

भारत सरकार Government of India **केन्द्रीय जल आयोग** CENTRAL WATER COMMISSION प्रशिक्षण निदेशालय Training Directorate

No. 5/57/2019-Trg/ 5880-5980

Dated 22 Aug, 2019

विषय: Training Programme Central Project Management Unit(CPMU) of DRIP-reg.

Central Project Management Unit (CPMU) of DRIP is organizing the following Training Programmes. It is requested that nominations if any, may be forwarded to this office with the approval of the Concerned Member/ Chief Engineer (HRM) in respect of HRM Unit/ Chief Engineer, NWA, CWC, Pune in respect of NWA Unit positively by the date indicated against each event. A copy of the Bio data with mobile number and e-mail-id of the nominated officers may also be enclosed along with the nominations indicating the number of events so far attended by them.

| SI No. | Name of the Training Course | Venue & date | Last date of Receiving Nominations in Training Directorate |
|-----------|---|---|--|
| 1. | Training Programme on "Seismic Design and safety Evaluation of Concrete Gravity Dams" | IITR Campus, Roorkee, Uttarakhand, 11-13 September 2019 | 29.08.2019 |
| 2. | Training Programme on " Water Quality Assessment, Reservoir Sedimentation & Risk Remedial Measures" | MNNIT Campus, Allahabad, Uttar Pradesh 25-29 September 2019 | 05.09.2019 |
| 3. | Training Programme on "Geotechnical Aspects Related to Dam Safety" | MNAIT Campus ,Bhopal, Madhya Pradesh 30 September -1 October,2019 | 06.09.2019 |

It is for information that nominations received after the stipulated date will not be considered and also nominations once approved by Chairman, CWC, will not be allowed to be withdrawn.

ई वैकटेश्वरन्) 22/8

उप-निदेशक(प्रशिक्षण)

- 1. PPS to Chairman, CWC, New Delhi.
- 2. PPS to Member D&R/RM/WP&P, CWC, New Delhi.
- 3. All Chief Engineers, Central Water Commission.
- 4. Director, D&RC, RMCD, WP&PC CWC, New Delhi.
- 5. Secretary/ Director (TC), CWC, New Delhi.
- 6. Director, DRIP, CWC, New Delhi.
- 7. All Directors/ Superintending Engineers, Central Water Commission.
- 8. J.E.(Trg), CWC, New Delhi to upload this circular on CWC website www.cwc.nic.in/intranet portal.

भारत सरकार Government of India केंद्रीय जल आयोग Central Water Commission केंद्रीय परियोजना प्रबंधन इकाई Central Project Management Unit बांध पुनर्वास और सुधार परियोजना

No. 03/03/2017/DSRD/ 4044 - 4048

Date: 20-08-2019

Sub: Training Programmes on Seismic Design and Safety Evaluation of Concrete Gravity Dams -reg.

Dam Rehabilitation & Improvement Project

Sir,

Central Project Management Unit (CPMU) of DRIP in association with Indian Institute of Technology Roorkee (IITR) is going to organize the Training Programme as per details given below:

| Name of the | Seismic Design and Safety Evaluation of Concrete Gravity Dams |
|--|---|
| Programme: | |
| Dates: | 11-13 September 2019 |
| Venue: IITR campus, Roorkee, Uttarakhand | |

Programme outline for the training programme attached for your information. The Course Coordinator for this programme is:

- 1. Dr. Pankaj Agarwal, Professor& Head, Dept. of Earth Quake Engineering, IITR Phone: +91 1332 285317; Mobile: +91 9837004618; Email: panagfeq@iitr.ac.in; panagfeq@gmail.com
- 2. Dr. Manish Shrikhande, Professor, Dept. of Earth Quake Englneering, IITRPhone: + 91 1332 285437; Mobile: +91 9412071738; Email:mshrifeg@iitr.ac.in

Therefore it is requested to nominate officials from CWC for this training programme. Total number of nominations required from CWC is 08 nos. Out of these 08nos; 04 no officials may be nominated form D&R Wing, 02 no officials may be nominated from RM Wing and 02 no officials may be nominated form WP&P wing.

Please note that there is no course fee for attending these training programme, however, the participants are required make their own arrangements for transportation and other incidentals. IIT Roorkee has kindly agreed to provide accommodation to the participants in their 'Continuing Education Centre Guest House'; participants are required to make direct payment to IIT Roorkee for the accommodation and the logistics.

> Jan 20108/19 (Gaurav Singhai)

Dy. Director, DSR, Central Water Commission Mobile no 6260447391, email dd3-drip-cwc@nic.in

तीसरी मंजिल, केन्द्रीय जल आयोग पुस्तकालय भवन, रामकृष्ण पुरम, नई दिल्ली— भूजरी8 Cavalars of are weight Floor, CWC Library Building, R.K. Puram, New Delhi-110 066 भ ठा हिस्सी प्रकालभी एक To, Director (Training), Ground Floor, New Library Building, CWC, New Delhi

तीसरी मंजिल, केन्द्रीय जल आयोग पुस्तकालय भवन, रामकृष्ण पुरम, नई दिल्ली--110066

Copy for information to:

- 1. Chief Engineer, HRM, CWC, New Delhi.
- 2. All field Chief Engineer, Central Water Commission with a request to send nominations from their organization to Director (Training), CWC, New Delhi for obtaining further approval from Competent Authority.
- 3. Chief Engineer, NWA, Pune.
- 4. Director (RM/D&R/WP&P) Coordination Directorate, CWC, New Delhi, with a request to send their nominations to Director (Training), CWC, New Delhi for obtaining further approval from Competent Authority.





Programme Content

Title: Seismic Design and Safety Evaluation of Concrete GravityDams

Coordinators: Prof. Pankaj Agarwal and Prof. Manish Shrikhande

Duration of Training: 3 days

Dates: September 11-13, 2019

Contents of the training:

- 1. Seismological parameters related to dam safetyevaluation
- 2. Basic concept of SDOF and MDOF system
- 3. Past performance of gravity dams duringearthquakes and mode of failure
- 4. Earthquake ground motion characteristics anddamage potential
- 5. Concept of Response Spectrum/ DesignSpectrum/ Seismic Hazard for dams
- 6. Finite element modelling and analysis of concrete gravity dams on ABAQUS® Hands on
- 7. Response spectrum analysis of concrete gravity dams on ABAQUS® Hands on
- 8. Pseudo-static seismic analysis of dams and stability analysis of concrete gravity dam as per IS 6512: 1984/ IS 1893
- 9. Non-destructive evaluation and seismicretrofitting of gravity dams
- 10. Time history analysis of concrete gravity damson ABAQUS® Hands on
- 11. Non-linear analysis of concrete gravity dams on ABAQUS® Hands on

भारत सरकार

Government of India केंद्रीय जल आयोग Central Water Commission केंद्रीय परियोजना प्रबंधन डकार्ड Central Project Management Unit बांध पनर्वास और सुधार परियोजना

Dam Rehabilitation & Improvement Project

No. 03/03/2017/DSRD/4117-4121

Date: 20-08-2019

Sub: Training Programme on "Water Quality Assessment, Reservoir Sedimentation & Risk Remedial Measures" -reg.

Sir.

Central Project Management Unit (CPMU) of DRIP in association with Motilal Nehru National Institute of Technology (MNNIT), Allahabad is going to organize the Training Programme as per details given below:

Name of the Programmes:

Water Quality Assessment, Reservoir Sedimentation & Risk

Remedial Measures

Dates:

25-29September 2019

Venue:

MNNIT campus, Allahabad, UttaraPradesh.

Programme outline for the training programme attached for your information. The Course Coordinator for this programme is:

Prof. R.P. Tiwari, Department of Civil Engineer, Mob: 9415216780, Email: rptewari a mnnit.ac.in

Therefore it is requested to nominate officials from CWC for this training programme. Total number of nominations required from CWC is 08 nos. Out of these 08nos; 04 no officials may be nominated form D&R Wing, 02 no officials may be nominated from RM Wing and 02 no officials may be nominated form WP&P wing.

Please note that there is no course fee for attending these training programme, however, the participants are required make their own arrangements for transportation and other incidentals. MNNIT Allahabad has kindly agreed to provide accommodation to the participants in their Guest House'; participants are required to make direct payment to MNNIT Allahabad for the accommodation and the logistics.

(Gauray Singhai)

Dy. Director, DSR, Central Water Commission Mobile no 6260447391, email dd3-drip-cwc@nic.in

To, Director (Training), Ground Floor, New Library Building, CWC, New Delhi

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- 2. All field Chief Engineer, Central Water Commission with a request to send nominations from their organization to Director (Training), CWC, New Delhi for obtaining further approval from Competent Authority.
- 3. Chief Engineer, NWA, Pune.
- 4. Director (RM/D&R/WP&P) Coordination Directorate, CWC, New Delhi, with a request to send their nominations to Director (Training), CWC, New Delhi for obtaining further approval from Competent Authority.



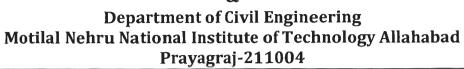






Water Quality Assessment, Reservoir Sedimentation & Risk Remedial Measures

25-29September, 2019 Central Water Commission, New Delhi &



PROGRAMME

| Time | Topic | Resource Person | |
|--|--|---|--|
| 9:30 AM-10:30 AM | Registration of participants | | |
| 10:30 AM-11:00 AM | Inauguration | 2mm== | |
| 11:00 AM-11:45AM | Tea | | |
| 11.45 AM- 1.15 PM | Key Note Lecture: Overview of Water quality assessment & Reservoir Sedimentation | Prof. R. P. Singh,MNNIT Allahabad | |
| 1:15 PM-3:00 PM | Lunch | | |
| Lecture 1: Water Quality Assessment of Reservoi – A Case Study > Water Quality Parameters > Chemical Analysis of Water > Importance of Water Quality for Reservoir Health | | External/Internal Experts | |
| 4:30PM-5:30 PM | Group Discussion& Interaction | | |

Water Quality Assessment, Reservoir Sedimentation & Risk Remedial Measures



25-29September, 2019 Central Water Commission, New Delhi &



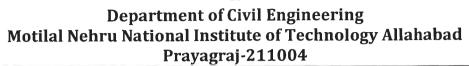
Department of Civil Engineering Motilal Nehru National Institute of Technology Allahabad Prayagraj-211004

| Thursday 26 September, 2019 | | |
|-----------------------------|--|------------------------------|
| Time | Topic | Resource Person |
| 10:00 AM-11:30 AM | Lecture 2: Reservoir Sedimentation ➤ Causes for Reservoir Sedimentation ➤ Concept of Catchment area treatment. ➤ Techniques of Catchment area treatment | External/Internal Experts |
| 11:30 – 12:00 Noon | Tea | |
| 12:00-1:30 PM | Lecture 3: Assessment and Management of Reservoir Sedimentation > Estimation of Reservoir Sedimentation > Correlation with Catchment Area > Preventive Measures | External/Internal Experts |
| 1:30 PM-3:00 PM | Lunch | |
| 3:00-4:30 PM | Lecture 4: Sedimentation Analysis of Reservoir - A Case Study Need of Sedimentation Analysis Process of Analysis A case Study | External/Internal Experts |
| 4:30-5:30 PM | Group Discussion & Interaction | |

Water Quality Assessment, Reservoir Sedimentation & Risk Remedial Measures



25-29September, 2019 Central Water Commission, New Delhi



| Friday 27 September, 2019 | | |
|---------------------------|---|------------------------------|
| Time | Topic | Resource Person |
| 10:00 AM-11:30 AM | Lecture 5: Risk assessment of Reservoir and Remedial Measures > Types of Risk in Reservoir > Quantitative and Qualitative Assessment > Remedial Measures | External/Internal Experts |
| 11:30 -12:00 Noon | Tea | |
| 12:00-1:30 PM | Lecture 6: Hydrograph Analysis, its Application & Importance Basic concept of Surface and Groundwater Hydrograph Hydrograph Analysis Uses and importance of Hydrograph | |
| 1:30 PM-3:00 PM | Lunch | |
| 3:00-4:30 PM | Lecture 7: Reservoir Sedimentation in India – An Overview National Scenario of Reservoirs Sedimentation trends in different reservoirs. Forecasting of Reservoir Sedimentation | |
| 4:30-5:30 PM | Valedictory Session | |

| Saturday28& Sunday 29 September 2019 | |
|--------------------------------------|--|
| Site Visit | |

भारत सरकार

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Dam Rehabilitation & Improvement Project

No. 03/03/2017/DSRD/40)3 - 77

Date: 20-08-2019

Sub: Training Programmes on "Geotechnical Aspects Related to Dam Safety" -reg.

Sir.

Central Project Management Unit (CPMU) of DRIP in association with Maulana Azad National Institute of Technology (MANIT), Bhopal is going to organize the Training Programme as per details given below:

| Name of the Programme: | Geotechnical Aspects Related to Dam Safety | |
|---|--|--|
| Dates: | 30 September to 01 October 2019 | |
| Venue: MANIT campus, Bhopal, Madhya Pradesh | | |

Programme outline for the training programme attached for your information. The Course Coordinator for this programme is:

Dr. S. K. Katlyar, Professor & Head of Civil Engg., MANIT Bhopal, Mobile: +91 9837004618; Email: <skatiyar7@rediffmail.com>; katiyarsk@manit.ac.in

Therefore it is requested to nominate officials from CWC for this training programme. Total number of nominations required from CWC is 08 nos. Out of these 08nos; 04 no officials may be nominated form D&R Wing, 02 no officials may be nominated from RM Wing and 02 no officials may be nominated form WP&P wing.

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Dy. Director, DSR, Central Water Commission Mobile no 6260447391, email dd3-drip-cwc@nic.in

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Maulana Azad National Institute of Technology, Bhopal

Dam Rehabilitation and Improvement Project (DRIP) Training Programme on GEOTECHNICAL ASPECTS RELATED TO DAM SAFETY 30 September to 01 October 2019 at MANIT Bhopal

Organised by
Civil Engineering Department, MANIT Bhopal

| S. No. | Topic | Date | Time |
|--------|--|----------------|---|
| | DA | Y-1 | |
| 1 | Registration of Participants & Inauguration | 30.09.2019 | 9:30 AM to 10:30AM |
| 2 | Inaugural Tea Break | 30.09.2019 | 10:30 AM to 11:00AM |
| 3 | Introduction and Overview of Programme | 30.09.2019 | 11:00 AM to 12:00AM |
| 4 | Soil characteristics and their impact on the stability of the dam. | 30.09.2019 | 12:00 AM to 1:30PM |
| | Lunch Break (1:30 | PM to 2:30 PM) | |
| 5 | Geophysical and geotechnical investigation of the dam site. | 30.09.2019 | 2:30 PM to 4:00PM |
| Ś | Tea Break | 30.09.2019 | 4:00 PM to 4:15 PM |
| 7 | Lab. Session (Geotechnical Engg.) | 30.09.2019 | 4:15 PM to 5:45 PM |
| | DAY- | | 4.13 PM to 3:43 PM |
| | Seepage control measures for Dams | 01.10.2019 | 9:30 AM to 11:00 AMM |
| | Tea Break | 01.10.2019 | |
| 0 | Seepage analysis of Dams (Computer Lab Session) | 01.10.2019 | 11:00 AM to-11:15 AM 11:15 AM to 1:30 PM |
| | Lunch Break (1:30 P | M to 2:30 PM) | |
| | Case study on Dam safety by Mr. | Townson | |
| 11 | Mahaveer Bidasaria | 01,10,2019 | 2:30 PM to 4:00 PM |
| 2 | Tea Break | 01.10.2019 | 1.00 DA4 A 15 P2 1 |
| 3 | Case study of Kannupur dam (Odisha), | 01.10.2019 | 4:00 PM to 4:15 PM 4:15 PM to 5:00 PM |
| | Valedictory | 01.10.2019~ | 5:00 PM to 5:30 PM |

