force Majeure, have become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures to be taken in the circumstances.

1.6.4 Extension of Time

Any period within which a Party shall, pursuant to this Agreement, complete any action or task, shall be extended for a period equal to the time during which such party was unable to perform such action as a result of Force


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Majeure.

1.6.5 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants shall be entitled to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of Services and in reactivating the Services after the end of such period.

1.7 Suspension

The Authority by written notice of suspension to the Consultants, may suspend all payments to the Consultants hereunder, if the Consultants fail to perform any of their obligations under this Agreement, including the carrying out of the Services provided that such notice of suspension (i) shall specify the nature of the failure and (ii) shall request the Consultants to remedy such failure within a period not exceeding fifteen (15) days after receipt by the Consultants of such notice of suspension.

1.8 The Authority for any reasons beyond his reasonable control, may ask the Consultant to suspend whole or part of the Services for such time till the reasons are removed or settled. The extra time period of such duration may be granted as time extension on the original terms and conditions

1.9 Termination

1.9.1 By the Authority

The Authority, may by not less than fifteen (15) days written notice of termination to the Consultant, such notice to be given after the occurrence of any of the events specified in paragraphs (a) to (c) of this Clause, terminate this Agreement:

- a) If the Consultants fail to remedy the failure in the performance of their obligations hereunder, as specified in a notice within fifteen (15) days of receipt of such notice of suspension or within such further period as the Authority may have subsequently approved in writing;
- e) If as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- c) If the Consultants fails to provide Services as per Agreement.


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1.9.2 The Consultant may terminate this Agreement, or any particular Services, immediately upon written notice to the Authority if the Consultant reasonably determines that it can no longer provide the Services in accordance with applicable laws or professional obligations. In that case the consultant shall give a notice 30 days before of such termination to the Authority.

1.9.3 Authority, in its sole discretion and for any reason whatsoever, may terminate this Agreement, after giving 15 days of notice to the Consultant..

1.9.4 Cessation of Rights and Obligations

Upon termination of this Agreement pursuant to *Clauses 1.2 or 1.9* hereof, or upon expiration of this Agreement pursuant to concerned provision of this Agreement hereof, all rights and obligations of the Parties hereunder shall cease, except:

- (i) Such rights and obligations as may have accrued on the date of termination or expiration,
- (ii) The obligation of confidentiality set forth in concerned of this Agreement hereof, and
- (v) Any right, which a party may have under the Applicable Law.

1.9.5 Cessation of Services

Upon termination of this Agreement by notice of either to the other pursuant to Clauses 1.9.1 or 1.9.2 of this Agreement hereof, the Consultants shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum with respect to documents prepared by the Consultants and equipment and materials furnished by the Authority, the Consultants shall proceed as provided, respectively, by concerned provision of this Agreement hereof.

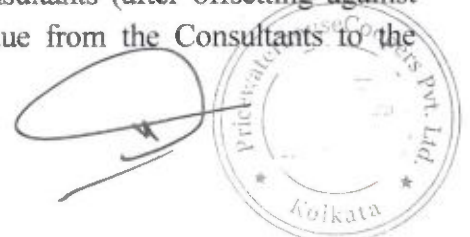
1.9.6 Payment upon Termination

Upon termination of this Agreement pursuant to Clauses 1.9.1 or 1.9.2 of this Agreement hereof, the Authority shall make the payment of Consultant Fee pursuant to Appendix-G of this Agreement hereof for Services performed prior to the effective date of termination to the Consultants (after offsetting against these payments any amount that may be due from the Consultants to the



Director

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Authority).

1.9.7 Disputes about Events of Termination

If Consultant disputes whether an event specified in paragraphs (a) to (c) Clause 1.9.1 of this Agreement has occurred, he may within forty five (45) days after receipt of notice of termination from the employer, refer the matter to arbitration under this Agreement.

Appendix-B

Terms of Reference (TOR) for Transaction Adviser

(1) Introduction

Government of West Bengal has taken several steps/initiatives for making all the cities Clean, Green and Beautiful with special emphasis on management of Solid Wastes in Municipal Towns of the State. One of the obligatory functions of the Municipal Bodies is to remove solid waste from the cities under Sections 63, 95B, 260, 273 of the West Bengal Municipal Act, 1993 and corresponding provisions of the statute governing Municipal Corporations in West Bengal. A number of initiatives have been taken by the Urban Development & Municipal Affairs Department to ensure that solid waste are collected by the Municipal Bodies and disposed of scientifically by them. Under Mission Nirmal Bangla, a lot of equipment *e.g.* garbage bins, compactors, hydraulic tippers and other vehicles, community bins to Municipal Bodies to assist them in systematic collection of garbage from individual holdings, their transportation and stacking before disposal. Land has also been provided through inter departmental transfer to municipal bodies to set up dumping ground cum solid waste processing plants. In some cases these bodies have been permitted to purchase private land for setting up these facilities. The municipal bodies are required to collect waste from individual holdings systematically and transport them regularly to the solid waste disposal facility and get them recycled/processed scientifically. Efforts has been taken by some municipalities to collect waste and process them to the best of their abilities. It is, however, a fact that most municipal bodies do not have the technical capability, financial capacity and managerial competence to handle disposal of solid waste in a scientific manner. As a result, in spite of best intentions and substantial investments, these efforts have not resulted in significant improvement of situation.

In the light of importance given to scientific collection and disposal of solid waste, a large number of legislations and guidelines have been issued by different authorities from time to time. Some of these are:

- 1) Solid Waste Management Rules 2016 framed by Government of India
- 2) Policy and Strategy on Solid Waste Management for Urban Areas of West Bengal


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made in 2017

- 3) Plastics Waste Management Rules 2016 framed by Government of India
- 4) Policy and Strategy on Plastics Waste Management for Urban Areas of West Bengal made in 2017
- 5) Amendment of the West Bengal Municipal Act 1993 incorporating the provisions for banning using plastic bags below 50 microns.
- 6) State Government Order to all the Urban Local Bodies to regularly remove Solid Wastes from all the Hospitals in their jurisdiction and accordingly make special arrangement for removal of solid waste generated at Hospital.
- 7) Guideline of Ministry of Housing & Urban Affairs, Government of India on Implementation of Solid Waste Management by Bulk Solid Waste Generators.

The present state of solid waste disposal in urban areas involves awareness generation among the population, expectation of segregation of source, door to door collection by the municipal bodies, intermediate storage of such collected waste, segregation at intermediate storage points, ultimate transportation to the disposal ground and segregation, recycling, processing (Bio-gas, RDF, compost) and finally landfill with the residue. While the municipalities in many cases are able to carry out the first three functions reasonably and effectively given appropriate support, the final steps, viz. collection of solid waste from intermediate transit points to their final processing and landfill may not be effectively carried out by the municipal bodies at their current level of resources and competence.

The Urban Development & Municipal Affairs (UD&MA) Department through Kolkata Metropolitan Development Authority (KMDA) and Municipal Engineering Directorate (MED) are developing landfill sites and solid waste processing facilities (compost plants and Biogas energy plants) in different municipalities based on this model.

However, segregation of solid waste, their processing to either to produce compost or Refuse Derived Fuel (RDF) or Bio-gas, their marketing, recycling of waste processing of construction and demolition waste, a remediation of legacy waste, management of landfill site, all of these are technically and managerially complex functions. The experience across cities in India and abroad shows that these functions are best carried out by technically and financially competent agencies. Such agencies are seen to be running successful plants in many Indian cities e.g. Hyderabad, Bangalore, Panaji, Indore, Bhopal, Surat etc.

In this light, State Government has decided to appoint **Transaction Advisor for Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management** for selection of Developers and Operators

(2) Objectives

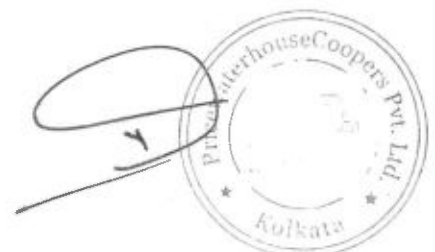
The objective of engaging a Transaction Advisor is for **Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management** for selection of Developers and Operators.



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(3) Scope of Work/Description of Task

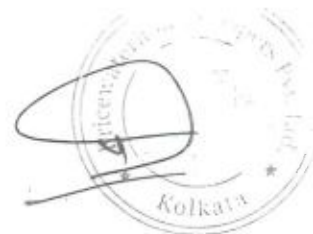
3.1. The broad responsibilities of the Transaction Adviser are summarized as follows:

- a) Carry out **feasibility study of the project** in all respect including techno economic viability of existing cluster /proposed cluster of municipal bodies.
- b) Preparation of **Detailed Feasibility Report** for Integrated Solid Waste Management for the municipal bodies involved in this project. The Feasibility Report must cover all ambits of municipal solid waste management from door to door collection, primary/secondary transportation (if required), requirement of transfer stations (if any), processing facility and disposal of inert. Costing of this will also be included in the report.
- c) Drafting of **Request for Proposal (RFP)** for selection of competent agency for carriage (as required) and processing of waste for the cluster.
- d) Assisting Solid Waste Management (SWM) Cell in managing the bid process including **evaluation of bids** and for selection of successful agency for the cluster.
- e) **Drafting of Tripartite Agreement** between Municipal Bodies in the Cluster, the SWM Cell of the Department and the Selected Agency.

3.2. The Transaction Advisor shall keep the following in view in the discharge of the above responsibilities:

- a) Consultation with Urban Development and Municipal Affairs Department, STATE URBAN DEVELOPMENT AGENCY, URBAN LOCAL BODIES, Development Authorities and other stakeholders to identify and conceptualize/develop projects for Solid Waste Management through cluster/standalone approach.
- b) Detailed Technical Feasibility Report should be developed from the primary collection stage up to the final processing and disposal of all types of solid waste. A comprehensive Technical Feasibility Report indicating each stages of waste management i.e. primary Door to Door collection of segregated waste, mode of transportation, setting up of transfer station wherever feasible and disposal of Solid Waste as per provision of SWM Rules, 2016 are to be followed.
- c) The Detailed Project Report for all ongoing projects should incorporate all capital investment already made and existing infrastructure should be considered optimally.
- d) The Detailed Technical Feasibility Report should be flexible with regard to technology for processing of waste and sanitary landfill. Transaction Advisors should provide the broad contours of the project indicating performance parameters considering land constraints and other limitations, if any, within which concessionaires are free and flexible to choose technology of choice.


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- e) It is preferable that the Transaction Advisor should have office setup at Kolkata for ease of interaction and should be available as and when required by the Authority.
- f) Projects should be structured under appropriate Public Private Partnership mode to enable optimum utilization of the investments already made in Solid Waste Management projects. Innovative business and commercial practices such as commercial sale of products, levy of user charges/ fee etc., as appropriate under the applicable laws should be incorporated in the Detailed Technical Feasibility Report.
- g) Transaction Advisor is to undertake visits to acclaim projects in other states and study best practices. In the financial proposal Transaction Advisor may incorporate the travel expenses and related incidental charges for visit to other States to see the best practices considering visit at least in two such cities with two experts from the team.

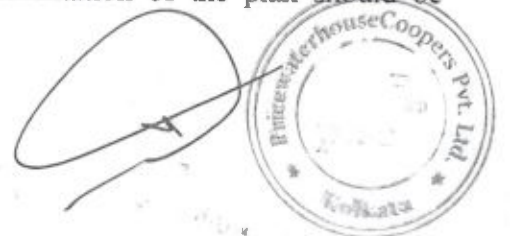
3.3. The Transaction Advisor shall prepare bid documents (RFP, Concession Agreement *etc.*) and manage bid process upto signing of Concession Agreement; while doing so the following objectives shall have to be addressed.

- a) Optimum utilization of existing infrastructure of Solid Wastes in the URBAN LOCAL BODIES and in conformity with policy of Government of West Bengal.
- b) Optimum utilization of land for processing plant and sanitary landfill site clubbing URBAN LOCAL BODIES in clusters to make the project financially and technically feasible.
- c) While undertaking the feasibility study, the proposed cluster sites should re-visited for suitable modification, if necessary. For finalization of cluster, STATE URBAN DEVELOPMENT AGENCY should be consulted. The cluster-wise Detailed Feasibility Report, Request for Proposal (concession Request for Proposal for implementation) may be prepared accordingly.
- d) Collection, segregation and transportation of wastes shall be the primary responsibility of URBAN LOCAL BODIES. However the Transaction Advisor will give a comprehensive and holistic mechanism in consultation with the URBAN LOCAL BODIES regarding collection at door step to final disposal.
- e) Incentive on performance for all stakeholders.
- f) A flow chart for disposal of all types of wastes from source up to the processing plant/Landfill to be developed. A clear pictorial representation of the plan should be developed by the TA itself in their report.

LSF

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- g) Necessary clearances to be obtained from the Department of Environment, West Bengal Pollution Control Board and other regulatory bodies, on behalf of operating agency as and when required as per extent of rules, statutory provisions etc. pertaining to the matter.
- i. Necessary clearances need to be secured by the Concessionaire with assistance from STATE URBAN DEVELOPMENT AGENCY/ other relevant Government Agencies
 - ii. Transaction Advisors are only required to list and specify the clearances required for executing the proposed projects in the given clusters
- h) New technology (i.e. the technology to be adopted in adherence to SWM Rules, 2016) should be backed by necessary certificate/s (Necessary Certification means Pollution Clearance Certificate etc.) from the proper authority (Proper authority means Pollution Control Board and other regulatory authorities.).
- i) Effective Operation & Management System is to be for at least 20 years.
- j) Processing and disposal of Legacy waste and reclamation of land is to be incorporated.
- k) Land for processing plant and sanitary landfill site is to be identified by URBAN LOCAL BODY.
- l) Reclamation of existing Dumping Grounds, scientific development, beautification etc. of the Dumping Grounds.
- m) Segregation and processing of recyclable waste as per Solid Waste Management Rules, 2016 is to be ensured effectively.
- n) Scope of work should be customized on available field data and technology for each cluster/project.
- o) Implementation of effective and viable model based on national and international best practices.
- p) Proposal should be inclusive of institutional structures required for implementation of projects and operation & maintenance thereof with private sector financing.


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State Urban Development Agency



- q) Key performance indicators to be identified. These are to be linked with schedule of payment to operating agencies.
- r) Principal objective: Achievement of 100 percent disposal and processing of incoming waste and waste as available in existing dumping site, and to maintain its sustainability.

(4) Assignment for following Proposed Cluster:

| Cluster No. | Proposed URBAN LOCAL BODYs |
|-------------|---|
| 9 | Ranaghat Municipality, Birnagar Municipality, Taherpur NAA and Coopers Camp NAA |

Appendix-C

Key Personnel Details:

It is envisaged that the assignment will be undertaken by the team proposed by the Transaction Advisor at the time of submission their Bid documents as detailed below:

| Sl No. | Position | Name of the Expert |
|--------|-----------------------------------|--------------------|
| 1 | Team Leader | Rahul Mallik |
| 2 | Solid Waste Management Specialist | Ayan Majumder |
| 3 | PPP Specialist | Rahul Singh |
| 4 | Financial Analyst | Anjan Kumar Roy |
| 5 | Legal Consultant | Santosh Pandey |

Appendix-D

(1) Deliverables

| Stage | Activity | Time Allocated * |
|---------|---|--|
| Stage 1 | Submission of the Inception Report | 10 days from the date of commencement. |
| Stage 2 | Submission of Draft Feasibility Report | 45 days from the Stage 1 |
| Stage 3 | Submission of Final Feasibility Report along with action plan | 10 days from approval of Stage 2 |
| Stage 4 | Submission of the Draft RFP for selection of Agency | 20 days from approval of Stage 3 |
| Stage 5 | Submission of the Final RFP for selection of Agency | 10 days from approval of Stage 4 |
| Stage 6 | Evaluation of the Tender Documents and recommendation for the Selected Agency | 10 days from tender closing date |
| Stage 7 | Getting the Concession Agreement signed by the selected Agency | 10 days from Stage 6 |

A Fortnightly meeting will be held where the progress of the assignment will be reviewed against the progress submitted by the Transaction Advisor.

Appendix-E

(1) Working arrangement:

The assignment will be contracted by Director, State Urban Development Agency, West Bengal. URBAN LOCAL BODY/s will nominate an officer to liaison with the Transaction Advisor Team.

(2) Items to be provided by the STATE URBAN DEVELOPMENT AGENCY:

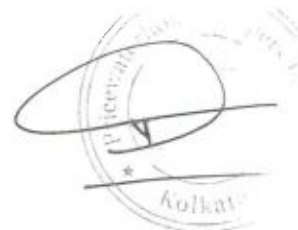
All the data will be provided by STATE URBAN DEVELOPMENT AGENCY and URBAN LOCAL BODY to the Transaction Advisor and for that Transaction Advisor should inform the requirement of requisite data to the office of STATE URBAN DEVELOPMENT AGENCY. However certain datas are to be collected by the Transaction Advisor during their Field Study if it is not readily available with STATE URBAN DEVELOPMENT AGENCY/ URBAN LOCAL BODY.

It is to say that with regards to topographical survey, geotechnical investigation, leachate quality analysis, ground & surface water quality analysis, waste characterization survey etc shall be under the scope of Transaction Advisor consultant where STATE URBAN DEVELOPMENT AGENCY/Kolkata Metropolitan Development Authority/Municipal Engineering Directorate will extend full support.

(3) Items to be provided by the Transaction Advisor:



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The Transaction Advisor shall organize and provide for:

- Transportation and travelling requirement of their personnel for visit to URBAN LOCAL BODIES, designated sites and any other place for completion of the assignment
- Expenses towards accommodation for various visits mentioned above will also be borne by the Transaction Advisor.
- Any other expenses as required for completion of assignment.

Appendix-F

The contract price of **Rs. 28,93,684/-** (Rupees Twenty Eight Lakh Ninety Three Thousand and Six hundred and Eighty Four only) shall remain fixed and firm during the period of contract excluding Goods and Service Tax. The Authority shall pay GST in the prevailing rate.

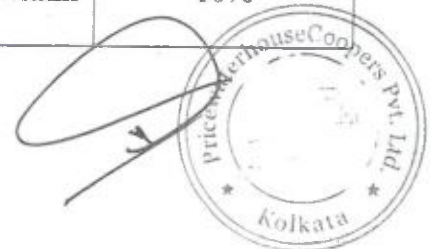
Appendix-G

Payment Schedule/Arrangement

| Stage | Details of stages | Percentage |
|----------|---|------------|
| Stage 1A | Submission of the Inception Report | 5% |
| Stage 1B | Acceptance of Inception Report by the Authority within 7 working days from the date of submission | 5% |
| Stage 2A | Submission of Draft Feasibility Report by the TA | 5% |
| Stage 2B | Acceptance of Draft Feasibility Report, by the Authority within 7 working days from the date of submission | 5% |
| Stage 3 | Submission of Final Feasibility Report along with action plan by the TA within 7 working days from the date of submission of corrected draft from the Authority | 5% |
| Stage 4A | Submission of Draft RFP by the Agency | 5% |
| Stage 4B | Acceptance of Draft RFP by the Authority within 30 working days of submission | 10% |

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Director
State Urban Development Agency

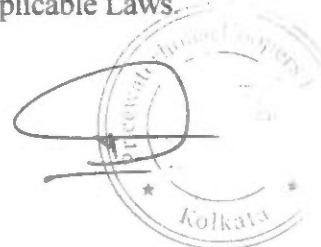


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| Stage 5A | Submission of the Final RFP for selection of Agency | 10% |
| Stage 5B | Acceptance of the Final RFP by the Authority within 30 working days of submission | 10% |
| Stage 6 | Evaluation of the Tender Documents and recommendation for the Selected Agency | 20% |
| Stage 7 | Getting the Concession Agreement signed by the selected Agency | 20% |
| | TOTAL | 100% |

STATE URBAN DEVELOPMENT AGENCY shall review and monitor the progress of the assignment. On acceptance of the report against each milestone by the Director, STATE URBAN DEVELOPMENT AGENCY, payment will be released subject to deduction of taxes, as applicable.

- (a) If the Agreement duration gets reduced due to Termination or any other reason that is not attributable to the Consultant, Consultant shall be entitled to:
- (i) the payment of the Consultant Fee for Services performed prior to the effective date of such termination (after offsetting against these payments any amount that may be due from the Consultants to the Authority); and
 - (ii) release of the performance security by the Authority to the Consultant.
- (b) Notwithstanding anything contrary contained in this Agreement, if project gets delayed beyond period of twelve (12) months from commencement date for any reason(s) not attributable to the Consultant, the Consultant shall be entitled to terminate the Agreement without any liability/cost thereof. Upon such exit, the Consultant shall be entitled to:
- (i) the payment of the Consultant Fee for Services performed prior to the effective date of such termination (after offsetting against these payments any amount that may be due from the Consultants to the Authority); and
 - (ii) release of the performance security by the Authority to the Consultant.
- (c) All payments made hereunder shall be net off and be paid by Authority along with applicable GST as per prevailing rates notified under Applicable Laws.


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Currency of Payment

Except as may be otherwise agreed between the Authority and the Consultants all payments under this Agreement shall be made in Indian Rupees only. The payments shall be made by Cheques / Demand Draft or electronic transfer to designated account of Consultant.

Mode of Billing and Payment

The billing and payment in respect of Services shall be made as follows:

- (a) As soon as practicable and not later than the fifteen (15) days after the completion of each stage, during the period of Services, the Consultant shall submit to Authority in duplicate a bill for payment.
- (b) The Authority shall cause the payment to the Consultant periodically as given above within ten (10) days after the receipt by the Consultant's bills.
- (c) All running payments shall be treated as interim payments subject to adjustment on the finalization of Agreement.

Recovery

Any sum falling due or any loss caused due to this Agreement shall be recoverable by the Authority from the Consultant's performance security and balance as if it were arrears of land revenue.

Performance Security means 10% of total Consultant Fee in the form of Bank Guarantee of any recognized bank in India in favour of the Authority to be submitted by the Consultant within 15 days from signing of the Agreement. Bank Guarantee should remain valid till the Agreement continues to be in force.

Appendix-H

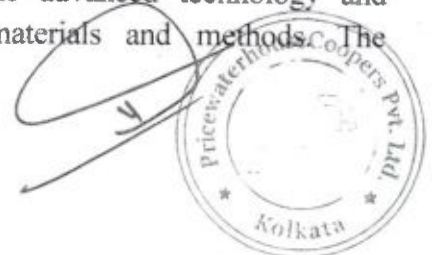
OBLIGATIONS OF THE CONSULTANTS

1.1 General

1.1.1 Standard of Performance

The Consultants shall perform the Services and carry out their obligations hereunder with all due diligence and efficiency, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. The


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Consultants shall always act, in respect of any matter relating to this Agreement or to the Services, as faithful advisers to the Authority, and shall at all times support and safeguard the Authority's legitimate interests in any dealings with Sub-consultants or Third Parties.

1.1.2 Law Governing Services

The Consultants shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Sub-consultants, as well as any personnel of the Consultant and/or sub-consultants and agents, comply with the Applicable Law time being in force. The Authority shall advise the Consultants in writing of relevant local customs and the Consultants shall, after such notice, respect such customs.

1.2 Conflict of Interests

1.2.1 Consultants not to benefit from Commissions, discounts etc.

The remuneration of the Consultants pursuant to Appendix-G of this Agreement hereof shall constitute the Consultant's sole remuneration in connection with this Agreement or the Services and subject to relevant provision of this Agreement hereof, the Consultants shall not accept for their own benefit any commission, discount or similar payment in connection with activities pursuant to this Agreement or to the Services or in the discharge of their obligations hereunder, and the Consultants shall use their best efforts to ensure that any of the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

1.2.2 Procurement Rules

If the Consultants, as part of the Services, have the responsibility of advising the Authority on the procurement of goods, works or services, the Consultants shall comply with any applicable procurement guidelines applicable in the State of West Bengal and shall at all times perform such responsibility in the best interest of the Authority. Any discounts or commissions obtained by the Consultants in the exercise of such procurement responsibility shall be for the account of the Authority.

1.2.3 Consultants and Affiliates not to engage in certain activities

The Consultants agree that, during the term of this Agreement and after its termination, the Consultants and any entity affiliated with the Consultants,


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as well as any sub-consultant and any entity affiliated with such sub-consultant, shall be disqualified from providing goods, works or Services (other than the Services and any continuation thereof) for any Project resulting to the Services.

1.2.4 Prohibition of Conflicting Activities

The Consultants shall not engage and shall cause their personnel as well as Sub-consultants and their Personnel not to engage, either directly or indirectly during the term of this Agreement, any business or professional activities in the State of West Bengal, which would conflict, with the activities assigned to them under this Agreement.

1.3 Confidentiality

The Consultants, their sub-consultants and the personnel of either of them shall not, either during the term or within 6 (six) months after the expiration of this Agreement, disclose any proprietary or confidential information relating to the project, the Services, this Agreement or the Authority's business or operations without the prior written consent of the Authority.

1.4 Liability of the Consultants

1.4.1 Subject to additional provisions, if any, set forth in this Agreement, Consultant's liability under this Agreement shall be as provided by the Applicable Law.

1.4.2 The Consultant shall, subject to the limitation specified provisions of this agreement, be liable to the Authority for any direct loss or damage accrued or likely to accrue due to deficiency in Services rendered by it.

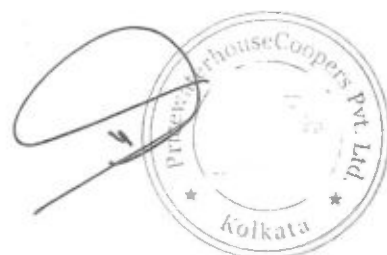
1.4.3 The Parties hereto agree that in case of negligence or willful misconduct on the part of the Consultant or on the part of any person or firm acting on behalf of the Consultant in carrying out the Services, the Consultant, with respect to damage caused to the Authority, shall not be liable to the Authority:

(i) for any indirect or consequential loss or damage; and

(ii) for any direct loss or damage that exceeds the Consultant Fee actually paid for the Services.

1.5 Accounting, Inspection and Auditing


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The Consultants (i) shall keep accurate and systematic accounts and records in respect of the Services, hereunder, in accordance with accepted accounting principles and in such form and detail as will clearly identify all relevant time charges and cost, and the bases thereof.

1.6 Consultant's Actions requiring Authority's prior Approval

The Consultants shall obtain the Authority's prior approval in writing before changing key personnel. The key personnel shall be available as per the requirement of fulfilment of Services. However, it shall not be mandatory for the key personnel of the Consultants to be stationed at the Authority location but will be available before the Authority as and when required.

1.7 Reporting Obligations

The Consultants shall submit to the Authority the reports and documents specified in the Terms of Reference as set forth in Appendix-B, and perform the Services as per terms set forth in the Terms of Reference.

Documents prepared by the Consultants to be the Property of the Authority. All plans, drawings, specifications, designs, reports, other documents and software prepared by the Consultants for the Authority under this Agreement shall become and remain the property of the Authority. The Consultants shall, not later than upon termination or expiration of this Agreement, deliver all such documents etc. to the Authority, together with a detailed inventory thereof. The Consultants may retain a copy of such documents and software.

The Authority shall constitute a Committee for periodic review of the documents/reports specified in the Terms of Reference as set forth in Appendix-B on a fortnightly basis.

OBLIGATIONS OF THE AUTHORITY

2. Assistance and Exemptions

2.1. The Authority will assist to Consultant in grant of following from Government:

2.2. Provide the Consultants, the sub-consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultants, sub-Consultants and Personnel to perform the Services (if applicable);

2.3. Assist the Consultants, sub-Consultants and the Personnel employed by them for the Services from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity according to the Applicable Law;

2.4. Grant to the Consultants, any sub-Consultants and the Personnel of either of them the

privilege, pursuant to the Applicable Law, of bringing into State of West Bengal reasonable amount of currency for the purposes of the Services or use of the personnel and their dependent and of withdrawing any such amounts as may be earned therein by the Personnel in the execution of the Services;

2.5. The Authority shall nominate an officer to liaison with the Consultant.

2.6. The Authority shall provide all the data to the Consultant and for that Consultant should inform the requirement of requisite data to the office of the Consultant. However certain data are to be collected by the Consultant during their Field Study if it is not readily available with the Authority and the Authority will assist the Consultant in such endeavours. However, with regard to topographical survey, geotechnical investigation, leachate quality analysis, ground and surface water quality analysis, waste characterization survey etc shall be under the scope of Consultant to consult where the Authority will extend full support.

Appendix-I

1. FAIRNESS AND GOOD FAITH

1.1. Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Agreement and to adopt all reasonable measures to ensure the realization of the objectives of this Agreement.

1.2. Operation of the Agreement

The parties recognize that it is impractical in this Agreement to provide for every contingency which may arise during the life of the Agreement, and the parties hereby agree that it is their intention that this Agreement shall operate fairly as between them, and without detriment to the interest of either of them and that if during the term of this Agreement either party believes that this Agreement is operating unfairly, the parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but on failure to agree on any action pursuant to this clause shall give rise to a dispute subject to arbitration in accordance with terms hereof.

2. INTELLECTUAL PROPERTY RIGHTS


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The Consultant may use data, software, designs, utilities, tools, models, systems and other methodologies and know-how ("Materials") that the Consultants own in performing the Services. Notwithstanding the delivery of any Reports, the Consultants retain all intellectual property rights in the materials (including any improvements or knowledge developed while performing the Services), and in any working papers that Consultants compile and retain in connection with the Services (but not Authority Information reflected in them). Upon payment for the Services, the Authority may use any materials included in the Reports, as well as the Reports themselves as permitted by this Agreement.

3. INDEMNITY

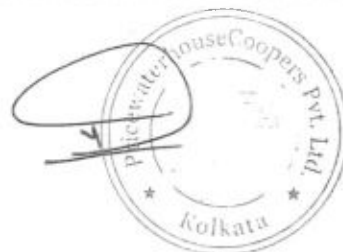
To the fullest extent permitted by applicable law and professional regulations, the Authority shall indemnify the Consultants, against all claims by third parties (including the Authority's affiliates) and resulting liabilities, losses, damages, costs and expenses (including reasonable external and internal legal costs) arising out of the third party's use of or reliance on any Report disclosed to it by or through the Authority or at the Authority's request. The Authority shall have no obligation hereunder to the extent that the Consultant have specifically authorized, in writing, the third party's reliance on the Services.

4. MISCELLANEOUS

- a. This Agreement constitutes the entire agreement as to the Services and the other matters it covers, and supersedes all prior agreements, understandings and representations with respect thereto, including any confidentiality agreements previously delivered.
- b. Both the Parties may execute this Agreement (including TOR and RFP), as well as any modifications to it by electronic means and each of us may sign a different copy of the same document. Both of us must agree in writing to modify this Agreement or any Statement of Work hereunder.
- c. The Consultant shall be liable for defects, discrepancies and disorders etc. in works executed under his supervision.
- d. Both the Authority and Consultant represents that the person signing this Agreement and any Statement of Work hereunder on its behalf is expressly authorized to execute them and to bind each of us to their terms.
- e. Neither of the Parties may assign any of their rights, obligations or claims under this Agreement;
- f. If any provision of this Agreement (in whole or part) is held to be illegal, invalid or otherwise unenforceable, the other provisions shall remain in full force and effect;


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- g. If there is any inconsistency between provisions in different parts of this Agreement, those parts shall have precedence as follows (unless expressly agreed otherwise): (a) the Cover Letter, (b) the applicable Statement of Work and any annexes thereto, (c) these General Terms and Conditions, and (d) other annexes to this Agreement;
- h. Neither of the Parties may use or reference the other's name, logos or trademarks without its prior written consent, provided that the Consultant may use the Authority's name publically to identify the Authority as a Authority in connection with specific Services or otherwise.

5. SETTLEMENT OF DISPUTES

5.1. Amicable Settlement

The parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Agreement or the interpretation thereof.

5.2 Dispute Redressal System

5.2.1 In the event of any Dispute between the Parties, either Party may call upon [Director, State Urban Development Agency, Government of West Bengal] and the Senior Management of the Consultant or a substitute thereof for amicable settlement, and upon such reference, the said persons shall meet not later than 10 (ten) days from the date of reference to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the 10 (ten) day period or the Dispute is not amicably settled within 15 (fifteen) days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) days of the notice in writing or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the provisions hereof.

5.2.2 Arbitration:-

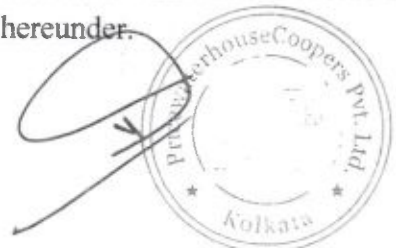
Any Dispute which is not resolved amicably pursuant to resolution mechanism as provided in Clause above, shall be finally decided by reference to arbitration by an Arbitral Tribunal appointed in accordance with this clause, and shall be subject to the provisions of the Arbitration and Conciliation Act, 1996 (as amended from time to time). The place of such arbitration shall be at Kolkata and the language of arbitration proceedings shall be English.

The Arbitral Tribunal shall constitute of the sole arbitrator to be mutually appointed by parties.

This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any arbitration proceedings hereunder.


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5.3 **Jurisdiction –**

The contract has been entered within the State of West Bengal and its validity, construction, interpretation and legal effect shall be to the exclusive jurisdiction of the appropriate court in State of West Bengal.


IN WITNESS THEREOF, the parties hereto have caused this Agreement to be signed in their respective names of the day and year first above written.

FOR AND ON BEHALF OF THE AUTHORITY

BY 
Director
Authorised Representative **State Urban Development Agency**

Witness:



FOR AND ON BEHALF OF THE CONSULTANTS

BY 
Authorised Representative 

Witness:

Santanu Mukherjee Lij
Gaurima Singh Gaurima Singh


Director
State Urban Development Agency

Inception Report

Transaction Advisory Support for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers & Operators

Ranaghat Municipality, Birnagar Municipality, Taherpur
NAA and Coopers Camp NAA

(Cluster 9)

Submitted to – State Urban Development Authority,
Department of Urban Development & Municipal Affairs

Government of West Bengal

Submitted by – PricewaterhouseCoopers Private Limited

October 2019

Abbreviations

| Abbreviation | Paraphrase |
|------------------|--|
| AE/Asst. Engg. | Assistant Engineer |
| C & T | Collection and Transportation |
| C&D | Construction & Demolition |
| C/N Ratio | Carbon Nitrogen Ratio |
| CAD | Computer Aided Design |
| CBD | Central Business Districts |
| CE | Chief Engineer |
| CEO | Chief Executive Officer |
| CPHEEO | Central Public Health and Environmental Engineering Organization |
| DBFOT | Design, Build, Finance, Operate and Transfer |
| DBOT | Design, Build, Finance and Transfer |
| DPR | Detailed Project Report |
| EE | Executive Engineer |
| EO | Executive Officer |
| FO | Finance Officer |
| GIS | Geographic Information System |
| GoWB | Government of West Bengal |
| IRR | Internal Rate of Return |
| IS | Indian Standard |
| IT | Information Technology |
| ITES | Information Technology Enabled Services |
| LFG | Land Fill Gas |
| LOI | Letter Of Intent |
| MED | Municipal Engineering Directorate |
| MSWM | Municipal Solid Waste Management |
| NGO | Non-Governmental Organization |
| NGT | National Green Tribunal |
| NPV | Net Present Value |
| O&M | Operation & Maintenance |
| PCB | Pollution Control Board |
| PPP | Public Private Partnership |
| RDF | Refuse Derived Fuel |
| RfP | Request for Proposal |
| SHG | Self Help Group |
| SI | Sanitary Inspector |
| Sq. Km | Square Kilometers |
| Sub. Asst. Engg. | Sub Assistant Engineer |
| SUDA | State Urban Development Agency |
| SWM | Solid Waste Management |

| | |
|---------|---------------------------------------|
| TA | Transaction Advisor |
| TBM | Temporary Bench Mark |
| UD & MA | Urban Development & Municipal Affairs |
| ULB | Urban Local Body |
| VTS | Vehicular Tracking System |
| WACC | Weighted Average Cost of Capital |
| WBPCB | West Bengal Pollution Control Board |

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1. Introduction

1.1. Project Background

1.1.1 General Background of SWM in India

Rapid urbanization in the last few decades has led to significant increase in municipal solid waste generation in India. Municipal Solid Waste Management (MSWM) has always been a great challenge for the urban local bodies (ULBs) in India. Public health, environment and quality of life in urban areas have a direct bearing on the efficiency with which the SWM service is provided by ULBs. In most cities of India, solid waste management is inefficient as systems adopted are primary, tools and equipment outdated, and inadequate & manpower productivity is low. A significant portion of the population does not have access to primary waste collection service and only 50 to 70% of waste collected is transported for disposal. Processing and treatment of waste is limited, and final disposal is in unscientific dumpsites, posing problems of soil, water contamination and air pollution.

1.1.2 General Background of SWM in West Bengal

There are a total of 125 ULBs in the State of West Bengal, of which seven are Municipal Corporations, while the remaining are large to small category municipalities. Some of the areas (particularly Corporations) are also part of larger developmental areas, governed by the Development Authorities, constituted under the West Bengal Town and Country (Planning & Development) Act, 1979. State Government has taken several steps/initiatives in its endeavor to make all the cities clean, green and beautiful, with special emphasis on management of solid wastes across all municipal towns. All the ULBs have been provided with movable/ stationary compactors for proper transportation and subsequent primary management of solid wastes to the dump sites. In some ULBs, battery operated hydraulic tippers have been provided for easy collection of waste from areas having narrow roads.

1.1.3 Conceptualizing of Cluster based SWM in the state

The State Government has started preparation of DPRs for Integrated Solid Waste Management of the municipal towns either in Stand-alone Mode or in Cluster Mode, considering the Components – i) Waste segregation at source into bio degradable & non bio degradable waste, ii) Door-to-door collection of segregated waste, iii) Transportation of waste to dumping ground through compactor or other means, and iv) Segregation of Waste at Dumping Ground (if required) and Processing of Bio degradable Waste either to compost or energy. Special emphasis is being given on the sustainability of the projects by way of generating revenue through composting and energy (Bio-Gas or other form of fuel) generation from the Bio-degradable waste. Maintaining hygienic operational procedure in solid waste management and beautification of the dumping sites are also being taken care of. Over and above these, awareness campaign along with ICT-enabled interventions have been planned to trigger citizens' participation in these initiatives.

State Urban Development Agency (SUDA), Government of West Bengal has identified clusters comprising a number of municipalities to develop & implement a scientific and integrated municipal solid waste management system. In this inception report, the cluster mentioned below is the study area.

Cluster 8: Ranaghat Municipality, Birnagar Municipality, Taherpur NAA, and Coopers Camp NAA

1.1.4. Need for Transaction Advisory Services

The existing waste management system in this cluster has deficiencies in terms of primary collection, secondary collection, treatment process and disposal. The system lacks synchronization between collection, storage & safe transportation of waste. To maximize efficiency and effectiveness of municipal management system in this cluster, it is necessary to address different dimensions of MSWM and devise cost-effective systems which would be viable in the available socio-economic and politico-environmental setting.

Therefore, to provide technical assistance to the ULBs in this cluster for preparation of detailed feasibility report, M/s PricewaterhouseCoopers Pvt. Ltd has been appointed as the Transaction Advisor.

1.2 Objectives

The project seeks to improve and develop a socially and environmentally sustainable system of solid waste management that reduces the associated environmental and public health risks. The overall objectives of the project are to:

- Prepare detail techno-economic feasibility reports for scientific municipal solid waste management for the ULBs in the cluster in compliance with the MSWM Rule 2016 and other statutory norms of CPHEEO & Central and State Pollution Control Board. This would include;
- Propose most viable technology options and corresponding cost-benefit analysis to evolve a zero-waste solution.
- Propose institutional structures required for implementation of projects and operation & maintenance thereof with private sector financing for the purpose of ensuring that the project is structured and executed in line with the specifications as stipulated in the DFR.
- Propose IEC/BCC interventions for effective citizen engagement.
- Suggesting key performance indicators linked with payment schedule for evaluation of private agencies
- To recommend suitable measures for capacity building and institutional development of the concerned ULBs in the cluster in order to sustain the proposed investments in SWM.
- To recommend suitable IEC measures for effective citizen engagement in the concerned ULBs in the cluster to sustain the proposed investments in SWM.
- To facilitate bid process management for selection of right technology partners and operators.

1.3 Scope of Work for Transaction Advisory Services

The scope of work for PricewaterhouseCoopers Pvt. Ltd. to provide the Transaction Advisory services includes the following:

- Carry out feasibility study of the project in all respect including techno economic viability of existing cluster /proposed cluster of municipal bodies.
- Preparation of Technical Feasibility Report for integrated solid waste management for the municipal bodies involved in this project.
- Structure projects under PPP mode to enable recovery of the investments made in SWM projects through innovative business and commercial practices such as commercial sale of products, levy of user charges/ fee etc., as appropriate under the applicable laws.
- Prepare bid documents (RfP, Concession Agreement etc.) and manage bid process till signing of Concession Agreement considering the above issues covered under feasibility study report.
- Assist Solid Waste Management (SWM) Cell in managing the bid process including evaluation of bids and for selection of successful agency for the cluster.
- Drafting of Tripartite Agreement between Municipal Bodies in the Cluster, the SWM Cell of the Department and the Selected Agency.

1.4 Structure of this Inception Report

The contents and chapters of this particular Inception Report has been framed as per the following:

Chapter 1: Introduction

This chapter gives a general over view of the project and explains in detail the objective and scope of work for the transaction advisor.

Chapter 2: Approach & Methodology of the Study

This chapter provides a detailed report on the approach and methodology undertaken to achieve the objectives of the project.

Chapter 3: Project Inception and Progress

This chapter provides an exhaustive account of the work that has been done so far and the activities that have been undertaken in that regard.

Chapter 4 : Work Plan and Way Forward

This chapter explains in detail the future course of action in terms of the deliverables and timelines for the same.

2. Approach and Methodology

2.1. Approach Adopted

2.1.1. Primary Considerations

The objective of the next deliverable is preparation of a feasibility study, the approach of PwC team to address the project, shall be based upon the following primary considerations or criteria:

- Integration of existing infrastructure & investment made into the proposed system.
- Synchronization of existing master plan or any future schemes into the proposed system.
- Optimization of land utilization (minimum disposal).
- Reduction of manual handling.
- Compliance of rules, environmental & social safeguard.
- Technological flexibility and options.
- Defined performance parameters.
- Robust monitoring & tracking system.

2.1.2. Team Mobilization

PwC has deployed a strong team of highly qualified professionals with experiences in the relevant fields. PwC's team comprises urban planner, civil engineer, SWM expert, environmental professional, financial expert, PPP expert, legal expert and competent support staff. The team has already visited the study area and commenced interactions with the client & different stakeholders.

2.1.3. Coordination with the Client

PwC would be carrying out the study in close consultation with SUDA and other related line departments including respective ULBs for the requirement of data collection, procurement of maps and drawings etc. as well as to seek technical views of the client on PwC's project approach and outcome.

2.1.4. Adoption of State-of-the-Art Tools and Techniques

Based on previous experience, the study team will adopt a robust methodology to carry out the assignment. For purpose of the study, GIS-based survey techniques, different software packages, such as – AUTOCAD etc. would be utilized.

2.2. Methodology Statement for the Feasibility Study

The broad roadmap to carry out the feasibility study includes the following:

- Review and compliance of regulatory framework
- Collection of secondary data
- Site visit & reconnaissance survey
- Existing waste collection transportation and disposal practices
- Situation analysis and gap identification
- Baseline survey and investigations
- Population projection and waste quantification
- Planning/ need assessment for integrated waste management
- Stakeholders consultation
- Design of processing and treatment facility (model case studies)
- Project financials
- Formulation of project implementation mechanism
- Information, Education & Communication component
- Preparation of bid documents including concession agreement.
- Bid Process Management from initiation of release of Tender notice to signing of Concession Agreement with the selected Bidder.

These have been discussed below in further detail:

2.2.1 Project Kick-Off

A project initiation meeting was held on 4th September 2019, between the PwC team and the Project Team of SUDA as well as associated ULBs of relevant clusters. The agenda for that initiation discussion included:

- Introduction of the project team;
- Identifying a single contact person at the Client end;
- Project management and communication protocols;
- Deliverable, timelines, approach & methodology of the study

This meeting focused on ensuring a shared understanding of inputs and expected outputs from PwC, identifying contacts, responsibility centres and any data and/or other information that will need to be supplied by ULBs and government counterparts to PwC for carrying out the assignment.

2.2.2 Review of existing Data, Information, Maps

The team would review all existing reports, data, information, drawings and maps available from different sources. This would help the consultants to understand the nature of the study area, existing infrastructure, conservancy strength, different ongoing projects and planned activities of ULBs.

2.2.3 Review of Policy and Regulatory Frameworks

The team will gain a thorough understanding of MSW Rules 2016, Plastic Waste Management Rules 2016, central and state PCB's norms & regulations, including latest updates from NGT guidelines pertaining to SWM, which are applicable for designing of the proposed waste management system vis-à-vis treatment and disposal facility for cluster II ULBs. The team shall also discuss with different stakeholders regarding ULB level by-laws that have been framed for the implementation of SWM system.

2.2.4 Review of Successful Models of other Cities

PwC team shall be reviewing the best practices adopted in different model cities, which have already ranked higher in the Swachh Sarvekshan 2018 and 2019 in last few years. The applicable model, may be adopted based on its relevance to the context. Few of the cities, from where examples would be reviewed are shown below.

Figure 1 Swachh Survekshan 2019

RANKING OF 100 ULBS ON BASIS OF TOTAL SCORE (More than 1 Lakh Population)

| SS2019 Ranking | Name of the ULB | Name of the State/ UT | PART-1: Service Level Progress (1250 M) | PART-2: Certification (1250 M) | PART-3: Direct Observation (1250M) | PART-4: Citizen Feedback & Swachhita App (1250 M) | Overall Marks (5000 M) |
|----------------|----------------------|-----------------------|---|--------------------------------|------------------------------------|---|------------------------|
| 1 | Indore | Madhya Pradesh | 1239 | 1050 | 1241 | 1129 | 4659 |
| 2 | Ambilapur | Chhattisgarh | 1194 | 1050 | 1133 | 1017 | 4394 |
| 3 | Mysuru | Karnataka | 1195 | 1000 | 1211 | 972 | 4379 |
| 4 | Ujjain | Madhya Pradesh | 1223 | 750 | 1222 | 1050 | 4244 |
| 5 | New Delhi (NDMC) | Delhi | 1194 | 750 | 1198 | 1049 | 4191 |
| 6 | Amdavad | Gujarat | 1167 | 750 | 1248 | 972 | 4137 |
| 7 | Navi Mumbai | Maharashtra | 1064 | 750 | 1236 | 1079 | 4129 |
| 8 | Tirupati | Andhra Pradesh | 1028 | 750 | 1141 | 1106 | 4025 |
| 9 | Rajkot | Gujarat | 989 | 750 | 1200 | 1061 | 4000 |
| 10 | Dewas | Madhya Pradesh | 1105 | 750 | 1151 | 962 | 3968 |
| 11 | Bhilai Nagar | Chhattisgarh | 1035 | 750 | 1093 | 1052 | 3929 |
| 12 | Vijayawada | Andhra Pradesh | 968 | 750 | 1097 | 1067 | 3882 |
| 13 | Ghaziabad | Uttar Pradesh | 983 | 700 | 1201 | 993 | 3877 |
| 14 | Surat | Gujarat | 914 | 750 | 1223 | 974 | 3861 |
| 15 | Jamshedpur | Jharkhand | 894 | 600 | 1249 | 1062 | 3806 |
| 16 | Kolhapur | Maharashtra | 1005 | 650 | 1090 | 1058 | 3803 |
| 17 | Khargone | Madhya Pradesh | 808 | 750 | 1172 | 1069 | 3798 |
| 18 | Nagda | Madhya Pradesh | 979 | 600 | 1167 | 1048 | 3794 |
| 19 | Bhopal | Madhya Pradesh | 986 | 600 | 1145 | 1062 | 3794 |
| 20 | Chandigarh | Chandigarh | 1129 | 500 | 1120 | 1038 | 3787 |
| 21 | Singrauli | Madhya Pradesh | 980 | 750 | 1058 | 975 | 3763 |
| 22 | Gandhinagar | Gujarat | 862 | 750 | 1229 | 916 | 3757 |
| 23 | Visakhapatnam (GVMC) | Andhra Pradesh | 914 | 600 | 1193 | 1037 | 3744 |
| 24 | Karnal | Haryana | 781 | 750 | 1204 | 1001 | 3736 |
| 25 | Jabalpur | Madhya Pradesh | 973 | 600 | 1080 | 1014 | 3667 |
| 26 | Chhindwara | Madhya Pradesh | 754 | 600 | 1184 | 1098 | 3636 |
| 27 | Mira-Bhayandar | Maharashtra | 817 | 700 | 1138 | 967 | 3622 |

Source: MoHUA

2.2.5 Reconnaissance Survey & Situation Analysis

The PwC Team will undertake reconnaissance survey of the study area, site visits and stakeholders consultation to get access to all relevant information related to the development and operation of solid waste management system. Thereafter the assessment of the existing system will be undertaken to understand the following aspects:

- Existing environmental, physical, social and economic conditions;
- Information on the planned lifetime of existing facilities and any plans for their replacement/ best use
- Existing waste management practices in the ULBs in terms of information on the planned lifetime of existing facilities and any plans for their replacement/ best use. Some of them are as follows:
 - ✓ Segregation & storage;
 - ✓ Primary collection & street sweeping;

- ✓ Secondary collection and transportation system;
- ✓ Waste collection efficiency and logistic optimisation;
- ✓ Current waste processing and disposal arrangements at site;
- ✓ Waste recycling & recovery activities;
- ✓ Manpower adequacy and institutional set up for waste management (separately for collection, transportation and disposal)
- ✓ Assessment of cost incurred for provision of SWM services from municipal budgets and audited documents, user charge, current service level and targeted benchmark etc.

Based on the above information, PwC will develop understanding of existing solid waste management system in the municipalities and will identify information gaps and overall system deficiencies, which would help the team to devise potential solutions.

2.2.6 Primary Studies and Surveys

Primary studies and surveys would be conducted to collect baseline information in the relevant urban areas of the cluster. Surveys would comprise – topographical survey, waste sampling & analysis, geotechnical survey etc. with a reasonable number of samples and within the area of proposed facilities. The detailed location (**provided in section: Rehabilitation of Dumpsites**), numbers of samples, extend of site investigation/survey etc. shall be decided upon the site visit during the time of feasibility study.

2.2.7 Waste Quantification & Characterization

Estimation of quantum of solid waste generated and its characteristics assume great significance for identifying the most suitable waste treatment and disposal options. To assess the waste generation trends of the project, a comprehensive desk research will be undertaken. Population data will be collected from secondary sources, census reports and shall be extrapolated (arithmetical progress, geometrical progress, incremental method and decadal growth method) as far as possible, for the design period. Applicable per capita waste generation factor shall be applied to estimate the quantity of waste generated in the study area.

Waste characterization survey will be done to understand their physical composition of the waste and its chemical characteristics as well.

2.2.8 Stakeholders' consultation

Based upon the concept plan, stakeholders' consultation will be carried out in the feasibility study. Stakeholders' consultation would include meeting with different Govt. agencies, NGOs, community representatives, community organizers and various institutions in the vicinity. The stakeholder's consultation would give a fair idea and realistic pictures of different issues, needs etc. of the city, present gaps in the SWM implementation.

Stakeholders' consultation would be also required to share the idea, views of the consultants while developing the concept plan of the development. The brainstorming session during the consultation with different Nodal authorities, such as – SUDA, Ranaghat, Birnagar, Taherpur NAA, Coopers Camp NAA, WBPCB would enrich the quality of the study output.

2.2.9 Development of Concept Plan

Reconnaissance survey will lead to assessment of the existing situation, the concept plan would be developed which primarily will be in line with the terms of reference of the TA assignment. The plan would be designed for short term and long-term horizon, in phased manner. The concept plan would entail need assessment, capacity estimation, population projection and accordingly the estimation proposed infrastructural requirement.

Key activities that will be undertaken include:

- Planning of source segregation and primary collection including street sweeping;
- Roadmap for involving NGO's, SHG's and private sector for transfer of solid waste management staff and carry out cost benefit analysis.
- Study of various treatment options available;
- Based on waste characterization and road map of source segregation, land requirement for both treatment and disposal facility will be assessed;
- Assessment of landfill volume and life will be carried out based on waste segregation
- Assessment of capacity of waste processing facility & other pertinent details; the general market for recyclable items, materials from processing (manure), gas or electricity (if from waste to energy) shall be

understood from the concerned ULB officials and accordingly a tentative road map for selling of the same would be proposed in the report

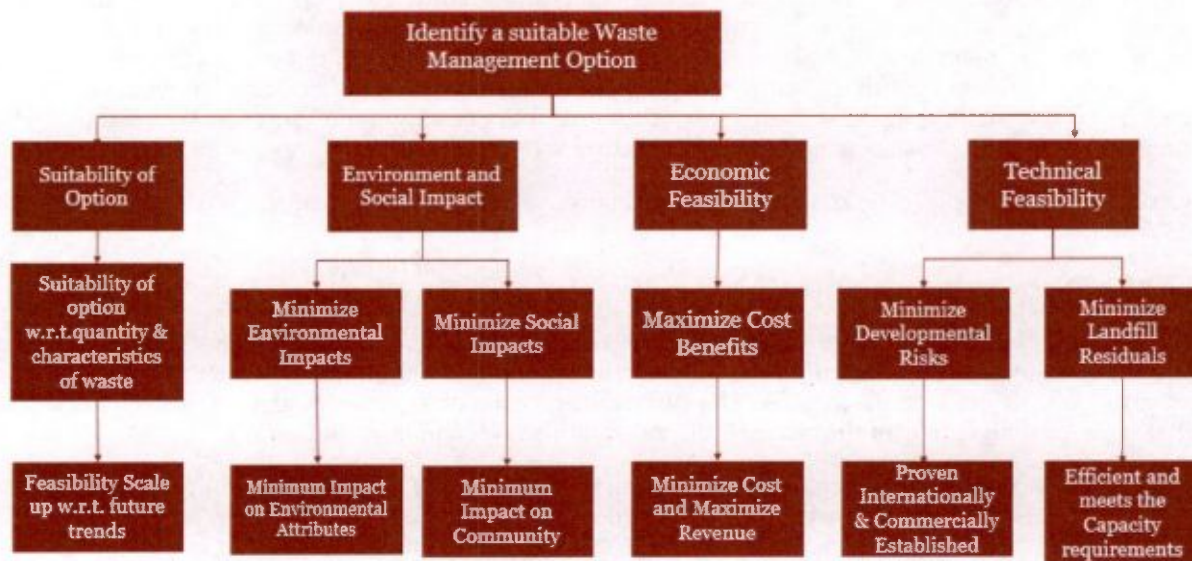
- Assess the existing service conditions of all SWM employees and suggest the improvements needed for enhancing up efficiency and effectiveness;
- Development of operating standards, service delivery, project costing in terms of both capital, O&M and other costs

2.2.10 Selection of Technology

Based on the assessment of waste quantity, category, and characteristics of waste, various disposal options shall be evaluated for suitability. Considering the fact that there is minimum land designated for waste treatment and disposal, techno-economic analysis shall be carried out for collection, transportation, treatment and disposal of waste. A list of options shall be developed keeping in mind a list of other important guiding options like climatic conditions, waste quantity and quality along with successful case studies in Indian scenario. The outline of list of options is as under.

- Composting (vermi-composting, aerobic composting, package composting plant, organic waste converters etc with both manual and mechanical options)
- Energy recovery options (power generation) such as anaerobic digestion (bio-methanation), RDF
- Off-site/ On-site waste disposal - land filling (engineered and secured landfills)

Figure 2 Framework for Selection of Right Technology



Once the above noted Decision Matrix is completed and information on how the various waste management system options perform in terms of financial, environmental, social, socio economic and practical implications are available, it will be appraised on how each option performs. Before proceeding to the appraisal, PwC shall consider whether there are any constraints that must be applied, which the options cannot meet, and it may well be appropriate to drop the option that does not address this constraint at this stage. PwC will have close consultation with Ranaghat Municipality, Birnagar Municipality, Taherpur NAA, Coopers Camp NAA& SUDA before finalizing the technology for the purposes of appraising each of the options against the Decision Criteria.

2.2.11 Waste Minimization Strategy

Based on the quantity of waste generated by different sources and categorization, various waste minimization options would be analyzed and a feasible strategy would be recommended. This exercise is required to minimize the waste generating from the household and commercial establishments.

2.2.12 Waste Minimization Strategy

Waste recycling strategy would reduce the quantum of waste reaching, treatment facility and disposal facility and thereby reducing the burden on land and infrastructure, which ultimately saves the cost. Further assessment will also be made on the current market potential and market rates of the recyclable that is expected from the project

2.2.13 Rehabilitation of Dumpsites

PwC study team will evaluate different closure technology, such as – simple closure, bioremediation, biomining as per the NGT guidelines which will lead to closure with land reclamation and landfill gas (LFG) extraction technologies pertaining to the closure of the dumpsites (as found applicable during feasibility study) in each of the municipalities of the cluster, as indicated below:

| Site | Tentative Area (in acres) | Ward/Location |
|---|---|--|
| Ranaghat | | |
| Disposal + Proposed Site | 3.36 (existing) 2.98 (existing) 0.65 (newly allocated) 1.33 (allocated for Biogas) | ULB owned land within Anulia Grampanchayat |
| TaherpurNAA | | |
| Dumpsite | 1.8 | Adjoining graveyard |
| Birnagar | | |
| Existing Dumpsite Site 1 | 8 | Adjoining park (aamBagam)- Ward 9 |
| Existing Dumpsite Site 2 | 5.5 | Krishna Panchayat- Ward 13 |
| Coopers Camp NAA | | |
| There is no fixed unscientific disposal site The primary one | NA | Adjoining graveyard |

The quantity of the waste will be assessed from the topographical survey and accordingly the technical feasibility of the closure system shall be designed.

2.2.14 Design of the Infrastructural Components

Based upon the need assessment and the infrastructural planning, the engineering design of different components, such as – source segregation, C&T, processing options, biological treatment facility, recycling facility, energy generation option, disposal technology & mechanism, with revenue model shall be carried out.

A comprehensive site layout plan for waste processing and disposal facility will be prepared. The plan will include site layout indicating waste processing and disposal facility, location plan, material flow plan, land requirement, buffer zones, and service areas. In the layout, suitable site access system will be shown.

The various components of the treatment & disposal facility that may be proposed, are listed down below, which will be taken into consideration in due course of the feasibility study.

- Collection & transportation mechanism
- Aerobic Composting Facility
- Biomethanation
- Refused Derived Fuel
- Material Recovery Facility
- Engineered Landfill

2.2.15 Design of support facilities

Integrated municipal solid waste processing and disposal facility also requires supporting facilities like maintenance building, unloading area, storage area, equipment, leachate treatment, etc. This task primarily comprises assessment of requirements towards:

- Development of necessary supporting facilities such as maintenance building, reception area, storage facility, etc.
- Provision of facilities like on-site packing, loading and storage facilities, power supply, water supply, sewerage, lighting and electrical works.

2.2.16 Schematic Drawings

The design planning and assessment will lead to the schematic drawing, layout etc. of different components and the same would be developed by the team.

2.2.17 Project Costing and Financial

Block costing will be done for different infrastructural components. The project financial analysis would be done to develop the strategic investment plan for the cluster. The investment plan may be depicted over a short term and long-term horizon.

The financial model will be developed considering all capital and operation cost with the objective to develop a tariff structure for end users so that the operations can be self-sustainable. The Financial Model shall also take into consideration, incentives and converting informal recycling sector into formal waste management taskforce, Revenue generation model – sale of products (compost, RDF, recyclables etc.), tipping fees and analysis for the cost recovery, breakeven period etc.

The team will also carry out viability assessment of the project and will ascertain whether project is economically and financially viable. It is essential for the success of the SWM PPP Projects to be economically feasible, Economic Rate of Return, with greater impact on the society and the environment in terms of employment generation and improving the health of the citizens.

The Financial viability shall be ascertained to ensure sufficient income for the projects to meet the O&M and financial obligations with future growth and sustainability of the project. The financial viability shall ascertain returns, Internal rate of return (IRR), weighted average cost of capital (WACC), Sensitivity Analysis, Net present value (NPV), from the project to give an indication of positive returns for the financial partners to invest in the project.

2.2.18 Operation & Maintenance Plan

The team will prepare an operation and maintenance plan for the proposed system. The operation and maintenance plan shall cover detail of collection and transportation systems (e.g. vehicle maintenance plan, operation schedule, interim storage stations, man power requirement, treatment facility (relevant units of treatment system, vehicle and equipment operation and maintenance with man power requirements) and disposal facility if in purview of operation under the proponent. The O&M framework shall typically cover the following aspects:

- Develop organization structure for effective implementation of the project
- Approach and methodology for implementation during construction and operation phase
- System to monitor and control activities and meet regulatory requirements
- Prepare project implementation schedule for execution and contract packaging plan.

The team shall develop the Operation and Maintenance Plan for the Integrated Waste Management Facility and the same will be mentioned in the RfP document, for the purpose of bidding. At the initial period of this phase (Operation and Maintenance phase), it has to be ensured that the contractor will maintain the facility as per the mandates mentioned in the document. Consultant would also develop an Operation and Maintenance manual as a guideline for the contractor during the operational and maintenance phase.

2.2.19 Development of Environmental Safeguard Mechanism

In due course of the feasibility study, PwC shall take in to account of all plausible environmental and social safeguards mechanism, which are necessary for operation of the processing and disposal facility. A systematic assessment of environmental impacts due to the landfill operation will be identified and required environmental management plan will be devised.

An Environmental and Health & Safety Management Plan will be developed to monitor and evaluate the effectiveness of the mitigation measures and the impacts of the project.

Environment safeguard mechanism, post closure maintenance plan and emergency response protocol along with environmental monitoring plan would include the following environmental parameters to be monitored on a regular basis and will be developed as per the MSW Rules.

- Quality of Leachate after Treatment
- Surface Water Quality
- Ground Water Quality
- Quantity and Quality of Gas Generated

- Ambient Air Quality

2.2.20 Implementation Structure for Public Private Participation

The team will assess various PPP options based on the financial viability of the project. Some of the options could be Design-Built-Finance-Operate-Transfer (DBFOT), Design-Built-Operate-Transfer (DBOT) and Hybrid Annuity Model.

The structure shall ensure the development of infrastructure as well as operation for the Authority on one side and value for money to the private partner on the other side. The following activities will form part of the processes to be followed by the TA as mentioned below:

- Relevance and appropriateness of implementing the waste collection, transfer and disposal system
- Whether components of the waste collection, transportation and disposal system can be implemented as whole or in sub-divided manner
- Whether contestable and competitive solid waste collection and/or transfer services should be provided through multi-year service contracts or franchises with private companies?
- Risk identification and address, tipping fees estimate, reporting structure and monitoring mechanism.
- Incentives and converting informal recycling sector into formal waste management taskforce
- Revenue generation model – sale of products (compost, RDF, recyclables etc.), tipping fees.

Depending upon the proposed technology options and O&M plan, the project structuring under suitable PPP model will be structured. Different types of the PPP models will be reviewed and based upon the successful case studies of similar nature of the city, suitable model shall be adopted in consultation with SUDA and related stakeholders.

2.2.21 Capacity Building

As mentioned earlier, PwC will carry out the studies in close association with the engineering staff of the SUDA, Government of West Bengal and the relevant municipalities within the cluster and enhance their understanding on the concept design, implementation and recommendations. Technical sessions with the commissioner or authorized officer in charge shall be conducted, as required for necessary capacity building of municipality officials on various methods of waste diversion and waste management techniques.

2.2.22 Preparation of Tender Documents

The team will prepare the bid documents for inviting proposals from potential bidders. The technical and financial qualification criteria would be developed to assess their experience in the sector and suitability to the project and financial capability for managing the project including operation and maintenance of the project facilities. The bidding process, which include single stage bidding process or two stage bidding process, would be decided in consultation with SUDA/ MED and the TA engagement will be from release of tender notice to signing of concession agreement with the prospective bidder. The team would also prepare the Concession Agreement on PPP model to be executed between the implementing agency (SUDA/ MED) and the private operator after identification and address of all the associated project risk indicating the following:

- Clear Scope of the Project
- Defined Roles & responsibilities and obligations of the both the parties;
- Design and construction requirements;
- Broad standard and specification of material used;
- Performance standards;
- Service Level Agreement
- Payment terms & penalties;
- Grant / Revenue sharing mechanism, if any
- Safety and Security of the projects including protection of Human
- Insurance
- Operation and maintenance requirement;
- Escrow mechanism for fair and transparent financial transaction
- Post closure monitoring; and
- Third party monitoring mechanism (Independent Engineer or Internal Office designate)
- Environmental norms for disposal.

2.2.23 Issuance of Bids, Evaluation of Bids, Contract Agreement & Award of Tender

The team shall ensure, the three consideration for the PPP procurement, i.e. Fair, Open and Transparent with utmost sincerity and shall follow procurement principles as below:

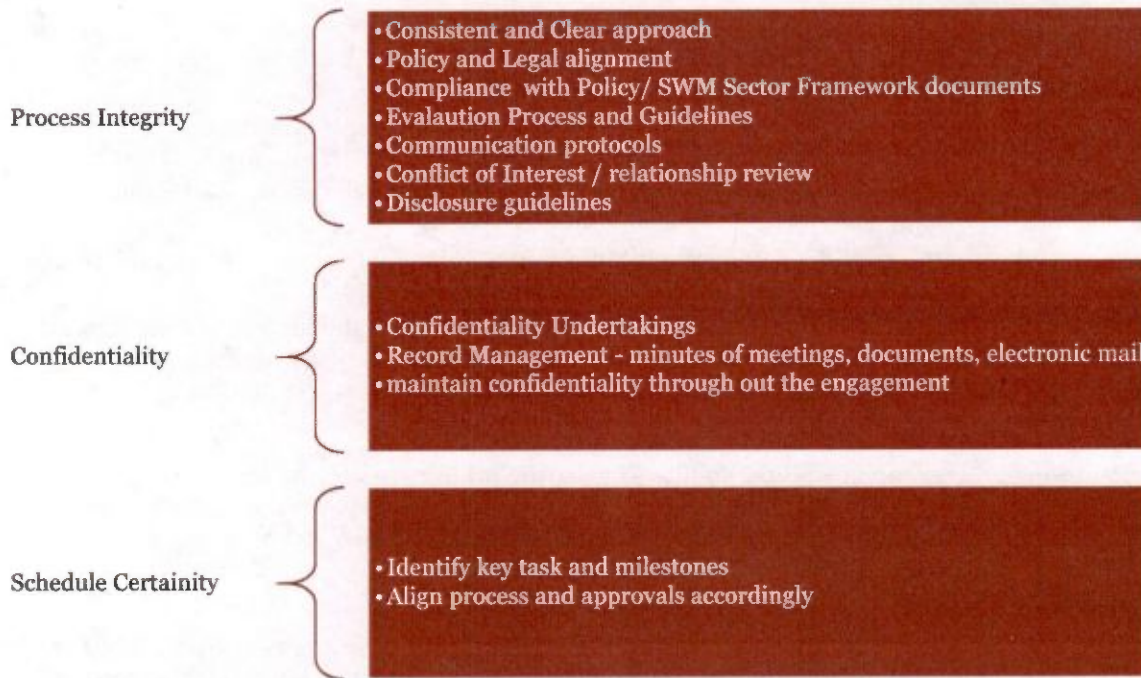


Figure 3 Principles of procurement to be followed by the PwC

The team will be involved from release of tender to short-listing of the PPP partner based on their Expressions of Interests or Proposals, submitted for their selection for the project. The team will also assist in finalization of the draft tender

documents including drawing, specifications, detailed estimates, and bill of quantities, bid evaluation criteria and Concession Agreement, complete in all respect for a successful tender process. The team shall assist ULBs/ SUDA in holding pre-tender meeting and offer clarifications if any, sought by the potential bidders. The team shall also prepare reply to the queries received to the Authority from prospective bidders, participated in the pre-bid meeting and the draft minutes of the pre-tender meeting shall be prepared by PwC team for approval by SUDA. The team will diligently evaluate the bid based on the criteria set out in the Request for Proposal document for contractors and if required will also provide inputs to the bid evaluation criteria based on our experience on providing transaction advisory to waste management projects.

The evaluation would be undertaken based on the set of parameters or guidelines already set or decided by the evaluation committee. Successful bidder would be selected after the technical and financial evaluation as detailed in the RfP document.

3. Project Inception & Progress

3.1. Reconnaissance Survey of the Study Area

PwC study team has undertaken reconnaissance survey of the study area and obtained onsite information and understanding. Four ULBs which have been considered in this cluster (Cluster 9) are:

- Ranaghat Municipality
- Birnagar Municipality
- Taherpur NAA
- Coopers Camp NAA

As an outcome of the preliminary site visits following understanding will be developed by the PwC study team:

3.1.1. Ranaghat Municipality

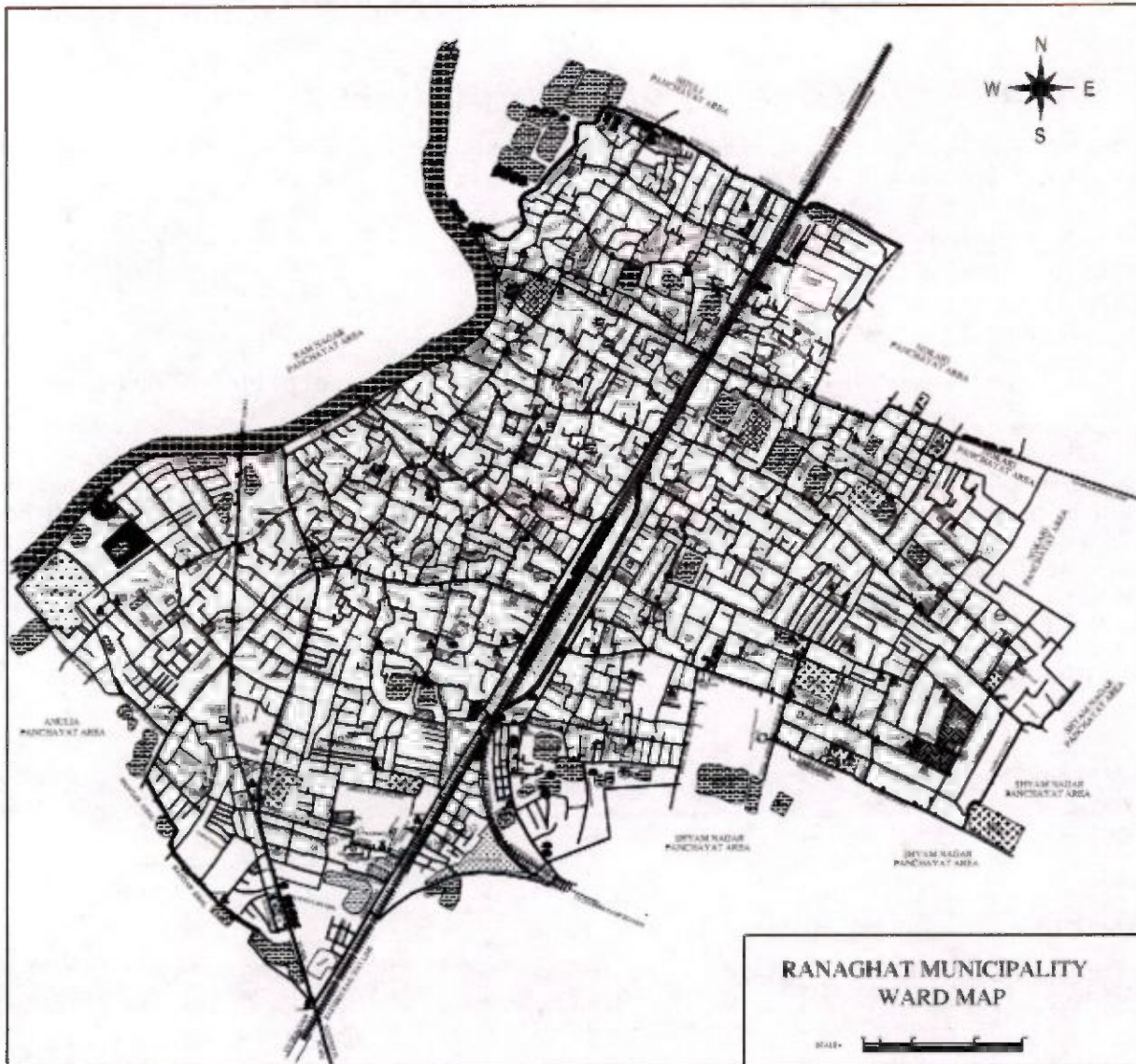
The Municipality of Ranaghat, spread over an area of 7.72 sq.km, is located in Nadia district of West Bengal. It is the headquarters of the Ranaghat subdivision and is situated on the banks of the churni river, 74 km north of Kolkata. The population (as per Census 2011) is 75,344 with around 18000 households. The municipality is divided into 20 wards and generates around 28-30 tonnes of waste per day. Small units of handlooms and power-looms forms the local industrial development. Further, there exists an SWM Task force in the municipality which monitors the SWM functions.

3.1.1.1. Ranaghat snapshot

Table 1 Snapshot of Ranaghat Municipality

| Demography | |
|--|--|
| Head Office | Ranaghat Municipality, Subhas Avenue, Ranaghat, Nadia district |
| No. of wards | Twenty (20) |
| Geographical Area | Total area of the ULB: 7.72 Sq. Km. |
| Population- 75,344 (0.75 Lakhs) | |
| Density | Nine thousand seven hundred and fifty-nine (9759) per sq. km. |
| Number of Households | Eighteen thousand (18000) |
| Establishment | |
| Year of Formation | 1864 |
| Board of Council Formation | 1864 |
| Administrative Jurisdiction | Sub-division Ranaghat |
| District | Nadia |
| Police Jurisdiction | Thana Ranaghat |
| Total waste generated | 28-30 TPD |

Figure 4 Map of Ranaghat Municipality



3.1.1.1.1. Primary collection

At present, the municipality collects waste from households on every alternate day due to lack of infrastructure and financial resources. Effectively, since the town is small and interlocked, and there is limited collection and transportation infrastructure, the ULB has strategically planned to cover 50% of the town's households every day and the waste is being collected in unsegregated manner. The ULB has an increased focus on community awareness generation through various modes. Recently, the ULB has provided twin-bins to each household in wards 3, 7 and 8 on a pilot basis to encourage them to segregate dry and wet waste

Figure 5 Distribution of Dustbin under process in Ranaghat



PwC

54 tri-cycle vans are engaged in door-to-door collection of waste from households. A nominal SWM user fee of INR 5/household is charged on monthly basis.

There are total of 26 markets in the city which include vegetable and wholesale markets, wholesale commodity markets, and daily markets along lanes.

The municipal area has a total 26 markets in the city

- Vegetable and non-veg market- 2 nos.
- Wholesale commodity market- 2 nos.

- Daily market along the lanes- 22 nos.

The waste from these markets is collected during the late afternoon/evening using 15-20 handcarts and 6 tri-cycle vans. 26 litter bins (120 lt.) in each of the markets and 200 bins at a community are placed across the city.

3.1.1.1.2. Secondary transportation

In context to household collection, collected waste is transported to the 36 identified collection points (31- open vat and 5- closed vat/dumping stations) catered across the city.

Figure 6 Road side- Secondary collection points- Open vat- Ranaghat



Figure 7 Compactor stations: Secondary collection points- Closed vat- Ranaghat



From these points, 12 tractors transport the waste to the disposal site.

Figure 8 Tractor for disposal- Ranaghat



The market waste is collected and transported to 6 secondary collection points in the town, namely, Subhas avenue railway market, Bhangra para fish market, Bhangra para vegetable market, GNPC, Rathtala market and Port para market. From these collection points, waste is collected and is disposed of in the disposal site through movable compactor and hydraulic tipper trucks.

Figure 9 Secondary waste collection points in market-Ranaghat



There are 54 schools within the Municipality which serves as a parking space for vans. In the morning before initiating door-to-door collection, these vans collect waste from the schools and transport it to the secondary collection points.

The Municipality has 1 movable compactor and 1 hydraulic tipper which collect waste from selected accessible markets and dispose of in the disposal site.

3.1.1.1.3. Status of Overall Awareness towards Waste Management

Almost all the wards are disposing mixed waste as of now. But due to continuous efforts of the Municipality through different modes of public awareness creation and providing twin-bin to each household, on a pilot basis- wards 3, 7 and 8 have started source segregation of dry and wet waste. However, this effort is only an outcome of creating public awareness regarding source segregation. Post collection, this waste is dumped in secondary collection points as mixed waste.

Ranaghat Municipality has been active in raising community awareness and promoting participatory practices to manage its solid waste system. The municipality board has taken a resolution to ban the production, sale, and use of plastic and thermocol. The same has been widely communicated to the citizens by handbills and making. A penalty system has also been introduced on sale and purchase of plastic bags. They have initiated the distribution of bio-plastic bags which are compostable.

Figure 10 Bioplastic bags in Ranaghat



In September 2019, the ULB completed a massive campaign on proper disposal and segregation of wastes. The municipality raised awareness and ensured community participation through streets sweeping, street drama, drawing competitions. Additionally, there are 7 NGOs, which can also be involved in the community mobilization process. Churni Banchao Committee is one of the prominent NGOs working in the locality.

3.1.1.1.4. Final disposal

In accordance to the existing system, there is currently one dumping site for the municipality to dispose of their waste, located at the trenching ground in Anuliya gram panchayat adjoining the municipality. It is spread over 3.36 acres, and the trenching ground is currently the primary disposal site of the municipality, where majority of the waste is being dumped on daily basis. The waste is collected from six secondary collection points, i.e., Subhas Avenue railway market, Bhangra para fish market, Bhangra para vegetable market, GNPC, Rathtala market, and Port para market are disposed of here.

Figure 11 Disposal Site in Ranaghat



3.1.1.1.5. Proposed disposal site

Currently the waste is being disposed in the trenching ground in Anuliya gram panchayat. However, the municipality has 2.98 acres of more land available adjoining the same and further, 0.65 acres of more land adjoining the existing disposal site has been purchased by the municipality. Also, a project of installing biogas plant was conceptualized and contracted out to a vendor, but later the project got halted. Therefore, the municipality has an adjacent land parcel of 1.33 acre for the same to install any waste treatment facility in future.

Figure 12 Land parcel for Biogas plant in Ranaghat



The town is very congested and there appears to be limited scope for installing decentralized treatment units. ULB officials have confirmed that the existing land parcel, which has been already allocated for 40 TPD Biogas plant can be utilized for installation of any waste treatment plant at the city level.

3.1.2. Birnagar Municipality

The municipality of Birnagar, located in Nadia district of West Bengal, is the hub of several small and medium scale industries: agro-based, small engineering, manufacturing and other industries. The other industrial units deals with production and processing of textiles, steel / iron products, bidi-making, etc. The major agricultural products of the area include rice, jute, and sugarcane, and pulses. The ULB is surrounded by Kishma Gram Panchayat in the north, Kalinarayanpur–Paharpur Gram Panchayats in the south, Kishma Gram Panchayat & Kalinarayanpur–Paharpur Gram Panchayats in the east and Barasat Gram Panchayat in the west. The Churni river is 2 km from the municipality is 2 Km away from the river Churni flows about 2 km in the east of the Birnagar Municipality area. The ULB is spread over an area of 5.52 sq.km. and is sub-divided into 14 wards.

3.1.2.1. Birnagar snapshot

Table 2 Snapshot of Birnagar Municipality

| Demography | |
|------------------------------------|--|
| Head Office | Birnagar Municipality, Ranaghat, Nadia |
| No. of wards | Fourteen (14) |
| Geographical Area | Total area of the ULB: 5.52 Sq. Km. |
| Population- 35,000 | |
| Density | Six thousand three hundred and forty (6,340) per sq. km. |
| Number of Households | Eight thousand (8000) |
| Establishment | |
| Year of Formation | 1869 |
| Board of Council Formation | 1869 |
| Administrative Jurisdiction | Sub-division Ranaghat, TownBirnagar |
| District | Nadia |
| Police Jurisdiction | Thana Ranaghat |
| Total waste generated | 10 TPD |

3.1.2.1.1. Primary collection

The municipality has 8000 households (*as per census 2011*) and it conducts door-to-door collection of all the households on daily basis. Owing to the local generation trends, site visit and discussion with officials, it has been observed that the ULB generates mostly organic waste, provided no source segregation of dry and wet is happening currently. In order to promote govt. initiative for household segregation of dry and wet waste, the municipality has distributed twin-bins to almost 4000 households with the intention of providing the remaining households in the coming days. The Municipality charges a bare minimum Rs. 10/HH/month as a user fee for SWM.

There exist 4 markets in the town, i.e. municipal haat (Ward 1 and 2), station bazaar market (Ward 3 and 4), jukta bazaar or bara bazaar (Ward 7 and 8), and paikpara bazaar (Ward 11 and 14). Municipality has been providing dustbins at community level and in markets.

Figure 13 Dustbins for market and Community in Birnagar



Figure 14 Market in Birnagar



3.1.2.1.2. Secondary transportation

Figure 15 Trolley Van for market waste collection in Birnagar



The household waste is collected by 30 trolley vans of 100kg capacity (making 2-3trips daily) and transported to secondary collection points, from where 2 tractors carry the waste to dumpsites located in the north of the municipality.

Waste from the community bins are collected and transported by 5trolley vans to the dumpsite. The waste from the four main markets and other secondary collection points is collected by a dumper and a movable compactor and subsequently transported to the dumpsite located in Ward 9 and Ward 13.

3.1.2.1.3. Biomedical, Hazardous and E-waste management

The ULB has presence of a large-scale hospital with capacity of over 200 beds, which also caters to neighbouring ULBs such as Krishnanagar. However, there is no formal arrangement for collection of biomedical/ e-waste/hazardous waste and the bio-

medical waste is currently buried in trenches, thus posing several health hazards.

3.1.2.1.4. Status of overall awareness towards waste management

The ULB is yet to publish any notification or resolution for plastic ban. However, there has been a proactive initiative in creating public awareness through various public events and distribution of IEC materials. 5 SHGs and 3 clubs are working in close co-ordination with the ULB for creating public awareness in waste management and dengue prevention works.

3.1.2.1.5. Final disposal

The municipality does not have any treatment facility in place and the untreated waste is either disposed off in trenches/pits or at the dumpsite. Currently there exist 2 disposal sites:

Ward 9 – The municipality owns 8 acres of land in Ward. 9 (in Aambagaan), where the waste is dumped in the open.

Ward 13 – The municipality owns 2.2 acres of land in Ward.13 adjoining to Khishna Panchayat.

Figure 16 Disposal site in Birnagar_Aambagan



3.1.2.1.6. Proposed site for decentralized unit(s)

The ULB has already identified a land parcel of 500 sq.mt. in ward 2, just adjoining the Municipality office, for installation of a bio-methanation plant.



Figure 17 Proposed land parcel for decentralized Bio-methanation plant in Birnagar

3.1.3. Taherpur NAA

Established in June 1993, Taherpur Notified Area Authority (NAA) is constated merging four adjoining mouzas Barasat, Bhaduris, Mahisdanga and Taherpur. It covers an area of 2.01 sq. km. This NAA records a population of 20895, including twenty-five refugee slums. Divided into 13 wards, presently there are only three health centres in ward. 1, 7 and 12.

3.1.3.1. Taherpur snapshot

Table 3 Snapshot of Taherpur NAA

| Demography | |
|------------------------------------|---|
| Head Office | Taherpur NAA, Ranaghat, Nadia |
| No. of wards | Thirteen (13) |
| Geographical Area | Total area of the ULB: 2.01 sq.km. |
| Population- 20,895 | |
| Density | Ten thousand three hundred and ninety-five (10395)/ sq. km. |
| Number of Households | Six thousand seven hundred and two (6702) |
| Establishment | |
| Year of Formation | June 1993 |
| Board of Council Formation | May 2015 |
| Administrative Jurisdiction | Sub-division Ranaghat |
| District | Nadia |
| Police Jurisdiction | Thana Taherpur |
| Total waste generated | 10 TPD |

3.1.3.1.1. SWM profile

The ULB has dedicated 13 tri-cycle vans in door-to-door collection of waste. Since no household level segregation is not happening currently, mixed waste is collected.

These wastes are transported to 1 mobile compactor which subsequently transports the waste to the disposal site. The ULB has one major and one small scale market within its boundary. Waste from these markets are collected by tri-cycle vans and transported to the point where the mobile compactor is stationed.



Figure 18 Tricycle Van for door-to-door collection in Taherpur

3.1.3.1.2. Final Disposal

The current unscientific disposal site spread across 1.8 acres of land and is located adjacent to the burning ghat. A mobile compactor is used for transporting waste from the secondary collection location(s) to the dumpsite for final disposal.

Figure 19 Disposal site in Taherpur



3.1.3.1.3. Proposed site for decentralized unit(s)

The Taherpur NAA has identified a 0.84 acre of land parcel in ward 12 along the road number 28 for any future decentralized interventions, if proposed.

3.1.4. Coopers Camp NAA

Notified in 1997, Cooper's Camp is located to the east of Ranaghat town. Nokari Gram Panchayat forms the northern boundary whereas Baidyapur Gram Panchayat forms the eastern as well as southern boundary. The ULB covers an area 1.5 sq. km. with a population of 18839 (as per Census 2011). It is divided into 12 wards.

3.1.4.1. Coopers Camp snapshot

Table 4 Snapshot of Coopers Camp NAA

| Demography | |
|------------------------------------|------------------------------------|
| Head Office | Coopers Camp NAA |
| No. of wards | Twelve (12) |
| Geographical Area | Total area of the ULB: 1.5 Sq. Km. |
| Population- 18,839 | |
| Density | 12,559 |
| Number of Households | Five thousand (5000) |
| Establishment | |
| Year of Formation | Panchayat – 1978 NAA – 1997 |
| Board of Council Formation | NAA – 1997 |
| Administrative Jurisdiction | Sub division Ranaghat |
| District | Nadia |
| Police Jurisdiction | Thana Ranaghat |
| Total waste generated | 15 TPD |

3.1.4.1.1. Primary collection

The ULB has recently initiated door-to-door collection mechanism, where they have been able to cater to 50% of the total households. About 20-25 hand carts and 20-25 tricycle vans are currently engaged in door-to-door waste collection from these households. This waste is collected and transported to 7-8 collection points within the city.



As of now, there are two main markets within the town's limits, i.e. fish and vegetable market in Ward. 7, and Poursobha market in Ward. 7. Both of these markets generate a significant share within the total 15 TPD waste generated by the town.

Figure 20 Secondary Collection point in Coopers Camp

3.1.4.1.2. Secondary transportation

The ULB currently possesses 2 tractors. These tractors collect waste from these secondary collection points, where household waste is collected and dispose it off to the disposal site(s).

Wastes from markets are collected in hand carts and is disposed of in these secondary collection points, from where tractors collect these wastes and dispose this of in the dumping site(s). They also have a hydraulic tipper placed in the market place in ward 7, which is also engaged for transportation of market and community waste in the disposal site(s).

Figure 21 Hydraulic Tipper in Coopers Camp



3.1.4.1.3. Street sweeping

In an endeavour to keep the streets clean and reduce the adverse health effects of poor waste management, dustbins have been distributed for waste collection at community level, market, etc. in each ward. A separate tri-cycle van is dedicated for disposal of animal. The dustbins are distributed in the following manner:

- 4 in each of the 12 wards
- 1 in market

3.1.4.1.4. Final disposal

Currently, there is no dedicated unscientific disposal site within the town. The ULB tends to dispose of waste in 4-5 locations. 1 mobile compactor is present with the ULB, which keeps on moving to different disposal sites and compact the disposed waste.

Figure 22 One of the disposal sites in Coopers Camp



3.2. Meeting with the Stakeholders

Several meetings have been held with different stakeholders during the inception phase. The details of such meetings are presented in the table below. These meetings were useful to understand the present situation and challenges, which would be addressed in planning & designing of the project.

Figure 23 Stakeholders Meetings & Consultations Held

| Activities | Remarks |
|--|--|
| Detailed site visit to Birnagar, Coopers Camp and Ranaghat | From 24 th to 26 th of Sept, we conducted a detailed site visit covering both the ULBs of Birnagar, Coopers Camp and Ranaghat . Along with detailed consultation with the ULB officials, we conducted a detailed site visits to the markets, congested areas, industrial areas, residential and society complexes, and other important nodes. We also ensured to visit any points where decentralized solutions can be installed. |
| Concurrence meeting with Ranaghat Municipality | On 23 rd Sept, a meeting was held with Ranaghat Municipality (Chairman) to discuss on exploring the probable site options for decentralized units and land parcels for Centralized Units and SLF for the entire cluster |
| SUDA | Debriefing to SUDA regarding ULBs visited in this cluster, our observations, understanding and preliminary views on proposed concept plan. |

3.3. Scope of Surveys and Investigation Planning

Baseline survey will be conducted for the purpose of the feasibility study. The survey will include topographical survey of the disposal sites of all the Municipalities and the proposed site(s), geotechnical survey and waste characterization survey. The scopes of those surveys have been formulated and presented in the following sections mentioned below:

3.3.1. Formulation of Geotechnical Investigation

The scope for geotechnical investigation at site is presented in the table below:

Figure 24 Details of the parameter For Geotechnical Investigation

| Item Description |
|--|
| Conducting Standard Penetration Test in the bore holes within the virgin soil strata at 1.5 m interval or at every change of strata whichever is earlier, up to rock bottom/ 10 m depth, whichever comes earlier as per IS: 2131-1981 (and collection of undisturbed soils samples from boreholes for other laboratory tests). |
| Depth of bedrock |
| Conducting the following properties on selected soil samples: - |
| Physical characteristics of soil type and strata, grainsize distribution |
| Atterburg's limits |
| Sieve analysis |
| Hydrometer analysis. |
| Tri-axial shear test. |
| Density and moisture content |
| Sheer tests and consolidation tests |
| Chemical analysis – sulphate, chloride, pH for ground water |
| Chemical analysis – sulphate, chloride, pH for soil |
| Soil bearing capacity |
| Depth of Ground Water |

3.3.2. Topographical Survey

The scope for topographical survey at site is as per the following:

- Complete topographical survey with spot levels and preparation of contour plan with 0.5 m interval.
- Level survey with spot level grid of 10 m x 10 m.
- Setting up temporary bench mark (TBM).
- Setting up a local coordinate system with respect to the magnetic North for future identification or reference frame.
- Actual Mean Sea Level of the Temporary bench mark established in the site
- Topographical map - two hardcopies in A0 size and one electronic copy in AUTOCAD Format showing main features of the site and adjoining areas.

Main features include:

- Key map
- Total Site boundary and survey area boundary
- Water bodies nearby/ adjacent to the site
- Existing drains/ Nallahs
- Roads inside and outside of the site, access road

- Electric poles & cables
- Water pipe lines
- Nearby houses/ settlements/ permanent structures
- Leachate pit/ water accumulated within the landfill site
- And any other important physical features

In the drawing, the total area of the site which was surveyed, as well as waste confined area shall be clearly marked and mentioned separately, i.e. (Total area of the site in acre or m², and area confined by accumulated waste in acre or m²). The volume of accumulated waste shall be represented in the drawing.

3.3.3. Waste Characterization Survey

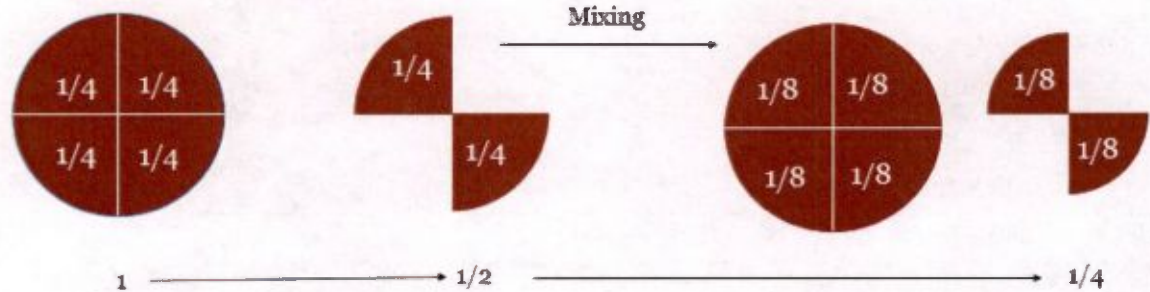
The scope for waste characterization survey at site is as per the following:

Collection of municipal solid waste samples:

Collection of waste samples shall be obtained by core sampling method for fresh waste. The collected sample shall be flattened and quadrisedected into four equal parts. From the four equal parts, two diagonal parts shall be taken out. The same procedure would be followed for a number of times until the weight of the final homogenous sample weighed as 5 kg. A schematic diagram for collection of sample is given below:

Figure 25
Methodology for waste characterization survey

Analysis for following chemical parameters



- Moisture content (%)
- Density (Ton/m³)
- Organic content (%)
- Calorific value (kcal/kg)
- C/N ratio

Analysis for following physical composition

- All type combustible type wastes (please mention the identified components)
- Food, food waste, vegetable, fruits, Garden, yard & park waste – all sort of organic waste
- Recyclable broken colour glasses, recyclable plastic, metal, paper, card board, thermocols and all other recyclable materials.
- Stone, aggregate (if any) and all types of inert matter.

3.4. Key issues observed

The below table highlights the issues for each of the Municipalities:

| S.L. NO | ULB | ULB specific issue(s) | Holistic issue of the Cluster |
|---------|--------------|--|--|
| 1. | Birnagar | <ul style="list-style-type: none"> The municipality has one disposal sites in one of its open green space, where the waste is being disposed of openly They have been able to allocate only a single land parcel for decentralized bio-methanation plant | <ul style="list-style-type: none"> No household level segregation is happening in any of the Municipalities or NAA All the municipalities of the cluster face lack in infrastructure for primary collection, secondary collection points and transportation All the ULBs observe irregular road side dumping and in community lanes All the municipalities face lack of conservancy staff Mounting of waste in the disposal sites, unscientific disposal of wastes and spill over of waste are observed in the all municipalities Absence of proper ULB level Byelaw(s) in all the ULBs Events on public awareness is not regular and scheduled and hence promising participation is not observed |
| 2. | Coopers Camp | <ul style="list-style-type: none"> They have recently initiated door-to-door collection They do not have any one single unscientific disposal site Although the municipality has agreed for the space allocation for couple of AOWC, but they are not able to allocate any land parcel for Bio-methanation plant | |
| 3. | Ranaghat | <ul style="list-style-type: none"> Ranaghat is very congested and hardly can accommodate any decentralized units In spite of conducting public awareness events on waste management and distributing twin dustbins, waste segregation is yet to be initiated The municipality has recently slashed their monthly SWM user fee from Rs 10 to Rs 5/HH | |
| 4. | Taherpur | <ul style="list-style-type: none"> The right of way of the lane leading to the disposal site is very small The municipality has been able to allocate only a single land parcel for installation of decentralized Bio-methanation plant | |

4. Work Plan & Way Forward

PwC study team has formulated a robust work plan to ensure an effective project delivery within stipulated time frame. In this section, the task force, activity schedule, deliverable milestones and key concerns for the project execution have been discussed.

4.1. Stakeholders' Task Force

The client has formed task forces which will work closely with the consultant focusing on the facilitation of the processes need for effective delivery of the deliverables. The following is a list of task force members available to us during this phase. Our team would be coordinating with the same during the course of our engagement.

Table 5 - Stakeholders' Task Force/persons responsible

| Organization | Position/ Designation | Name |
|------------------|-----------------------|----------------------------|
| Ranaghat | Executive Officer | Mr. Biswanath Bag |
| | Assistant Engineer | Mr. Sudipto Mukherjee |
| | Assistant Engineer | Mr. Mrinal Basak |
| | Sanitary Inspector | Mr. Rajat Ghosh |
| Binagar | Executive Officer | Mr. Rabi Shankar Sahu |
| | Sub. Asst. Engineer | Mr. Gautam Das |
| | Conservancy HR | Mr. Ujjawal Sarkar |
| Coopers Camp NAA | Executive Officer | Mr. Pronob Narayan Basu |
| | Sub. Asst. Engineer | Mr. Sukanta Ray |
| | Community Organizer | Mr. Ripan Biswas |
| Taherpur NAA | Executive Officer | Mr. Narayan Chandra Biswas |
| | Sub. Asst. Engineer | Mr. Raghunath Murnu |
| | Community Organizer | Mr. Tarak Das |

4.2. Project Deliverables

Following project deliverables will be submitted in due course of the study.

- **Inception Report (D1)** - Within 10 days after execution of agreement. The report will cover overall approach and methodology, initial findings, issues and challenges at each site and requests for client assistance.
- **Draft Feasibility Report (D2)** - A draft final feasibility study report outlining the major findings and recommendations of the study proposing a preferred method of closure at legacy waste sites as well as technical details of the proposed treatment & disposal system will be also discussed. An outline of the chapters of draft feasibility report is also being submitted in this Inception report.
- **Final Feasibility Report (D3)** - Final feasibility study report incorporating the comments from the client will be prepared and submitted.
- **Draft RfP (D4)** – It will cover all the scope for contractor, terms of references, tender qualifying criteria, evaluation criteria, draft concession agreement etc.
- **Final RfP (D5)** – Based upon comments from SUDA, the draft RfP will be modified and finalized for floating.
- **Tender Evaluation (D6)** – Submitted tenders will be evaluated by PwC and evaluation report shall be submitted with recommendation for selection of successful bidder.
- **Agreement signing (D7)** – PwC will assist client to execute the concession agreement with the successful bidder, once the final selection will be over.

4.3. Project Timeline and Activity Schedule

The time period for completion of the entire project activity is 119 days from the date of commencement of the Services. The project timeline, deliverable planning and activity schedule is presented in the following figure. Refer to activity schedule for detailed breakup of stages and assigned plans and deliverables.

However, the deliverables' timeline may be rationally synchronized with respect to the input and requested information, comments, suggestions, feedback etc. received from different ULBs/ client time to time.

Activity Schedule

| S.No. | Description | Duration (days) | September | | | | October | | | | November | | | | December | | | | January | |
|---------|---|---------------------------------------|----------------|-----------------|-----------------|---------------|---------|----------|-----------|-----------|--------------|--------------|-----------|-----------|--------------|----------|-----------|-----------|--------------|-------------|
| | | | Sept 4-Sept 11 | Sept 11-Sept 18 | Sept 18-Sept 25 | Sept 25-Oct 2 | Oct 2-9 | Oct 9-16 | Oct 16-23 | Oct 23-30 | Oct 30-Nov 6 | Nov 6-Nov 13 | Nov 13-20 | Nov 20-27 | Nov 27-Dec 4 | Dec 4-11 | Dec 11-18 | Dec 18-25 | Dec 25-Jan 1 | Jan 1-Jan 8 |
| Stage 1 | Inception Report | 10 days from the date of commencement | Shaded | Shaded | | | | | | | | | | | | | | | | |
| Stage 2 | Submission of Draft Feasibility Report | 45 days from the stage 1 | | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded | Shaded |
| Stage 3 | Submission of Final Feasibility Report along with action Plan | 10 days from approval of stage 2 | | | | | | | | | | | | | | | | | | |
| Stage 4 | Submission of Draft RFP for selection of agency | 20 days from approval of stage 3 | | | | | | | | | | | | | | | | | | |
| Stage 5 | Submission of Final RFP for selection of agency | 10 days from approval of stage 4 | | | | | | | | | | | | | | | | | | |

Inception Report - Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers & Operators – Cluster # 9

| | | | | | | | | | | |
|---------|--|--------------------------------------|--|--|--|--|--|--|--|--|
| Stage 6 | Evaluation of the tender document and recommendation for the selected agency | 10 days from the tender closing date | | | | | | | | |
| Stage 7 | Getting the Concession Agreement signed by the selected agency | 10 days from Stage 6 | | | | | | | | |

4.4. Indicative Structure of Feasibility Report

An indicative chapterization of the Draft Feasibility Report is presented below, the same is the next deliverable and represents an indicative structuring of the same which may be subject to evolution during the next phase of the assignment.

| | |
|-------------------|--|
| Chapter 1 | : Introduction |
| Chapter 2 | : Policy & regulatory framework |
| Chapter 3 | : The study area profile |
| Chapter 4 | : Present scenario & situation analysis |
| Chapter 5 | : Baseline surveys & investigations |
| Chapter 6 | : Project concept and planning philosophy |
| Chapter 7 | : Design of proposed system |
| Chapter 8 | : Closure of existing disposal site |
| Chapter 9 | : Environmental and sustainability approach of the project |
| Chapter 10 | : Institutional aspects and Capacity building |
| Chapter 11 | : Community awareness and public participation |
| Chapter 12 | : Operation and maintenance aspects |
| Chapter 13 | : Implementation mechanism |
| Chapter 14 | : Cost estimation and project financials |

4.5. Client's Intervention on the Feasibility Study

Stakeholder collaboration is of utmost importance to carry out the feasibility study with due consultation with the client (SUDA) and other stakeholders. During the inception stage PwC team would like to seek clients' assistance in certain aspects of data collection as well as in some critical aspects. These aspects are discussed below.

4.5.1. Checklist of Data Collection Requested

During inception stage, a checklist of information required has been submitted to SUDA, requesting all stakeholders to assist PwC project team with relevant data, information report etc. The checklist of information sought, is presented below:

| Quantitative | Qualitative |
|--|--|
| List of all existing assets, infrastructures, equipment, plant & machineries – Name, make, capacity, purpose, numbers, year of purchase/ installation, present workability condition, utilization status | An overview of the current practices of waste management – generation, source segregation, collection, transportation, processing/ treatment, recovery/ recycling, disposal mechanism etc. |
| Existing location of different waste collection points | What is the major issues and challenges in their area for waste management |
| Waste collection mechanism – lift per day of respective vehicles – from generation point to secondary collection point (transfer station or compactor), and then from secondary collection point to disposal from respective wards | All current ongoing projects (or on hold projects), present or future plans which have been consolidated, to integrate into the proposed |
| Weighbridge data at disposal site or truck count (wrt. vehicle no & capacity) | Land identified for future prospective projects |
| Strategy of street sweeping – timing, bead, frequency, road length covered by each sweeper, time taken etc; what are the equipment used (automatic) | Completed or scrapped past projects |
| Drain cleaning mechanism | What is the condition and strategy of other waste management in the study area, such as – biomedical waste, hazardous waste and e-waste |
| Ward-map (preferably in CAD, if possible) | Name and location of the major waste generators, such as - |

| | |
|---|---|
| | sabzi mandis, commercial establishments, public and community activity areas, eateries (food court, restaurants, roadside food junctions & joints etc.) |
| Ward-wise decadal population (1981, 1991, 2001, 2011, 2019) and floating population, if available | HIG areas (big society, big residential complex, abashan) and slum areas |
| Conservancy details – institutional structure, no of staffs at different level, their responsibilities, employment status | Which are the congested areas and colonies, where accessibility and mobility of the vehicle is a big issues |
| Annual operation and maintenance cost figure of the ULB for SWM | Initiatives taken for IEC/BCC, Capacity building and Community participation |
| Present year budgetary allocation made for SWM | Issuance of Notifications/Bye-laws |
| Previously prepared any relevant report, DPR, master plan, study document | |
| Secondary data on soil test, waste characterization, any other survey etc. | |
| Status of recycling industry – nos. of units, market rates of different items, demand, etc. | |
| Status of nurseries and horticultural unit – nos. of unit, compost demand | |
| Listing/mapping of land identified for future projects | |
| List of Notifications/Byelaws published | |
| Events on IEC/BCC, Capacity building and Community participation | |
| List of Trainers, Trainees and Volunteers | |
| Formation of Task force/Ward committee- details (in case any) | |

4.5.2. Critical Project Parameters for Clients' Intervention

As part of the Inception Report, the team would like to bring to the attention of SUDA, the following important aspects which may play a critical roles and therefore require intervention of the SUDA & other stakeholders during conceptualization of the project:

- The land ownership and legal details of the Ranaghat disposal site for considering the same for closure and reclaiming it for future SLF facility for the entire cluster (in one of the Municipalities) , if possible (as an alternative to fodder land)
- The land ownership and legal details of all exiting disposal sites of respective ULBs for considering them for ULB level processing & treatment facility.
- Alternative land availability
- Concerns towards the disposal site
- The land declaration (land-use notified as) for the existing disposal site and proposed identified site
- Legal status (administrative & social)
- Environmental clearance requirement (PCB consultation)

However, PwC would request SUDA and other stakeholders to assist our team (during this conceptual stage only) with their discretion/ decision on those wards for inclusion, as identified by project team. Thereafter, the infrastructure planning shall be done accordingly in the feasibility stage for those wards, where concurrence has been received from client.

4.6. Way forward

After submission of Inception Report, PwC would undertake the process of detailed situational analysis, development of strategy of collection & transportation, field survey integration of the existing system with the proposed, project overall feasibility study with optional alternatives.

PwC team will be working closely with SUDA and update the concerned official regarding progress of the project on periodic basis.

Appendix A. - Appendices

A.1. Minutes of meetings with the Client

A.1.1 Site visit and meeting with ULB officials

Venue: Birnagar, Coopers Camp NAA and Ranaghat

Date – 24-09-2019 and 26-09-2019

The meeting commenced with the consultants and the respective Municipalities to note in details the SWM management system of each of the Municipalities and site to important nodes/locations with the city. The objective of the meeting was primarily focused on the as-is solid waste management condition of the Municipality, the issues faced within the city while providing services and lack of assets leading to the current non-efficient system.

In addition to these some of the points that were discussed are as follows:

- Irregular IEC/BCC activities due to absence of any planned event calendar
- Not a single house is segregating waste and mixed waste is collected
- Lack of waste management awareness is even leading residing citizens to dispose of their waste in the neighborhood in spite of a coordinated way of handing over the waste to the tri-cycle van(s) dedicated for door-to-door collection
- Lack of infrastructure and conservancy staff for collection and transportation of the management chain
- Unavailability of any decentralized land parcel for installing waste treatment facilities
- Over flowing waste at the unscientific disposal site
- Absence of even one fixed unscientific disposal sites

A.1.2 Discussion with officials of Taherpur

Venue: Kalyani, during Nadia cluster meeting

Date – 25-09-2019

The meeting commenced with the consultants and the Taherpur ULB to note in details the SWM management system. The objective of the meeting was primarily focused on the as-is solid waste management condition of the Municipality, the issues faced within the city while providing services and lack of assets leading to the current non-efficient system.

In addition to these some of the points that were discussed are as follows:

- Not a single house is segregating waste and mixed waste is collected
- Lack of waste management awareness is even leading residing citizens to dispose of their waste in the neighborhood in spite of a coordinated way of handing over the waste to the tri-cycle van(s) dedicated for door-to-door collection
- Lack of infrastructure and conservancy staff for collection and transportation of the management chain
- Right of way of the lane leading to the unscientific disposal site is narrow

A.1.3 Concurrence from Ranaghat in way forward

Venue: Municipality of Ranaghat

Date – 22-10-2019

The meeting commenced with the consultants and Ranaghat Municipality to discuss on the way forward of the Cluster based waste management solution. The objective of the meeting was to finalize the probable site for SLF and shortlist the number of decentralized units of treatment facilities.

In addition to these some of the points that were discussed are as follows:

- In course of execution of the project, the Municipality will ensure that segregated waste is transported to the centralized treatment facility
- The existing disposal site will be reclaimed and utilized for construction of centralized SLF which will cater to Birnagar, Taherpur, Coopers Camp, Chakdah and Ranaghat itself
- The Municipality has specifically mentioned the inclusion of waste from Anulia Gram panchayat in the Feasibility report and SWM plan
- The existing area allocated proposed Biogas plant can be utilized for any proposed Biomethanation plant planned in this project

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CONTRACT FOR CONSULTANT'S SERVICES

Project Name: "APPOINTMENT OF TRANSACTION ADVISOR for Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers & Operators"

**Project Ref.No. STATE URBAN DEVELOPMENT AGENCY-227/2018/1617 Dated:
31.12.2018**

**(For Cluster No.9: Ranaghat Municipality, Birnagar Municipality, Taherpur NAA
and Coopers Camp NAA)**

Memorandum of Agreement for providing service for "Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers & Operators"

Between

**State Urban Development Agency (STATE URBAN DEVELOPMENT AGENCY),
Department of Urban Development & Municipal Affairs, Government of West Bengal
ILGUS Bhawan, HC Block, Sector-III, Bidhannagar, Kolkata - 700 106**

and

PricewaterhouseCoopers Private Limited,

Plot Nos 56 & 57, Block DN -57, Sector V, Salt Lake, Kolkata 700 091

Dated: 27.08.2019



MEMORANDUM OF AGREEMENT

This MEMORANDUM OF AGREEMENT is made on this Twenty Seventh day of August, 2019

BETWEEN

the **State Urban Development Agency, Urban Development and Municipal Affairs Department, Government of West Bengal** acting through the Director (hereinafter referred to as the “**Authority**”) which expression shall where the context so admits, includes his successors in office and assigns on the One Part,

AND

PricewaterhouseCoopers Private Limited, a Private Limited Company registered under Companies Act 1956 with Corporate Identity Number or CIN: U74140WB1983PTC036093 and having its registered office at Plot Nos 56 & 57, Bock DN -57, Sector V, Salt Lake, Kolkata 700091 authorized signatory Yogesh Daruka (hereinafter called the “**Consultants**”) which expression shall where the context so admits, includes his successors in office and assigns on the Other Part.

WHEREAS

(A) STATE URBAN DEVELOPMENT AGENCY has invited tenders for empanelled transaction advisor firms, enlisted by the Finance Department (PPP cell), Government of West Bengal, vide no.3738 F(Y) dated 11-06-2018 for Appointment of Transaction Advisor for Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers and Operators, through No. STATE URBAN DEVELOPMENT AGENCY-227/2018/1617, dated 31.12.2018 and subsequently revised through RFP No. STATE URBAN DEVELOPMENT AGENCY-227/2018/1760 dated 18.01.2019 and subsequent corrigendum No. STATE URBAN DEVELOPMENT AGENCY - 227/2018/1796 dated 25.01.2019 (hereinafter called the “services”); followed by

provide the services for a consideration of **Rs. 28,93,684/-** (Rs. Twenty Eight Lakh Ninety Three Thousand Six hundred and Eighty Four only) by entering into the contract;

(C) the Authority, on acceptance of the aforesaid proposals of the Consultant, awarded the Consultancy to the Consultant vide its Letter of Award vide no. STATE URBAN DEVELOPMENT AGENCY-227/2018/1899 dated 12.02.2019 (the "**LETTER OF ASSOCIATION**"); and

(D) in pursuance of the **LETTER OF ASSOCIATION**, the parties have agreed to enter into this Agreement.

NOW THEREFORE the parties hereto hereby agree as follows: -

The following documents attached here to (Schedule A and B) shall be deemed to form an integral part of this Agreement:

Schedule-A:

1. Main RFP
2. Revised RFP (including the TORs)
3. RFP Corrigendum
4. **LETTER OF ASSOCIATION.**

Schedule-B:

5. Appendix A: **COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF AGREEMENT**
6. Appendix B: Terms of Reference
7. Appendix C: Key personnel details
8. Appendix D: Time Schedule for Deliverables
9. Appendix E: Working arrangement and items to be provided by STATE URBAN DEVELOPMENT AGENCY
10. Appendix F: Price
11. Appendix G: Payment schedule/arrangement
12. Appendix-H: **OBLIGATIONS OF THE CONSULTANT AND AUTHORITY**
13. Appendix-I: **FAIRNESS AND GOOD FAITH**

The mutual rights and obligations of the Authority and the Consultants are set forth in this Agreement; in particular:

- (a) The Consultant shall carry out the Services in accordance with the provisions of the Agreement; and
- (b) The Authority shall make payments to the Consultant in accordance with the provisions of the Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be signed in their respective names as on the day and the year written above.

(Authorised Representative)

FOR AND ON BEHALF OF

(PRICEWATERHOUSE COOPERS PRIVATE LIMITED)

By.....

(Authorised Representative)

Witnesses

1)

2)

CONSULTANT

STATE URBAN DEVELOPMENT AGENCY

CONDITIONS OF AGREEMENT

1. GENERAL PROVISIONS

1.1 Definitions:

Unless the context otherwise requires, the following term whenever used in this Agreement have following meanings:

- a) "Applicable Law" means the laws and any other instruments having the force of law in the India and the State of West Bengal as they may be issued and in force from time to time;
- b) "Agreement" means the Agreement signed by the Parties, together with all documents/ Appendices attached hereto and includes all modifications made in term of the Provisions of Clause 2 hereof;
- c) "Affiliate(s)" means an individual or an entity that directly or indirectly controls, is controlled by, or is under common control with the Consultant.
- d) "Authority" means "State Urban Development Agency, Urban Development and Municipal Affairs Department, Government of West Bengal" ;
- e) "Consultant" means and includes sub-consultant and their Personnel, if any, engaged for carrying out of Services under this Agreement;
- f) "Currency" means the Indian Rupees;
- g) "Key personnel" means the personnel referred to in Clause 4.
- h) "Personnel" means persons hired by the Consultants or by any sub-consultant as employees and assigned to the performance of the Services or any part thereof;
- i) "Party" means the Authority or the Consultants, as the case may be, and Parties means both of them;
- j) "Services" shall have the meaning ascribed to it in the RFP and *Term of Reference (TOR)* as set forth in APPENDIX-B hereto;

1.2 Law Governing Agreement

This Agreement, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

1.3 Language

This Agreement has been executed in English, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Agreement.

1.4 Headings

pursuant to this Agreement shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, speed post, Telegram, facsimile or email to such Party at the addresses specified hereunder: -

Authority:

[.....].

Attention: [.....] (West Bengal)..

Phone

E-mail:

Facsimile:

Consultants: -----

Attention: -----

E-mail

Telex: -----

Facsimile: -----

[Note: Fill in the blanks]

1.5.2 Notice will be deemed to be effective as follows:

The notice shall be deemed to be effective in the manner and at time as specified as follows:

- (a) In the case of personal delivery, speed post or registered mail, on delivery;
- (b) In the case of telexes, telegrams and facsimiles 24 hours following confirmed transmission;

1.6 **Location:**

The Services shall be performed in consultation with State Urban Development Agency, West Bengal to the Urban Local Bodies falling under cluster in State of West Bengal. However, it is not be mandatory for the key personnel of the Consultants to be stationed at the Authority office though it is preferable that the Transaction Advisor should have office setup at Kolkata for ease of interaction and they should be readily available.

1.7 **Authorised Representatives**

For the Authority:

[.....] (West Bengal)..

Phone

E-mail:

Facsimile:

For the Consultant:

[.....] (West Bengal)..

Phone

E-mail:

Facsimile:

1.8 Taxes and Duties

The Consultants and the personnel shall pay the taxes, duties, fees, levies and other impositions levied under the existing, amended or enacted laws during life of this Agreement and the Authority shall perform such duties in regard to the deduction of such tax as may be lawfully imposed. Irrespective of the aforesaid, the payment to be made hereunder by the Authority shall be made net off applicable GST (at prevailing rates notified under Applicable Laws from time to time), which Authority shall pay over and above the fee payable hereunder.

- 1.9 The conditions shown in letter of invitation, term of reference, and RFP, and financial offers shall be deemed to be incorporated and form part of this Agreement by reference.

Schedule-A

1. Main RFP (Annexure-1)
2. Revised RFP (including the TORs) (Annexure-2)
3. RFP Corrigendum(Annexure-3)
4. LETTER OF ASSOCIATION. (Annexure-4)

Appendix-A

1. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF AGREEMENT

1.1 Effectiveness of Agreement

This Agreement shall come into force on the date of signing the Agreement.

1.2 Commencement of Services

The Consultants shall begin carrying out the Services within 15 days from the date of signing of the Agreement. If the Consultant fails to either acknowledge the LETTER OF ASSOCIATION or commence the assignment as specified herein, save and except for delays caused because of Force Majeure or Authority's breach, the LETTER OF ASSOCIATION shall stand automatically terminated, the earnest money of the bidder shall stand forfeited and in such a situation the authority shall be entitled to proceed with the matter as it deem fit.

1.3 Expiration of Agreement

Unless terminated earlier pursuant to Clause 1.9 hereof, the Agreement shall, subject to the conditions of Appendix-G of this Agreement and other terms hereof, expire upon completion of Services by the Consultant.

1.4 Liability of Parties

This Agreement contains all covenants, stipulations and provisions agreed by the parties. No agent or representative of either Party has authority to make, and the Parties shall not bound by or be liable for, any statement, representation, promise or Agreement not set forth herein.

1.5 Modification

Modifications of the terms and conditions of this Agreement, including any modification of the scope of the Services, may be made only by written Agreement between the parties upon mutual consent.

1.6 Force Majeure

1.6.1 Definition: -

- (a) For the purposes of this Agreement, "Force Majeure" means an event which is beyond the reasonable control of a party, and which makes a party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, war, riot, Civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockout or other industrial action are within the

- (i) Any event which is caused by the negligence or intentional action of a party or such party's sub-consultant or agent or employees, nor
- (ii) Any event which a diligent party could reasonably have been expected to both (a) take into account at the time of the conclusion of this Agreement and (b) avoid or overcome in the carrying out of its obligations hereunder.
- (c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

1.6.2 No Breach of Agreement

The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of or default under, this Agreement insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Agreement.

- a) A Party affected by an event of Force Majeure shall take all reasonable measures to remove such Party's inability to fulfill its obligations hereunder with a minimum of delay.
- b) A Party affected by an event of Force Majeure shall notify the other party of such event as soon as possible, and in any event not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
- c) The Parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

1.6.3 Consultation

Not later than thirty (30) days after the Consultants, as the result of an event of Force Majeure, have become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures to be taken in the circumstances.

1.6.4 Extension of Time

Any period within which a Party shall, pursuant to this Agreement, complete any action or task, shall be extended for a period equal to the time during which such party was unable to perform such action as a result of Force Majeure.

1.6.5 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants shall be entitled to be reimbursed for additional costs reasonably and necessarily incurred by them during such

1.7 Suspension

The Authority by written notice of suspension to the Consultants, may suspend all payments to the Consultants hereunder, if the Consultants fail to perform any of their obligations under this Agreement, including the carrying out of the Services provided that such notice of suspension (i) shall specify the nature of the failure and (ii) shall request the Consultants to remedy such failure within a period not exceeding fifteen (15) days after receipt by the Consultants of such notice of suspension.

1.8 The Authority for any reasons beyond his reasonable control, may ask the Consultant to suspend whole or part of the Services for such time till the reasons are removed or settled. The extra time period of such duration may be granted as time extension on the original terms and conditions

1.9 Termination

1.9.1 By the Authority

The Authority, may by not less than fifteen (15) days written notice of termination to the Consultant, such notice to be given after the occurrence of any of the events specified in paragraphs (a) to (c) of this Clause, terminate this Agreement:

- a) If the Consultants fail to remedy the failure in the performance of their obligations hereunder, as specified in a notice within fifteen (15) days of receipt of such notice of suspension or within such further period as the Authority may have subsequently approved in writing;
- e) If as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- c) If the Consultants fails to provide Services as per Agreement.

1.9.2 The Consultant may terminate this Agreement, or any particular Services, immediately upon written notice to the Authority if the Consultant reasonably determines that it can no longer provide the Services in accordance with applicable laws or professional obligations. In that case the consultant shall give a notice 30 days before of such termination to the Authority.

1.9.3 Authority, in its sole discretion and for any reason whatsoever, may terminate this Agreement, after giving 15 days of notice to the Consultant..

1.9.4 Cessation of Rights and Obligations

Upon termination of this Agreement pursuant to *Clauses 1.2 or 1.9* hereof, or upon expiration of this Agreement pursuant to concerned provision of this Agreement hereof, all rights and obligations of the Parties hereunder shall cease, except:

- (i) Such rights and obligations as may have accrued on the date of termination or expiration,

1.9.5 Cessation of Services

Upon termination of this Agreement by notice of either to the other pursuant to Clauses 1.9.1 or 1.9.2 of this Agreement hereof, the Consultants shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum with respect to documents prepared by the Consultants and equipment and materials furnished by the Authority, the Consultants shall proceed as provided, respectively, by concerned provision of this Agreement hereof.

1.9.6 Payment upon Termination

Upon termination of this Agreement pursuant to Clauses 1.9.1 or 1.9.2 of this Agreement hereof, the Authority shall make the payment of Consultant Fee pursuant to Appendix-G of this Agreement hereof for Services performed prior to the effective date of termination to the Consultants (after offsetting against these payments any amount that may be due from the Consultants to the Authority).

1.9.7 Disputes about Events of Termination

If Consultant disputes whether an event specified in paragraphs (a) to (c) Clause 1.9.1 of this Agreement has occurred, he may within forty five (45) days after receipt of notice of termination from the employer, refer the matter to arbitration under this Agreement.

Appendix-B

Terms of Reference (TOR) for Transaction Adviser

(1) Introduction

Government of West Bengal has taken several steps/initiatives for making all the cities Clean, Green and Beautiful with special emphasis on management of Solid Wastes in Municipal Towns of the State. One of the obligatory functions of the Municipal Bodies is to remove solid waste from the cities under Sections 63, 95B, 260, 273 of the West Bengal Municipal Act, 1993 and corresponding provisions of the statute governing Municipal Corporations in West Bengal. A number of initiatives have been taken by the Urban Development & Municipal Affairs Department to ensure that solid waste are collected by the Municipal Bodies and disposed of scientifically by them. Under Mission Nirmal Bangla, a lot of equipment e.g. garbage bins, compactors, hydraulic tippers and other vehicles, community bins to Municipal Bodies to assist them in systematic collection of garbage from individual holdings, their transportation and stacking before disposal. Land has also been provided through inter departmental transfer to municipal bodies to set up dumping ground cum solid waste processing plants. In some cases these bodies have been permitted to purchase private land for setting up these facilities. The municipal bodies are required to collect waste from individual holdings systematically and transport them regularly to the solid waste disposal facility and get them recycled/processed scientifically. Efforts has been taken by some municipalities to collect waste and

In the light of importance given to scientific collection and disposal of solid waste, a large number of legislations and guidelines have been issued by different authorities from time to time. Some of these are:

- 1) Solid Waste Management Rules 2016 framed by Government of India
- 2) Policy and Strategy on Solid Waste Management for Urban Areas of West Bengal made in 2017
- 3) Plastics Waste Management Rules 2016 framed by Government of India
- 4) Policy and Strategy on Plastics Waste Management for Urban Areas of West Bengal made in 2017
- 5) Amendment of the West Bengal Municipal Act 1993 incorporating the provisions for banning using plastic bags below 50 microns.
- 6) State Government Order to all the Urban Local Bodies to regularly remove Solid Wastes from all the Hospitals in their jurisdiction and accordingly make special arrangement for removal of solid waste generated at Hospital.
- 7) Guideline of Ministry of Housing & Urban Affairs, Government of India on Implementation of Solid Waste Management by Bulk Solid Waste Generators.

The present state of solid waste disposal in urban areas involves awareness generation among the population, expectation of segregation of source, door to door collection by the municipal bodies, intermediate storage of such collected waste, segregation at intermediate storage points, ultimate transportation to the disposal ground and segregation, recycling, processing (Bio-gas, RDF, compost) and finally landfill with the residue. While the municipalities in many cases are able to carry out the first three functions reasonably and effectively given appropriate support, the final steps, viz. collection of solid waste from intermediate transit points to their final processing and landfill may not be effectively carried out by the municipal bodies at their current level of resources and competence.

The Urban Development & Municipal Affairs (UD&MA) Department through Kolkata Metropolitan Development Authority (KMDA) and Municipal Engineering Directorate (MED) are developing landfill sites and solid waste processing facilities (compost plants and Biogas energy plants) in different municipalities based on this model.

However, segregation of solid waste, their processing to either to produce compost or Refuse Derived Fuel (RDF) or Bio-gas, their marketing, recycling of waste processing of construction and demolition waste, a remediation of legacy waste, management of landfill site, all of these are technically and managerially complex functions. The experience across cities in India and abroad shows that these functions are best carried out by technically and financially competent agencies. Such agencies are seen to be running successful plants in many Indian cities e.g. Hyderabad, Bangalore, Panaji, Indore, Bhopal, Surat etc.

In this light, State Government has decided to appoint **Transaction Advisor for Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management** for selection of Developers and Operators

(2) Objectives

The objective of engaging a Transaction Advisor is for **Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management** for selection of Developers and Operators.

(3) Scope of Work/Description of Task

3.1. The broad responsibilities of the Transaction Adviser are summarized as follows:

- a) Carry out **feasibility study of the project** in all respect including techno economic viability of existing cluster /proposed cluster of municipal bodies.
- b) Preparation of **Detailed Feasibility Report** for Integrated Solid Waste Management for the municipal bodies involved in this project. The Feasibility Report must cover all ambits of municipal solid waste management from door to door collection, primary/secondary transportation (if required), requirement of transfer stations (if any), processing facility and disposal of inert. Costing of this will also be included in the report.
- c) Drafting of **Request for Proposal (RFP)** for selection of competent agency for carriage (as required) and processing of waste for the cluster.
- d) Assisting Solid Waste Management (SWM) Cell in managing the bid process including **evaluation of bids** and for selection of successful agency for the cluster.
- e) **Drafting of Tripartite Agreement** between Municipal Bodies in the Cluster, the SWM Cell of the Department and the Selected Agency.

3.2. The Transaction Advisor shall keep the following in view in the discharge of the above responsibilities:

- a) Consultation with Urban Development and Municipal Affairs Department, STATE URBAN DEVELOPMENT AGENCY, URBAN LOCAL BODIES, Development Authorities and other stakeholders to identify and conceptualize/develop projects for Solid Waste Management through cluster/standalone approach.
- b) Detailed Technical Feasibility Report should be developed from the primary collection stage up to the final processing and disposal of all types of solid waste. A comprehensive Technical Feasibility Report indicating each stages of waste management i.e. primary Door to Door collection of segregated waste, mode of transportation, setting up of transfer station wherever feasible and disposal of Solid Waste as per provision of SWM Rules, 2016 are to be followed.
- c) The Detailed Project Report for all ongoing projects should incorporate all capital investment already made and existing infrastructure should be considered optimally.
- d) The Detailed Technical Feasibility Report should be flexible with regard to technology for processing of waste and sanitary landfill. Transaction Advisors should provide the broad contours of the project indicating performance parameters considering land constraints and other limitations, if any, within which concessionaires are free and flexible to choose technology of choice.
- e) It is preferable that the Transaction Advisor should have office setup at Kolkata for ease of interaction and should be available as and when required by the Authority.
- f) Projects should be structured under appropriate Public Private Partnership mode to enable optimum utilization of the investments already made in Solid Waste Management projects. Innovative business and commercial practices such as commercial sale of products, levy of user charges/ fee etc., as appropriate under the applicable laws should be incorporated in the Detailed Technical Feasibility Report.
- g) Transaction Advisor is to undertake visits to acclaim projects in other states and study best practices. In the financial proposal Transaction Advisor may incorporate the travel expenses and related incidental charges for visit to other States to see the

- a) Optimum utilization of existing infrastructure of Solid Wastes in the URBAN LOCAL BODIES and in conformity with policy of Government of West Bengal.
- b) Optimum utilization of land for processing plant and sanitary landfill site clubbing URBAN LOCAL BODIES in clusters to make the project financially and technically feasible.
- c) While undertaking the feasibility study, the proposed cluster sites should re-visited for suitable modification, if necessary. For finalization of cluster, STATE URBAN DEVELOPMENT AGENCY should be consulted. The cluster-wise Detailed Feasibility Report, Request for Proposal (concession Request for Proposal for implementation) may be prepared accordingly.
- d) Collection, segregation and transportation of wastes shall be the primary responsibility of URBAN LOCAL BODIES. However the Transaction Advisor will give a comprehensive and holistic mechanism in consultation with the URBAN LOCAL BODIES regarding collection at door step to final disposal.
- e) Incentive on performance for all stakeholders.
- f) A flow chart for disposal of all types of wastes from source up to the processing plant/Landfill to be developed. A clear pictorial representation of the plan should be developed by the TA itself in their report.
- g) Necessary clearances to be obtained from the Department of Environment, West Bengal Pollution Control Board and other regulatory bodies, on behalf of operating agency as and when required as per extent of rules, statutory provisions etc. pertaining to the matter.
 - i. Necessary clearances need to be secured by the Concessionaire with assistance from STATE URBAN DEVELOPMENT AGENCY/ other relevant Government Agencies
 - ii. Transaction Advisors are only required to list and specify the clearances required for executing the proposed projects in the given clusters
- h) New technology (i.e. the technology to be adopted in adherence to SWM Rules, 2016) should be backed by necessary certificate/s (Necessary Certification means Pollution Clearance Certificate etc.) from the proper authority (Proper authority means Pollution Control Board and other regulatory authorities.).
- i) Effective Operation & Management System is to be for at least 20 years.
- j) Processing and disposal of Legacy waste and reclamation of land is to be incorporated.
- k) Land for processing plant and sanitary landfill site is to be identified by URBAN LOCAL BODY.

- m) Segregation and processing of recyclable waste as per Solid Waste Management Rules, 2016 is to be ensured effectively.
- n) Scope of work should be customized on available field data and technology for each cluster/project.
- o) Implementation of effective and viable model based on national and international best practices.
- p) Proposal should be inclusive of institutional structures required for implementation of projects and operation & maintenance thereof with private sector financing.
- q) Key performance indicators to be identified. These are to be linked with schedule of payment to operating agencies.
- r) Principal objective: Achievement of 100 percent disposal and processing of incoming waste and waste as available in existing dumping site, and to maintain its sustainability.

(4) Assignment for following Proposed Cluster:

| Cluster No. | Proposed URBAN LOCAL BODYs |
|-------------|---|
| 9 | Ranaghat Municipality, Birnagar Municipality, Taherpur NAA and Coopers Camp NAA |

Appendix-C

Key Personnel Details:

It is envisaged that the assignment will be undertaken by the team proposed by the Transaction Advisor at the time of submission their Bid documents as detailed below:

| Sl No. | Position | Name of the Expert |
|--------|-----------------------------------|--------------------|
| 1 | Team Leader | Rahul Mallik |
| 2 | Solid Waste Management Specialist | Ayan Majumder |
| 3 | PPP Specialist | Rahul Singh |
| 4 | Financial Analyst | Anjan Kumar Roy |
| | | Santosh Danday |

Appendix-D

(1) Deliverables

| Stage | Activity | Time Allocated * |
|---------|---|--|
| Stage 1 | Submission of the Inception Report | 10 days from the date of commencement. |
| Stage 2 | Submission of Draft Feasibility Report | 45 days from the Stage 1 |
| Stage 3 | Submission of Final Feasibility Report along with action plan | 10 days from approval of Stage 2 |
| Stage 4 | Submission of the Draft RFP for selection of Agency | 20 days from approval of Stage 3 |
| Stage 5 | Submission of the Final RFP for selection of Agency | 10 days from approval of Stage 4 |
| Stage 6 | Evaluation of the Tender Documents and recommendation for the Selected Agency | 10 days from tender closing date |
| Stage 7 | Getting the Concession Agreement signed by the selected Agency | 10 days from Stage 6 |

A Fortnightly meeting will be held where the progress of the assignment will be reviewed against the progress submitted by the Transaction Advisor.

Appendix-E

(1) Working arrangement:

The assignment will be contracted by Director, State Urban Development Agency, West Bengal. URBAN LOCAL BODY/s will nominate an officer to liaison with the Transaction Advisor Team.

(2) Items to be provided by the STATE URBAN DEVELOPMENT AGENCY:

All the data will be provided by STATE URBAN DEVELOPMENT AGENCY and URBAN LOCAL BODY to the Transaction Advisor and for that Transaction Advisor should inform the requirement of requisite data to the office of STATE URBAN DEVELOPMENT AGENCY. However certain datas are to be collected by the Transaction Advisor during their Field Study if it is not readily available with STATE URBAN DEVELOPMENT AGENCY/ URBAN LOCAL BODY.

It is to say that with regards to topographical survey, geotechnical investigation, leachate quality analysis, ground & surface water quality analysis, waste characterization survey etc shall be under the scope of Transaction Advisor consultant where STATE URBAN DEVELOPMENT AGENCY/Kolkata Metropolitan Development Authority/Municipal Engineering Directorate will extend full support.

(3) Items to be provided by the Transaction Advisor:

The Transaction Advisor shall organize and provide for:

... .. arrangement of their personnel for visit to URBAN

borne by the Transaction Advisor.

- Any other expenses as required for completion of assignment.

Appendix-F

The contract price of **Rs. 28,93,684/-** (Rupees Twenty Eight Lakh Ninety Three Thousand and Six hundred and Eighty Four only) shall remain fixed and firm during the period of contract excluding Goods and Service Tax. The Authority shall pay GST in the prevailing rate.

Appendix-G

Payment Schedule/Arrangement

| Stage | Details of stages | Percentage |
|----------|---|-------------|
| Stage 1A | Submission of the Inception Report | 5% |
| Stage 1B | Acceptance of Inception Report by the Authority within 7 working days from the date of submission | 5% |
| Stage 2A | Submission of Draft Feasibility Report by the TA | 5% |
| Stage 2B | Acceptance of Draft Feasibility Report, by the Authority within 7 working days from the date of submission | 5% |
| Stage 3 | Submission of Final Feasibility Report along with action plan by the TA within 7 working days from the date of submission of corrected draft from the Authority | 5% |
| Stage 4A | Submission of Draft RFP by the Agency | 5% |
| Stage 4B | Acceptance of Draft RFP by the Authority within 30 working days of submission | 10% |
| Stage 5A | Submission of the Final RFP for selection of Agency | 10% |
| Stage 5B | Acceptance of the Final RFP by the Authority within 30 working days of submission | 10% |
| Stage 6 | Evaluation of the Tender Documents and recommendation for the Selected Agency | 20% |
| Stage 7 | Getting the Concession Agreement signed by the selected Agency | 20% |
| | TOTAL | 100% |

STATE URBAN DEVELOPMENT AGENCY shall review and monitor the progress of the assignment. On acceptance of the report against each milestone by the Director, STATE URBAN DEVELOPMENT AGENCY, payment will be released subject to deduction of taxes, as applicable.

(a) If the Agreement duration gets reduced due to Termination or any other reason that is not attributable to the Consultant, Consultant shall be entitled to:

- (i) the payment of the Consultant Fee for Services performed prior to the effective date of such termination (after offsetting against these payments any amount that may be due from the Consultants to the Authority); and
- (ii) release of the performance security by the Authority to the Consultant.

(b) Notwithstanding anything contrary contained in this Agreement, if project gets delayed beyond period of twelve (12) months from commencement date for any reason(s) not attributable to the Consultant, the Consultant shall be entitled to terminate the Agreement without any liability/cost thereof. Upon such exit, the Consultant shall be entitled to:

- (i) the payment of the Consultant Fee for Services performed prior to the effective date of such termination (after offsetting against these payments any amount that may be due from the Consultants to the Authority); and
- (ii) release of the performance security by the Authority to the Consultant.

(c) All payments made hereunder shall be net off and be paid by Authority along with applicable GST as per prevailing rates notified under Applicable Laws.

Currency of Payment

Except as may be otherwise agreed between the Authority and the Consultants all payments under this Agreement shall be made in Indian Rupees only. The payments shall be made by Cheques / Demand Draft or electronic transfer to designated account of Consultant.

Mode of Billing and Payment

The billing and payment in respect of Services shall be made as follows:

- (a) As soon as practicable and not later than the fifteen (15) days after the completion of each stage, during the period of Services, the Consultant shall submit to Authority in duplicate a bill for payment.
- (b) The Authority shall cause the payment to the Consultant periodically as given above within ten (10) days after the receipt by the Consultant's bills.
- (C) All running payments shall be treated as interim payments subject to adjustment on the finalization of Agreement.

Performance Security means 10% of total Consultant Fee in the form of Bank Guarantee of any recognized bank in India in favour of the Authority to be submitted by the Consultant within 15 days from signing of the Agreement. Bank Guarantee should remain valid till the Agreement continues to be in force.

Appendix-H

OBLIGATIONS OF THE CONSULTANTS

1.1 General

1.1.1 Standard of Performance

The Consultants shall perform the Services and carry out their obligations hereunder with all due diligence and efficiency, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. The Consultants shall always act, in respect of any matter relating to this Agreement or to the Services, as faithful advisers to the Authority, and shall at all times support and safeguard the Authority's legitimate interests in any dealings with Sub-consultants or Third Parties.

1.1.2 Law Governing Services

The Consultants shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Sub-consultants, as well as any personnel of the Consultant and/or sub-consultants and agents, comply with the Applicable Law time being in force. The Authority shall advise the Consultants in writing of relevant local customs and the Consultants shall, after such notice, respect such customs.

1.2 Conflict of Interests

1.2.1 Consultants not to benefit from Commissions, discounts etc.

The remuneration of the Consultants pursuant to Appendix-G of this Agreement hereof shall constitute the Consultant's sole remuneration in connection with this Agreement or the Services and subject to relevant provision of this Agreement hereof, the Consultants shall not accept for their own benefit any commission, discount or similar payment in connection with activities pursuant to this Agreement or to the Services or in the discharge of their obligations hereunder, and the Consultants shall use their best efforts to ensure that any of the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

1.2.2 Procurement Rules

If the Consultants, as part of the Services, have the responsibility of advising the

Consultants in the exercise of such procurement responsibility shall be for the account of the Authority.

1.2.3 Consultants and Affiliates not to engage in certain activities

The Consultants agree that, during the term of this Agreement and after its termination, the Consultants and any entity affiliated with the Consultants, as well as any sub-consultant and any entity affiliated with such sub-consultant, shall be disqualified from providing goods, works or Services (other than the Services and any continuation thereof) for any Project resulting to the Services.

1.2.4 Prohibition of Conflicting Activities

The Consultants shall not engage and shall cause their personnel as well as Sub-consultants and their Personnel not to engage, either directly or indirectly during the term of this Agreement, any business or professional activities in the State of West Bengal, which would conflict, with the activities assigned to them under this Agreement.

1.3 Confidentiality

The Consultants, their sub-consultants and the personnel of either of them shall not, either during the term or within 6 (six) months after the expiration of this Agreement, disclose any proprietary or confidential information relating to the project, the Services, this Agreement or the Authority's business or operations without the prior written consent of the Authority.

1.4 Liability of the Consultants

1.4.1 Subject to additional provisions, if any, set forth in this Agreement, Consultant's liability under this Agreement shall be as provided by the Applicable Law.

1.4.2 The Consultant shall, subject to the limitation specified provisions of this agreement, be liable to the Authority for any direct loss or damage accrued or likely to accrue due to deficiency in Services rendered by it.

1.4.3 The Parties hereto agree that in case of negligence or willful misconduct on the part of the Consultant or on the part of any person or firm acting on behalf of the Consultant in carrying out the Services, the Consultant, with respect to damage caused to the Authority, shall not be liable to the Authority:

(i) for any indirect or consequential loss or damage; and

(ii) for any direct loss or damage that exceeds the Consultant Fee actually paid for the Services.

1.5 Accounting, Inspection and Auditing

The Consultants (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder in accordance with accepted accounting principles and in such form and

personnel. The key personnel shall be available as per the requirement of fulfilment of Services. However, it shall not be mandatory for the key personnel of the Consultants to be stationed at the Authority location but will be available before the Authority as and when required.

1.7 Reporting Obligations

The Consultants shall submit to the Authority the reports and documents specified in the Terms of Reference as set forth in Appendix-B, and perform the Services as per terms set forth in the Terms of Reference.

Documents prepared by the Consultants to be the Property of the Authority. All plans, drawings, specifications, designs, reports, other documents and software prepared by the Consultants for the Authority under this Agreement shall become and remain the property of the Authority. The Consultants shall, not later than upon termination or expiration of this Agreement, deliver all such documents etc. to the Authority, together with a detailed inventory thereof. The Consultants may retain a copy of such documents and software.

The Authority shall constitute a Committee for periodic review of the documents/reports specified in the Terms of Reference as set forth in Appendix-B on a fortnightly basis.

OBLIGATIONS OF THE AUTHORITY

2. Assistance and Exemptions

2.1. The Authority will assist to Consultant in grant of following from Government:

2.2. Provide the Consultants, the sub-consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultants, sub-Consultants and Personnel to perform the Services (if applicable);

2.3. Assist the Consultants, sub-Consultants and the Personnel employed by them for the Services from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity according to the Applicable Law;

2.4. Grant to the Consultants, any sub-Consultants and the Personnel of either of them the privilege, pursuant to the Applicable Law, of bringing into State of West Bengal reasonable amount of currency for the purposes of the Services or use of the personnel and their dependent and of withdrawing any such amounts as may be earned therein by the Personnel in the execution of the Services;

2.5. The Authority shall nominate an officer to liaison with the Consultant.

2.6. The Authority shall provide all the data to the Consultant and for that Consultant should inform the requirement of requisite data to the office of the Consultant. However certain data are to be collected by the Consultant during their Field Study if it is not readily available with the Authority and the Authority will assist the Consultant in such endeavours. However, with regard to topographical survey, geotechnical investigation, leachate quality analysis, ground and surface water quality analysis, waste characterization survey etc shall be under the scope of Consultant to consult where the Authority will extend full support

1. FAIRNESS AND GOOD FAITH

1.1. Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Agreement and to adopt all reasonable measures to ensure the realization of the objectives of this Agreement.

1.2. Operation of the Agreement

The parties recognize that it is impractical in this Agreement to provide for every contingency which may arise during the life of the Agreement, and the parties hereby agree that it is their intention that this Agreement shall operate fairly as between them, and without detriment to the interest of either of them and that if during the term of this Agreement either party believes that this Agreement is operating unfairly, the parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but on failure to agree on any action pursuant to this clause shall give rise to a dispute subject to arbitration in accordance with terms hereof.

2. INTELLECTUAL PROPERTY RIGHTS

The Consultant may use data, software, designs, utilities, tools, models, systems and other methodologies and know-how ("Materials") that the Consultants own in performing the Services. Notwithstanding the delivery of any Reports, the Consultants retain all intellectual property rights in the materials (including any improvements or knowledge developed while performing the Services), and in any working papers that Consultants compile and retain in connection with the Services (but not Authority Information reflected in them). Upon payment for the Services, the Authority may use any materials included in the Reports, as well as the Reports themselves as permitted by this Agreement.

3. INDEMNITY

To the fullest extent permitted by applicable law and professional regulations, the Authority shall indemnify the Consultants, against all claims by third parties (including the Authority's affiliates) and resulting liabilities, losses, damages, costs and expenses (including reasonable external and internal legal costs) arising out of the third party's use of or reliance on any Report disclosed to it by or through the Authority or at the Authority's request. The Authority shall have no obligation hereunder to the extent that the Consultant have specifically authorized, in writing, the third party's reliance on the Services.

4. MISCELLANEOUS

- a. This Agreement constitutes the entire agreement as to the Services and the other matters it covers, and supersedes all prior agreements, understandings and representations with respect thereto including any confidentiality agreements previously delivered.

- c. The Consultant shall be liable for defects, discrepancies and disorders etc. in works executed under his supervision.
- d. Both the Authority and Consultant represents that the person signing this Agreement and any Statement of Work hereunder on its behalf is expressly authorized to execute them and to bind each of us to their terms.
- e. Neither of the Parties may assign any of their rights, obligations or claims under this Agreement;
- f. If any provision of this Agreement (in whole or part) is held to be illegal, invalid or otherwise unenforceable, the other provisions shall remain in full force and effect;
- g. If there is any inconsistency between provisions in different parts of this Agreement, those parts shall have precedence as follows (unless expressly agreed otherwise): (a) the Cover Letter, (b) the applicable Statement of Work and any annexes thereto, (c) these General Terms and Conditions, and (d) other annexes to this Agreement;
- h. Neither of the Parties may use or reference the other's name, logos or trademarks without its prior written consent, provided that the Consultant may use the Authority's name publically to identify the Authority as a Authority in connection with specific Services or otherwise.

5. SETTLEMENT OF DISPUTES

5.1. Amicable Settlement

The parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Agreement or the interpretation thereof.

5.2 Dispute Redressal System

5.2.1 In the event of any Dispute between the Parties, either Party may call upon [Director, State Urban Development Agency, Government of West Bengal] and the Senior Management of the Consultant or a substitute thereof for amicable settlement, and upon such reference, the said persons shall meet not later than 10 (ten) days from the date of reference to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the 10 (ten) day period or the Dispute is not amicably settled within 15 (fifteen) days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) days of the notice in writing or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the provisions hereof.

5.2.2 Arbitration:-

Any Dispute which is not resolved amicably pursuant to resolution mechanism as provided in Clause above, shall be finally decided by reference to arbitration by an Arbitral Tribunal appointed in accordance with this clause, and shall be subject to the provisions of the Arbitration and Conciliation Act, 1996 (as amended from time to time). The place of such arbitration shall be at Kolkata and the language of arbitration proceedings shall be English.

The Arbitral Tribunal shall constitute of the sole arbitrator to be mutually appointed by parties.

This Agreement and the rights and obligations of the Parties shall remain in full force and

interpretation and legal effect shall be to the exclusive jurisdiction of the appropriate court in State of West Bengal.

IN WITNESS THEREOF, the parties hereto have caused this Agreement to be signed in their respective names of the day and year first above written.

FOR AND ON BEHALF OF THE AUTHORITY

BY

Authorised Representative

Witness:

FOR AND ON BEHALF OF THE CONSULTANTS

BY

Authorised Representative

Witness:

রাজ্য নগর উন্নয়ন সংস্থা

STATE URBAN DEVELOPMENT AGENCY

“ইলগাস ভবন”, এইচ-সি ব্লক, সেক্টর-৩, বিধাননগর, কলকাতা-৭০০ ১০৬, পশ্চিমবঙ্গ
“ILGUS BHAVAN”, H-C Block, Sector - III, Bidhannagar, Kolkata - 700 106, West Bengal

ক্রমিক নংSUDA-227/2018(Pt.I)/ 5509

তারিখ 13.08.2019

To
Mr. Yogesh Daruka,
Pricewaterhouse Coopers (PwC) Pvt. Ltd.
Plot No. DN56-57, Sector-V
Salt Lake, Kolkata - 700091

Sub: Work Order for providing Transaction Advisory Services

Ref: Finance Department U.O. No. Group-T/2019-2020/0277 dated 04.07.2019

Sir,

With reference to above, I would like to inform you that your proposed rate of Rs.28,93,684/- (Inclusive of all expenses excluding GST) with regard to ‘Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management for selection of Developers & Operators’ has been accepted for each of the following Clusters:

| Cluster No. | Proposed Cluster |
|-------------|--|
| 8 | Kalyani, Gayeshpur, Halisahar, Haringhata and Kanchrapara Municipalities |
| 9 | Ranaghat Municipality, Birnagar Municipality, Taherpur NAA and Coopars Camp NAA, |
| 10 | Krishnagar, Nabadwip and Santipur Municipalities |

The broad responsibilities of you as a Transaction Adviser for all these Clusters are as follows:

- Carry out feasibility study of the project in all respect including techno economic viability of existing cluster /proposed cluster of municipal bodies.
- Preparation of Detailed Project Report for Integrated Solid Waste Management for the municipal bodies involved in this project.
- Drafting of Request for Proposal (RFP) for selection of competent agency for carriage (as required) and processing of waste for the cluster.
- Assisting Solid Waste Management (SWM) Cell in managing the bid process including evaluation of bids and for selection of successful agency for the cluster.
- Drafting of Concession Agreement to be executed with the selected agency.

The work will have to be executed as per Terms of Reference enclosed herewith adhering to the following stipulated conditions:

দুরভাষ : ২৩৫৮ ৬৪০৩ / ৫৭৬৭, ফ্যাক্স : ২৩৫৮ ৫৮০০

Tel : 2358 6403/5767, Fax : 2358 5800, E-mail : wbsudadir@gmail.com

Account Section : 2358 6408

1. Deliverables:

| Stage | Activity | Time Allocated |
|---------|---|---|
| Stage 1 | Submission of the Inception Report | 10 days from the date of signing of contract. |
| Stage 2 | Submission of Draft Feasibility Report | 45 days from the Stage 1 |
| Stage 3 | Submission of Final Feasibility Report along with action plan | 10 days from approval of Stage 2 |
| Stage 4 | Submission of the Draft RFP for selection of Agency | 20 days from approval of Stage 3 |
| Stage 5 | Submission of the Final RFP for selection of Agency | 10 days from approval of Stage 4 |
| Stage 6 | Evaluation of the Tender Documents and recommendation for the Selected Agency | 10 days from tender closing date |
| Stage 7 | Getting the Concession Agreement signed by the selected Agency | 10 days from Stage 6 |

2. Payment Schedule:

| Stage | Details of stages | Percentage |
|----------|---|-------------|
| Stage 1A | Submission of the Inception Report | 5% |
| Stage 1B | Acceptance of Inception Report by the Authority within 7 working days from the date of submission | 5% |
| Stage 2A | Submission of Draft Feasibility Report by the TA | 5% |
| Stage 2B | Acceptance of Draft Feasibility Report, by the Authority within 7 working days from the date of submission | 5% |
| Stage 3 | Submission of Final Feasibility Report along with action plan by the TA within 7 working days from the date of submission of corrected draft from the Authority | 5% |
| Stage 4A | Submission of Draft RFP by the Agency | 5% |
| Stage 4B | Acceptance of Draft RFP by the Authority within 30 working days of submission | 10% |
| Stage 5A | Submission of the Final RFP for selection of Agency | 10% |
| Stage 5B | Acceptance of the Final RFP by the Authority within 30 working days of submission | 10% |
| Stage 6 | Evaluation of the Tender Documents and recommendation for the Selected Agency | 20% |
| Stage 7 | Getting the Concession Agreement signed by the selected Agency | 20% |
| | TOTAL | 100% |

3. The Manpower support that you have to put in place for timely execution of the assignment has to be maintained appropriately.

Subject to acceptance of abovementioned conditions, you are hereby requested to execute a formal agreement with the undersigned within 15 days from the date of issue of this letter of acceptance cum work order, failing which it will be presumed that you are not interested to execute the offer and in that case the work order will be treated as cancelled.

Yours faithfully

[Handwritten Signature] 13/8/19

(Director)

Encl: Terms of Reference

SUDA-227/2018(Pt.I)/ 5509/1(1)

Date: 13.08.2019

Copy forwarded for kind information to:

The Principal Secretary, UD & MA Department, GoWB

[Handwritten Signature] 13/8/19

(Director)

Terms of Reference (TOR) for Transaction Adviser

(1) Introduction

Government of West Bengal has taken several steps/initiatives for making all the cities Clean, Green and Beautiful with special emphasis on management of Solid Wastes in Municipal Towns of the State. One of the obligatory functions of the Municipal Bodies is to remove solid waste from the cities under Sections 63, 95B, 260, 273 of the West Bengal Municipal Act, 1993 and corresponding provisions of the statute governing Municipal Corporations in West Bengal. A number of initiatives have been taken by the Urban Development & Municipal Affairs Department to ensure that solid waste are collected by the Municipal Bodies and disposed of scientifically by them. Under Mission Nirmal Bangla, a lot of equipment e.g. garbage bins, compactors, hydraulic tippers and other vehicles, community bins to Municipal Bodies to assist them in systematic collection of garbage from individual holdings, their transportation and stacking before disposal. Land has also been provided through inter departmental transfer to municipal bodies to set up dumping ground cum solid waste processing plants. In some cases these bodies have been permitted to purchase private land for setting up these facilities. The municipal bodies are required to collect waste from individual holdings systematically and transport them regularly to the solid waste disposal facility and get them recycled/processed scientifically. Efforts has been taken by some municipalities to collect waste and process them to the best of their abilities. It is, however, a fact that most municipal bodies do not have the technical capability, financial capacity and managerial competence to handle disposal of solid waste in a scientific manner. As a result, in spite of best intentions and substantial investments, these efforts have not resulted in significant improvement of situation.

In the light of importance given to scientific collection and disposal of solid waste, a large number of legislations and guidelines have been issued by different authorities from time to time. Some of these are:

- 1) Solid Waste Management Rules 2016 framed by Government of India
- 2) Policy and Strategy on Solid Waste Management for Urban Areas of West Bengal made in 2017
- 3) Plastics Waste Management Rules 2016 framed by Government of India
- 4) Policy and Strategy on Plastics Waste Management for Urban Areas of West Bengal made in 2017
- 5) Amendment of the West Bengal Municipal Act 1993 incorporating the provisions for banning using plastic bags below 50 microns.
- 6) State Government Order to all the Urban Local Bodies to regularly remove Solid Wastes from all the Hospitals in their jurisdiction and accordingly make special arrangement for removal of solid waste generated at Hospital.
- 7) Guideline of Ministry of Housing & Urban Affairs, Government of India on Implementation of Solid Waste Management by Bulk Solid Waste Generators.

The present state of solid waste disposal in urban areas involves awareness generation among the population, expectation of segregation of source, door to door collection by the

municipal bodies, intermediate storage of such collected waste, segregation at intermediate storage points, ultimate transportation to the disposal ground and segregation, recycling, processing (Bio-gas, RDF, compost) and finally landfill with the residue. While the municipalities in many cases are able to carry out the first three functions reasonably and effectively given appropriate support, the final steps, viz. collection of solid waste from intermediate transit points to their final processing and landfill may not be effectively carried out by the municipal bodies at their current level of resources and competence.

The Urban Development & Municipal Affairs (UD&MA) Department through Kolkata Metropolitan Development Authority (KMDA) and Municipal Engineering Directorate (MED) are developing landfill sites and solid waste processing facilities (compost plants and Biogas energy plants) in different municipalities based on this model.

However, segregation of solid waste, their processing to either to produce compost or Refuse Derived Fuel (RDF) or Bio-gas, their marketing, recycling of waste processing of construction and demolition waste, a remediation of legacy waste, management of landfill site, all of these are technically and managerially complex functions. The experience across cities in India and abroad shows that these functions are best carried out by technically and financially competent agencies. Such agencies are seen to be running successful plants in many Indian cities e.g. Hyderabad, Bangalore, Panaji, Indore, Bhopal, Surat etc.

In this light, State Government has decided to appoint **Transaction Advisor for Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management** for selection of Developers and Operators

(2) Objectives

The objective of engaging a Transaction Advisor is for **Assisting the State Government for Planning of Scientific Solid Waste Management through Cluster Approach and Bid Process Management** for selection of Developers and Operators.

(3) Scope of Work/Description of Task

3.1. The broad responsibilities of the Transaction Adviser are summarized as follows:

- a) Carry out **feasibility study of the project** in all respect including techno economic viability of existing cluster /proposed cluster of municipal bodies.
- b) Preparation of **Detailed Feasibility Report** for Integrated Solid Waste Management for the municipal bodies involved in this project. The Feasibility Report must cover all ambits of municipal solid waste management from door to door collection, primary/secondary transportation (if required), requirement of transfer stations (if any), processing facility and disposal of inert. Costing of this will also be included in the report.
- c) Drafting of **Request for Proposal (RFP)** for selection of competent agency for carriage (as required) and processing of waste for the cluster.
- d) Assisting Solid Waste Management (SWM) Cell in managing the bid process including **evaluation of bids** and for selection of successful agency for the cluster.
- e) **Drafting of Tripartite Agreement** between Municipal Bodies in the Cluster, the SWM Cell of the Department and the Selected Agency.

3.2. The Transaction Advisor shall keep the following in view in the discharge of the above responsibilities:

- a) Consultation with Urban Development and Municipal Affairs Department, STATE URBAN DEVELOPMENT AGENCY, URBAN LOCAL BODIES, Development Authorities and other stakeholders to identify and conceptualize/develop projects for Solid Waste Management through cluster/standalone approach.
- b) Detailed Technical Feasibility Report should be developed from the primary collection stage up to the final processing and disposal of all types of solid waste. A comprehensive Technical Feasibility Report indicating each stages of waste management i.e. primary Door to Door collection of segregated waste, mode of transportation, setting up of transfer station wherever feasible and disposal of Solid Waste as per provision of SWM Rules, 2016 are to be followed.
- c) The Detailed Project Report for all ongoing projects should incorporate all capital investment already made and existing infrastructure should be considered optimally.
- d) The Detailed Technical Feasibility Report should be flexible with regard to technology for processing of waste and sanitary landfill. Transaction Advisors should provide the broad contours of the project indicating performance parameters considering land constraints and other limitations, if any, within which concessionaires are free and flexible to choose technology of choice.
- e) It is preferable that the Transaction Advisor should have office setup at Kolkata for ease of interaction and should be available as and when required by the Authority.

- f) Projects should be structured under appropriate Public Private Partnership mode to enable optimum utilization of the investments already made in Solid Waste Management projects. Innovative business and commercial practices such as commercial sale of products, levy of user charges/ fee etc., as appropriate under the applicable laws should be incorporated in the Detailed Technical Feasibility Report.
- g) Transaction Advisor is to undertake visits to acclaim projects in other states and study best practices. In the financial proposal Transaction Advisor may incorporate the travel expenses and related incidental charges for visit to other States to see the best practices considering visit at least in two such cities with two experts from the team.

3.3. The Transaction Advisor shall prepare bid documents (RFP, Concession Agreement etc.) and manage bid process upto signing of Concession Agreement; while doing so the following objectives shall have to be addressed.

- a) Optimum utilization of existing infrastructure of Solid Wastes in the URBAN LOCAL BODIES and in conformity with policy of Government of West Bengal.
- b) Optimum utilization of land for processing plant and sanitary landfill site clubbing URBAN LOCAL BODIES in clusters to make the project financially and technically feasible.
- c) While undertaking the feasibility study, the proposed cluster sites should re-visited for suitable modification, if necessary. For finalization of cluster, STATE URBAN DEVELOPMENT AGENCY should be consulted. The cluster-wise Detailed Feasibility Report, Request for Proposal (concession Request for Proposal for implementation) may be prepared accordingly.
- d) Collection, segregation and transportation of wastes shall be the primary responsibility of URBAN LOCAL BODIES. However the Transaction Advisor will give a comprehensive and holistic mechanism in consultation with the URBAN LOCAL BODIES regarding collection at door step to final disposal.
- e) Incentive on performance for all stakeholders.
- f) A flow chart for disposal of all types of wastes from source up to the processing plant/Landfill to be developed. A clear pictorial representation of the plan should be developed by the TA itself in their report.
- g) Necessary clearances to be obtained from the Department of Environment, West Bengal Pollution Control Board and other regulatory bodies, on behalf of operating agency as and when required as per extent of rules, statutory provisions etc. pertaining to the matter.

- i. Necessary clearances need to be secured by the Concessionaire with assistance from STATE URBAN DEVELOPMENT AGENCY/ other relevant Government Agencies
 - ii. Transaction Advisors are only required to list and specify the clearances required for executing the proposed projects in the given clusters
- h) New technology (i.e. the technology to be adopted in adherence to SWM Rules, 2016) should be backed by necessary certificate/s (Necessary Certification means Pollution Clearance Certificate etc.) from the proper authority (Proper authority means Pollution Control Board and other regulatory authorities.).
 - i) Effective Operation & Management System is to be for at least 20 years.
 - j) Processing and disposal of Legacy waste and reclamation of land is to be incorporated.
 - k) Land for processing plant and sanitary landfill site is to be identified by URBAN LOCAL BODY.
 - l) Reclamation of existing Dumping Grounds, scientific development, beautification etc. of the Dumping Grounds.
 - m) Segregation and processing of recyclable waste as per Solid Waste Management Rules, 2016 is to be ensured effectively.
 - n) Scope of work should be customized on available field data and technology for each cluster/project.
 - o) Implementation of effective and viable model based on national and international best practices.
 - p) Proposal should be inclusive of institutional structures required for implementation of projects and operation & maintenance thereof with private sector financing.
 - q) Key performance indicators to be identified. These are to be linked with schedule of payment to operating agencies.
 - r) Principal objective: Achievement of 100 percent disposal and processing of incoming waste and waste as available in existing dumping site, and to maintain its sustainability.

(4) Assignment for following Proposed Clusters:

| Cluster No. | Proposed Cluster |
|-------------|--|
| 8 | Kalyani, Gayeshpur, Halisahar, Haringhata and Kanchrapara Municipalities |
| 9 | Ranaghat Municipality, Birnagar Municipality, Taherpur NAA and Coopars Camp NAA, |
| 10 | Krishnagar, Nabadwip and Santipur Municipalities |