

**TERMS OF REFERENCE (TORs) FOR CONSULTANCY SERVICES FOR CONDUCTING 3<sup>RD</sup>**  
**PARTY TECHNICAL SUPERVISION, MONITORING AND QUALITY ASSURANCE OF WORKS OF**  
**CLOSURE AND CONTAINMENT OF MSW DUMPSITE AT KADAPA**

### **1. Introduction**

The Government of India, through the Ministry of Environment and Forests (MoEF) is implementing a project on Capacity Building and Industrial Pollution Management (CBIPMP) with financial assistance from the World Bank. Andhra Pradesh Pollution Control Board (APPCB) is the nodal agency for the state of Andhra Pradesh. Under the Project the Closure and Containment of MSW dumpsite is being implemented. A consulting firm is engaged for conducting the detailed studies of the dump, proposing remedial options, drawings for the final selected remediation plan and preparation for the bidding documents. The remedial option is finalised and the works pertaining to the closure and containment of dumpsite is under process.

In this regard, Andhra Pradesh Pollution Control Board seek the services of an experienced Consulting firm for conducting 3rd party technical supervision, monitoring and Quality Assurance of works being implemented at Municipal Solid Waste (MSW) Dumpsite at Ukkayapalli, Kadapa town.

### **2. Site Description**

Kadapa is the district headquarters of Y.S.R, Kadapa district of the Rayalaseema region of state of Andhra Pradesh. Project site is the Municipal Solid Waste Dump at Ukkayapalli, which is located outside the Kadapa city along a road connecting to a neighbouring village Suddhavatam. The coordinates of the site are at 14°28' 51.96" N and 78° 50' 38.60" E. The site is spread over an area of 4.2 ha. As per the assessment studies carried out by the consultant the size of the dump is 10.38Acres with an estimated volume of 201,638m<sup>3</sup> in 2012.

### **3. Objectives & Scope**

The objective of engaging the consultancy services is to assist AP Pollution Control Board (APPCB):

- i) In successful and timely completion of the project
- ii) To understand the drawings given by the remediation consultants and work in co-ordination with the remediation consultant and the contractor.
- iii) Monitoring and Comprehensive supervision of project implementation activities carried out by the contractor
- iv) To ensure compliance with the drawings, technical specifications and materials used
- v) Contract management and to suggest /assist in making engineering decisions,
- vi) Quality assurance in the execution of the works using latest tools and techniques
- vii) verification of quantities and quality, recording of measurements and certification of measurement and bills of the contractor executing the works
- viii) Monitoring of implementation of Environmental Management and safety plan being implemented by the contractor

**The Scope of the consultancy is as follows:**

1. The Consultancy firm will act as Engineer-In-Charge for the closure and containment of MSW dumpsite at Ukkayapalli, Kadapa by providing expert advice to APPCB on all the engineering aspects, design criteria given by the remediation consultant and as per the bid document of the contractor.
2. The anticipated scope of works will be related to Closure and Containment of the MSW dumpsite as per the MSW rules 2000 of GoI.
3. During the Closure and Containment project, a qualified and experienced senior engineer shall need to regularly inspect and examine the implementation of the works.
4. The consulting firm shall be responsible for usage of material as specified, implementation of the works as per the design criteria in accordance with the drawings given by the remediation consultant.
5. Monitor progress of the Works, identify causes, or potential causes, of any delay and advise the Employer of suitable corrective actions in a timely manner;
6. The supervision consultant will make all necessary measurements and control the quality of works. Ensure that the quality of the works is in accordance with the contractual specifications.
7. The supervision consultant will make all engineering decisions in co-ordination and on approval of APPCB as required for the successful and timely implementation of the project
8. Administer the closure and containment contract, approve materials and recommend variation orders to the employer for issue to contractors.
9. Associate with the tests being carried out by staff of the Contractor and undertake additional tests as necessary to ensure the quality of works.
10. Measurement of quantities and certification, recording of measurements, and verification of invoices of the contractor. All necessary arrangements for any measurements offsite or onsite have to be made by the consultant. The offsite facility shall have necessary approvals and quality certifications, while for onsite measurements calibration of the instruments with valid certification is a must.
11. Suggest justified modifications in the contractor's work program, method statements, material sources, etc., to the employer for consideration and approval.
12. Provide assistance to the Employer in respect of contract implementation, claims and other matters;
13. Advise and assist the Employer with respect to the arbitration, the appeal of arbitration or litigation relating to the works, whenever required;
14. Provide other specialist services relevant to the Project as may be agreed to, during negotiations or ordered by the Employer;
15. Initiate advance actions for handing over of site and/ or issue of drawings, and/ or advise Employer.
16. Furnish quality assurance System of consultant and obtain quality assurance system of Contractor and approve it in co-ordination with APPCB
17. Review and check the safety management plan prepared by the Contractor, and undertake daily safety assessment.

18. Examine the requests for advances and monthly statements of contractors.
19. Prepare fortnightly reports fully describing the progress of work and the services rendered by the consultant during the month under review.
20. To verify the Contractor's proposed personnel for positions nominated in the Contract are in the field
21. Maintain record of measurements & provide timely certification of RA bills & final bills submitted by all contractors.
22. Ensure that the contractors submit 'As Built' drawings and certify them before the closure of the contract.

#### 4. Technical clarifications:

To interact with the remediation Consultants and provide technical clarifications to the contractors on the specifications, designs and drawings of the tender document, as may be required from time to time.

#### 5. Qualifications expected:

- The firm should have experience in Project Management Consultancy for Solid Waste Management Projects and/or Similar Construction Projects.
- At least have completed 2 projects of a similar nature and cost, in the past 5 years.
- An experienced civil engineer with at least 15 years of experience relevant to the waste sorting, segregation and construction of scientific landfills as Engineer in chief.
- A Team leader with Civil Engineering as background with experience in Solid Waste Management Projects.
- To have available at least five civil and environmental engineers on company roles in the past three years.
- Preference will be given to the consultancy firms registered with the Institute of Engineers.

#### 6. Short Listing:

- Consultants will be selected in accordance with the procedures set out in the World Bank's Guidelines.
- Consultants will be short listed on the basis of their past experience of handling similar types of projects/assignments, strength of their key personnel and financial strength of the firm/organisation.

#### 7. Timeframe

One year from the date of issue of contract.

The interested firms shall forward their applications with copies of experience such as projects executed, value and capacity, details of works carried out relevant to the present project, Manpower, with copies of performance letter from the client, details of approval / empanelment, if any, from Government / Government Agencies. The EoI may be submitted to The Member Secretary, APPCB / Project Director, CBIPMP, Paryavarana Bhavan, A-III Industrial Estate, Sanath Nagar, Hyderabad – 500 018