

Training Program on
Assessment of Structural Safety of Existing Dams
(25 August – 04 September 2025)

REGISTRATION FORM

Name (in capitals):

Designation:

Organization:

Responsibilities (in

brief):

Full Postal Address

Tel Nos (with STD Code):

Email:

Mobile

Whether require accommodation? YES / NO

Date: (Signature of the Participant)

SPONSORING AUTHORITY

Full Postal Address

Tel Nos (with STD Code):

Email :

Mobile

Date (Signature and Seal)

Completed Registration Form may be sent by email:

nwa.pune@gmail.com directordes-nwa@gov.in



Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Water Commission



Training Program on
Assessment of Structural Safety of Existing Dams
(25 August – 04 September 2025)



Organized by
National Water Academy, CWC, Pune

INTRODUCTION AND OBJECTIVE

India ranks third globally in terms of number of large dams in operation and about 400 dams are under construction. In addition, there are several thousand smaller dams. These dams are vital for ensuring the water security of the Country. Dams pose significant threats to human life, crops, houses, buildings, roads, the environment and the economy as well. To ensure safety of dams is of paramount importance to prevent potential hazard and to protect this valuable infrastructure. The **Dam Safety Act 2021** mandates the monitoring, inspection, operation, and maintenance of dams to prevent dam failure-related disasters. Chapter IX of the Dam Safety Act provides for the obligation of the dam owner with regard to the **Comprehensive Dam Safety Evaluation**, review and analysis of available data on the design, General assessment of seismic safety of specified dam with mandatory site-specific seismic parameters study and **assessment of the condition of the structure** based on the visual observations, available data on the design and performance of the structure.

Many of existing dams have various structural deficiencies and shortcomings and they do not meet the requirements of the present design standards – both structurally and hydrologically. Design review and rehabilitation of dams is required to counter various deficiencies which develop with time and also to correct inadequacies on account of revisions in various standards/guidelines. Various studies are required to be carried out e.g. hydrological review studies, reservoir routing studies, checking of the adequacy of existing freeboard, assessment of structural safety, investigations required for issues like excessive seepage, material testing to determine various engineering parameters of existing dams/foundations, examination of instrumentation data, design studies including structural and hydraulic designs, review of dam stability for different conditions.

A two-weeks (9 days) Training Program on **“Assessment of Structural Safety of Existing Dams”** has been conceptualized by NWA to provide an insight into the various issues related to structural safety of dams to decide remedial measures/Rehabilitation.

PROGRAM CONTENTS

Overview of Structural safety of Dams, Types of dams: Concrete and Masonry dams, Earth and rockfill dams, CFRD, GFRD, RCC dams, Components of a dam: spillways, outlets, abutments, Energy Dissipation arrangement, foundations etc. Evaluating performance of concrete, masonry dams and Earthen dams; Failure modes and Mechanisms, Design / Stress Analysis for Concrete and Masonry dams, Stability Analysis for Earth and rockfill dams, Finite Element Analysis along with hands-on practice, Material Testing for Concrete/Masonry Dams, Non-Destructive testing methods for Concrete dams, Remodeling/ Retrofitting of Spillway, Data/Details for Assessment of Structural Safety of Dams, Structural Health Monitoring of Dams (Data acquisition, Dissemination Interpretation and analysis), Evaluating Seismic Performance of dams, Geophysical Investigations for masonry/ concrete dams/ Earth and rockfill dams, Case Studies.

TARGET GROUP

This training course is intended to the officers of Central/State Govts/PSUs/Dam owners in the rank of AE/AEE/EE/SE or equivalent working in the dam design activities in CDOs and other design units of the organizations.

RESOURCE PERSONS The resource persons for the program would be subject experts from CWC, CSMRS, CWPRS, State WRD, Subject experts etc.

PROGRAM FEE

There is no program fee for participants from Central and State Govt.

Departments. Charges for participants from various categories are as below:

Category	Description	Fee in Rs.(per participant)
A.	Central/State/Local Government Depts. including their autonomous bodies:	Nil
B.	'Not for Profit' Central and State PSUs	Nil
C.	Recognized academic institutions, NGOs	2700/-
D.	Central and State Public Sector Undertakings	18,000/-
E.	Private Companies, individuals	27,000/-

Discounts applicable: (a) 50% for PSUs of MoJS i.e. WAPCOS & NPCC (no group discount); (b) For others – 20% discount for 3-4 participants; 30% discount for 5 or more participants from the same organization.

Payment for the programme fee, if applicable, is to be deposited with NWA before the commencement of the program. Payment is accepted through **Online / Demand Draft without deducting any TDS. DD drawn in favour of PAO-Ministry of Water Resources payable at Pune** or through electronic transfer in the Account details given below:

Account holder name: PAO - Ministry of Water Resources, Account No: 11382328092; IFSC Code: SBIN0001904

DURATION

The program is of two-weeks (9 days) duration scheduled during 25 August to 04 September 2025. The participants are expected to reach NWA by the evening of 24 August 2025 and should plan to leave only after 20:00 Hrs. 04 September 2025.

VENUE National Water Academy, CWC, Pune-Sinhagad Road, Khadakwasla, Pune – 411024

PARTICIPATION

The nomination of the officers fitting the target profile may be sent to the Program Coordinator latest by **18th August 2025** by email (nwa.pune@gmail.com ; directordes-nwa@gov.in). The nominated officers are requested to start the program only after confirmation of their accepted nomination. The accepted nominations will be displayed on NWA's website on 18th August 2025 evening.

ACCOMODATION

The trainee officers would be accommodated in NWA hostel on applicable payment basis. Lodging & boarding charges as per government rates (about Rs.275/- per person per day) will have to be borne by the participants. Working Lunch during the training program will be provided by NWA (participants from CWC will be provided free lodging & boarding facilities). Participants will have to bear breakfast, evening snacks and dinner charges, as applicable. Airport/ Railway station pickup/drop will also have to be arranged by the trainee officers themselves.

WEATHER

In August, Pune experiences a lot of rain and pleasant weather. The average maximum temperature during the day ranges from 25 to 27 degree Celsius, while the average minimum temperature at night ranges from 20 to 25 degrees Celsius.

CONTACT

For sending nominations or for any information about this program, please contact: Shri Vivek Kumar Verma, Director & Course Coordinator
National Water Academy, CWC, Khadakwasla R S ,Pune – 411 024
Mobile: # 9140706811 Email: nwa.pune@gmail.com ; directordes-nwa@gov.in