

PUBLIC HEALTH ENGINEERING TRAINING PROGRAMME

As on 30.6.2010

Training courses on the aspects of Public Health Engineering (PHE) are essential for the design, construction, operation and maintenance of water supply & sanitation projects, if programmes are to meet the criteria of cost effectiveness and efficient operation, maintenance and repair.

To fulfill the above objective, Central Public Health & Environmental Engineering Organization (CPHEEO) the technical wing of Ministry of Urban Development and Poverty Alleviation made efforts to launch and promote PHE Training Programme in 1956. The coverage of these activities has increased considerably over the years. In order to cater to the needs of various Public Health Engineering Departments, Water Supply & Sanitation Boards, Urban Local Bodies, State Pollution Control Boards and other Water Supply & Sanitation agencies like Jal Sansthans to train their personnel engaged in the field of PHE at various levels, the following training programmes have been introduced and are being conducted through research & academic Institutes and field departments:

1. Post Graduate Course in Public Health Engineering/Environmental Engineering.
2. Short Term Course in Public Health Engineering/Environmental Engineering.
3. Refresher Courses on various aspects of design, construction, operation and maintenance of water supply and sanitation facilities including solid waste management.

I. POST GRADUATE COURSE

The Ministry has recognized 11 academic institutes so far as listed below. The annual intake capacity in 11 institutes is 88. The intake capacity, duration of the course and the eligibility criteria for admission etc. in these institutes are given below:

STATEMENT SHOWING DETAILS OF VARIOUS POST GRADUATE INSTITUTIONS RECOGNIZED BY THE MINISTRY. ACADEMIC SESSION 2010-11.

Sl.No.	Institute	Period for which stipend is extended (Months)	Total duration including project work (Months)	No.of seats reserved for the Ministry	Educational Qualification and experience
1	2	3	4	5	6
1.	Indian Institute of Technology, Delhi, New Delhi	24	24	5	BE/B.Tech(Civil) with a minimum CGPA of 6.75 on 10 Point scale or 60% marks. Admission through interview by I. I. T.
2.	Veermata Jeejabai Technological Institute, Mumbai.	24	24	10	BE(Civil)/AMIE (civil Engg.) with minimum two

				years experience in civil engg. & must have secured minimum 55% marks
				at qualifying exam.
3. Visvesvaraya National Institute of Technology, Nagpur	24	24	10	BE(Civil,AMIE (Civil) with minimum 50% marks.
4. Sri Jayachamarajendra College of Engineering Mysore.	24	24	10	BE/B.Tech(civil) AMIE(Civil) with Minimum 50% marks And entrance test for AMIE(civil) only.
5. Motilal Nehru National Institute of Technology, Allahabad.	24	24	5	B.E(Civil/Mechanical/ Chemical/Architecture or its equivalent) with 60% marks with Professional experience of minimum 2 years.
6. Shri G.S.I of Technology & Science, Indore.	24	24	10*	BE(Civil) /AMIE (Civil), BE(Elect./ Mech./Chemical) with 55% marks & 2 years professional experience.
7. Indian Institute of Technology, Bombay Mumbai	24	24	2	B.Tech/BE(Civil/ Chemical/Mechanical with 1st class with 70% marks.Admiss- ion through inter- view by I.I.T.
8. Malaviya National Institute of Technology, Jaipur	24	24	10	BE(Civil/Mechani- cal/Chemical) with I Class/Division 60% marks(55% for SC/ST) or CGPA 6.75 (6.15% for SC/ST) or AMIE(Civil)with 60% (55% for SC/ST) in A & B sections along with I Class Diploma with 60% Marks (55% for SC/ST candidates)in relevant branch and three years professional experience.
9. Anna University, Chennai.	24	24	10#	BE(Civil, Mechanical Electrical)/B.Tech Chemical with 3 years professional

					experience.
10.	Indian Institute of Technology, Kharagpur	24	24	1	BE(Civil), I Class with 70% marks. Admission through
11.	Centre for Water Resources, Institute Of Science & Technology, Jawaharlal Nehru Technological University, Hyderabad	24	24	7	interview by I.I.T. B.E./ B.Tech (Civil, Mechanical, Chemical, Computer Science and Agricultural)
12.	All India Institute of Hygiene & Public Health(AIIPH), Kolkata.	24	**	24	BE(Civil) **

** As on December,2009, there is inadequate engineering faculty in the AIIPH to teach engineering topics. Candidates will be nominated provided the AIIPH fills up the vacant posts of engineering faculty on permanent basis.

* Only two seats are for candidates with B.E. (Elect./Mech/Chemical) Degree.

Hostel accommodation may be available provided construction of hostel building is completed.

II. SHORT TERM COURSE

The duration of Short Term Course is three months and is conducted by the following Institutes

- 1) Anna University, Chennai Tamil Nadu.
- 2) Shri Jayachmarajendra College of Engineering, Mysore, Karnataka.

The annual intake capacity for Short Term Courses in two Institutes is 50. Outstation sponsored candidates are eligible to draw stipend @ 1,500/- per month.

II. REFRESHER COURSE

During the year 2010-11, 65 Refresher Course, as per the enclosed list at **Annexure** are proposed to be conducted through 21 recognized Institutes. The duration of RC vary from one week to four weeks. Intake capacity in Refresher Courses vary from course to course from 15 to 30 candidates in each course which depend upon the level of participants, nature of course, duration etc. The names of the Institutes conducting the RC are as under:

1.	All India Institute of Hygiene & Public Health (AIHH&PH), 110, Chittaranjan Avenue, Kokata – 700073.	2.	Gujarat Jalseva Training Institute, Gujarat Water Supply & Sewerage Board, Sector-15, ‘G’ Road, Gandhinagar-382015.
3.	Institution of Public Health Engineers, CK-58, Salt Lake City, Kolkata-700091	4.	Visvesvaraya National Institute of Technology (VNIT), Nagpur-440011.
5.	Kerala Water Authority, Water Works Campus, Thiruvananthapuram-695033.	6.	Centre for Environmental Studies, Anna University, Guindy Campus, Chennai-600025.
7.	Research & Training Centre, Maharashtra Jeevan Pradhikaran, I.S.P. Road, Near Divisional Commissioner’s Office, Nashik Road- 422101.	8.	Shri G.S. Institute of Technology & Science, 23, Park Road, Indore-452003.
9.	TWAD Board, TWAD Hourse, 31, Kamarajar Salai, Chennai-600005.	10.	Shri Jayachamarajendra College of Engineering (SJCE), Mysore,- 570006.
11.	PHE Department, Government of Rajasthan, Gandhi Nagar, Jaipur-302015.	12.	Rajasthan Institute of Local Self Government, Tonk Road, Jaipur-302015
13.	Public Health & Preventive Medicine, Institute of Public Health, Poonamallee, Chennai-600056.	14.	Public Health Department Palasoni, Government of Orissa Bhubaneshwar-751001.
15.	Metro Water Training Centre, Chennai Metropolitan Water Supply & Sewerage Board, No. 56, Raji Street, Ayanavaram, Chennai-600023.	16.	Motilal Nehru National Institute of Technology (MN NIT), Allahabad-211004.
17.	All India Institute of Local Self Government, Sthanikraj Bhawan, C.D. Barfiwala Marg, Andheri(West), Mumbai-400058.	18.	All India Institute of Local Govt., near Palika Bhawan, 4, Shivaji Nagar, Bhopal-462016.
19.	Municipal Corporation of Greater Mumbai, Civic Training Institute and Research Centre, Abhinav Nagar, Borivali (East), Mumbai-400066.	20.	All India Institute of Local Self Govt., ‘D’ Block, Janakpuri, New Delhi-110058.
21.	Institute of Technology, Civil Engineering Department, Banaras Hindu University, Varanasi-221054.		

Every year CPHEEO invites nominations from the concerned State departments/agencies dealing with water supply & sanitation for the aforementioned courses. After scrutiny of the nominations/applications, the details of provisionally selected candidates are forwarded by CPHEEO to the respective institutes for final selection/admission.

The Refresher Courses being sponsored by the Ministry are broadly on the following

aspects:-

- Computer Aided Design for Water and Sewage Treatment Plants, Water Supply & Sewer Network etc.
- Project Planning
- New Development in Water Treatment
- Water and Sewage Treatment Plants Design
- Water Works Supervisors
- Sewage Works Supervisors
- Water Supply System Management
- Corrosion Control
- Solid Waste Management
- Filter Operation
- Operation and Maintenance aspects of Water Supply Systems
- Water Quality Monitoring & Surveillance
- Water and Waste Water analysis
- Pipes & Conduits
- Pumping Machinery etc.

The year-wise details of targets and achievements from 1998-99 to 2009-10 on various courses of the training programme are given below:

Sl. No.	Year	Post Graduate Course		Short Term Course		Refresher Courses	
		Target	Achievement	Target	Achievement	Target	Achievement
1.	1998-99	98	70	50	25	1400	1170
2.	1999-00	98	56	50	24	1400	1288
3.	2000-01	98	57	50	22	1400	1096
4.	2001-02	93	42	50	15	1300	1085
5.	2002-03	88	50	20	15	1200	1250
6.	2003-04	88	35	20	15	1200	1243
7.	2004-05	88	34	20	13	1200	1155
8.	2005-06	88	34	20	13	1200	1298
9.	2006-07	95	32	20	7	1200	1348
10.	2007-08	80	30	*	-	1200	1308
11.	2008-09	80	31	20	4	**	-
12.	2009-10	80	30	17	***	1200	930

* Short Term Courses were not conducted during the year 2007-08.

** Refresher Courses were not conducted during the year 2008-09

*** 17 Engineers and Para Engineers are expected to be trained in Short Term Course by February, 2010. Information is still awaited.

The allocation (RE) and expenditure for PHE Training Programme since 1998-99 are given below:-

(Rs. in lakh)

Sl. No.	Year	Allocation	Actual
1.	1998-99	80.00	80.25
2.	1999-2000	100.00	80.66
3.	2000-2001	100.00	99.58
4.	2001-2002	100.00	99.58
5.	2002-2003	100.00	82.15
6.	2003-2004	110.40	110.40
7.	2004-2005	87.70	87.70
8.	2005-2006	97.50	96.64
9.	2006-2007	*	106.3
10.	2007-2008	*	102.00
11.	2008-2009	*	46.52
12.	2009-2010	*	20.083

* No specific allocation was made. However, expenditure was made from other Heads.

System of Evaluation

1. Evaluation formats formulated by CPHEEO are sent to all the Institutes for evaluation of each Training Course.
2. The Institutes in turn get the information from the participants and evaluate the programme and accordingly, the curriculum is modified, if warranted.
3. The Feedback formats are communicated to CPHEEO for review and comments.
4. CPHEEO gives suggestions to the Institutes based on the feedback to incorporate in the training module, whenever considered appropriate.

Need for re-evaluation of the Training Programme

The Government of India has from time to time launched various programmes for increasing the provision of drinking water supply and sanitation facilities. The infrastructure which is being developed by various ULBs/State Departments for drinking water supply, sewerage, sanitation, drainage, solid waste management etc. will need more number of qualified and trained manpower for better designing, speedy implementation of all the schemes in economical manner and also for proper operation and maintenance of old and new projects and infrastructure development. It is, therefore, being felt that there is an urgent need to evaluate the Training Programmes in its various aspects as the same is long overdue.

The following areas may be covered for re-evaluation:-

- (i) Re-assessment of the course contents of the various programmes and suggest revision/modification of the courses including incorporation of new topics wherever necessary so that the trainees are updated on the latest technological developments.
- (ii) Addressing the issues/problems being faced by the institutes and the trainees for conducting/attending the courses e.g. shortage/lack of availability of teaching

- faculty, hostel accommodation, necessary equipment and other facilities for running the programmes smoothly.
- (iii) To examine whether additional course can be incorporated to enhance the knowledge of the field engineers in the areas of water supply and sanitation.
 - (iv) Whether other areas related to subjects like Finance and Management may be incorporated as Refresher Courses and the possibility of nominating officials other than engineers/para-engineering personnel for these courses.

Proposal for Revision of Existing Financial Norms

The proposal of revision of existing financial norms for sanction of grants to academic, research and field departments for conducting Post Graduate, Short Term and Refresher Course have been examined in the IFD several times. On the request of the IFD some necessary information pertaining to the upward revision of the financial norms were sent to US(PHE) for onward transmission to the IFD in a prescribed format for further necessary action. The subject is being taken up separately.

Annexure-II

Financial support and other criteria for undergoing Post Graduate Course in Public Health/Environmental Engineering during 2010 - 11 for 2010-2012 batch.

Financial Support

1. A monthly stipend of Rs.2000/- is paid to each of the outstation sponsored Candidates by the Government of India through the Academic Institute.
2. Expenses towards tuition and examination fees only are borne/reimbursed to each sponsored candidate by the Government of India through the Institute. All other fees are to be paid by each candidate/nominating department.
3. Contingency grant @ Rs.2500/- per semester (Maximum for 4 semester only) is sanctioned to the Institute (and not to any individual candidate) by the Government of India.

Other Criteria

1. Each candidate must have minimum 3 years of experience in Public Health Engineering and preferably below 45 years of age.
2. The candidate who had been selected during last academic session and offered admission by the Institute, but not joined should not be considered while forwarding the nominations.
3. In case it is not possible to accommodate the candidates in the Institutions as per their first priority they will have to accept other order of priority mentioned by them.
4. In case any candidate discontinues the course or fails to complete the Post Graduate course in all respects including submission of thesis or fails to obtain the P.G. degree within the stipulated time period of 24 months, the entire amount paid by the Government of India (through the Institute) to the candidate towards stipend, tuition & examination fees, contingencies etc will be recovered from him/her .

Contd...

5. Selection of candidates by CPHEEO shall be treated as final.

6. In case the selected candidate(s) is not relieved in time to enable him/her to join the Institute, it is very likely that the slot kept for him/her will remain unutilized for that academic session and under such circumstances, his/her candidature will not be considered for admission to PG course for the next three academic sessions.

7. Sponsored candidates are required to pay/deposit Institute's fees on their own at the time of admission and later, the Ministry reimburses only the tuition & examination fees along with stipend for outstation candidates through the Institute to the candidates after receiving the final list of candidates admitted with details of tuition fee, examination fee, date of joining etc from the Institute.

Annexure-III

No.Z-22011/1-PG/2010-CPHEEO

Ministry of Urban Development
(CPHEEO)

Proforma for calling nominations from the candidates for admission to M.E. (PHE)/M.Tech (Environmental Engineering) course in the 2010 -12 batch under the sponsorship of the Ministry of Urban Development during the year 2010-11.

Affix a
Passport size
Photograph.

1. Name of the Applicant (in block letters) :
2. Father's Name :
3. Age & Date of Birth :
4. Designation :
5. Official Address :
6. Residential Address :
7. Contact Telephone No. & Fax No. :
8. Name of the Department where employed. :
9. Qualification & Experience (See Appendix):
- 10.a) whether the applicant had applied :
earlier, if so, in which year.
- b) Had he been selected by CPHEEO, :
if yes, state reason for not joining.

Contd..

11. Indicate the Institute Priority wise to undergo the PG Training Programme:

Sl.No.	Name of the Institute	Indicate Priority No.
1	2	3
1.	Sri Jayachamarajendra College of Engineering, Mysore.	:
2.	Veermata Jijabai Technological Institute, Mumbai	:
3.	Shri G.S. Institute of Technology & Science, Indore.	:
4.	Motilal Nehru National Institute of Technology, Allahabad.	:
5.	Visvesvaraya National Institute of Technology, Nagpur.	:
6.	Indian Institute of Technology, Bombay, Mumbai	:
7.	Malaviya National Institute of Technology, Jaipur	:
8.	Anna University, Chennai	:
9.	Indian Institute of Technology, Kharagpur	:
10.	Indian Institute of Technology, Delhi	:
11.	Jawaharlal Nehru Technological University, Hyderabad	:
12.	All India Institute of Hygiene & Public Health(AIIH&PH), Kolkata.	: *

* As on December,2009, there is no in-house engineering faculty in the AIIH&PH to teach engineering topics. Candidature will be considered provided the AIIH&PH fills up the vacant posts of engineering faculty.

N.B.: (Priority should necessarily be mentioned against all the Institutes listed above).

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The particulars furnished above & in Appendix are true and correct to the best of my knowledge. I declare that I will not back out if I am selected and admitted in any one of the Institutions mentioned above.

Signature of the candidate.

Countersigned and sponsored Shri _____

To undergo the P.G. course in the years 2010- 2012 in any one of the Institutions mentioned above. It is hereby certified that in case he/she joins the course he/she will continue to draw his/her normal monthly salary & allowances as per rules through out the period of studies and his/her TA/DA, educational tour expenses etc. will be reimbursed by the Department.

Signature of the Competent Authority/
Head of the Department as the case may be.

Note:

1. Incomplete application will be liable for rejection.
2. Application should be submitted in **triplicate along with attested copies of all certificates and mark sheets.**
3. Application will not be considered without the sponsorship of the employer.

Contd.

Appendix

Ministry of Urban Development
(CPHEEO)

P.G. Course in Public Health Engg./Environmental
Engineering.

Educational Qualification:

Qualifi- cation	Institution	Board/ Univer- sity	Specia- lization Branch	Division/ % of marks	Year of passing	Remarks.
1	2	3	4	5	6	7

i) Matriculation

ii) Diploma

iii) Degree

or equivalent

iv) Post Graduate

Note : Please enclose copy of certificate and mark sheets obtained in each qualification/degree along with every application).

Details of Experience including Present job (Chronological order):

Name of the Organisation	Duration		Desig- nation	Nature of duties	Reasons for Leaving
	From	To			
1	2	3	4	5	6

Signature of the applicant.

Financial Norms of the Ministry of Urban Development for sanction of grant-in-aid for conducting Refresher Courses in Public Health Engineering

- 1. Honorarium for the faculty lecture :** i) Junior Level : @Rs.125/- per lecture
ii) Middle Level : @Rs.200/- per lecture
iii) Senior Level : @Rs.250/- per lecture

These rates are subject to the following conditions:-

- a) The lectures will be of not less than 75 minutes duration.
- b) No lecturer would be entitled to honorarium for more than 5 lectures for any course.
- c) No person below the rank of Executive Engineer will be deputed for giving these lectures.

Note:

The above rates are applicable only in the case of short-term course of a duration not more than one month / four weeks.

- 2. TA to the faculty from outstation :** In addition to the honorarium mentioned above outstation faculty may be given only TA as per their entitlement or actual whichever is less (Rail fare maximum upto I class or II A/C admissible). No. DA or free boarding and lodging fee will be allowed.

- 3. Transport charges for field visit :** Rs.18/- per km or actual whichever is less.

- 4. Stationery, lecture materials, Refreshment & Contingencies :**

- a) Courses of short duration upto 2 weeks a) Rs.100/- per trainee per day limited to actual.
- b) Courses of duration of 3 weeks b) Rs. 85/- per trainee per day limited to actual.
- c) Courses of duration of 4 weeks c) Rs. 75/- per trainee per day limited to actual.

- 5. Chemicals and Glassware :** This will be allowed only as per actual. The PHE side may, however, indicate a lump sum at the time of submitting proposals for the grants.

- 6. Stipend (for outstation candidates only) :** Stipend @ Rs.1500/- per month/per candidate for courses of duration of 4 weeks or more. Candidate should not claim DA from their departments, if they draw stipend.

