

HIMACHAL PRADESH
STATE WATER AND SANITATION MISSION
WSSO, DHALLI, SHIMLA-171012

No: SWSM-WSSO-Training/Vol-4/2015-16/

663-725

Dated:- 06-06-2016

To

The Engineer-in-Chief (IPH)
U.S. Club, Shimla-1

Subject: Two days "Training Needs Assessment" workshop held on 11th-12th May, 2016 at State Training Centre, Mandi under NRDWP: Suggestions on draft training and capacity building plan thereof.

Reference: This office letter Nos. SWSM-WSSO-training/vol-4/2015-16/223-29 dated 20-04-2016 and SWSM-WSSO-training/vol-4/2015-16/466-72 dated 03-05-2016

In reference to above cited subject and referred letters, a two days State level residential workshop on "Training Needs Assessment" was organized by Water and Sanitation Support Organization (WSSO) on 11th-12th May, 2016 at State Training Centre (STC), Dhangsidhar, Mandi. The workshop methodology was consists of presentations, focused group discussions, group work and brain storming exercises wherein gaps, issues, challenges, training needs and possible training institutes were identified in consultation with representatives of all categories of departmental officers/officials (list of participants is at **Annexure-A**). The gaps, issues and trainings needs were assessed in two core areas of the department related to drinking water and sanitation:

- Drinking water supply sector
- Sewage and sewerage system management

The final report of the workshop is under progress. Meanwhile, as an outcome of the workshop, the draft training and capacity development plan is enclosed herewith (**Annexure-B**) for inviting **suggestions/comments from all the concerned of the department** on the courses formulated in the workshop so that final report may be submitted to the Competent Authority.

It is, therefore, requested that the draft plan may be uploaded on the departmental website and any suggestions/comments on the same may be submitted to undersigned by e-mail on **dirwssohp@yahoo.com** or through fax on **0177-2647512** by **25th June, 2016** so that final report may be submitted accordingly.

Encl: As above

Chief Engineer
cum Director (WSSO)
Dhalli, Shimla-12

Copy to:-

1. The Secretary (IPH) to the Govt. of Himachal Pradesh, Shimla-2 for information please.
2. The Chief Engineer, IPH Zone Shimla, Mandi, Dharamshala and Hamirpur for information and with the request to share the above cited plan uploaded on the departmental website with all the concerned and submit any suggestions (if any) accordingly as mentioned above please.
3. The Superintending Engineers of the department (all) for information and necessary action.
4. The Executive Engineers of the department (all) for information and necessary action.
5. The Programmer, IPH U.S. Club for information and uploading on the departmental website.

Chief Engineer
cum Director (WSSO)
Dhalli, Shimla-12

TWO DAYS WORKSHOP ON "TRAINING NEEDS ASSESSMENT" UNDER NRDWP DATED 11-12 MAY, 2016

LIST OF PARTICIPANTS

S. No.	Name	Designation	Phone No	Address/Place of Posting
1	Er.Raghubir Singh	Chief Engineer cum Director (WSSO)	9418007270	WSSO, Dhalli, Shimla-12
2	Er.Rajesh Bakshi	Chief Engineer (IPH)	9418121919	I&PH, Mandi Zone
3	Er.Lekh Ram Choudhary	Superintending Engineer	9418079918	I&PH Circle Sundernagar
4	Er.R.K. Virmani	Superintending Engineer	9418012415	I&PH Circle Bilaspur
5	Er.S.K. Dhiman	Superintending Engineer	9418124832	I&PH Chief Office Hamirpur
6	Er.Bheem Singh	Executive Engineer (D)	9418030722	O/O Chief Engineer I&PH Deptt. Mandi Zone
7	Er.Bharat Bhushan	Executive Engineer (D)	9418035952	I&PH Circle Nurpur
8	Dr.Anil Kumar	Consultant (HRD&IEC)	9418548604	WSSO, Shimla
9	Ms. Pawana Pal	Consultant (WQMS)	9882430821	WSSO, Shimla
10	Er.Arvind Verma	Assistant Engineer	9418488098	I&PH Circle Hamirpur
11	Er.H.K.Sharma	Assistant Engineer	9418056092	I&PH Sub-Div. Lambagaon
12	Er.Shamsher Chauhan	Assistant Engineer	9418004116	Hydrology S/Div Mandi
13	Er.Rajneesh Onkar	Assistant Engineer	9418131091	I&PH Sub Division Saigaloo, Mandi
14	Er.Rakesh Prashar	Assistant Engineer		Mechanical Sub-Division Baggi, Distt Mandi
15	Er.Virender Pathnia	Assistant Engineer	9418452654	CCDU, S.T.C,Dhangsidhar Mandi
16	Sh.Bhavwesh Sharma	Hydrogeologist	9418080275	SDC Mandi
17	Er.Karam Chand	AAE	9418788700	Chief Office Hamirpur
18	Er.Amit Thakur	Junior Engineer	8628871130	I&PH Circle Nahan
19	Er.Asheem Kumar	Junior Engineer	9816660564	Dharamshala Zone
20	Er.Shivani Goswami	Junior Engineer	8894861030	I&PH Circle Sundernagar
21	Er.Shweta Singh	Junior Engineer	9882762167	Hydrology Sub-Division Mandi Dhangsidhar
22	Er.Anil Thakur	Junior Engineer	8894238696	I&PH Circle Nahan
23	Er.Naveen Kumar	Junior Engineer	9418174453	Section Bhota S/Div Bhota
24	Sh.Bhupesh Kumar	Sr. Assistant	9418133629	I&PH Sub/Div. No.-li Kullu
25	Sh.Bhiani Singh	Sr. Assistant	9418183600	I&PH Sub/Div. No.-I Kullu
26	Sh.Pratap Singh Rana	Sr. Assistant	9418065772	I&PH Circle Sundernagar
27	Sh.Raj Pal	Surveyor	9418653719	I&PH Sub/Div. No.-1 Mandi
28	Sh.Chinta Mani	Surveyor	8988224747	I&PH Sub/Div. Saigaloo
29	Sh.Surender Pal	Work Inspector	9418900187	CCDU, S.T.C,Dhangsidhar Mandi
30	Sh.Bipan Chand	Work Inspector	9816759813	I&PH Section Garh Sub/Div. Daroh
31	Sh.Vijay Kumar Thakur	Work Inspector	9816022268	I&PH Sub-Div. Katrain
32	Sh.Bhag Chand	Work Inspector	9459781887	I&PH Sub-Div. Kullu-I
33	Sh.Vijay Kumar	Block Co-ordinator	9418796768	I&PH Sub Division Panchrukhi, Distt. Kangra
34	Sh.Lalit Singh	Block Co-ordinator	9736029655	I&PH S/Div Katrain
35	Smt.Sheetal Gupta	Data Entry Operator	9418140059	I&PH Div. Mandi
36	Sh.Gopal Sharma	STA (H.G.)	9418079507	Iph Circle Kullu
37	Sh.Naresh Kumar	TSP	9418161993	I&PH Sub/Div. No.-I Kullu
38	Sh.Rajinder Singh	Pump Operator	9418459836	Vill. Rehol P.O. Dhundeh Teh. Arki
39	Sh.Ajay Kumar	Pump Operator	8988157954	Vill. Mastial P.O Niar Teh Jaswan Distt. Kangra
40	Sh.Padam Nabh	Pump Operator	9817131825	I&PH Sub-Div. Kullu-I
41	Sh.Madan Lal	Fitter	9418012256	Vill. Nadaun Teh Nadaun Distt. Hamirpur
42	Sh.Parkash Chand	Fitter	9418478189	Vill. Badog Teh Arki Distt. Solan
43	Sh.Budhi Singh	Fitter	9805227685	Vill. Baldoa Teh Jawali Distt. Kangra

**HIMACHAL PRADESH
STATE WATER AND SANITATION MISSION
WSSO, DHALLI, SHIMLA-171012**

Training Needs Assessment Workshop at STC, Dhangsidhar, Mandi held on 11th -12th May, 2016

(A. FORMAT FOR COURSE DESIGN IN DRINKING WATER SECTOR)

Sr. No.	Target Group	Apprx. total strength (Nos.)	Key responsibilities	Key gaps, issues and challenges	Nature of course required	Topic of course (training/ workshop / exposure visit)	Proposed potential training Institute (especially KRC designated by MDWS, GoI)	Proposed duration of the training (in days)
1	2	3	4	5	6	7	8	9
A.	Top & middle management level							
i	Engineer-in-Chief/ Chief Engineers/ S.Es./ E.Es.	ENC (1) CE (6) SE (21) EE (82)	<ul style="list-style-type: none"> Planning & Design Monitoring & Supervision of Works Execution and Implementation 	<ul style="list-style-type: none"> Shortage of skilled staff Lack of training Water quality monitoring and surveillance O&M of Water Treatment Plants Water management Redressal of 	<ul style="list-style-type: none"> Refresher Courses Trainings Exposure visits Orientation & consultation workshops 	<ul style="list-style-type: none"> Refresher course on latest technologies in design, operation & maintenance of W.T.Ps. Refresher course on planning and design of distribution system and its software application Refresher course on latest technologies in drinking water supply and distribution sector Training on environment, economics and social aspects of water resources projects Training Water Governance: Organizations Involved, Jurisdiction, Laws and Regulations Refresher course on monitoring and surveillance of water quality and latest techniques like automation and remote water quality monitoring and surveillance 	<ul style="list-style-type: none"> IIT Roorkey/ Mandi Water Academy (WA), Pune Water Academy (WA), Pune Water Academy (WA), Pune Water Academy (WA), Pune NEERI, Nagpur 	<ul style="list-style-type: none"> Min. three days & max. seven days or as per the time frame of a particular training Institute

					<ul style="list-style-type: none"> • Training on communication, presentation and leadership skills • Training on latest integrated water management technologies • Training on integrated drinking water management, water security planning, water and energy audit, water metering • Training on latest technologies in source identification design, selection and water source sustainability • Training on latest applications of Remote Sensing, Geographical Positioning System (GPS), Geographical Information System (GIS), SCADA & total station survey in rural and urban water supply system • Orientation workshop on PRIs and community participation in operation and maintenance RWSS and participation in conservation and management of water resources • Learning exchange exposure visits to share and see the best practices in rural and urban drinking water sector • Training on stress management, multisectoral functions, useful management and utilization of existing human and financial resources 	<ul style="list-style-type: none"> • IIMC, New Delhi/ HIPA/STC, Mandi • Engineering Staff College of India Hyderabad • MDWS, GoI or its KRC • All India institute of Local Self Govt, Lacknow • National Sensing Centre (NRSC)/ ESRI, Hyderabad /W.A, Pune • LBSNAA, Masoorie / IIMC, New Delhi or at STC, Mandi • By WSSO • HIPA, Shimla
				<ul style="list-style-type: none"> • Lack dedicated postings • Political interferences • Satisfaction of public • Land disputes • Paucity of funds for operation & maintenance 	<ul style="list-style-type: none"> • Training on communication, presentation and leadership skills • Training on latest integrated water management technologies • Training on integrated drinking water management, water security planning, water and energy audit, water metering • Training on latest technologies in source identification design, selection and water source sustainability • Training on latest applications of Remote Sensing, Geographical Positioning System (GPS), Geographical Information System (GIS), SCADA & total station survey in rural and urban water supply system • Orientation workshop on PRIs and community participation in operation and maintenance RWSS and participation in conservation and management of water resources • Learning exchange exposure visits to share and see the best practices in rural and urban drinking water sector • Training on stress management, multisectoral functions, useful management and utilization of existing human and financial resources 	<ul style="list-style-type: none"> • IIMC, New Delhi/ HIPA/STC, Mandi • Engineering Staff College of India Hyderabad • MDWS, GoI or its KRC • All India institute of Local Self Govt, Lacknow • National Sensing Centre (NRSC)/ ESRI, Hyderabad /W.A, Pune • LBSNAA, Masoorie / IIMC, New Delhi or at STC, Mandi • By WSSO • HIPA, Shimla

B.	Field level officers/ officials						
ii	Assistant Engineers & Junior Engineers AEs (299) JEs (794)	<ul style="list-style-type: none"> To provide adequate potable water to every household To ensure equitable distribution of water Planning, surveying, investigation and designing of scheme Execution of scheme Quality control Management of field staff and community 	<ul style="list-style-type: none"> Shortage of staff Lack of training and refresher course Non availability of advanced equipments Lack of standby systems Lack of accessibility Hindrances in the progress of projects due to forest act/ railway etc. O & M of WTPs Non-existence of water testing labs at the sub-division level 	<ul style="list-style-type: none"> Induction courses Refresher courses Workshops Trainings Exposure visits 	<ul style="list-style-type: none"> Induction course on design, construction & contract management for water resources projects Induction course on latest technologies in design, operation & maintenance of W.T.Ps/STPs. Training on drinking water project planning Training on water assessment methodology Training on drinking and sewerage water quality monitoring and surveillance Training on water governance: organizations involved jurisdiction, laws and regulations Refresher course on rules, regulations pertaining to Department and R.T.I Act Training on design of underground structures using latest techniques Courses on FCA, workman compensation Act. Training on MIS system modules Training of pumping machinery Orientation workshop on NRDWP, PRIs and 	<ul style="list-style-type: none"> WA, Pune WA, Pune / IIT Mandi WA, Pune/KRC WA, Pune/KRC ECO Lab, Mohali WA, Pune HIPA, Shimla WA, Pune/KRC HIPA, Shimla STC Mandi PEC University, Chandigarh/ IIT Mandi/ Machinery Supplier LBSNAA, Massoorie 	<p>Minimum 15 days induction course and other courses of min. three days & max. seven days duration or as per time frame of a particular training Institute</p>

iii	Hydrogeolo -gists	Sr. Hydrogeo logist(2) Jr. Hydrogeo	<ul style="list-style-type: none"> Identifying sites for water supply & irrigation 	<ul style="list-style-type: none"> Lack of training Lack of geo-physical 	<ul style="list-style-type: none"> Induction courses Refresher 	<ul style="list-style-type: none"> Orientation workshop on NRDWP, PRIs and community participation in operation and maintenance RWSS and participation in conservation and management of water resources/participatory rural appraisal Learning exchange exposure visits to share and see the best practices in rural and urban drinking water sector Training on stress management, multisectoral functions, useful management and utilization of existing human and financial resources Training on communication, presentation and leadership skills Workshop on latest technologies in drinking water sector Training on application of Remote Sensing and GIS in drinking water sector Training on integrated drinking water management, water security planning, water and energy audit, water metering 	<ul style="list-style-type: none"> LBSNAA, Massoorie / IIMC, New Delhi or at STC, Mandi By DWSSM (WSSO) HIPA, Shimla IIMC, New Delhi MDWS, GoI/its KRC NRSC, Hyderabad All India institute of Local Self Govt. Lacknow Rajiv Gandhi ground Water Training and Research Institute, Raipur (C.G) 	<ul style="list-style-type: none"> Minimum 15 days induction course and other courses of min. three days & max. seven days
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	logist (2)		instruments and their operational training	courses	Refresher course on modern drilling techniques and geophysical techniques	CGWB (Hard Rock) Hyderabad	duration or as per time frame of a particular training Institute
	<p>Jr. geologist (2)</p> <p>Jr. geophysicist (1)</p>	<ul style="list-style-type: none"> • Deep bore Hand pumps, Percolation Wells, Tube Wells, Recharging structures • Designing of assemblies of tubewells • Ground water monitoring & estimation 	<ul style="list-style-type: none"> • Knowledge gap remote sensing and GIS techniques • Lack of awareness regarding latest development in drilling technology in hard rocks & alluvial areas. • Shortage of staff • Logistic support / conveyance for site collection, monitoring of underground water structure 	<ul style="list-style-type: none"> • Trainings 	<ul style="list-style-type: none"> • Training on application of GIS and Remote sensing techniques in ground water studies • Training on design of underground structures using latest techniques • Training on well hydraulics and pumping test data analysis 	<ul style="list-style-type: none"> • National Remote Institute Dehradun (U.K) • WA Pune • RGGWTRL, Raipur (C.G.) 	

iv	Pump Operator & Fitter	Pump Operator (3500) Fitter (2100)	<p>Pump Operators</p> <ul style="list-style-type: none"> O&M of pumping machinery properly & proper electricity supply to machinery Proper maintenance of pump house time to time To provide pure drinking water to community Providing drinking water on daily basis <p>Fitter</p> <ul style="list-style-type: none"> To repairs the various dia of pipe lines and repair of hand pumps To provide pure and sufficient water to community Chlorination of tanks & Super chlorination of spring source 	<p>Pump Operators</p> <ul style="list-style-type: none"> Lack of promotion channel & R&P rules Due to shortage of staff over burden of duty hours. <p>Fitter</p> <ul style="list-style-type: none"> Lack of promotion channel & R&P rules Due to shortage of staff over burden of duty hours No proper weekly rest. 	<ul style="list-style-type: none"> Induction courses Refresher courses Trainings 	<p>Pump Operators</p> <ul style="list-style-type: none"> Induction level training to pump operators and fitters (new entrants) Refresher course on new technologies in pumping machinery like automation, online machinery information, GPS monitoring to pump operators Training on operation and maintenance of pumping machinery, energy saving techniques <p>Fitter</p> <ul style="list-style-type: none"> Refresher course on new technologies in jointing of pipe line through new machine cutter, welding sets, energy saving techniques etc. Training on new technologies in operation and maintenance of hand pumps 	<ul style="list-style-type: none"> In workshops at Baggi, Shimla & Una N.I.T. Hamirpur/ Polytechnic college Sundernagar Departmental workshop. N.I.T. Hamirpur/ Polytechnic college Sundernagar STC Mandi/ Polytechnic college Sundernagar 	<p>Minimum six months induction course and other courses of min. three days & max. seven days duration or as per time frame of a particular training Institute</p>
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			<ul style="list-style-type: none"> Collection of water samples to testing labs New water connection. Supervision of the all schemes and all field management by WIs. Survey work of all schemes by Surveyors 	<ul style="list-style-type: none"> Lack of technical training Lack of latest survey equipment i.e. total station and auto CAD 	<ul style="list-style-type: none"> Induction courses Trainings 	<ul style="list-style-type: none"> Induction level course on civil works execution and specification for Work Inspectors and surveyors Training on latest survey instruments, total station & auto CAD for surveyors. 	STC, Mandi/Polytechnic College, Sundernagar	Min. 3 months induction course & other training are of min. three days & max. seven days duration or as per particular training Institute
v	Work Inspectors & Surveyors	Work Inspector (650) Surveyors (250)						
vi	Senior Assistants and TSPs /DEOs (outsourced)	Jr./Sr. Astt. (1170) TSPs/ DEOs (80)	<ul style="list-style-type: none"> Maintenance of record of various categories Preparation of monthly account Disposal of various types of 	<ul style="list-style-type: none"> Shortage of staff Shortage of residential accommodation Updation of record on dept website i.e. R & P rules, 	<ul style="list-style-type: none"> Induction courses Refresher courses Trainings 	<ul style="list-style-type: none"> Induction level training to Jr. Assistants/ Sr. Assistants/clerk (new entrants) on departmental rules & regulations, office procedures, record keeping, day to day accounting etc. Refresher course training to existing Jr. Assistants/ Sr. Assistants/clerk on departmental rules & regulations, office procedures, record keeping, day to day accounting etc. Training on latest accountings like tally and computer fundamentals to existing staff 	<ul style="list-style-type: none"> HIPA, Shimla/STC, Mandi. HIPA, Shimla/STC, Mandi HIPA, Shimla/STC, Mandi 	Min. 15 days induction course & other training min. three days & max. seven days duration or as per particular training Institute

vii	Block Coordinators BRC (outsourced) & working under DWSMs in each block of the State.	78	<p>correspondences.</p> <p>TSPs/DEOs (outsourced)</p> <ul style="list-style-type: none"> Regular entry on MIS & IMIS 	<p>seniority list and transfer orders</p> <p>TSPs/DEOs (outsourced)</p> <ul style="list-style-type: none"> Lack of co-operation by staff Increase of salary Require regulation policy 	<p>TSPs/DEOs (outsourced)</p> <ul style="list-style-type: none"> Training and workshop on MIS and GOI website time to time STC, Mandi 	<p>TSPs/DEOs (outsourced)</p> <ul style="list-style-type: none"> Refresher course after every year Training on Participatory Rural Appraisal, Community involvement in operation and maintenance of RWSS, water management and water quality monitoring Exposure visit within the state or outside the state to see the best practices in community managed rural water supply schemes Training on water management and conservation, village water security planning Training on community communication skills and presentation skills 	<ul style="list-style-type: none"> STC, Mandi STC, Mandi DWSM (WSSO) STC, Mandi STC, Mandi 	<p>Min. five days induction course & other training min. two days & max. seven days duration or as per particular training Institute</p>
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**HIMACHAL PRADESH
STATE WATER AND SANITATION MISSION
WSSO, DHALLI, SHIMLA-171012**

State Level Training Needs Assessment Workshop at STC, Dhangsidhar, Mandi held on 11th -12th May, 2016

(B. FORMAT FOR COURSE DESIGN IN SEWAGE AND SEWERAGE SYSTEM MANAGEMENT)

Sr. No.	Target Group	Apprx. total strength (Nos.)	Key responsibilities	Key gaps, issues and challenges	Nature of course required	Topic of course (training/ workshop / exposure visit)	Proposed potential training Institute (especially KRC designated by MDWS, Govt)	Proposed duration of the training (in days)
1	2	3	4	5	6	7	8	9
A.	Top and middle management level							
i	Engineer-in-Chief / Engineer / S.E. / E.E.	ENC (1) CE (6) SE (21) EE (82)	<ul style="list-style-type: none"> Planning, design, monitoring & supervision of works Execution and implementation 	<ul style="list-style-type: none"> Shortage of labour Lack of training Lack of co-operation of Public Proper functioning of labs & connectivity No Dedicated Staff 	<ul style="list-style-type: none"> Induction courses Refresher courses Workshops Trainings Exposure visits 	<ul style="list-style-type: none"> Refresher course on latest technologies in planning, design, processing, O&M, sewer network and software applications in the area of STPs. Training on environment, economic, legal and social aspects of sewerage treatment plants Exposure visit to see the best practices in O & M and sewer network, connectivity in STPs Workshop on record keeping in STPs Orientation training on waste water analysis, instrumentation and waste water standards for safe operation and maintenance of STPs 	<ul style="list-style-type: none"> TWAD Board, Chennai, TN/ IIT Roorkey NEERI, Nagpur TWAD Board, Chennai, TN STC, Mandi NEERI, Nagpur/ECO Lab, Mohali 	<ul style="list-style-type: none"> Min. three days & max. seven days or as per the time frame of a particular training Institute

B.	Field level officers & officials								
ii	Assistant Engineer and Junior Engineer	AEs (299) JEs (794)	<ul style="list-style-type: none"> Planning, survey and investigation of STP and sewerage schemes Construction, O & M of sewerage system and STP 	<ul style="list-style-type: none"> Lack of technical and skilled staff Outsourcing of sewerage schemes Land disputes, court cases regarding connectivity of sewerage connections 	<ul style="list-style-type: none"> Induction courses Refresher courses Workshops Trainings Exposure visits 	<ul style="list-style-type: none"> Refresher course on latest technologies in planning, design, processing, O&M, sewer network and software applications in the area of STPs. Training on environment, economic, legal and social aspects of sewerage treatment plants Exposure visit to see the best practices in O & M and sewer network, connectivity in STPs Workshop on record keeping in STPs Orientation training on waste water analysis, instrumentation and waste water standards for safe operation and maintenance of STPs 	<ul style="list-style-type: none"> TWAD Board, Chennai, TN/ IIT Roorkey NEERI, Nagpur TWAD Board, Chennai, TN STC, Mandi NEERI, Nagpur/ECO Lab, Mohali 	Min. three days & max. seven days or as per the time frame of a particular training Institute	

Note: As informed during the TNA by Pump Operators, after the level of AE and JE, there is no dedicated staff of the IPH department for running of Sewerage Treatment Plants and the same are being run on outsourcing basis by the department

ALL THE CONCERNED ARE REQUESTED TO SUBMIT THEIR FEEDBACK/SUGGESTIONS ON THE TRAINING NEEDS IDENTIFIED BY 25-06-2016 TO CHIEF ENGINEER CUM DIRECTOR (WSSO), DHALLI, SHIMLA-12 BY EMAIL ON EMAIL ID dirwssohp@yahoo.com or by fax at 0177-2647512. AFTER 25-06-2016, THE FINAL REPORT WILL BE SUBMITTED TO THE COMPETENT AUTHORITY.