



STATE POLLUTION CONTROL BOARD, ORISSA
A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
Phone-2564033/2563924, EPABX-2561909, Fax:2562822/2560955

No 16347 Ind-I-Con-Misc-1154

Dt 12-7-07

TENDER CALL NOTICE

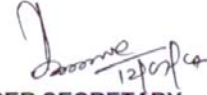
State Pollution Control Board, Orissa invites sealed tenders from the Bonafied Software firms accredited atleast with Software Capacity Maturity Model (CMM) level 5 for developing and installation of a comprehensive Air Pollution Monitoring Inter locking System (APMIS) soft ware for the Sponge Iron Plants of Orissa.

Duly filled in tender bids (Part I & II), complete in all respects including necessary enclosures etc. shall be submitted in separate sealed covers latest by **25.08.2007** (3.00 P.M.), addressed to the Member Secretary, State Pollution Control Board, Orissa, A/118, Nilakhantanagar, Bhubaneswar – 751 012 (INDIA).

The Board reserves the right to cancel any or all tenders without assigning any reason thereof.

The tender schedule alongwith Terms of Reference (TOR) are available in the Board's Website.

website: www.ospcboard.org


12/07/07

MEMBER SECRETARY

Memo No 16348 dt 12-7-07

Copy forwarded to Administrative Officer, State Pollution Control Board, Bhubaneswar for information. He is requested to publish the tender call notice in a widely circulated National News Paper (English) i.e, Times of India or Indian Express in all Editions for one day only and also publish the notice in one Oriya Daily like Samaj/Sambad / Dharitri for wide circulation.

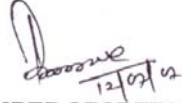

12/07/07

MEMBER SECRETARY
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Memo No 16349 /dt 12-7-07

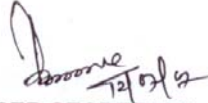
Copy forwarded to Accounts Section, State Pollution Control Board, Bhubaneswar for information and necessary action.


12/07/07

MEMBER SECRETARY

Memo No 16350 /dt 12-7-07

Copy for Notice Board for circulation.


12/07/07

MEMBER SECRETARY

Tender Schedule for development and installation of an Air Pollution Monitoring Inter locking System (APMIS) Software for the Sponge Iron Plants of Orissa

1. Sealed tenders as per enclosed prescribed tender schedule are invited from the bonafied Software firms accredited at least with software Capacity Maturity Model (CMM) level 5 for development and installation of a comprehensive Air Pollution Monitoring Inter Locking System (APMIS) software for Sponge Iron Plants of Orissa for environmental compliance & monitoring. The tender document shall have three parts: (a) Technical bid alongwith tender schedule (b) Commercial bid and (c) Earnest Money Deposit (EMD). Each part shall be kept in separate envelope, properly sealed and superscribed with Technical bid/ commercial bid/ EMD respectively in clearly legible ink. These three envelopes should be kept in another envelope, properly sealed and superscribed with "Tender document for Development and Installation of an Air Pollution Monitoring Inter locking System (APMIS) Software" for the Sponge Iron Plants of Orissa and submitted as follows.

2. The sealed envelope containing the tender documents must reach to the Member Secretary, State Pollution Control Board, Orissa, A/118, Nilakhantanagar, Bhubaneswar – 751 012 (INDIA), before 3.00 P.M. of date 25.08.2007 which shall be opened at 4.00 P.M. on the same day in presence of the tenderers or their authorized representatives. Any bidder, if found not to have submitted the aforesaid 3 sealed envelopes, shall be eliminated from the bidding process. Decision of the SPC Board, Orissa in this regard will be final and no complaint will be entertained.

3. The tender should accompany an earnest money deposit (EMD) @ 1% of the quoted tender value in shape of Bank Draft drawn in favour of the Member Secretary, State Pollution Control Board, Orissa, Bhubaneswar. No interest will be paid for E.M.D. at the time of release. Request for adjustment or part deposit of earnest money will not be entertained. Tenders without E.M.D. will be rejected outright at the time of opening of the tender.

4. Evaluation of the proposals:

i. Technical evaluation:

Sealed Technical bids will be opened first and evaluated by a committee constituted by the Board. The bidders will be required to make technical presentation about their proposals before the committee on a pre-scheduled date for evaluation based on experience, expertise and approach of the bidders for development and installation of software. Those securing less than 60% will be rejected and their financial bid envelopes including EMD will be returned unopened.

ii. Financial evaluation:

All the bidders who come successful in technical appraisal shall be called for financial bidding on a prescribed date and time where the Financial bids will be opened in their presence or authorized representatives. The project will be awarded to the firm with lowest financial bid whose technical bid has been qualified.

5. The work order will be placed to the firm with lowest quoted amount in financial bid.
6. The successful bidders shall have to deposit @ 10% cost of contract value as security Deposit (SD) in shape of Bank Guarantee. The EMD received shall be refunded to rest of the bidders including the successful bidder. The SD will be retained for a period of one year (warranty period) after successful installation and demonstration of APMIS. In case of any non-compliance to the terms and conditions of work order particularly regarding performance of the software, the SD amount will be forfeited.
7. Attested Copy of valid pan card should also be enclosed with the tender.
8. The rate should be quoted inclusive of all taxes and freight charges with delivery and installation of the system at site both in figures and words and shall be expressed in Indian Rupees.
9. Tender received through Fax/Telegraph/Telephone/ e-mail will not be entertained. Tenders received after due date and time will be rejected outright.

10. The successful tenderer will be required to develop and install the ordered software within 120 calendar days of issue of the work order. Failure to install the software in four pilot plants within the stipulated date shall lead to revocation of work order and forfeiture of Security Deposit to the Board's account. Decision on Modification/Extension of any target date of project schedule shall lie with the Board.

11. Schedule of payment:

The payment shall be made by the State Pollution Control Board, Orissa, Bhubaneswar in the following stages.

- (i) Mobilization advance will be 20 % of the total contract value, which will be released against receipt of bank guarantee of equal amount from the successful bidder. The bank guarantee should be valid for 6 months and drawn in favour of Member Secretary, State Pollution Control Board, Orissa, Bhubaneswar.
- (ii) After development of the software and satisfactory installation, commissioning and demonstration of the softwares and hardwares in four pilot plants, 45 % of the contract value will be released.
- (iii) After successful demonstration and satisfactory performance of the APMIS for a period of 3 months and handover of all softwares/documents/password/warranty etc, the balance 35 % shall be released.

12. State Pollution Control Board, Orissa shall have exclusive rights over the developed APMIS software; full or part thereof in any form shall not be used/copied/reproduced without written permission from the Board.

13. The competent authority reserves the right to reject any or all tenders or accept a portion thereof, increase or decrease the number of requirements without assigning any reason thereof.

14. In case of any dispute, the matter shall be settled in any Court at Bhubaneswar jurisdiction or in the Hon'ble High Court of Orissa at Cuttack.

Signature of Tenderer

Date:

TERMS OF REFERENCE (TOR)

1. TECHNICAL SPECIFICATION:

A software controlled interlocking facility is to be installed in order to prevent bypassing of untreated flue gas through emergency cap of the rotary kiln of the Sponge Iron Plant and non-operation/malfunctioning of ESP or any other pollution control devices attached to the kiln. This interlocking system shall ensure automatic stoppage of raw material feed conveyor to the kiln based on the real time data from the plant control system in case any noncompliance/failure mentioned above, takes place. The interlocking system should not be configured in the plant control system but should be a fully configurable independent tool, capable of communicating with the plant control system on a real time basis. The system should be able to take care of multiple operating parameters and their interrelations to prevent any possibility of defeating the basic objective of the interlock. The interlocking system should have "password based" access for the State Pollution Control Board, Orissa and restricted access for the plant personnel and should be temper proof. It should also provide audit trails proving noncompliant operations. The system should keep a log of any effort of bypassing the APMIS system, the ESP or any other Air Pollution Control device attached to the kiln and the interlocking system. The system should have provision for storage, view, take print out and online data transmission of non-compliance reports.

2. CONFIGURATION OF THE PLANTS WHERE THE INTERLOCKING SOFTWARE SYSTEM IS PROPOSED TO BE IMPLEMENTED

- i. The sponge iron plants operating in the State of Orissa follow direct reduction of iron (DRI) process technology and are run with the help of Distributed Control Systems (DCS)/ PLC.
- ii. The sponge iron plants are operating in Orissa with rotary kilns of capacity 50 TPD/ 100 TPD/ 300 TPD/350 TPD/ 500 TPD.
- iii. The rotary kilns have been provided with Air Pollution Control Devices like Gas Conditioning Tower (GCT)/ Air to Air Heat exchanger followed by ESP

or Pulse Jet Bag Filter. Some of the plants are operating with Waste Heat Recovery Boiler replacing the GCT/Heat Exchanger.

3. SUPPORT TO BE PROVIDED BY THE STATE POLLUTION CONTROL BOARD (SPCB), ORISSA:

- i. SPCB authority will arrange for access of the Project team of the successful firm into a few selected sponge iron plants as may be necessary for gathering basic information/ data on process, operational practice etc during the course of implementation of the project.
- ii. The plants will implement the necessary changes to be adopted as recommended by the firm and communicated by SPCB within the prescribed period.
- iii. SPCB will identify four sponge iron plants (one 50 TPD, one 100 TPD, one 350 TPD (or 300 TPD) and one 500 TPD Kiln capacity) for demonstration of the APMIS in consultation with the software firm and pass necessary orders to the concerned industry for procurement of hard wares, computers with servers, printers, cables, accessories etc. as to be specified by the firm for installation of APMIS.
- iv. Configuration of the DCS / PLC would be carried out by the respective DCS vendors on the recommendation provided by the firms through SPCB and the plant.
- v. SPCB shall ensure that the Cabling & Installation is carried out by the concerned Sponge Iron Plant within stipulated time. All such installations shall be done under the supervision of the firm.
- vi. System test data, for the application will be arranged from the sponge iron units through SPCB.
- vii. Authorised officials of the Board shall co-ordinate with the firm and the industry from time to time during the project implementation, make necessary discussions, and field visits to the concerned sponge iron plants and review the progress.

- viii. SPCB shall provide facilities to train its officials on the APMIS. The training shall be imparted by the firm and it shall provide requisite training materials/manuals.
- ix. Recommendations of the firm on APMIS shall be communicated to the sponge iron plants through a workshop organized by SPCB. The firm shall make all technical presentation and provide materials and assistance in organizing the workshop.

4. SCOPE OF THE WORK ON THE PART OF THE FIRM:

Bidders are required to describe and justify in detail their proposed method of approach. High weightage will be given to the clarity, completeness, practicality etc of the Proposed Approach. The firm shall have the following scope of work.

- i. Assist SPCB, Orissa in selecting four sponge iron plants of rotary kiln capacity 50 TPD, 100 TPD, 350 TPD (or 300 TPD) 500 TPD for pilot implementation of APMIS.
- ii. Design a Prototype of the proposed APMIS.
- iii. The firm needs to clearly specify the detail hardware requirement envisaged for implementation of the proposed software including approximate cost of the hardware. It shall furnish a list of hardware suppliers (multiple parties in each item) along with the specification and quality of the hard wares for procurement by the sponge iron plants. The firm shall also furnish a list of vendors who can undertake the job of cabling and installation of hardwares.
- iv. The firm needs to suggest multiple options for establishing the communication network, with associated costs. For future guidance of SPCB depending on its present and future requirement vis-à-vis the location of SPCB regional offices/ head office.
- v. Develop, test and implement the APMIS at the four selected pilot sponge iron plants.
- vi. Provide IT related Technical Support to SPCB officials in coordinating with the four pilot sponge iron plants for implementing process interlocks in their control systems

- vii. Procure and install appropriate Relational Databases for monitoring APMIS related real time data.
- viii. Assist SPCB officials in acceptance testing of the APMIS.
- ix. Provide Implementation Support and training to SPCB officials and the technical persons of the four pilot plant for a period of one week on APMIS.
- x. The firm shall maintain the APMIS of all four pilot plants for a period of 6 months after completion of installation and demonstration. During such period the hardwares if damaged shall be replaced by the concerned sponge iron unit.
- xi. Materials and informations materials to be delivered by the software firm to the SPCB, Orissa by the time the APMIS is implemented by the firm will be as follows:
 - 1. Presentation of Systems Plan
 - 1. Prototype of APMIS Software and User Manual
 - 2. Developed APMIS Software for the First Pilot Plant
 - 3. Customised APMIS Software for the Second Pilot Plant
 - 4. Customised APMIS Software for the Third Pilot Plant
 - 5. All passwords
 - 6. Any other information related to the software and the operating system APMIS
 - 8. The firm shall provide warranty for a period of one year for the software system subsequent to the acceptance test of the APMIS to be carried out by SPCB. During this period, any defects (bugs) found in the system developed by the firm, will be rectified by the firm free of cost, provided that no changes have been made to this software by SPCB or by any third party.

Every deliverable will be first reviewed by the firm in accordance with functional and technical requirements. The responsibility of acceptance of deliverables lie with SPCB, who will send an acceptance letter to the software firm against each deliverable submitted.

TECHNICAL BID**Development and Installation of an Air Pollution Monitoring Interlocking System (APMIS) Soft ware for the Sponge Iron Plants of Orissa****Part – I (*)**

(Extra pages may be used wherever necessary for detail information)

1. Name and Address, Website and E-Mail of the :
Organisation

2. Organisational Set Up :

3. Contact Person – Name, Address with Telephone & :
Fax Nos. and E-Mail

4. Experience in the Development & Installation of :
Software

5. Manpower and expertise available :

6. Recognition if any, please furnish (copy of CMM
level 5 certificate must be furnished)

7. Financial Status (Annual Audited Report of last :
three years shall be submitted) (**)

8. Technical Specification :

**Authorised Signatory
with seal**

Name:

Date:

(*) Part I to be separately sealed with inscription "Technical Bid for Development and Installation of an Air Pollution Monitoring Inter locking System (APMIS) Soft ware for the Sponge Iron Plants of Orissa" on the top of the cover.

() To be submitted alongwith this document or furnish an undertaking that the same will be submitted before issue of Work Order if selected otherwise.**

COMMERCIAL BID**Development and Installation of an Air Pollution Monitoring Inter locking System (APMIS) Soft ware for the Sponge Iron Plants of Orissa****Part – II (*)**

(Extra pages may be used wherever necessary for detail information)

1. Name & Address of the Organisation :

2. Cost

(Detail break up on the followings shall be given exclusively):

- | | |
|--|--|
| a. Software development | c. Training to SPCB officials & representatives of sponge iron plants |
| b. Installation & demonstration in four pilot sponge iron plants | d. Maintenance of APMIS for 6 months for four pilot sponge iron plants |

3. Terms & Condition of Payment

**Authorised Signatory
with seal**

Name:

Date:

(*) Part II to be separately sealed with inscription "Commercial Bid for Development and Installation of an Air Pollution Monitoring Inter locking System (APMIS) Soft ware for the Sponge Iron Plants of Orissa" on the top of the cover.