

No.D-31011/5/2017/CT/Gen.1

Government of India

National Institution for Transforming India

(NITI Aayog)

Sansad Marg, New Delhi-110001

Dated the 15th September, 2017

e-TENDER NOTICE

Subject: Invitation of on-line bids for Comprehensive Annual Maintenance Contract (CAMC) for maintenance of Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility installed in NITI Aayog.

Online quotations (Single Bid) are invited under the Rule 169 of GFR, 2017 from technically equipped ISO certified service providers for maintenance of 18 Nos. of Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility installed in NITI Aayog Sansad Marg, New Delhi. Manual bids will not be accepted under any circumstances.

2. The Terms & Conditions of the tender are given at Annexure-II and instructions for on-line bid submission are at Annexure-III. The check-list of documents to be submitted along with the bid is at Annexure-IV.

3. The bidders have to submit bids as per the proforma given along with the tender document in Annexure-II. The rates are to be quoted in Indian Rupees, excluding GST. The scanned copy of Earnest Money Deposit (EMD) of **Rs. 15,000/- (Rupees fifteen thousand only)** must be uploaded with the tender document and the EMD in original (in sealed cover superscribed with the words: "EMD – for CAMC for maintenance of 18 Nos. of Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility") is to be dropped in the "EMD Box" kept at Reception Area of NITI Aayog within the office hours w.e.f. 18.09.2017 (12.00 noon) to 12.10.2017 (upto 2:00 p.m.).

4. The last date and time for submission of bids is 12.10.2017 (up to 2.00 p.m.). The bids shall be opened online at 3.00 P.M. on 13.10.2017 by the duly constituted Tender Opening Committee. One authorized representative of each participating firm/agency/company, who wish to be present to view the tender opening process, will be allowed to do so.

5. All the required documents in support of the eligibility criteria are also to be positively uploaded along with the tender documents. The bidders are advised, in their own interest, to submit the desired papers/ documents with their bids as per the requirements indicated in **Annexure-IV** failing which their bids may be declared as non-responsive, without any further reference to them. The format in which the bids are to be submitted is provided at Annexure-I (Bid format). **The bidders are requested to submit the copy of ISO certificate along with the bids, failing which their bids will be summarily rejected.**

6. Complete tender documents may be downloaded from the website of Central Public Procurement Portal (<http://eprocure.gov.in/eprocure/app>) and from NITI Aayog website (<http://niti.gov.in>) with effect from the date of publication of the tender notice. Information or any corrigendum related to this tender will be available only on website of Central Public Procurement Portal/NITI Aayog. However, if any clarification is required on any particular point the undersigned may please be approached for the same, before the closing date of the instant tendering process.



(Ajay Joshi)

Under Secretary to the Govt of India

Tel. No. 011-23096636

APPLICATION

1. Name of the Bidding Company/
Firm/Agency (Bidder) : _____
2. Status of the firm : _____
(Whether Proprietary/Partnership/Company)
3. Name(s) of the Owner/Partner/Director(s): _____
4. Full address of Registered Office : _____

5. Full address of the operative branch of : _____
the Bidder (in Delhi/New Delhi/NCR) _____
6. Name of Banker with complete address : _____

Telephone No. of the Banker : _____
7. Registration Details (self-attested copies to be enclosed):
(a) PAN/TIN No. : _____
(b) Bank Account No. : _____

(c) Tax (GST) Registration No. : _____
(d) Proof of Income Tax Assessment : _____
(Copies of ITR of last three years)
8. Details of Earnest Money Deposit (Rs. 15,000/-):
(a) Banker's Cheque No./Demand Draft No. _____
(b) Date _____
(c) Name of Issuing Bank _____
9. Copy of ISO certification -----Yes/No
10. Bids quoted (including consumables spare parts of items IS/BIS marked as applicable) :

S. No.	Rate quoted for CAMC of one unit of Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility (in Rupees) excluding GST	Number of Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility	Total Bid amount in Rupees excluding GST
(1)	(2)	(3)	(4)
		18 (Eighteen)	

Signatures of the applicant bidder

Part of Annexure I

IS 10500 : 2012

Indian Standard
DRINKING WATER — SPECIFICATION
(*Second Revision*)

ICS 13.060.20 © BIS 2012

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002
May 2012
Price Group 6

AMENDMENT NO. 1 JUNE 2015 TO
IS 10500 : 2012 DRINKING WATER — SPECIFICATION

(Second Revision)

[Page 2, Table 2, SI No. xii), col 3] — Substitute ‘ 1.0’ for ‘0.3 ’.
[Page 3, Table 3, SI No. x), col 4] — Substitute ‘No relaxation’^‘0.05’.
(FAD 14)

Publication Unit, BIS, New Delhi, India

FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Drinking Water Sectional Committee had been approved by the Food and Agriculture Division Council.

This standard was originally published in 1983. A report prepared by the World Health Organization in cooperation with the World Bank showed that in 1975, some 1 230 million people were without safe water supplies. These appalling facts were central to the United Nations decision to declare an International Drinking Water Supply and Sanitation decade, beginning in 1981. Further, the VI Five-Year Plan of India had made a special provision for availability of safe drinking water for the masses. Therefore, the standard was formulated with the objective of assessing the quality of water resources, and to check the effectiveness of water treatment and supply by the concerned authorities.

The first revision was undertaken to take into account the up-to-date information available about the nature and effect of various contaminants as also the new techniques for identifying and determining their concentration. Based on experience gained additional requirements for alkalinity; aluminium and boron were incorporated and the permissible limits for dissolved solids, nitrate and pesticides residues modified.

As per the eleventh five year plan document of India (2007-12), there are about 2.17 lakh quality affected habitations in the country with more than half affected with excess iron, followed by fluoride, salinity, nitrate and arsenic in that order. Further, approximately, 10 million cases of diarrhoea, more than 7.2 lakh typhoid cases and 1.5 lakh viral hepatitis cases occur every year a majority of which are contributed by unclean water supply and poor sanitation. The eleventh five year plan document of India (2007-2012) recognizes dealing with the issue of water quality as a major challenge and aims at addressing water quality problems in all quality affected habitations with emphasis on community participation and awareness campaigns as well as on top most priority to water quality surveillance and monitoring by setting up of water quality testing laboratories strengthened with qualified manpower, equipments and chemicals.

The second revision was undertaken to upgrade the requirements of the standard and align with the internationally available specifications on drinking water. In this revision assistance has been derived from the following:

- a) EU Directives relating to the quality of water intended for human consumption (80/778/EEC) and Council Directive 98/83/EC.
- b) USEPA standard — National Primary Drinking Water Standard. EPA 816-F-02-013 dated July, 2002.
- c) WHO Guidelines for Drinking Water Quality. 3rd Edition Vol. 1 Recommendations, 2008.
- d) Manual on Water Supply and Treatment, third edition — revised and updated May 1999, Ministry of Urban Development, New Delhi.

This standard specifies the acceptable limits and the permissible limits in the absence of alternate source. It is recommended that the acceptable limit is to be implemented as values in excess of those mentioned under 'Acceptable' render the water not suitable. Such a value may, however, be tolerated in the absence of an alternative source. However, if the value exceeds the limits indicated under 'permissible limit in the absence of alternate source' in col 4 of Tables 1 to 4, the sources will have to be rejected.

Pesticide residues limits and test methods given in Table 5 are based on consumption pattern, persistence and available manufacturing data. The limits have been specified based on WHO guidelines, wherever available. In cases where WHO guidelines are not available, the standards available from other countries have been examined and incorporated, taking in view the Indian conditions.

In this revision, additional requirements for ammonia, chloramines, barium, molybdenum, silver, sulphide, nickel, polychlorinated biphenyls and trihalomethanes have been incorporated while

the requirements for colour, turbidity, total hardness, free residual chlorine, iron, magnesium, mineral oil, boron, cadmium, total arsenic, lead, polynuclear aromatic hydrocarbons, pesticides and bacteriological requirements have been modified.

In this revision, requirement and test method for virological examination have been included. Further, requirements and test methods for cryptosporidium and giardia have also been specified. Routine surveillance of drinking water supplies should be carried out by the relevant authorities to understand the risk of specific pathogens and to define proper control procedures. The WHO Guidelines for Drinking Water Quality, 3rd Edition, Vol. 1 may be referred for specific recommendations on using a water safety approach incorporating risk identification. Precautions/Care should be taken to prevent contamination of drinking water from chlorine resistant parasites such as cryptosporidium species and giardia.

Indian Standard
DRINKING WATER — SPECIFICATION
(Second Revision)

1 SCOPE

This standard prescribes the requirements and the methods of sampling and test for drinking water.

2 REFERENCES

The standards listed in Annex A contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated in Annex A.

3 TERMINOLOGY

For the purpose of this standard the following definition shall apply.

3.1 Drinking Water — Drinking water is water intended for human consumption for drinking and cooking purposes from any source. It includes water (treated or untreated) supplied by any means for human consumption.

4 REQUIREMENTS

Drinking water shall comply with the requirements given in Tables 1 to 4. The analysis of pesticide residues given in Table 3 shall be conducted by a recognized laboratory using internationally established test method meeting the residue limits as given in Table 5.

Drinking water shall also comply with bacteriological requirements (see 4.1), virological requirements (*see* 4.2) and biological requirements (*see* 4.3).

4.1 Bacteriological Requirements

4.1.1 *Water in Distribution System*

Ideally, all samples taken from the distribution system including consumers' premises, should be free from coliform organisms and the following bacteriological quality of drinking water collected in the distribution system, as given in Table 6 is, therefore specified when tested in accordance with IS 1622.

4.2 Virological Requirements

4.2.1 Ideally, all samples taken from the distribution

Table 1 Organoleptic and Physical Parameters
(Foreword and Clause 4)

Sl No. (1)	Characteristic (2)	Requirement (Acceptable Limit) (3)	Permissible Limit in the Absence of Alternate Source (4)	Method of Test, Ref to Part of IS 3025 (5)	Remarks (6)
i)	Colour, Hazen units, Max	5	15	Part 4	Extended to 15 only, if toxic substances are not suspected in absence of alternate sources
ii)	Odour	Agreeable	Agreeable	Part 5	a) Test cold and when heated b) Test at several dilutions
iii)	pH value	6.5-8.5	No relaxation	Part 11	—
iv)	Taste	Agreeable	Agreeable	Parts 7 and 8	Test to be conducted only after safety has been established
v)	Turbidity, NTU, Max	1	5	Part 10	—
vi)	Total dissolved solids, mg/l, Max	500	2 000	Part 16	—

NOTE — It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts
(Foreword and Clause 4)

Sl No. (1)	Characteristic (2)	Requirement (Acceptable Limit) (3)	Permissible Limit in the Absence of Alternate Source (4)	Method of Test, Ref to (5)	Remarks (6)
i)	Aluminium (as Al), mg/l, Max	0.03	0.2	IS 3025 (Part 55)	—
ii)	Ammonia (as total ammonia-N), mg/l, Max	0.5	No relaxation	IS 3025 (Part 34)	—
iii)	Anionic detergents (as MBAS) mg/l, Max	0.2	1.0	Annex K of IS 13428	—
iv)	Barium (as Ba), mg/l, Max	0.7	No relaxation	Annex F of IS 13428*	— or IS 15302
v)	Boron (as B), mg/l, Max	0.5	1.0	IS 3025 (Part 57)	—
vi)	Calcium (as Ca), mg/l, Max	75	200	IS 3025 (Part 40)	—
vii)	Chloramines (as Cy), mg/l, Max	4.0	No relaxation	IS 3025 (Part 26)* or APHA 4500-Cl G	—
viii)	Chloride (as Cl), mg/l, Max	250	1 000	IS 3025 (Part 32)	—
ix)	Copper (as Cu), mg/l, Max	0.05	1.5	IS 3025 (Part 42)	—
x)	Fluoride (as F) mg/l, Max	1.0	1.5	IS 3025 (Part 60)	—
xi)	Free residual chlorine, mg/l, Min	0.2	1	IS 3025 (Part 26)	To be applicable only when water is chlorinated. Tested at consumer end. When protection against viral infection is required, it should be minimum 0.5 mg/l

xii)	Iron (as Fe), mg/l, Max	0.3	No relaxation	IS 3025 (Part 53)	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
	Magnesium (as Mg), mg/l, Max				—
xiii)	Max	30	100	IS 3025 (Part 46)	—
xiv)	Manganese (as Mn), mg/l, Max	0.1	0.3	IS 3025 (Part 59)	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
xv)	Mineral oil, mg/l, Max	0.5	No relaxation	Clause 6 of IS 3025 (Part 39) Infrared partition method	—
xvi)	Nitrate (as NO ₃), mg/l, Max	45	No relaxation	IS 3025 (Part 34)	—
xvii)	Phenolic compounds (as C ₆ H ₅ OH), 0.001 mg/l, Max		0.002	IS 3025 (Part 43)	—
xviii)	Selenium (as Se), mg/l, Max	0.01	No relaxation	IS 3025 (Part 56) or IS 15303*	—
xix)	Silver (as Ag), mg/l, Max	0.1	No relaxation	Annex J of IS 13428	—
xx)	Sulphate (as SO ₄) mg/l, Max	200	400	IS 3025 (Part 24)	May be extended to 400 provided that Magnesium does not exceed 30
xxi)	Sulphide (as H ₂ S), mg/l, Max	0.05	No relaxation	IS 3025 (Part 29)	—
xxii)	Total alkalinity as calcium carbonate, mg/l, Max	200	600	IS 3025 (Part 23)	—
xxiii)	Total hardness (as CaCO ₃), mg/l, Max	200	600	IS 3025 (Part 21)	—
xxiv)	Zinc (as Zn), mg/l, Max	5	15	IS 3025 (Part 49)	—

NOTES

1 In case of dispute, the method indicated by '*' shall be the referee method.

2 It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

Table 3 Parameters Concerning Toxic Substances
(Foreword and Clause 4)

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to	Remarks
i)	Cadmium (as Cd), mg/l, Max	0.003	No relaxation	IS 3025 (Part 41)	—
ii)	Cyanide (as CN), mg/l, Max	0.05	No relaxation	IS 3025 (Part 27)	—
iii)	Lead (as Pb), mg/l, Max	0.01	No relaxation	IS 3025 (Part 47)	—
iv)	Mercury (as Hg), mg/l, Max	0.001	No relaxation	IS 3025 (Part 48)/ Mercury analyser	—
v)	Molybdenum (as Mo), mg/l, Max	0.07	No relaxation	IS 3025 (Part 2)	—
vi)	Nickel (as Ni), mg/l, Max	0.02	No relaxation	IS 3025 (Part 54)	—
vii)	Pesticides, pg/l, Max	See Table 5	No relaxation	See Table 5	—
viii)	Polychlorinated biphenyls, mg/l, Max	0.000 5	No relaxation	ASTM 5175*	or APHA 6630
ix)	Polynuclear aromatic hydrocarbons (as PAH), mg/l, Max	0.000 1	No relaxation	APHA 6440	—
x)	Total arsenic (as As), mg/l, Max	0.01	0.05	IS 3025 (Part 37)	—
xi)	Total chromium (as Cr), mg/l, Max	0.05	No relaxation	IS 3025 (Part 52)	—
xii)	Max Trihalomethanes:				
	a) Bromoform, mg/l, Max	0.1	No relaxation	ASTM D 3973-85* or APHA 6232	—
	b) Dibromochloromethane, mg/l, Max	0.1	No relaxation	ASTM D 3973-85* or APHA 6232	—
	c) Bromodichloromethane, mg/l, Max	0.06	No relaxation	ASTM D 3973-85* or APHA 6232	—
	d) Chloroform, mg/l, Max	0.2	No relaxation	ASTM D 3973-85* or APHA 6232	—

(1) (2) (3) (4) (5) (6)

NOTES

- 1 In case of dispute, the method indicated by '*' shall be the referee method.
 2 It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

Table 4 Parameters Concerning Radioactive Substances
(Foreword and Clause 4)

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to Part of IS 14194	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1.	Radioactive materials:				
	a) Alpha emitters Bq/l, Max	0.1	No relaxation	Part 2	
	b) Beta emitters Bq/l, Max	1.0	No relaxation	Part 1	

NOTE — It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

Table 5 Pesticide Residues Limits and Test Method
(Foreword and Table 3)

Sl No.	Pesticide	Limit ng/l	Method of Test, Ref to	
			USEPA (4)	AOAC/ ISO (5)
(1)	(2)	(3)	(4)	(5)
i)	Alachlor	20	525.2, 507	—
ii)	Atrazine	2	525.2, 8141 A	—
iii)	Aldrin/ Dieldrin	0.03	508	—
iv)	Alpha HCH	0.01	508	—
v)	Beta HCH	0.04	508	—
vi)	Butachlor	125	525.2, 8141 A	—
vii)	Chlorpyrifos	30	525.2, 8141 A	—
viii)	Delta HCH	0.04	508	—
ix)	2,4- Dichlorophenoxyacetic acid	30	515.1	—
x)	DDT (o, p and p, p - Isomers of DDT, DDE and DDD)	1	508	AOAC 990.06
xi)	Endosulfan (alpha, beta, and sulphate)	0.4	508	AOAC 990.06
xii)	Ethion	3	1657 A	—
xiii)	Gamma — HCH (Lindane)	2	508	AOAC 990.06
xiv)	Isoproturon	9	532	—
xv)	Malathion	190	8141 A	—
xvi)	Methyl parathion	0.3	8141 A	ISO 10695
xvii)	Monocrotophos	1	8141 A	—
xviii)	Phorate	2	8141 A	—

NOTE — Test methods are for guidance and reference for testing laboratory. In case reference of two methods, USEPA method shall be the method.

Table 6 Bacteriological Quality of Drinking Water^{1 2}
(Clause 4.1.1)

S.no	Organization	Requirement
i)	All water intended for drinking: a) <i>E. coli</i> or thermotolerant coliform bacteria ^{2^ 3)}	Shall not be detectable in any 100 ml sample
ii)	Treated water entering the distribution system: a) <i>E. coli</i> or thermotolerant coliform bacteria ²⁾ b) Total coliform bacteria	Shall not be detectable in any 100 ml sample Shall not be detectable in any 100 ml sample
iii)	Treated water in the distribution system: a) <i>E. coli</i> or thermotolerant coliform bacteria b) Total coliform bacteria	Shall not be detectable in any 100 ml sample Shall not be detectable in any 100 ml sample

[^]Immediate investigative action shall be taken if either *E.coli* or total coliform bacteria are detected. The minimum action in the case of total coliform bacteria is repeat sampling; if these bacteria are detected in the repeat sample, the cause shall be determined by immediate further investigation.

4.2.2 None of the generally accepted sewage treatment methods yield virus-free effluent. Although a number of investigators have found activated sludge treatment to be superior to trickling filters from this point of view, it seems possible that chemical precipitation methods will prove to be the most effective.

4.2.3 Virus can be isolated from raw water and from springs, enterovirus, reovirus, and adenovirus have been found in water, the first named being the most resistant to chlorination. If enterovirus are absent from chlorinated water, it can be assumed that the water is safe to drink. Some uncertainty still remains about the virus of infectious hepatitis, since it has not so far been isolated but in view of the morphology and resistance of enterovirus it is likely that, if they have been inactivated hepatitis virus will have been inactivated also.

4.2.4 An exponential relationship exists between the rate of virus inactivation and the redox potential. A redox potential of 650 mV (measured between platinum and calomel electrodes) will cause almost instantaneous inactivation of even high concentrations of virus. Such a potential can be obtained with even a low concentration of free chlorine, but only with an extremely high concentration of combined chlorine. This oxidative inactivation may be achieved with a number of other oxidants also, for example, iodine, ozone and potassium permanganate, but the effect of the oxidants will always be counteracted, if reducing components, which are mainly organic, are present. As a consequence, the sensitivity of virus towards disinfectants will depend on the *milieu* just as much as on the particular disinfectant used.

4.2.5 Viruses are generally resistant to disinfectants as well as get protected on account of presence of particulate and organic matter in water. Because the difference between the resistance of coliform organisms and of virus to disinfection by oxidants increases with increasing concentration of reducing components, for example, organic matter, it cannot be assumed that the absence of available coliform organisms implies freedom from active virus under circumstances where a free chlorine residual cannot be maintained. Sedimentation and slow sand filtration in themselves may contribute to the removal of virus from water.

4.2.6 In practice, >0.5 mg/l of free chlorine for 1 h is sufficient to inactivate virus, even in water that was originally polluted provided the water is free from particulates and organic matter.

4.2.7 MS2 phage are indicator of viral contamination in drinking water. MS2 phage shall be absent in 1 litre of water when tested in accordance with USEPA method 1602. If MS2 phage are detected in the drinking

water, virological examination shall be done by the Polymerase Chain Reaction (PCR) method for virological examination as given in Annex B. USEPA method in Manual of Method for Virology Chapter 16, June 2001 shall be the alternate method. If viruses are detected, the cause shall be determined by immediate further investigation.

4.3 Biological Requirements

4.3.1 Ideally, all samples taken including consumers premises should be free from biological organisms. Biological examination is of value in determining the causes of objectionable tastes and odours in water and controlling remedial treatments, in helping to interpret the results of various chemical analysis, and in explaining the causes of clogging in distribution pipes and filters. In some instances, it may be of use in demonstrating that water from one source has been mixed with that from another.

4.3.2 The biological qualities of water are of greater importance when the supply has not undergone the conventional flocculation and filtration processes, since increased growth of methane-utilizing bacteria on biological slimes in pipes may then be expected, and the development of bryozoal growths such as *Plumatella* may cause operational difficulties.

4.3.3 Some of the animalcules found in water mains may be free-living in the water, but others such as *Dreissena* and *Asellus* are more or less firmly attached to the inside of the mains. Although these animalcules are not themselves pathogenic, they may harbour pathogenic organisms or virus in their intestines, thus protecting these pathogens from destruction by chlorine

4.3.4 Chlorination, at the dosages normally employed in waterworks, is ineffective against certain parasites, including amoebic cysts; they can be excluded only by effective filtration or by higher chlorine doses than can be tolerated without subsequent dechlorination. *Amoebiasis* can be conveyed by water completely free from enteric bacteria; microscopic examination after concentration is, therefore, the only safe method of identification.

4.3.5 Strict precautions against back-syphonage and cross-connections are required, if amoebic cysts are found in a distribution system containing tested water.

4.3.6 The *cercariae of schistosomiasis* can be detected by similar microscopic examination, but there is, in any case, no evidence to suggest that this disease is normally spread through piped water supplies.

4.3.7 The cyclops vector of the embryos of *Dracunculus medinensis* which causes dracontiasis or Guinea-worm disease can be found in open wells in a

number of tropical areas. They are identifiable by microscopic examination. Such well supplies are frequently used untreated, but the parasite can be relatively easily excluded by simple physical improvements in the form of curbs, drainage, and apron surrounds and other measures which prevent physical contact with the water source.

4.3.8 *Cryptosporidium* shall be absent in 10 liter of water when tested in accordance with USEPA method 1622 or USEPA method 1623* or ISO 15553 : 2006.

4.3.9 *Giardia* shall be absent in 10 liter of water when tested in accordance with USEPA method 1623* or ISO 15553 : 2006.

4.3.10 The drinking water shall be free from microscopic organisms such as algae, zooplanktons, flagellates, parasites and toxin producing organisms. An illustrative (and not exhaustive) list is given in Annex C for guidance.

5 SAMPLING

Representative samples of water shall be drawn as prescribed in IS 1622 and IS 3025 (Part 1).

NOTE — In case of dispute, the method indicated by ‘*’ in 4.3.8 and 4.3.9 shall be referee method.

ANNEX A (Clause 2)

LIST OF REFERRED INDIAN STANDARDS

IS No.	Title	IS No.	Title
1622 : 1981	Methods of sampling and microbiological examination of water (first revision)	(Part 41) : 1992	Cadmium (<i>first revision</i>)
3025	Methods of sampling and test (physical and chemical) for water and waste water:	(Part 42) : 1992	Copper (<i>first revision</i>)
(Part 1): 1987	Sampling (<i>first revision</i>)	(Part 43) : 1992	Phenols (<i>first revision</i>)
(Part 2) : 2002	Determination of 33 elements by inductively coupled plasma atomic emission spectroscopy (Part 4): 1983 Colour (<i>first revision</i>)	(Part 46) : 1994	Magnesium
(Part 5): 1983	Odour (<i>first revision</i>)	(Part 47) : 1994	Lead
(Part 7): 1984	Taste threshold (<i>first revision</i>)	(Part 48) : 1994	Mercury
(Part 8) : 1984	Tasting rate (<i>first revision</i>)	(Part 49) : 1994	Zinc

(Part 10): 1984	Turbidity (<i>first revision</i>)	(Part 52) : 2003	Chromium
(Part 11) : 1983	pH value (<i>first revision</i>)	(Part 53) : 2003	Iron
(Part 16) : 1984	Filterable residue (total dissolved solids) (<i>first revision</i>)	(Part 54) : 2003	Nickel
(Part 21) : 1983	Total hardness (<i>first revision</i>)	(Part 55) : 2003	Aluminium
(Part 23) : 1983	Alkalinity (<i>first revision</i>)	(Part 56) : 2003	Selenium
(Part 24) : 1986	Sulphates (<i>first revision</i>)	(Part 57) : 2005	Boron
(Part 26) : 1986	Chlorine residual (<i>first revision</i>) (Part 27) : 1986 Cyanide (<i>first revision</i>)	(Part 59) : 2006	Manganese
(Part 29) : 1986	Sulphide (<i>first revision</i>)	(Part 60) : 2008	Fluoride
(Part 32) : 1988	Chloride (<i>first revision</i>)	13428 : 2003	Packaged natural mineral water — Specification (<i>first revision</i>)
(Part 34) : 1988	Nitrogen (<i>first revision</i>)	14194	Radionuclides in environmental samples — Method of estimation
(Part 37) : 1988	Arsenic (<i>first revision</i>)	(Part 1) : 1994	Gross beta activity measurement
(Part 39) : 1989	Oil and grease (Part 40) : 1991 Calcium	(Part 2) : 1994	Gross alpha activity measurement
		15302 : 2002	Determination of aluminium and barium in water by direct nitrous oxide- acetylene flame atomic absorption spectrometry
		15303 : 2002	Determination of antimony, iron and selenium in water by electrothermal atomic absorption spectrometry

Terms & Conditions

I. Instructions to Bidders

1. Bids received after the specified date and time will not be accepted. If the EMD in original is not received by 12.10.2017 (2.00 P.M), the bids will summarily be rejected. The EMD of the unsuccessful bidder will be returned only after finalization of the due tendering process. No interest will be payable on the EMD.
2. If any bidder withdraws his bid at any point of time during the tendering process, the EMD of the concerned bidder will stand forfeited.
3. Rates should strictly be quoted in accordance with the specifications. The bidders are advised to quote their rates (excluding GST) as per specifications indicated in the relevant Annexures of this tender document, failing which their bids shall be out-rightly rejected. Taxes (GST) will be paid extra as applicable.
4. The Bidder should upload duly filled in scanned copy of the details as per format at Annexure-I and also upload self-attested copies of the supporting documents while doing the on-line bid submission. List of such documents is given at Annexure-IV for ready reference. The details of experience, etc., should also be scanned and uploaded along with bids. L-1 firm will maintain all Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility and will be responsible for replacement of all faulty consumables/spares for smooth functioning of the same and to ensure the quality of water as per the detailed specification mentioned under the Indian Standard Drinking Water Specification IS 10500: 2012 with amendment no. 1 June, 2015 Annexed with Annexure-I of this Tender Notice.

II. Eligibility Criteria

5. The Registered Office or Branch Office of the bidding Company/firm/Agency (i.e., the Bidder) should be located in Delhi/New Delhi/NCR Region. The Bidder is required to upload the proof of its office address along with telephone number during the online bid submission.
6. The Bidder should have its own Bank Account, TIN Number, PAN Card, GST Registration. Duly signed copy of the same should be uploaded with the Tender during the online bid submission. The firm should also enclose copies of Tax registration and copies of last three years' Income Tax return.
- 7.(a) The bidder should have the experience of dealing with at least one State/Central Government Ministry/Department/PSU/Autonomous Bodies etc for at least three full years.
- 7.(b) The bidder should have well qualified experienced technicians to be deployed for CAMC of Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility. There would be at least one such person available on all working days and as per the specific request of this Department for any particular day(s) by the successful bidder.
- 7.(C) The bidders are requested to submit a copy of ISO certification of the firm for the purpose, failing which their bids will be summarily rejected.
8. The Bidder should upload duly signed certificate, along with its bid indicating that they have carefully read the terms and conditions of the Tender and accepted all the provisions of the Tender during online bid submission.
9. The bidder should submit an undertaking that the Bidder has not been blacklisted by any Ministry/Department/Organization of the Central Government/State Government and any Public Sector Undertaking.

10. The Bidder whose services have been terminated by the NITI Aayog (erstwhile Planning Commission) before the expiry of the contract, are not eligible to participate in the bid for a period of 3 years from the date of termination of the contract. A certificate in this regard is to be submitted by the bidder during online bid submission stating that the firm has not been terminated by NITI Aayog (erstwhile Planning Commission) before expiry of the contract during the last three years.

11. The average turnover of the bidder in this sector must not be less than Rs.50.00 lakh (Rupees fifty lakh only) for the last three years. Scanned copy of proof in this regard is to be uploaded along with the bid.

III Earnest Money Deposit (EMD)-

12. The tender must be submitted online within the scheduled time period i.e. by 12.10.2017 (2.00 PM) which should be accompanied by scanned copy of Account Payee Demand Draft/ Pay Order of **Rs. 15.000/- (Rupees fifteen thousand only)** as Earnest Money Deposit (EMD) drawn in favour of Pay and Accounts Office, NITI Aayog and payable at New Delhi. The EMD in original is required to be dropped in EMD Box kept at Reception area of NITI Aayog within the office hours w.e.f 18.09.2017(12.00 Noon) to 12.10.2017(2.00 PM).

13. The bidders who are exempted from submission of EMD for tenders floated under Rule 170 of GFR, 2017 shall be dealt with as per the General Financial Rules, 2017 subject to submission of an undertaking from the firm seeking such exemption. Copies of relevant Orders/documents regarding such exemption should be submitted along with the bid.

IV Bid Evaluation Process

14. All terms and conditions stipulated in this tender document shall be considered for selection of a firm for signing the rate contract.

15. The bids shall be opened by the Tender Opening Committee (TOC) on the scheduled date and time (at 3.00 PM. On 13.10.2017), in Room No. 548, NITI Aayog, Sansad Marg, New Delhi-110001 in the presence of the representatives of the Bidders, if any, who wish to be present at the time of opening the tender. The lowest Bidder (L-1 firm) will be decided on the basis of total of rates quoted for 18 Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility.

V Specific Terms and Conditions

16. The contract shall be for a period of one year from the date of award of contract. The period of contract may be further extended for another two years (total 03 years) on yearly basis, subject to satisfactory performance of the contractor, on same rates, terms and conditions. The rates, upon which the contract has been finalized, shall remain effective for the entire contract period. No request/claim for any hike in the approved rates would be entertained, under any circumstances, during the period of contract.

17. The selected bidder will have to maintain all Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility in satisfactory working condition. The complaints will have to be attended immediately, and in any case, within the next working day. The contractor (L-1 firm) will maintain all Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility and will be responsible for replacement of all faulty consumables/spares for smooth functioning of the same.

18. If the selected firm fails to deliver the service or replace the defective/spurious parts within the permissible period, a penalty @ Rs. 1000/- per day or the amount which may be required to be paid to an outside agency by this office, for the desired maintenance, whichever is higher, shall be adjusted against the firm's pending bills.

19. This office shall not be responsible for any financial loss or other injury to any person deployed by the successful bidder in the course of performing their duties in NITI Aayog.

VI General Terms and Conditions

20. The successful bidder/supplier (L-1 bidder) has to deposit a Performance Security Deposit amounting to 10% of the contract value in the form of any Accounts Payee Demand Draft/Fixed Deposit Receipt (FDR) made in the name of the Agency and hypothecated to the Pay & Accounts Officer, NITI Aayog, New Delhi from a commercial bank. The Performance Security Deposit should remain valid for a period of sixty (60) days beyond the date of expiry of the period of contract.
21. In the event of failure to accept the Offer of Contract and submission of Performance Security Deposit by the successful bidder for whatsoever reasons(s), Earnest Money Deposit submitted by the successful Bidder shall be forfeited.
22. Non-satisfactory service during the period of contract may lead to forfeiture of performance security deposit and cancellation of contract.
23. The validity of bids will be 180 (One Hundred eighty) days from the date of opening of the tender in the instant tendering process. Further extension of validity of bid will be at the discretion of the Competent Authority, NITI Aayog, but the bidders would be asked for their opinion on the same if the validity period is to be extended.
24. Bidders can obtain clarification regarding the bidding conditions, bidding process or rejection of their bids. The enquiries relating to rejection of bids would be considered for reply/consideration only until sixty (60) days after the date of award of contract.
- 25.(a) The rates for CAMC of Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility (as per the performa at Annexure-I) are to be quoted for repair/ replacement of all consumable/spare parts of items (IS/BIS marked as applicable).
25. (b) The consolidated rates for the CAMC of the machines should be quoted after inspecting the present condition of Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility on “as is where is” basis. If need be, the Bidder may visit this office for inspecting the Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility on prior permission of Shri Ajay Joshi, Under Secretary (GA), NITI Aayog.
- 25.(c) The contractor will ensure that all Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility give uninterrupted service. For this purpose, the contractor will depute at least one qualified technician in this Department for the whole day and all the complaints relating to Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility should be promptly attended to by them. The contractor will be responsible for all safety measures and precaution to prevent any damage in respect of all the items under the CAMC.
- 25.(d) It shall be the responsibility of the firm to hand over the all machines under contract owned by this department, in working condition at the end of the contract period.
- 25 (e) Transport charges and labour charge for delivery of service will be borne by the contractor himself.
- 25.(f). It is the bounding obligation of the contracting party (successful bidder) under the CAMC to provide only genuine/original parts, wherever required to the satisfaction of this Department. Failure to do so will render the contractor liable for penal action of deduction of the value of any loss caused to the Department on this account. The penalty may also include premature termination of contract and forfeiture of security deposit.
- 26.(a) The contractor will attend all the complaints as directed/ ordered by the General Section/ Authorised Person. Work done certificate may also be obtained from the concerned officials for the job attended.
- 26.(b) The decision of this Deptt. shall be final and binding on the contractor for all matters relating to the instant tendering process. Unrealistic prices quoted by bidders would debar them from being considered for this award of the contract.

27. If new machines are added or removed in the instant CAMC during the currency period of the CAMC, payment will be made on pro-rata basis, as per the rates approved for this purpose.

28. The Competent Authority in the NITI Aayog would, at his/her own discretion, be free to annul the contractual agreement if the repairs/maintenance are not carried out on time or the spares/consumables supplied by the firm are deficient in quality in any way or found not up to the mark.

29. Payment will be made by Electronic Clearing System (ECS) on quarterly basis on submission of bills by the contractor. The bills raised by the selected firm should have all tax (GST) registration numbers printed on bills. Validity of the tax registration during the currency of contract shall be the sole responsibility of the firm. The bill should be inclusive of all permissible taxes.

30. The selected firm shall not be allowed to transfer, assign, pledge or sub-contract its rights and liabilities under this contract to any other agency without the prior written consent of this Department.

31. The NITI Aayog reserves the right to cancel the tender at any time/ stage or relax/amend/withdraw any of the terms and conditions contained in the Tender Documents without assigning any reason thereof. Any inquiry after submission of the bid shall not be entertained. In case of withdrawal of bids, the EMD of the concerned bidder will stand forfeited.

32. Any controversy or dispute arising out of this contract shall be referred to the sole arbitration of Additional Secretary/Adviser (General Administration) or any Joint Secretary level officer in NITI Aayog, New Delhi, dealing with General Administration at the relevant time, or to any officer nominated by him/her. There shall be no bar to the reference of dispute to the arbitration by such officer as nominated by the competent authority even though the said officer as an employee of the NITI Aayog, New Delhi might have dealt with the matter earlier or expressed his opinion thereon. In case the arbitrator to whom the matter earlier is originally referred to is transferred or vacates his office or is unable to act for any reasons, the Joint Secretary level officer shall be competent to appoint another person as arbitrator, who shall be entitled to proceed with the reference, from the stage at which it was left by his predecessor. No person other than the one nominated by the Additional Secretary/Adviser (General Admn.) shall act as arbitrator. The decision of the Additional Secretary/Adviser (General Admn.) or the officer nominated by him shall be final and binding on the party/parties. The arbitration proceedings shall be held at an appropriate location in Delhi/New Delhi. The limitation for filing claim for arbitration is 180 days from the expiry of the contract period and in case no claim is filed within this period, it shall be presumed that there is no claim. The place of settlement of disputes shall be Delhi. In the case of settlement of dispute in the Court of Law, it will be in jurisdiction of Court at Delhi.

33. Subject to the above, the provisions of the Arbitration Act, 1996 or any statutory modification on enactment thereof and rules made thereunder and for the time being in force, shall apply to arbitration proceedings under this Clause.

34. The arbitrator may from time to time extend the time for making and publishing the award. He may do so without any need for obtaining the consent of the parties to the dispute.

(Ajay Joshi)
Under Secretary to the Govt. of India
Tel. No. 011-23096636

Copy to:-

NIC, NITI Aayog with the request to upload the tender document on the NITI Aayog's website.

Instructions for Online Bid Submission

**Instructions to the Bidders to submit the bids online through
the eProcurement site
<https://eprocure.gov.in>**

- 1) Bidder should do the registration in the tender site using the “Click here to Enroll” option available.
- 2) Then the Digital Signature of SIFY/TCS/nCode or any Certifying Authority is to be registered after logging into the site.
- 3) Bidder can use “My Space” area to update standard documents in advance as required for various tenders and use them during bid submission. This will facilitate the bid submission process by reducing time.
- 4) Bidder may read the tenders published in the site and download the required documents/tender schedules for the tenders he is interested.
- 5) Bidder then logs in to the site using the secured log in by giving the user id/ password chosen during registration and password of the DSC/etoken.
- 6) Only one DSC should be used for a bidder and should not be misused by others.
- 7) Bidder should read the tender schedules carefully and submit the documents as asked, otherwise, the bid will be rejected.
- 8) Bidder should take into account of the corrigenda published before submitting the bids online.
- 9) Bidder must in advance prepare the bid documents to be submitted as indicated in the tender schedule and they should be in required format. If there are more than one document, they can be clubbed together.
- 10) Bidder should prepare the EMD as specified in the tender. The original should be posted/couriered/given in person to the specified location as per Tender Document, latest by the last date of bid submission.
- 11) Bidder selects the tender which he is interested using search option & then move it to the my favorites folder.
- 12) From the ‘my favorites’ folder, he selects the tender to view all the details indicated.
- 13) The bidder reads the terms & conditions and accepts the same to proceed further to submit the bids.
- 14) The bidder has to select the payment option as offline to pay the EMD as applicable
- 15) The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the bid submitted will not be acceptable.
- 16) The bidder has to enter the password of the DSC/etoken and the required bid documents have to be uploaded one by one as indicated.
- 17) The rates offered details have to be entered separately in a spread sheet file (xls) in the space allotted and should be updated as BOQ.xls file for each tender after the financial bid. The BOQ file, if found modified by the bidder will result in rejection of the bid.

- 18) The tendering system will give a successful bid updation message & then a bid summary will be shown with the bid no & the date & time of submission of the bid with all other relevant details. The bidder has to submit the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid will be rejected.
- 19) The bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid.
- 20) The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening date.
- 21) For any clarifications with the TIA, the bid number can be used as a reference.
- 22) Bidder should log into the site well in advance for bid submission so that he submits the bid in time i.e on or before the bid submission time. If there is any delay, due to other issues, bidder only will be responsible.
- 23) Each document to be uploaded online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced by scanning at lo resolution and the same can be uploaded. However if the file size is less than 1 MB, the transaction/uploading time will be very fast.
- 24) The time settings fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the eProcurement system. The bidders should follow this time during bid submission.
- 25) All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not viewable by unauthorized persons during bid submission & not be viewable by any one until the time of bid opening.
- 26) The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.
- 27) Any document that is uploaded to the server is subjected to symmetric encryption using a generated symmetric key. Further this key is subjected to asymmetric encryption using buyers public keys. Overall, the submitted tender documents become readable only after the tender opening by the authorized individual.
- 28) For any queries, the bidders are asked to contact by mail cphp-nic@nic.in or by phone: 1-800-233-7315 well in advance.

CHECK LIST

DOCUMENTS TO BE SUBMITTED ALONG WITH THE BID

1. E.M.D. (Pay Order/Demand draft) to be dropped in EMD box separately. (Clause No. 12 at Annexure-III).
2. Proof of Registered Office / Branch Office of Company /Firm /Agency in Delhi/New Delhi/NCR. (Clause No. 5 at Annexure-II).
3. Proofs of own Bank Account, TIN, PAN, VAT/Sales Tax Registration and the latest copy of the Income Tax Return. (Clause No. 6 at Annexure-II).
4. Self-attested copy of a certificate indicating that the bidder has carefully read the terms and conditions of the tender and accepted al the provisions of the tender (Clause No. 8 at Annexure-II).
5. Self-attested copy of non-blacklisting certificate (Clause No. 9 at Annexure-II).
6. Certificate that the services of the firm has not been terminated by NITI Aayog before the expiry of the contract during last three years. (Clause No.10 at Annexure-II).
7. Copy of ISO certification issued in their favour (Clause No. 7 (c) at Annexure-II)
8. A proof about average annual turnover not be less than Rs. 50.00 lakh for last three years. (Clause No.11 at Annexure-II).
9. A scanned copy of the E.M.D. (Pay Order/Demand draft) to be enclosed with the tender bid. (Clause No. 12 at Annexure-III).
10. If the bidder is exempted from submission of EMD, copy of relevant orders/documents regarding such exemption to be enclosed with the bid (Clause No. 13 at Annexure-III).

NOTE: Bidders are advised to submit the above documents in the sequence as per check list and refer the page nos. of the documents in the check list.

Tender Opening Committee (TOC)

- | | | |
|-------------------------------------|---|----------|
| 1. Shri Ajay Joshi, Under Secretary | - | Chairman |
| 2. Shri S. Sundaram, PSE,NIC | - | Member |
| 3. Shri N.S. Rawat | - | Member |

No.D-31011/5/2017/CT/Gen.1
Government of India
(NITI Aayog)

NITI Aayog, Sansad Marg,
New Delhi-110001
Dated the 15th September, 2017

Office Memorandum

The undersigned is directed to convey the approval of the Competent Authority, NITI Aayog for constitution of Tender Opening Committee and Tender Evaluation Committee (TEC) consisting of following officers in r/o the tender for providing Annual Maintenance Contract (CAMC) for maintenance of 18 nos. of Water Cooler 100 LPH with inbuilt RO Water Purifier 50 LPH with cooling facility installed in NITI Aayog.

Tender Opening Committee (TOC)

- | | | |
|-------------------------------------|---|----------|
| 1. Shri Ajay Joshi, Under Secretary | - | Chairman |
| 2. Shri S. Sundaram, PSE, NIC | - | Member |
| 3. Shri N.S. Rawat | - | Member |

Tender Evaluation Committee (TEC)

- | | | |
|---|---|----------|
| 1. Shri Dinesh Kochher, Under Secretary | - | Chairman |
| 2. Shri Dheeraj Kumar, T O | - | Member |
| 3. Shri Devender Singh, Section Officer | - | Member |

2. All the members of the TOC are informed that the bids shall require to be opened at 3.00 P.M. on 10.10.2017 by the duly constituted Tender Opening Committee in room no. 548, NITI Aayog, Sansad Marg, New Delhi

(Ajay Joshi)
Under Secretary to the Govt. of India
01123042532

