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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

D.O. No. W-11011/27/97/TM-II
Dated : 3rd January 2013

Dear Sir/ Madam,

At the outset, please accept my warm greetings for a Happy and Prosperous New Year 2013.

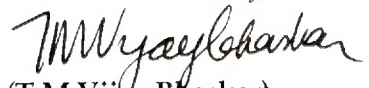
It is proposed to organize systematic and structured training to PHED engineers/ hydro-geologists to focus on important issues like Ground Water Prospects Map (HGM Map) reading, understanding groundwater potential, yield and depth, applied hydro-geological aspects like geomorphic types and possible contamination potential, identification of geological structures on map and field along with their importance, field survey studies, introduction of water quality layer, etc. The training schedule planned is annexed.

You are requested to depute the Executive Engineer/Hydro-geologist from each district along with SE/CE in-charge of planning at the State Headquarters to attend this training programme. Large States may like to first depute officers from such districts where groundwater availability/contamination are a problem. These officers once trained shall have the capacity to train other engineers in the State through State level Workshops. The Ministry will take active part in this training programme along with NRSC, Hyderabad. It is also proposed to invite eminent experts from NGRI, NIH, CGWB, NESAC and RRSSC to deliver specific lectures.

Secondly, you may please direct the leader of your State team to deliver a 10-minute presentation on usage of HGM maps in your State for identification of production wells/ recharge structures, its success/ failure and activities that have been take up under NRDWP-Sustainability during the past 2-3 years, for detailed deliberations and to draw the road map ahead.

The expenses towards organizing the Workshops including TA/DA expenses of Experts shall be met by NRSC, Hyderabad out of the funds provided by the Ministry. However, the TA/DA expenses of the participants of the Workshops may be met out of NRDWP-Support funds by the respective States.

With regards,

Yours sincerely,

(T.M.Vijay Bhaskar)

To

1. Principal Secretary/ Secretary in-charge of Rural Drinking Water Supply in all States
2. Dr V.K.Dhadwal, Director, NRSC, ISRO, Balanagar, Hyderabad

ग्रामीण क्षेत्रों में
पेयजल स्थायित्व एवं सम्पूर्ण स्वच्छता

Sustainable Drinking Water and
Sanitation for all in Rural Areas

**Training Schedule for the proposed 2-day Workshops on
Usage of Groundwater Prospects (HGM) Maps**

States	Date	Venue and Organizer
1 All India	17-18 th Jan, 13	NRSC, Hyderabad
2 Karnataka	23-24 th Jan, 13	RRSC-S, Bengaluru
Goa		
3 Andhra Pradesh	23-24 th Jan, 13	NRSC, Hyderabad
4 Kerala	30-31 st Jan, 13	RRSC-S, Bengaluru
Lakshadweep		
5 Orissa	30-31 st Jan, 13	RRSC-E, Kolkata
Jharkhand		
Bihar		
West Bengal		
6 Maharashtra	6-7 th Feb, 13	RRSC-C, Nagpur
Daman-Diu		
D-N-Haveli		
7 Madhya Pradesh	6-7 th Feb, 13	RRSC-C, Nagpur
Chhattisgarh		
8 Tamilnadu	13-14 th Feb, 13	RRSC-S, Bengaluru
A&N Islands		
Puduchery		
9 Uttarakhand	13-14 th Feb, 13	IIRS, Dehradun
Himachal Pradesh		
Jammu & Kashmir		
Punjab		
Haryana		
10 Rajasthan	20-21 st Feb, 13	RRSC-W, Jodhpur
11 Gujarat	27-28 th Feb, 13	RRSC-W, Jodhpur
12 Uttar Pradesh	27-28 th Feb, 13	IIRS, Dehradun
13 N Eastern States	27-28 th Feb, 13	NESAC, Shillong

- The participants for all India level will be from PHED at the level of Supt. Engineer / Chief Engineer
- The participants for State Level will be from PHED at the level of EE/Hydro-geologist
- The list of participants shall be sent by the States directly to NRSC with a copy to MDWS
- The maximum number of participants for State/Regional level training will be around 50-60 numbers and the all India level training will be about 100 numbers
- The Nodal officers from MDWS will be Shri D.Rajasekhar, DA(WQ) and Shri S.M.Sharma, Consultant(HG) while from NRSC shall be Dr S.K.Subrahmanian, Group Director(HG) and Dr G.S.Reddy, Sr. Scientist(HG).

Suggested topics/ sessions for Training to State officers on usage of HGM maps

Day-1

1. **Map reading-**
 - a. Elements of map reading
 - b. Topo sheets – how to read and use
 - c. How to read and interpret HGM maps
2. **Introduction to Hydro-geomorphological Maps**
 - a. Rock types and Geomorphic features as groundwater controlling structures, and possible contamination potential
 - b. Different Layers such as lithgeom, drainage, etc
 - c. Various parameters such as groundwater potential, and depth.
3. **Field techniques-**
 - a. Field guide to identify lineaments
 - b. Field identification of rock types, and structural features such as folds, faults, dykes, etc
 - c. Concept of dip, strike, bedding planes, and related field observations
4. **Principles of field Hydrogeology**
 - a. Concepts
 - b. Aquifer Characteristics, Parameters, and Aquifer performance and yield tests
5. **Water Quality maps**
 - a. Methodology being adapted for preparation of water quality layer
 - b. How the Water Quality layer maps are to be read in conjunction with the rock types

Day-2

6. **Furtherance on HGM usage-**
 - a. Geophysical exploration
 - b. GIS for preparation of area of interest maps from Bhuvan/ Cartosat/ Cadastral maps
7. **Concept of Drinking Water Security-** Drinking Water Security planning, and Integrated Water Resource management- experiences of Pilot projects, and participatory approach
8. **Open house interactions**
9. **Presentation by states on**
 - a. Understanding of HGM maps- and tentative strategy based on the training- 10 minutes to each state
 - b. Status of HGM maps usage, and experience sharing- 20 minutes to each state
10. **Feed back** of the participants through questionnaires