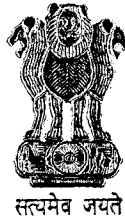


T.M. Vijay Bhaskar, I.A.S.
Joint Secretary
टी.एम. विजय भास्कर, आई.ए.एस.
संयुक्त सचिव



भारत सरकार
पेयजल एवं स्वच्छता मंत्रालय
राजीव गांधी राष्ट्रीय पेयजल मिशन
Government of India
Ministry of Drinking Water and Sanitation
Rajiv Gandhi National Drinking Water Mission

DO No.W-11042/76/Water-II/NRC- ECo

Dated : 23rd July, 2012

Dear Sir/ Madam,

The Ministry proposes to conduct a sample Water Quality Survey in the country to assess the quality of drinking water, being consumed in rural households, as well as in the drinking water sources. This sample survey is proposed to be carried out conjointly with the NSSO 69th round survey. The sampling and analysis will be scheduled in two phases viz., from Oct'2012 to Jan'2013 for post-monsoon data and March'2013 to May'2013 for pre-monsoon data.

2. The objectives behind the proposed study are :

- To establish authentic data on drinking water quality both at source and in households following the precision sampling methodology to be provided by NSSO.
- To understand various water quality problems in the rural areas.
- To understand the nature and extent of water storage, handling and hygiene habits within the rural households in relation to bacteriological contamination.
- To provide the generated data to NRSC, Hyderabad for including in GIS layer into the HGM or groundwater prospect maps generated by them.

3. Drinking water samples will be collected from about 67,000 households and from drinking water sources used by them spread over all districts of the country. On an average in each district there will be totally about 110 households from approximately 5-6 villages.

4. The Ministry is eager to ensure that this first ever Drinking Water Quality Sample Survey is done by adhering to highest standards in the interest of credibility and reliability.

5. In this regard you are requested to take the following actions immediately:

a) **Sample Collection** : One or two water sampling Assistants have to be deputed for collection of drinking water samples in each district. In case the district lab already has full-time or part-time (contracted) assistants/volunteers, they should be used. In States/districts where there is no person in the district lab for water sampling, Chemistry graduates can be hired for the purpose. However, they have to be trained for one day to build their capacity for proper collection of samples as prescribed under IS 3025/2488. You are requested to identify the sampling assistant and train them, latest by 15th September, 2012 at State level by the State Chief Chemist or State Water Quality Laboratory In-charge. These external samplers can be paid an honorarium of Rs. 100/- per sample collected. Regular staff may be paid honorarium of Rs. 50/- per sample collected. Since the samples have to be safely transported, a suitable vehicle may be provided to the sampling assistant on the days of sample collection.

b) GPS co-ordinates and depth of all drinking sources being sampled should also be noted.

c) **Training of Chemists** : The Ministry has entrusted the work of training one chemist each from all districts in the country to NEERI, Nagpur. Dr. Pawan Labhasetwar, Head of WT Division of NEERI is the Nodal Officer for these trainings. He can be contacted at his email : pawankl@hotmail.com or on his Mobile No. 09423687381. You are requested to kindly depute chemists from all districts and avail the facility of training them.

d) **Testing of Collected Samples**: The samples so collected will have to be tested in the District Water Quality Laboratories. Wherever the District Laboratories are not functional or do not have capabilities of testing water samples, it can be outsourced to suitable reputed agencies.

e) It is proposed that 14 parameters be tested viz. pH, turbidity, Total dissolved solids, Calcium hardness, Magnesium hardness, alkalinity, chloride, sulphate, fluoride, nitrate, arsenic, iron, total coliforms and E-coli.


6. Reputed National and International NGOs like Arghyam, Water Aid, etc. will be requested to monitor the work of water sampling and analysis during Oct'12 to January'13 and March'13 to May'13. Independent monitors from such agencies would be requested to monitor the sampling and testing processes.

: 3 :

7. You are requested to identify a Nodal Officer from the State for this survey and communicate his contact details to this Ministry.
8. The expenditure incurred for the Sample Water Quality Survey should be met out of 3% NRDWP (WQMS) funds available with the States.
9. The Ministry will create a format linking with the IMIS data which should be downloaded by the District Chemist and provided to the Sampling assistants for preparing manual records and these should be subsequently uploaded into the Website. The Ministry would closely monitor the progress of implementation with the State Nodal Officer to be appointed by the respective State. Video-conferencing will also be held to review the progress as well as to solve any problems under implementation stage.

With regards.

Yours sincerely,


(T M Vijay Bhaskar)

To

Principal Secretaries In-charge of Rural Drinking Water Supply in all States

copy to - TD - N/E (web meeting)

**Format for Drinking Water Quality Survey to be conducted in the Country using
sampling methodology of NSSO**

Name of the State	
Name of the District	
Name of the Block	
Name of the Gram Panchayat	
Name of the Habitation	
Date of sampling	
Source ID code (as per IMIS)	
Type of source	Handpump/ Tubwell/ Open well/ Spring/River/ Pond/Tank/Rainwater harvesting/ Household
Sample ID code (to be given by State)	
Date and time of collection of sample	
Depth of source (in case of groundwater source only)	
Latitude and Longitude	
Date of conducting water sample analysis/testing	
Contamination levels observed	
pH	
Turbidity, mg/l	
Total Dissolved solids, mg/l	
Calcium hardness, mg/l (as CaCO ₃)	
Magnesium hardness, mg/l (as CaCO ₃)	
Alkalinity, mg/l	
Fluoride, mg/l	
Chloride, mg/l	
Sulphate, mg/l	
Chloride, mg/l	
Nitrate, mg/l	
Arsenic, mg/l	
Dissolved iron, mg/l	
Total coliforms, MPN/100ml	
E-coli, No./ 100 ml	
Result	FIT / UNFIT FOR DRINKING PURPOSES AS PER IS-10500 LIMITS