

Corrigendum No. 1 to the Request for Proposal (RFP)

Corrigendum No. 1 to the Request for Proposal (RFP) for the selection of an Agency for Design, Development and Operation of Three modular Sewage Treatment Plants (STPs) of 250 KL capacity each (totaling to 750 KL capacity) for the Games Village of the 35th National Games

Tender No: 42/CENGS/2014-15

Date: 18/10/2014

I. Responses to Queries on RfP

With respect to the queries received on the RfP following are our clarifications / responses:

S. No.	Query by the bidder	Response by NGS
1	As per Clause Eligibility criteria 3.2 page 23 (Financial Qualifications) the average annual turnover for the last three years shall not be less than Rs. 5 Crores. We request that a turnover of Rs. 2 Crores is considered.	Clause 3.2 Page 23 remains unchanged. Average Annual turnover for the last three years shall not be less than Rs. 5 Crores.
2	We also request that in addition to a single vendor, a Consortium of two or more Vendors, acting together as a Consortium may also be permitted to participate.	In addition to a single bidder, a Consortium of maximum 2 members, with the lead member individually meeting the Financial Qualification is allowed.
3	As per specifications Annexure 7 Detailed Scope of work-Treatment Scheme –Coarse Screening (page no.57) of the technical specifications mentioned in the tender, the bar screen is specified as "mechanical bar screen".	The revised Annexure 7 Scheme of STP is given in this Corrigendum. The Bidder is expected to follow the revised Annexure 7. None of the Equipment type and specifications other than the capacity and

	<p>As there are no manufacturers in India for the mechanical bar screen it should be imported and is a time consuming process.</p> <p>Request that manually cleaned type Bar Screen may be permitted.</p>	<p>the retention time for design of the key units, viz., collection Tank and Treated water tank is mentioned by NGS.</p> <p>The design, sizing and detailed engineering drawings of the STP to treat the combined stream of sewage, sullage and kitchen wastewater is in the scope of the bidder.</p>
4	<p>In Cl Annexure 7 Detailed Scope of work- Design Parameters – (3) Material Of Construction (page no.55) of the technical spec the MOC of the tanks are shown as MS-FRP coated/FRP/SMC.</p> <p>Kindly note that supplying MS with FRP lining will take more time than that of MS with epoxy lining we request that MS with Epoxy lining be specified.</p>	<p>Material of Construction for remains unchanged. Suggested MoC of MS-FRP coated/FRP/SMC prevails.</p> <p>The Bidder is expected to follow the revised Annexure 7.</p>
5	<p>In Cl Annexure 7 Detailed Scope of work-Treatment Scheme (j) Ultra filtration, (page 59) of the technical specification Ultra filtration is mentioned & the flow is mentioned as 750 KLD with disc type membranes.</p> <p>Kindly note that Disc type Ultra Filtration membranes are not readily available only tubular membranes are available as the disc type membranes needs to be imported. We request that Tubular Type Membranes may be specified.</p>	<p>UF is optional, in case the bidder is not confident about achieving the result with PSF/ACF and final Tertiary treatment.</p> <p>The Bidder is expected to follow the revised Annexure 7.</p>

6	Kindly specify the operating hours of the Ultra Filtration System?	The Bidder is expected to follow the revised Annexure 7. Bidder to specify the details, if UF is included.
7	Kindly specify the operating hours of the STP.	STP is expected to be optimally designed for round the clock operation to minimize the CAPEX.
8	In the tech. Spec Annexure 7 Detailed Scope of work-Treatment Scheme (n) Balancing tank capacity calculation (page 60) the capacity of the treated water tank is 1.5 KL	The Bidder is expected to follow the revised Annexure 7.
9.	Kindly specify the retention time of the treated water tank?	Minimum 1 day capacity (750 KL) is recommended for Treated Water Tank (Please refer Page No. 15 - Scope of Item A, point no.8) of the RfP Document. Treated water tank with provision for aeration fountain/ cascading etc.

II. Changes in the RFP

1. Contents (Page 3) is modified to include the following:

Annexure 4 - Performance Bank Guarantee 50

2. Page (8) is revised as below:

The Project comprises the following components:

Modular Wastewater Treatment Plant (3 Units of 250 KLD Plant), each consisting of

- i. Primary Treatment System involving chemical treatment process
- ii. Secondary Advanced Oxidation System with Aeration
- iii. Tertiary Treatment System with Filtration and Disinfection
- iv. Treated Water Collection and storage for Reuse
- v. Sludge handling system
- vi. Dewatered sludge to be packed and stored in covered space for disposal/sale.

Suggested Scheme for STP and tentative flows is attached as **Annexure No. 7**.

j. National Games Secretariat (NGS) proposes to develop a 750 Kilo Litres per Day (KLD) capacity Sewage Treatment Plant (STP), comprising of three modular Plants, to meet the treated water discharge norms currently prescribed by the Kerala State Pollution Control Board (KSPCB). NGS through this notice invites tenders for proposal from prospective Indian bidders for the project at Games Village in Menamkulam, Trivandrum.

k. Through this **Request for Proposal (RFP)**, NGS invites tenders from competent and experienced Agencies for the Design, Supply, Construction, Installation, Testing, Commissioning, Operation, Upkeep and Maintenance of Modular Sewage Treatment Plant (STP) having a total capacity of 750 KLD, comprising of three modular Units, each having 250 KLD capacity based on pre-fabricated structures for fast installation as per the scheme given and components listed in **Annexure No. 7**.

l. The Bidders are required to design and quote for the entire scheme detailed in **Annexure 7**, failing which the Bid will not be considered for evaluation.

3. Project Summary (Page 10) stands modified as

TABLE 1: PROJECT SUMMARY

Name of the Project	Design, Supply, Construction, Installation, Testing, Commissioning, Operation, Upkeep and Maintenance of Modular Sewage Treatment Plant (STP) based on chemical treatment process having a total capacity of 750 KLD, comprising of three modular Units, each having 250 KLD capacity based on pre-fabricated fast installation concept.
Name of the Project Authority	National Games Secretariat (NGS), Nodal Agency of the Government of Kerala (GoK) for organising the National Games
Project Description	The Project Components are as follows: Sewage Treatment Plant (STP) Modular Sewage Treatment Plant (3 nos. of 250 KLD Plant), each consisting of <ol style="list-style-type: none"> 1. Primary Treatment System involving Chemical Treatment Process 2. Secondary Advanced Oxidation System with Aeration 3. Tertiary Treatment System with Filtration and Disinfection 4. Treatment Water Collection and storage for Reuse 5. Sludge handling system 6. Dewatered sludge to be packed and stored in covered space within the STP area for safe disposal.
Eligible Bidder	A single Corporate entity meeting the technical and financial criteria as stipulated in the pre-qualification OR A Consortium of maximum 2 members, with the lead member individually meeting the Financial Qualification and the members together meeting the Technical Qualification.
Duration of Project	2 months Implementation Period and 20-30 Days Operations Period from the date of commissioning and handing over
Payment milestones	Stage wise release of up to 90% of the payments against on successful physical completion of each milestone and Balance 10% after the successful completion of the Operations Period

4. Section 1.2 (b) Key Dates Page 11 stands revised as below:

Key Dates

No	Events	Details
1	Commencement of issuance of RFP document	18-10-2014
2	Last date for receipt of queries	28-10-2014
3	Pre-Bid Meeting	30-10-2014
4	Last date for issuance of Corrigendum, if any	31-10-2014
5	Last date for Submission of Bid	10-11-2014
6	Date and Time for Opening of Technical Bid	13-11-2014
7	Date and Time of Opening of Financial Bids	To be intimated later
8	Declaration of Successful Bidder	To be intimated later

5. Section 2.3 Project Timelines stands modified as below:

The Selected Agency shall strictly follow the below mentioned timelines for execution of the scope defined in the RFP document:

No	Milestones	Timelines
1	Date of Contract Signing	T
2	Completion of 100% of the work to be executed	T+60 days
3	Testing & Commissioning of STP	T+65 days
4	Operation and Maintenance of the STP	January 25 to February 18, 2015.

6. Section 3.9 Performance Security stands modified as below:

- a) The successful Applicant / Selected Bidder shall be required to furnish to NGS a Performance Security for 10% of the value of the Contract, within 15 days of issue of Work Order. The Performance Security may be submitted either in the form of a Bank Guarantee or a Demand Draft in favour of the Authority, National Games Secretariat (NGS).
- b) Following the submission of the Performance Security, the successful Applicant / Selected Bidder shall be required to sign a contract with NGS for the stated assignment. The EMD of the successful Applicant shall be released after submission of the Performance Security and signing of the Contract.

7. Section 3.10 Bidder's Responsibility is revised as follows:

- a) The Bidder is solely responsible for the details of his Bid and the preparation of Bids.

- b) The Bidder is expected to examine carefully all the contents of RFP document, including instructions, conditions, forms, and terms etc and take them fully into account before submitting his offer. Bids, which do not satisfy all the requirements, as detailed in these documents, are liable to be rejected as being unresponsive.
- c) Those Bids which does not conform to the terms and conditions of this RFP will not be considered for Financial Evaluation and shall be summarily rejected.
- d) The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Authority will in no case be responsible and liable for these costs.

8. Section 4.4 Technical & Financial Evaluation (c) Scoring Methodology stands modified as follows:

The total maximum point for evaluation of Technical Proposal is 100 marks.

This score shall be based on an assessment of the Technical Proposal of the Bidder.

The Technical Proposal for each Proposal submitted by the Bidder would be assessed by rating of various parameters set out in the tender document

Only the responsive Bids, as mentioned in the previous clause, shall be technically evaluated on the following parameters:

9. Section 3.14 Page 29 Financial Package

The BOQ is revised removing Sl. No. 3, Cost for Dismantling and Relocation. The Bidder is to follow the revised BOQ. Only the sum of Sl. No. 1 & 2 shall be considered for financial evaluation.

However, the Sl. No. 3 needs to be indicated only for budgetary understanding of NGS and will not be considered for the financial evaluation.

The Bidder has to download the revised BOQ for submitting the Financial Quote.

10. Annexure 7 of the RFP stands revised and is replaced as follows:

ANNEXURE 7 – SCHEME FOR WASTEWATER TREATMENT (*Obtained in principle approval from KSPCB*)

I. THE PROJECT

Games Village proposed in 31 acres of land along the eastern bank of Parvathi Puthanar Canal will include:

- A. **Residential Zone** developed through PUF construction comprising of the following:
 - 365 housing units (190 in Men's Section and 175 in the Women's Section to house athletes and officials;
 - 40 housing units for Chef-De-Mission with conference facilities and dining area

- B. **Common Amenities Zone** comprising of Social infrastructure, viz., Welcome Plaza, commercial and retail spaces, Kitchen and Food Court for the participants, Common Dining Area/canteen for visitors, Gymnasiums, Training areas and indoor halls; etc. developed through temporary overlay;

- C. **Village Operation and Support Zone** comprising of Entry Plaza, Security out post, transport mall, and other services developed through temporary overlay;

- D. **Utilities Zone** comprising of Water Storage and Treatment area and distribution network, Sewage Collection and Treatment area and sewerage network, Power distribution network, etc.

The Games Village (GV) is intended to house about a maximum of 5000 participants and expected to have a maximum of 1000 visitors on a particular day during the course of 20 days of occupancy period. The GV, during its operational phase is expected to generate wastewater, which is required to be treated and reused for irrigation/fire/ disposed in land/surface water in compliance with the regulations presently prescribed by the KSPCB.

Total number of operational days will be 20-30 days only, with maximum organic load of 400 mg/l BOD and hydraulic load of 750 KLD is considered as the basis for design. Since the requirement for the facility is of a very short duration, there will not be sufficient time for stabilization of the biological process and also during the operating period, the load will be highly fluctuating. Considering the unique nature of the project biological treatment is not considered in the scheme. Instead Chemical Precipitation Process followed by an Advanced Oxidation stage and a Tertiary Filtration and disinfection is recommended as treatment scheme.

II. DESIGN BASIS

The design criterion for the treatment plant is given below.

1. Wastewater Generation

Total Estimated Wastewater Generation: 720 KLD

Total Installed Capacity proposed: 750 KLD (considering 10 KLD for Backwash)

Average Flow: 500 KLD

Peak Factor: 1.50

Peak Flow: 750 KLD

2. Capacity of the plant

- The capacity of the unit shall be 250 KLD and 3 such units shall be provided.
- The flow arrangement shall be such that all the three units can be operated individually or in a combined manner.

3. Land Area earmarked for WwTP

The Wastewater Treatment Plant (WwTP) has to be accommodated within an area of 4000 sq m.

4. Material of construction:

- All tanks shall be of MS FRP coated or FRP or SMC
- All tanks and chambers shall have a minimum free board of 0.30M.
- All pipelines shall be of DI/cast iron/PVC/GI with ISI marked suitable for the pressure and gravity flow.
- Unless specified otherwise all pumps shall be of submersible type manufactured by reputed manufacturers.
- All compressed air pipelines shall be of GI of relevant class to withstand 1.5 times the operating pressure.
- All compressors used for aeration shall be of rotary type.

5. Characteristics of the raw and treated Wastewater

The plant shall be designed for treatment of Wastewater with the following inlet and outlet characteristics.

Characteristics of Raw Combined Wastewater (Sewage & Sullage and Kitchen Wastewater)

- BOD: 250 - 400 mg/l
- COD: 400 - 600 mg/l
- TSS: 200 - 250 mg/l
- Ammonia: 10 – 15 mg/l

Characteristics of treated Combined Wastewater (Sewage & Sullage and Kitchen Wastewater)

- BOD \leq 30 mg/l
- COD \leq 100 mg/l
- TSS \leq 10 mg/l
- FC - Nil

The design of the plant shall generally follow the flow pattern attached as **Appendix 1**.

If necessary, soil investigation shall be done by the successful contractor without any additional cost to NGS.

III. THE PROPOSED SCHEME

The proposed scheme comprises the following components:

Modular Wastewater Treatment Plant (3 nos. of 250 KLD Plant), each module consisting of

- i. Primary Treatment System involving Chemical Precipitation Process
- ii. Secondary Advanced Oxidation System with Aeration
- iii. Tertiary Treatment System with Filtration and Disinfection
- iv. Treatment Water Collection and storage for Reuse
- v. Sludge handling system
- vi. Dewatered sludge to be packed and stored in covered space for disposal/sale.

A block diagram and tentative flows is attached as **Appendix 1**. Modular prefabricated tanks are suggested for ease of dismantling and removal of the WwTP after the Games for reinstallation.

IV. DETAILS OF THE PROCESS

The following details of the process proposed to be employed for treatment of Wastewater shall be provided by the Bidder:

1. Type of process
2. Description of various steps involved in the process
3. Number, capacity and dimensions of tank/ structure proposed in the main process,
4. Material of Construction.
5. Number and capacity of equipment used for aeration
6. Number and capacity of pumps used for recirculation of sludge
7. Number and capacity of pumps used for surplus sludge removal.
8. Method, number and capacity of equipment used for separation and removal of the treated water for the next stage.
9. Type of control used for obtaining the desired quality of treated water.
10. Total power required for the process.
11. Total time required for the cycle.

APPENDIX I: TREATMENT SCHEME FOR COMBINED WASTEWATER STREAM

Typical Block Diagram for Each Module (Capacity: 250 KLD)

