

**KERALA INDUSTRIAL INFRASTRUCTURE DEVELOPMENT CORPORATION (KINFRA)
THIRUVANANTHAPURAM**



REQUEST FOR EXPRESSION OF INTEREST

Name of work : Consultancy services for preparation of basic conceptual design and specifications, estimation, preparation of bid documents, invitation of bids, selection of contractors, proof checking and approval of contractors designs, project management services for construction, commissioning and operation during defect liability period of one year and continued O & M for 3 years thereafter for two nos.(25 MLD and 20 MLD output) state-of-the-art hybrid new generation fully automated and online quality controlled Water Treatment Plants for KINFRA .

**MANAGING DIRECTOR
KINFRA
KINFRA HOUSE, 31/2312,
SASTHAMANGALAM, TRIVANDRUM-695010**

REQUEST FOR EXPRESSION OF INTEREST

NAME OF WORK : Consultancy services including preparation of basic conceptual design and specifications, estimation, preparation of bid documents, invitation of bids, selection of contractors, proof checking and approval of contractors designs, project management services for construction, commissioning and operation during defect liability period of one year and continued O & M for 3 years thereafter for two nos.(25 MLD and 20 MLD output) state-of-the-art hybrid new generation fully automated and online quality controlled Water Treatment Plants for KINFRA .

Kerala Industrial Infrastructure Development Corporation, a statutory body of Government of Kerala formed under the Kerala Industrial Infrastructure Development Act 1993 has its headquarters at Trivandrum. KINFRA has already developed as many as twenty two industrial parks along the length and breadth of the state. Some of them are theme based and some others as general industrial parks by acquiring large extent of contiguous land and by providing basic quality infrastructure facilities like roads (both internal and external), power, water, ware housing, communication etc. The occupancy rate of the completed parks of KINFRA are very high especially because of the assured uninterrupted and quality infrastructure provided in them.

KINFRA has large extent of land at its Kanjikode Industrial park at Palakkad abutting the National Highway leading to Salem and near to Coimbatore. A Navaratna company of Government of India BEML has procured 374 acres of land in the park and have already started manufacturing components required for Indian Military and Railways. Western India group has occupied nearly 200 acres and many big companies like Pepsico etc are located in this area. Recently, MOFPI of Government of India under the Mega Food Park scheme has sanctioned one mega food park in 78.68 acres of land in the park the development of which is already in the anvil. Since the local water sources available are not sufficient to meet the increased water demand, KINFRA has already executed an agreement with Kerala Water Authority for bringing 25 MLD raw water (in 20 hours operation) from Malampuzha reservoir some 15 km away from the park. This work is expected to be taken up immediately and is expected to be completed by the end of 2017. By the time, the water reaches the park, facilities for treating the water has to be created within the park area. The plant should have capacity to produce 25 MLD treated water by 20 hours operation. Since raw water is brought from 15 km away, facilities for recycling the wash water also has to be made in the park.

Similarly, the Kakkanad area in Kochi is the newly upcoming industrial belt in the state. KINFRA has already established KINFRA Export Promotion Industrial Parks at Kakkanad and its second stage expansion through Government of India assisted Electronic cluster, International Convention Centre etc is already in the advanced stage of planning. The Infopark Cochin is lying adjacent to KEPIP and its first stage development is already saturated and the second stage expansion is under way. The Smart city Cochin , the joint venture between Government of

Kerala and Smartcity Infrastructure Projects Ltd is also abutting the KINFRA Park. At present KINFRA is supplying water to all these entities ie KEPIP, Infopark and Smart City Kochi through their 10 MLD Water Treatment Plant with a nearby local source. Government have entrusted the augmentation of the scheme also to KINFRA. Arrangements for bringing 30 MLD raw water from a running river Periyar some 15 km away from the park have already been mooted and the tenders for this work will be issued in another 3 months time. The time of completion for the work is 18 months and by the middle of 2017 raw water is expected to reach Kakkanad. Here also the treatment facilities for 20 MLD have to be developed by this time. The scheme is designed for 23.5 hours operation and facilities for recycling the wash water of WTP is also to be contemplated.

The treated water from these two schemes are required at very high quality standards ie for the Mega Food Park at Palakkad and for the Electronic Cluster, IT and IT enabled services at Infopark and Smart City, Kochi. Fully automated operation and quality control system have to be incorporated. To enable incorporation of the above, WTPs of hybrid new generation and state-of-the-art facilities are proposed to be constructed. The plants are proposed to be constructed as lump sum contract based with contractor's own hydraulic and structural designs, commissioning and running the plant for a defect liability period of 1 year by the contractor with his men, material etc excluding power under the bid amount. He has also to undertake the continued O & M of the plant for 3 years on expiry of the defect liability period for which separate AMC charges have to be quoted. The battery limit of contract will be from the entry of raw water main to the Water Treatment Plant area upto and including construction of a minimum two hour capacity clear water reservoir and a clear water pump house of 150 m² to 200 m² area for housing the clear water pumps and machinery required. All the unit operations are to be fully PLC controlled and the inlet and outlet quality parameters of various units are to be measured, monitored and controlled online in the system. In other words, the entire treatment process shall be fully automatic with least human intervention and the manpower requirement shall be bare minimum.

KINFRA propose to engage a consultant firm professionally sound, financially capable and with proven previous experience in the design, estimation and PMC services of already completed and commissioned similar works for the construction, commissioning and O & M of the above two treatment plants. The terms of reference for the selected consultants will be as follows:

1. Consultancy services for preparation of preliminary conceptual hydraulic and structural design, cost estimation etc for the construction of two nos. (25 MLD 20 MLD output) state-of-the-art hybrid fully automated and online quality controlled Water Treatment Plant to treat normal river water to international drinking water standards.
2. Preparation of detailed specifications, tender documents for construction of the plant as lumpsum turnkey contracts with contractor's own design, commissioning of the plant and continued O & M for 3 years after the defect liability period of one year.
3. Invitation of tenders.
4. Evaluation of tenders received and submission of recommendations.
5. Assisting KINFRA for execution of agreement with contractors.

6. Scrutiny, vetting and approval of hydraulic structural designs of the contractors and approval of data sheets for bought out item etc.
7. Project management services for construction like supervision, quality control, approval of materials, measurement, billing etc.
8. Close supervision of the O & m of the plant and to evaluate the performance to achieve the objectives during the defect liability of period of one year and to set right latches, short comings or defects if any through the contractors.
9. Preparation of as built plans and other documents with literature of components used, list of suppliers etc.
10. Preparation O & M manual including preventive maintenance schedule inventory planning etc.
11. Overall general guidance and occasional visit to the plant during the 3 year O & M period after defect liability period.

KINFRA invite eligible consulting firms having previous experience in similar works available in houseman power strength, financial capability etc to indicate their Expression of Interest in taking up the assignment so as to reach the undersigned before 30.01.2016.

Along with the EOI the following documents also have to be submitted:

1. Consultants company profile
 - Provide a brief description of background and organization of the firm.
 - Complete address of the firm including postal, telephone, web, email etc.
 - Name and designation of the contact person with telephone, email etc (Appendix I).
 - Ownership details of the firm.
 - Date and place of incorporation of the firm.
 - Objectives of the firm.
 - Availability of professional manpower in water treatment in the pay role of the firm on 1.01.2016 (attach details with name, qualification, age total years of experience.. with the company etc) (in Appendix II).
2. Turnover of the firm on the basis of audited accounts for the three financial years in Appendix III.
 - 2012-13
 - 2013-14
 - 2014-15
3. A. Experience as prime consultant in construction of WTPs .

Provide experience of PMC assignment of design, construction of WTPs not less than 10 MLD output capacity during the last 5 years in Appendix IV. Only WTPs which are commissioned needs to be included.

B. Give full details of fully automated and online quality controlled water treatment plants of capacity not less than 20 MLD for which consultancy services were rendered by the firm conceptualization till commissioning during the last three years which are working satisfactorily at present in Appendix V.

Further information if any can be obtained at the address given below during office hours (10.00 am to 5.00 pm) on any working days before the due date fixed for submission of Expression of Interest.

The Expression of Interest may be made in letter form in the letter heads of the firm along with formats for Appendix I to V and the data sheets showing full particulars of WTPs mentioned in the Appendix V, duly signed by the authorized signatory and sent to the undersigned in the address given below so as to reach him on **30.01.2016**

**Managing Director
KINFRA**

**KINFRA House, TC No. 31/2312,
Sasthamangalam,
Thiruvananthapuram-695010
Kerala, India
Email: kinfraannexe@gmail.com
Web: www.kinfra.org
Fax: 0471-2724773
Phone: 0471-2727282**

Appendix I

Corporate Profile and Status

| SI no. | Description | Details | Remarks |
|--------|--|---------|---------|
| 1 | Name of the firm | | |
| 2 | Status (legal entity) | | |
| 3 | Year of constitution of the firm | | |
| 4 | Address with pin code | | |
| 5 | Name of the authorized representative of the firm (Management) | | |
| 6 | Contact No. | | |
| 7 | Mobile No. | | |
| 8 | Fax No. | | |
| 9 | Email Id | | |
| 10 | Web address | | |
| 11 | Name and designation of the nominated contact person for the proposed assignment | | |
| 12 | His phone No. | | |
| 13 | His mobile No. | | |
| 14 | His email Id | | |
| 15 | Any other relevant information | | |

Note : Attach additional sheets if necessary.

Seal

Signature of Authorized Signatory

Name :

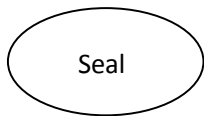
Designation :

Appendix II

Availability professional with experience in design and construction of WTPs (on the pay roles of the firm as on 01.01.2016).

| Sl no. | Name | Designation | Age | Qualification | Total experience in this field | Length of service with firm as on 01.01.2016 | Details of duties in the firm | Details of WTPs for which services were rendered while in the firm | Remarks |
|--------|------|-----------------------|-----|---------------|--------------------------------|--|-------------------------------|--|---------|
| A. | | Civil Engg. | | | | | | | |
| 1. | | | | | | | | | |
| 2. | | | | | | | | | |
| B. | | Chemical Engg. | | | | | | | |
| 1. | | | | | | | | | |
| 2. | | | | | | | | | |
| C. | | Hydraulic Engg. | | | | | | | |
| 1. | | | | | | | | | |
| 2. | | | | | | | | | |
| D. | | Electrical Engg. | | | | | | | |
| 1. | | | | | | | | | |
| 2. | | | | | | | | | |
| E. | | Instrumentation Engg. | | | | | | | |
| 1. | | | | | | | | | |
| 2. | | | | | | | | | |
| | | | | | | | | | |

Note:- Attach additional sheets if found necessary.



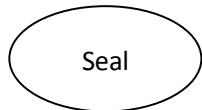
Signature of Authorized Signatory

Name :

Designation :

Appendix III

| Audited Balance Sheet and Profit and Loss Account for last 3 years ending 31.03.2015 | | | | | | |
|--|----------------|----------------------------|------------|-------------|-----------|---------|
| Sl no | Financial Year | Total Turnover of the firm | Net Profit | Loss if any | Net worth | Remarks |
| | | | | | | |
| | | | | | | |
| | | | | | | |



Signature of Authorized Signatory

Name :

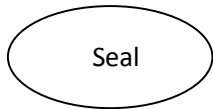
Designation :

Appendix IV

Summary of relevant experience for 5 years (2010-11 to 2014-15)

Details of PMC Services rendered for design and construction of WTP as prime consultants.

| Sl no | Name of the Project | Name & Address of client | Capacity of plant | Type of plant | Cost of plant | Duration of assignment | Consultancy fee | Whether commissioned | Remarks |
|-------|---------------------|--------------------------|-------------------|---------------|---------------|------------------------|-----------------|----------------------|---------|
| | | | | | | | | | |



Signature of Authorized Signatory

Name :

Designation :

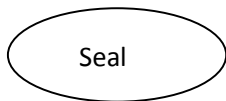
Appendix V

Details of specific experience during last three years (2012-13 to 2014-15)

Details of consultancy services rendered for fully automated quality controlled WTP's of capacity 20 MLD or more (2012-13 to 2014-15)

| Sl no | Name of the Project | Name & Address of client | Name & address of the project manager of the client | Contact details of Project manager of the client | Nature of assignment by the firm | Duration of assignment | Exact time of assignment | | Consultancy fee received | Capacity of plant | Present status | Remarks |
|-------|---------------------|--------------------------|---|--|----------------------------------|------------------------|--------------------------|----|--------------------------|-------------------|----------------|---------|
| | | | | | | | From | To | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Note: Only plants which are completed during last three years can be included in the list. The items listed under the format must be backed up with separate data sheet showing (a) source of raw water (b) general raw water characteristics (c) component wise details of each unit operation with numbers and dimensions (d) Name & Address of the contractors executed the work (e) Cost of the Water treatment Plant (f) Agreed time for completion (g) actual time taken for completion (h) performance after commissioning (i) details of clear water analysis (j) specific observations and remarks of the consultant failing which will not be considered for evaluation.



Signature of Authorized Signatory

Name :

Designation :