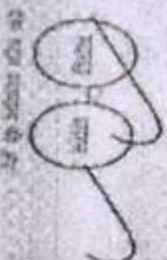




SOUTH DELHI MUNICIPAL CORPORATION
OFFICE OF THE EXECUTIVE ENGINEER
ZONAL OFFICE BUILDING, ROOM NO. 301, 302
DHANSA STAND, NAJAFGARH, New Delhi - 110043


Executive Engineer

No. D-612/EE/EMS/NGZ/2016-17

Date: 23/1/17

Subject: - EOJ for Planning, Designing, Engineering, Procurement, Construction, Installation, Testing, Commissioning, Operation and Maintenance of BFO-Gas Plant (cattle dung & kitchen waste) and Gas up gradation with slurry management on PPP mode (BOT basis) having capacity of 150 MTPD at Goyla Dairy NGZ SDMC.

Sub Head: - Response to Pre-bid Queries.


Please find the enclosed herewith the response to Pre-bid Queries to above mentioned work along with following amendments: -

- 1) The EOJ shall be valid for acceptance for a period of atleast 150 days from the opening of EOJ.
- 2) The schedule is as under:-
 - a) Response to queries - 24.01.2017.
 - b) Last date of submission of EOJ - 07.02.2017 upto 4:00 PM.
 - c) Opening of EOJ response - 07.02.2017 at 4:30 PM.
 - d) Place and opening of EOJ response - Office of the SE (DEMS), E-1 Block, Room No. 204, Dr. SPM Civic Center, JN Marg, New Delhi-110002. Phone No.: 011-23225253
 - e) Contact person - Sh. Anil Kumar, EE (EMS)/NGZ-9717788385, Sh. Umred Singh, AE (EMS)/NGZ-9717788385.

You are requested to upload the above along with encloser on website www.mcdonline.gov.in, www.mcdetenders.com, urgent please

Enclosed: Reply to Pre-bid Queries:

Director-(IT)/SDMC


Anil Kumar
EE (EMS)/NGZ (MS)
Executive Engineer
South Delhi Municipal Corporation

Subject:- EOI for Planning, Designing, Engineering, Procurement, Construction, Installation, Testing, Commissioning, Operation and Maintenance of BIO-Gas Plant (cattle dung & kitchen waste) and Gas up gradation with slurry management on PPP mode (BOT basis) having capacity of 150 MTPD at Goyla Dairy NGZ SDMC.

Sub Head: - Response to Pre-bid Queries.

Pre-bid conference to the above mentioned subject matter was held on 10.1.2017 at 3:00 PM in the office of SE-DEMS, Core Center. The list of participant attended the conference is placed opposite in file. Following parties submitted their queries through e-mail by 5:00 PM 13.01.2017.

- A. ENKEM Engineers Pvt. Ltd.
- B. Organic Recycling System Pvt. Ltd.
- C. Pecma Air System Pvt. Ltd.
- D. Mahindra & Mahindra Ltd.
- E. 3 R Management (P) Limited.
- F. Growdiesel
- G. Spectrum Renewable Energy Pvt Ltd.
- H. Shiwass Services Pvt Ltd

The queries submitted by participants are placed opposite in file. The queries & their reply by department is as under:-

| S. | Observation | Reply |
|------------------------------------|--|---|
| A). ENKEM ENGINEERS PVT LTD | | |
| 1 | EOI (Express of Interest) called by SDMC, please conform it will only have our experience, references, our partners references etc, it will not have Technical proposal as Technical proposal will be submitted only if our expression of interest is accepted and other conditions are known. | Interested parties shall submit original & one (copy) of their experience in the related project executed so far. |
| 2 | a). SDMC to guarantee delivery of cattle dung and vegetable waste to Project site at one point, the time of delivery to be agreed. | Cattle dung is to be collected by the successful bidder from the nearby dairy namely Goela Dairy, Nangli Dairy & Kakrola Dairy. However, for kitchen / vegetable waste, it is at the discretion of the SDMC to provide or to assist successful bidder in collection of the kitchen / vegetable waste and modalities for this shall be finalized at a later stage. The interested parties are requested to visit the site location of all these dairy. |
| | b). The guaranteed waste to be 150TPD Cattle Dung Plus agreed vegetable waste for at least 350 days in a year. | Cattle dung is to be collected by the successful bidder from the nearby dairy namely Goela Dairy, Nangli Dairy & Kakrola Dairy. However, for kitchen / vegetable waste, it is at the discretion of the SDMC to provide or to assist successful bidder in collection of the kitchen / vegetable waste and modalities for this shall be finalized at a later stage. The |

SE-DEMS,

South Delhi Municipal Corporation

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| | <p>c). Quality of Waste, to be free of Soil, Plastics etc.</p> <p>d). How will SDMC compensate any shortfall in waste supplied by them as will reduce our revenue.</p> <p>e). We need safe bearing capacity of soil at site.</p> <p>f). Any liquid waste we should be allowed to discharge into drain after treatment to CPCB norms</p> <p>g). The Period of PPP to be agreed, to agree for minimum 20 years and 10 years extendable the commencement date to be from full waste commencement to the Project.</p> <p>h). SDMC to assist in obtaining all clearance for starting the project.</p> <p>i). Incoming Power to Plant by SDMC what will be tariff we have to pay during the PPP period.</p> | <p>Interested parties are requested to visit the site location of all these diary. However the interested parties may inspect these dairies to have their own assessment.</p> <p>As per 2(b) above.</p> <p>Interested parties to make their own arrangement to test bearing capacity of the soil.</p> <p>As per acceptable norms subject to no objection by various related agencies/authorities, without making any harm to the environment.</p> <p>The project is for 20 years plus further extendable upto 5 years with the consent of the both parties by the way of new agreement.</p> <p>As per EOI document.</p> |
| 3 | <p>a). Who will buy the end product i.e., compost and Bio CNG (95% methane) and what price and what are terms of payment and method of payment and escalation agreed.</p> <p>b). When VGF be will released what will be the release pattern.</p> <p>c). SDMC should enter into a land lease agreement with the company we will form (SPV) if selected. The land lease agreement will be for 3 years (for construction) plus the waste agreement supply period.</p> <p>d). The land given on lease will be allowed to be pledged if Indian Financial Institutions require the same for giving loan to the SPV.</p> <p>e). The Fuel purchase and compost purchase agreement will also be signed with agreed parties, SDMC to identify the same, the mechanism and Price with agreed escalation clause has to be confirmed. This should be signed along with Waste supply, and Land lease to enable SPV take up financial closure.</p> | <p>Bidder to make their own arrangement / exercise, strictly as per norms & without making any harm to the environment.</p> <p>As per decision and norms of Ministry of New & Renewable Energy (MNRE).</p> <p>As per EOI document.</p> <p>As per EOI document.</p> <p>As per 3 (a) above.</p> |
| | <p>f). The VGF method of disbursement preferably one lot to the financial Institute (Lender) to ensure speedy construction.</p> | <p>As per 3 (b) above.</p> |

B). Organic Recycling Systems Pvt. Ltd


1 What will be the ratio of feed Major position available is Cow

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 Director
 Organic Recycling Systems Pvt. Ltd
 1302/1303
 Ganga Nagar, Jhappal, Coimbatore-641011

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| 2 | material? (Cow Dung, Kitchen Waste in 150 TPD) | Dung, however SDMC assist to provide Kitchen Waste (10-20%) is also available. |
| 3 | Is there any waste escalation every year? | As per EOI document, However the successful bidder is requested to make their own assessment. |
| 4 | Does plant capacity need to be increase based on waste escalation? | As per 2 above. |
| 5 | Proposed Land should be free from any encumbrances, Soil investigation report. | As per EOI document. |
| 6 | Total feed material should be provided by SDMC at processing facility at free of cost. | Interested parties to make their own arrangement to evaluate bearing capacity of the soil. Cattle dung is to be collected by the successful bidder from the nearby dairy namely Gwala Dairy, Nangli Dairy & Kakrola Dairy. The interested parties are requested to visit the site location of all these dairy & dhalaos. |
| 7 | Is SDMC looking for specific product like electricity/compressed biogas? | SDMC objective is to provide clean gaseous fuel & organic manure without causing any harm to the environment. |

C). Pecma Air Systems Pvt. Ltd.

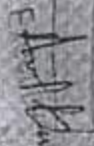
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| 1 | SDMC shall categorically specify and mention in the Tender Technical requirements that Bio Gas Plant shall have all the necessary provisions, Equipments and Systems based on Zero Emission and Zero Discharge for Handling, Treatment and Disposal of all Solid, Liquid and Gaseous Waste process and generated from Biogas Plant and shall meet all the statutory requirements of the competent authorities broadly mentioned below. | |
| | i). Solid Waste Management Handling, Treatment & Disposal Rules & Regulations as defined by MOUD | Plant should meet all necessary guidelines/rules/regulations/no rms of various controlling authorities/agency /boards. |
| | ii). Statutory Rules & Regulation as defined by MOEF, Central Pollution Control Board (CPCB) | Plant should meet all necessary guidelines/rules/regulations/no rms of various controlling authorities/agency /boards. |
| | iii). PESO, Petroleum Explosive Safety Organization. | Plant should meet all necessary guidelines/rules/regulations/no rms of various controlling authorities/agency /boards. |
| | iv). Hazardous / Toxic Waste Handling & Treatment Rules and Regulations as defined by CPCB. | Plant should meet all necessary guidelines/rules/regulations/no rms of various controlling authorities/agency /boards. |
| | v). Water, Waste Water and Slurry Discharge shall comply with Statutory requirements / Rules & Regulation as defined by CPCB. There shall be Zero | Plant should meet all necessary guidelines/rules/regulations/no rms of various controlling |


 Anil Kumar, Engineer (EMS)
 Assistant
 South Delhi Municipal Corporation

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| <p>Slurry Discharge to the surrounding. 100% Slurry shall be reutilized in the process.</p> <p>vi). Air Emission Control Rules & Regulations as defined by CPCB.</p> | <p>authorities/agency /boards.</p> <p>Plant should meet all necessary guidelines/rules/regulations/norms of various controlling authorities/agency /boards.</p> |
| <p>vii). Safety & Hygiene Act</p> | <p>Plant should meet all necessary guidelines/rules/regulations/norms of various controlling authorities/agency /boards.</p> |
| <p>viii). The system shall be compliant to ISO 13485 quality systems particular requirements for the application of ISO 9001 applicable to manufactures and service providers that perform their own design activities.</p> | <p>Plant should meet all necessary guidelines/rules/regulations/norms of various controlling authorities/agency /boards.</p> |
| <p>ix). The system shall be compliant with IEC 61010-1, covering safety requirements for electrical equipment for measurement control and laboratory use.</p> | <p>Plant should meet all necessary guidelines/rules/regulations/norms of various controlling authorities/agency /boards.</p> |
| <p>x). Purified Biogas shall have configuration as CH₄>95% CO₂<2%, H₂S<13mg/Nm³ Moisture 16mg/m³+ others</p> | <p>Plant should meet all necessary guidelines/rules/regulations/norms of various controlling authorities/agency /boards.</p> |
| <p>xi). Bio Fertilizer should have C/N ratio > 35.</p> | <p>Plant should meet all necessary guidelines/rules/regulations/norms of various controlling authorities/agency /boards.</p> |
| <p>2 We suggest that complete Project shall be divided in two parts</p> | |
| <p>Ist Part - Transportation of Solid & Liquid Waste generated from Dairies, Vegetable/Fruit Markets and Hotels/Restaurants to the proposed Site.</p> | |
| <p>IInd Part - i). Processing of Organic Waste (Cow Dung, Vegetable/Fruit Waste)</p> | |
| <p>ii). Generation of Raw Biogas</p> | |
| <p>iii). Enrichment & Purification of Raw Biogas</p> | |
| <p>iv). Compression & Bottling of Purified Biogas (OBG) of CNG quality</p> | |
| <p>v). Bio Fertilizer having C/N ratio as > 35</p> | |
| <p>Ist Part: a). Collection, Transportation of Solid Cow Dung (150MT) and Waste from Subzi Mandis (app. 20MT) to the designated site shall be in Scope of work of separate Agency.</p> | <p>As per EOI document.</p> |
| <p>b). Collection Transportation of wash out from Drainage system of Dairies through existing and modified drainage system shall be provided by SDMC or by separate agency</p> | <p>As per EOI document.</p> |

As per EOI document.
 Municipal Corporation

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| <p>collecting & Transporting Solid Waste to the designate Site.</p> | <p>As per EOI document</p> |
| <p>c). Alternative Collection and Transpiration System of Solid / Liquid Waste to be develop by Separate Agency for which a separate Tender shall be floated by SDMC and scope of work shall be categorized as "Collection & Transportation" of Cow Dung and Other Organic Waste from Diaries and Vegetable/ Fruit Markets in the 10km range of Waste processing site.</p> | <p>As per EOI document.</p> |
| <p>d). SDMC / Agency shall charge a fixed amount from Diaries / Fruit / Vegetable Markets on the basis of total quantum of Waste (kg) generated per day plus monthly fixed charges which shall varies from Rs. 2000/- per month to Rs. 5000/- per month depending upon Cattle heads available by each Diary.</p> | <p>As per EOI document.</p> |
| <p>e). Tender for this Scope of work: "Collection & Transportation" shall be separate and / or it shall be mandatory to quote for this Tender by agencies who qualifies for the main tender i.e Tender Notice No. EE(EMS)/2016/EOI:Biogas)71 dated 20.12.2016</p> | <p>As per EOI document.</p> |
| <p>f). It shall be mandatory for all agencies to quote for both Scope of work separately and tendered who does not quote for both work shall be disqualified.</p> | <p>As per EOI document.</p> |
| <p>g). SDMC shall also specify Bill of Quantities, Technical Specifications of all the Bio Methanation Process Equipments and other Handling and Treatment Equipments in order to make all vendors to par with the International Standard Practices.</p> | <p>As per EOI document. However bidder may specify details for Bio Methanation process Equipments / handling Treatment etc.</p> |
| <p>h). Biogas Purification Compression & Bottling shall also have process for CO2 Recovery & Bottling.</p> | <p>As per EOI document.</p> |
| <p>i). 100% Slurry generated shall be mandatory utilized in the Bio Methanation Plant and if some% of Slurry generated is not utilized shall be treated in Effluent Treatment Plant (ETP) and Waste Water shall be treated in Effluent Treatment Plant (ETP) and Waste Water shall be treated to a lever where the treated water generated shall be reuse for Utility /Horticulture Purpose and preferably shall meet the Drinking water standards. This shall help in meeting the Regulatory requirements of CPCB and shall comply with NGT requirements of Zero Emission -Zero Discharge for Waste Processing and Energy Generation Plants.</p> | <p>As per accepted norms by various agencies, subject to no objection by agencies / authorities without making any harm to the Environment.</p> |
| <p>j). It shall be made mandatory by</p> | <p>As per EOI document.</p> |


 E. Anil Kumar
 Jointly
 Health Municipal Corporation
 (EMS)

