

**TERMS OF REFERENCE FOR IMPLEMENTATION OF  
OLD DUMPSITES MINING & RECLAMATION IN  
KHAMMAM MUNICIPAL CORPORATION, TELANGANA**

**Introduction :**

**Old Dumpsites Mining and Reclamation** is a process whereby Municipal solid wastes which have previously been disposed by open dumping are excavated and land reclaimed. The function of dumpsite mining and reclamation is to reduce the amount of mass and/or temporarily removes hazardous material to allow protective measures to be taken. In the process, mining recovers valuable recyclable materials and reclaim space as a secondary benefit regarding future use. The overall appearance of the landfill mining procedure is a sequence of processing machines laid out in a functional conveyor system. The operating principle is to excavate, sieve and sort the landfill material.

The concept of mining and reclamation was introduced as early as 1953 by the Dan Region Authority next to the city of Tel Aviv, Israel, Waste contains many resources with high value. Dumpsite mining is also recommended for places where vacant lands are not available for ULBs for new landfill sites. In this instance space from old dumpsites can be reclaimed by the extraction of biodegradable waste and other substances requiring proper disposal.

Mining of Municipal waste dumping sites is more complicated and has to be based on the expected content of the landfill. The biodegradable wastes are more easily sieved out, leaving the non-biodegradable materials readily accessible. The quality of these materials for recycling and reprocessing purposes is not as high as initially recycled materials.

**The Swachh Telangana Vision** is “All cities and towns in Telangana become totally clean, sanitized, healthy, livable, ensuring and sustaining good public health and environmental outcomes for all citizens, with a special focus on hygienic and affordable sanitation for the urban poor and women.

As part of Swachh Telangana Initiative, **Khammam Municipal Corporation (KMC)** with an urban population of 284268 with 98548 Households (2011 census) is progressively moving towards sustainable solid waste management initiatives from Door-2-Door Collection to organic and Inorganic Recyclable Resource processing comprehensively in the past one year in Compliance to the MSW M&H Rules and NGT norms.

In addition to the existing initiatives, old dumpsite mining and Reclamation will further reduce the burden on KMC to find newer dump / landfill sites and manage the existing resources and space constraints effectively.

**Goals and Objectives of the project**

The Project should be able to achieve the following goals and objectives.

KMC should reclaim and remove existing open dumpsite and restore them as close to ground level as possible.

The sites will be developed as SWM Resource Management Park with processing facilities and green belt as required under the MSWM Rules 2016 and prevent further dumping of mixed waste.

**Scope of work for the Project:**

**Action plan & Activities to be taken up by KMC**

**Key Focus : 1)** Reclamation and restoration of land and mining of valuable from old dump site of approx area 3.00 Acres.

**Key Focus : 2)** Appropriate method of assessment, mining & reclamation using Mechanized machinery capable of handling not less than 100 tons per day.

**Key Steps :**

**Company / Agency / Org Responsibilities**

1. Mechanized sieving & separation of different streams.
2. Reclamation of land
3. Safe guarding the compost yard by individual dumping of day to day waste till a system as per the SWM Rules in the place.

**KMC Responsibilities**

1. Digested soil as compost to be lab tested & Auctioned for soil enrichment
2. Recyclable to be auctioned and sold to recyclers.
3. Debris and inert to be used for filling – up or low-laying areas, bricks making or formation of Kutchra roads etc., as suggested under CPCB guidelines (CPCB Report No.Est(G)/0210)
4. Facilitating market linkages of mined resources.

**The scope of work to be performed by qualified company / Agency / Organization .**

**Task1 :** Deploy appropriate machinery to mine old dumps not less than 100TPD

**Task2 :** Separate streams and reclaim land

**Task3 :** Maintaining of compost yard by providing place in a planned way to dump the day to day waste, till the system as per SWM Rules 2016 is in its place.

**OUTCOMES**

- Reclaimed land to be handed over to KMC for further waste resource management activities
- Income generation through auction of mined resources to KMC
- Abandoned dumps to be reclaimed for future use of the KMC
- Reduce Greenhouse gas emissions and soil & water pollution by removing old garbage dumps

**Eligibility:**

For the purpose of this EOI, the term company / Agency / Org / Bidder / Applicant means a single Bidder or a Consortium or Technical Partnership of firms subject to a maximum of two members in a consortium / Technical Partnership. Unless otherwise provided, the eligibility as provided in this clause shall be met jointly by the lead bidder and the consortium member or technical partner, as applicable.

### **A. Technical Eligibility**

The sole Bidder or the lead Bidder in case of a consortium / technical partnership, as the case may be, shall have trained manpower experienced in waste management activities i.e., completed with SWM rules 2016 in any ULB with Bin free & Dump free model and machinery capable of processing not less 100 Tons per day. The bidder must have completed atleast one similar project and submit experience certificate. Five Years Experience in Solid Waste Management.

### **B. Financial Eligibility**

The company / Agency / Org shall have a turnover business not less than 2.50 Crores in any consecutive three years prior to this year.

#### **Proposals should include the following information**

##### **A. Technical Proposal**

1. A brief description of the firm / Organization and an outline of recent experience on assignments / projects of similar nature executed if any
2. Assessment of Dump site and Budgetary projections to be made by the company / Agency/ org in the Terms of Reference (TOR)
3. A description of the Manner in which Agency / Orgs would plant to execute the work. Work plant time schedule, approach or methodology proposed for carrying out the required work.
4. The composition of the team of personnel which the company / Agency / Org would proposed to provide and the tasks which would be assigned to each team member.
5. Curricula vitae of the individual key staff members to be assigned to the work and of the team leader who would be responsible for supervision of the team. The curricula vitae duly signed by the concerned personnel.
6. The company / Agency / Org's comments, if any , on the date, service and facilities to be provided by company / Agency / Org as indicated in the Terms of Reference (TOR)
7. The company / Agency / Org's work program and time schedule for key personnel.

##### **B. Financial Proposals**

Two Financial proposals:

1. Cost of assessment of old dump sites and estimation quantities either in CMT or any other options to be mined.
2. Financial bid with rough cost break – up for the proposed mining, reclamation activities

#### **Contract Negotiations.**

The aim the negotiation is to reach an agreement on all points with the company / Agency / Org and initiate a draft contract by the conclusion of negotiations. Negotiations commence with a discussion of Company / Agency / Org's proposal, the proposed work plan, staffing and any suggestions company / Agency / Firm may have made to improve the Terms of Reference. Agreement will then be reached on the final Terms of Reference, the staffing etc, which will indicate personnel, periods in the field and home office, field office, man-months, and reporting schedule.

**Terms of Payments :**

KMC will released funds in a timely manner as stated in the contract Agreement on completion of each Task.

**The submission of Proposals:**

The Proposals shall be submitted in two parts, viz., Technical proposal and Financial proposal the cost of Mining, Reclamation as to be safe guarding the compost yard, avoiding indiscriminate dumping to achieve the compliance of SWM Rules 2016, along with EMD for Rs.10,000/-in the form of DD in favour of Commissioner, Khammam Municipal corporation.

The “ Technical proposal” and “Financial Proposal” must be submitted in two separate sealed envelops (with respective marking in bold letters) following the formats / Schedules given in Annexure. The first envelop marked “ Technical Proposal ” should include the description of the firm/organization, the firm’s general experience in the field of Assignment, the qualification and competency of the personnel proposed for the Assignment and the proposed work plan, methodology and approach in response to suggested Terms of Reference. The first envelope containing the Technical proposal should contain any cost information what so ever. It should be properly sealed.

The second envelope marked “ Financial Proposal” must also be properly sealed and initials twice across the seal and should contain the detailed price offer for the consultancy service both in words and figures.

Both the sealed envelops should again be placed in a sealed cover and the name of work to which it is submitted should be super scribed. It will be received in the office of the Municipal Commissioner, Khammam Municipal corporation.

Company/Agency / Org. shall provide a detailed breakdown of cost and fee as per the format for Financial Proposal. The submitted Bids not adhering to these instructions will be rejected.

The Technical proposal will be opened by the Municipal Commissioner, Khammam Municipal corporation or authorized representative in his office at 3.00 P.M on 19-11-2016 it may

please noted that the Financial Proposal will be opened only after the completion of Technical evaluation of the Technical Proposal and the result approved and notified to all Company/Agency Orgs.

There will be no pre-proposal conference. Bidders seeking clarifications on the project, if any, may send their queries up to 3 days before the submission of EOI.

**Evaluation**

A two stage procedure will be adopted in evaluating the proposals with the technical evaluation being completed prior to opening of the Financial Proposal. The Technical Proposal will be evaluated based on the following criteria.

- I. Experience in consultancy and implementation of such program in SWM related sector (30 marks)
- II. Key personnel (HR) for under taking the Assignment (20marks)
- III. The quality of the methodology proposed (20 marks)
- IV. Work plan including team organization, work division and responsibilities (20 marks)
- V. Profile of the Agency/Orgs with similar experience(10 marks)

**The overall technical proposal will be evaluated in the following manner:**

1. Quality of Methodology proposed (20 marks). In this chapter understanding of the objective of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output may be explained . company/Agency/Firm should highlight the problem being addressed and their importance, and explain the technical approach company/Agency/firm would adopt to address them. Company/ Agency/Firm propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
2. Work plan (20 marks). In this chapter company/Agency/ Firm should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestone and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of documents, including reports, drawings, and tables to be delivered as final output, should be include here.
3. Experience in relevant sector (40 marks)

One Project – 25 marks

Two Or more projects – 30 marks

Limited companies will be given preference by awarding extra 10marks compared to individual bidders.

**Deciding Award of Contract**

1. The quality and competence of the company/Agency/Firm and implementing service shall be considered as the paramount requirement.
2. The Agency/Orgs scoring a minimum of 60marks as Technical score of the total points in Technical evaluation will be considered qualified and their Financial proposals alone will be opened KMC shall notify the Agency/Orgs who have secured the minimum qualifying marks, indicating the date and time set for opening the Financial proposals. The notification may be sent by registered letter, cable, facsimile, or electronic mail.
3. KMC, at its discretion shall notify those Agency/Orgs whose proposals did not meet the minimum qualifying mark or were considered non-responsive to the expression of interest and terms of reference, indicating that their Financial proposals will be returned unopened after completing the selection process.
4. The financial proposals shall be opened publicly in the presence of the Agency/Orgs representatives who chose to attend. The name of the Agency/Org, the quality scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. KMC shall prepare minutes of the Financial Proposals opening.
5. The Agency/ Org securing the highest score will be invited for negotiations.
6. Prior to the expiration period of proposal validity, KMC will notify the successful Agency/Org who submitted the highest scoring proposal in writing by registered letter, cable telex or facsimile and invite it to negotiate the contract. Negotiations normally take a day. The aim is to reach an agreement on all points, and initial a draft contract by the conclusion of Negotiations.

7. Having selected the Agency/Org, among other things, on the basis of an evaluation of the proposed key professional staff, KMC expects to negotiate a contract on the basis these staff named in the proposal and, prior to contract negotiations, will require assurance that these staff will be actually available. The negotiations will be concluded with a review of the draft form of contract/MOU.
8. The duration of appointment of the company/Agency/firm is for 3 months from the date of appointment. The term may be extended by mutual consent by the parties.
9. Please note that the remuneration which company/Agency/Firm receives from the Contract will be subject to normal tax liability and service tax will be waived. Ref the Gazette of India Extraordinary Part II, Section 3, Sub-section (i) GOI Ministry of Finance (Department of Revenue) Notification No.25/2012-service Tax (No.25)

**OTHER CONDITIONS:**

1. KMC reserves the right to accept or reject any/ all of the EOI submission by the entities. The EOI document may be withdrawn or cancelled by RMC at any point of time during the process, without assigning any reason thereof.
2. The proposed Technologies should also comply with the following requirement:-
  - a) It should be proven robust technology, suitably adapted to local tropical conditions viz humidity, monsoon etc., for processing & disposal of MSW.
  - b) It should be based on the concept volume of residues will be disposed at landfill site, ideally towards zero residues.
  - c) It should be implemented in eco-friendly, aesthetic manner
  - d) It should be scalable in module
  - e) It should be require minimum implementation period, minimum processing time & minimum footprint area.
3. To begin with the KMC intends to take up processing & disposal of about 500 MT per day waste. It is necessary to identify such technologies which are strictly in compliance with strict environmental laws and are legally acceptable. The entity can also suggest ideal module size for its technology.
4. The interested entities should apply with following details & relevant supporting documents:
  - i) Annexure-1 : Details of the entity
  - ii) Annexure-2 : Experience in setting up and operating projects in the Municipal Solid Waste Management sector with a capacity more than or equal to 400 metric tons per day (in a single installation)
  - iii) Annexure-3 : Financial Credentials
  - iv) Annexure-4 : Project and Technology Management
  - v) Any other related information
5. The application will be required to make presentation of the technology proposed before select technical group of the KMC at a suitable date and time which will be communicated to them

**Commissioner  
Khammam Municipal Corporation**